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QUANTITATIVE APTITUDE

NUMBERS

- 1) Find the unit place: $1+2^2+3^3+4^4+5^5+6^6$
a) 6 b) 7 c) 8 d) 9
- 2) Which number should be subtracted from 876905 so that it can be divisible by 8?
a) 1 b) 2 c) 3 d) 4
- 3) Arrange $2/15$, $18/29$, $7/18$, $10/87$ in ascending order:
a) $2/15$, $18/29$, $7/18$, $10/87$ b) $18/29$, $7/18$, $10/87$, $2/15$
c) $10/87$, $2/15$, $7/18$, $18/29$ d) $2/15$, $18/29$, $10/87$, $7/18$
- 4) If a number is divisible by 63, then it is also divisible by:
a) 7 b) 11 c) 13 d) 17
- 5) -3.4 is a number on the real number line. if we subtract 1 from this number then the new number will be
a) Farther from the origin than -3.4 b) Closer to the origin than -3.4
c) Equality farther from the origin as -3.4 is d) none of the above
- 6) $54+636+45+32+52=?$ Find unit digit
a) 0 b) 1 c) 2 d) 3
- 7) The number $456*85$ is completely divisible by 3. Smallest whole digit number in place of * can be?
a) 10 b) 84 c) 12 d) 21
- 8) Which number is multiplied by 43, which have 3 prime factors?
a) 2 b) 4 c) 6 d) 8
- 9) Find the odd one : 396, 462, 572, 427, 671, 264
a) 392 b) 427 c) 671 d) 264
- 10) A number when divided by the sum of 625 and 515 gives a quotient that is 5 times the difference between 625 and 515 and remainder as zero. What is the number?
a) 632500 b) 627000
c) 617500 d) 642000
- 11) What is the smallest number that should be divided by 10500 to make it a perfect cube?
a) 4 b) 84 c) 12 d) 21
- 12) If an integer 'K' is divisible by 2, 5 and 13. What is the next largest number that is divisible by all the 3 given numbers?
a) 2K b) $K + 13$ c) $2K + 13$ d) $2K + 65$ e) $K + 130$
- 13) For the smallest number that should be multiplied with 54000 to make it a perfect cube?
a) 4 b) 27 c) 5 d) 3
- 14) What is the smallest square number, which is divisible by 2, 4, 5, 6 and 9?
a) 200 b) 90 c) 180 d) 900
- 15) What is the least number which should be added to 1330 to make it a perfect square?
a) 56 b) 1 c) 40 d) 30 e) 39
- 16) Square of two more than a two digit number is multiplied and divided by 2 and 5 respectively. If twice the result is equal to 500 then find the number?
a) 45 b) 23 c) 87 d) 47
- 17) Find the sum of the first 50 common terms of 12, 16, 20 ...and 18, 24, 30...
a) 15900 b) 12700 c) 19990 d) 18400
- 18) The number 673 and 865 is divisible by which of the following leaving a remainder 1?
a) 1 b) 2 c) 3 d) 4 e) 2, 3, 4
- 19) 4522 is not divisible by
a) 7 b) 17 c) 19 d) 21
- 20) Which of the following numbers is not divisible by 11?
a) 40,12,503 b) 3,33,064 c) 54,32,105 d) 64,31,040
- 21) A number is to be multiplied by the fraction $4/5$. But Samir, by mistake, multiplied it by $5/4$ and obtained the number 81 more than the correct one. What was the original number?
a) 200 b) 120 c) 180 d) 240

22) What is the number that should be subtracted from 682 to make it a perfect square?

- a) 2 b) 4 c) 6 d) 8

23) What is the least number by which 16,800 must be divided to get a number perfect square

- a) 21 b) 42 c) 24 d) 40

24) A number was divided by 8,7,6,5, successively and gave the remainder 1,2,3,4. The number is:

- a) 3208 b) 3209 c) 3210 d) 3334

25) A number becomes a perfect square when we subtract 1 from it. Which of the following cannot be the last digit of that number?

- a) 2 b) 4 c) 5 d) 0

26) 4.28 and -3.28 are two numbers on a real number line. If one is added to both the numbers, then which of the following is true?

- a) Distance between the two new numbers is 2 units more than the distance between 4.28 and -3.28
b) Distance between the two new numbers is 2 units less than the distance between 4.28 and -3.28
c) Distance between the two new numbers is 2 units equal to the distance between 4.28 and -3.28
d) None

27) $528/7$ change into mixed fraction

- a) $78 \frac{3}{7}$ b) $76 \frac{4}{7}$ c) $75 \frac{3}{7}$ d) $34 \frac{5}{7}$

28) $1+22+33+44+55+66=?$ Find unit digit

- a) 9 b) 4 c) 1 d) 5 e) 0

29) Which is greater $22/7$, $138/43$?

- a) $22/7$ b) $138/43$ c) $26/7$ d) $91/5$

30) What should be the highest value that must be assigned to # so that the number $10114\#5$ is exactly divisible by 7?

- a) 5 b) 6 c) 7 d) 8 e) 9

31) Martha was supposed to multiply the number of cans sold with the price of one can to ascertain the amount earned by her. Instead of taking 41 as the number of cans, she wrote 14 by mistake. As a result, the product went down by 135. What is the other multiplier?

- a) 5 b) 9 c) 7 d) 12

32) The product of a number and its multiplication inverse is

- a) -1 b) 0 c) 1 d) None

33) Find the remainder when $(888\ldots\text{repeat } 63 \text{ times})$ is divisible by 9.

- a) 4 b) 8 c) 0 d) 1

34) A three digit number $4a3$ is added to another three digit number 984 which result in four digit number $13b7$. This four digit number is divisible by 11. What is the value of $a+b$?

- a) 8 b) 9 c) 10 d) 11

35) What is the least number that should be subtracted from 3592 to obtain a number exactly divisible by 19?

- a) 0 b) 1 c) 2 d) 3

36) If the difference of two numbers is 8 and the difference of their squares is 160, then the numbers are

- a) 18, 10 b) 8, 16 c) 6, 14 d) None of these

37) What are the values for x & y in $72x23y$ for it to be perfectly divisible by 88?

- a) $x=1$ & $y=5$ b) $x=7$ & $y=5$ c) $x=3$ & $y=2$ d) $x=7$ & $y=2$

38) When 2^{35} is divided by 5, the remainder is

- a) 2 b) 3 c) 4 d) 0

39) Which of the following fraction is smallest?

- a) $63/80$ b) $31/40$ c) $13/16$ d) $7/8$

40) 1,2,3,4 number is a

- a) Prime number b) Composite number
c) Positive number d) both a and b

41) What are the largest 4-digit and the smallest 3-digit numbers divisible by 6, 15, 21 and 24?

- a) 9235,420 b) 9980,840 c) 9240,840 d) 9999,999

42) The number 2594^* is completely divisible by 6. The smallest value of $*$ can be:

- a) 0 b) 2 c) 4 d) 6

43) Write 0.555... as a fraction

- a) $\frac{1}{5}$ b) $\frac{5}{9}$ c) $\frac{1}{3}$ d) $\frac{4}{5}$

44) If $764xy$ is divisible by 90, then what is the value of $x + y$

- a) 1 b) 3 c) 5 d) 6

45) What is the remainder when we divide 1251 by 10^{31} ?

- a) 4 b) 1 c) 2 d) 0

46) What is the least perfect square, which is divisible by 24, 30 and 60?

- a) 1600 b) 3600 c) 14400 d) 32400

47) X and Y are 2 numbers which when divided by 6 leaves a remainder of 4 and 5 respectively. What will be the remainder when $Y+X$ is divided by 6?

- a) 6 b) 9 c) 1 d) None of these

48) Write $(625)_{10}$ as a number, in the number system with base 8.

- a) 9161 b) 1161 c) 19161 d) 1061

49) A pie has to be divided amongst few kids. Punith gets $\frac{2}{7}$ th portion of the pie and Shella gets $\frac{5}{8}$ th portion of the pie. Who amongst the two gets lesser share?

- a) Punith b) Shella
c) Both gets equal share d) cannot be determined

50) A car engine is half filled and holds 15 litres of petrol. What fraction of the engine is full if it contains 18 litres of petrol?

- a) $\frac{1}{4}$ b) $\frac{2}{3}$ c) $\frac{2}{5}$ d) $\frac{3}{5}$

51) Sameer plants 7225 plants so that there are many rows as there are trees in a row. How many trees are there in a row?

- a) 65 b) 75 c) 85 d) 95

52) $(x^n + y^n)$ is divisible by $(x - y)$

- a) For all values of n b) Only for even values of n
c) Only for odd values of n d) For no values of n

53) A trend was observed in the growth of population in saya island. The population tripled every month. Initially the population of saya islands was 100. What would its population after 4 months?

- a) $100 \cdot 4^3$ b) $100 \cdot 3^4$ c) $100 \cdot 3 \cdot 4$ d) $(100 \cdot 3)^4$

54) $2^2 + 4^2 + 5^2 + 6^2 = ?$

- a) 49 b) 64 c) 36 d) 81

55) Find the Decimal number: $(10101)_2$

- a) 19 b) 20 c) 21 d) 22 e) 23

56) $5^{-2} \cdot 10^{-4} / 2^{-5} \cdot 5^{-6}$

- a) 1 b) 2 c) 3 d) 5

57) The packaging unit of a factory has two panels. Each of the panels contains 4 rows of items stored. Each row has 4 kinds of items that are to be packed. How many items are stored for packaging in the packaging unit?

- a) 2^4 b) 4^4 c) $(4^4)^2$ d) 2^5

58) If Anita scores 66 out of hundred then how much does she score out of 75?

- a) 50 b) 60 c) 66 d) 45

59) The value of $(\frac{1}{512})^{1/9}$ is:

- a) $\frac{1}{2}$ b) $\frac{1}{3}$ c) $\frac{1}{5}$ d) 4 e) $\frac{1}{6}$

60) What is the value of $[52 \cdot 258 / 6252] / 7$

- a) 5 b) 25 c) 625 d) 0.3

61) Swaroop draws a certain amount of money from ATM machine. Numbers of 500 rupees notes are double the number of Rs.100 notes. Which of the following can be possible amount drawn?

- a) 5000 b) 8800 c) 10000 d) 9500

62) I read $\frac{3}{5}$ of a book on one day and $\frac{4}{5}$ of the remainder on another day. If now there were 27 pages unread, the book (approx.) contains

- a) 240 b) 340 c) 230 d) 140

63) During a quality control conference if 30 employees are seated in column, then 50 columns could be formed. However, if 25 employees are seated in a column then how many such columns could be formed?

- a) 105 b) 100 c) 75 d) 60

64) Namita has 4.2 kg of flour. She has been asked to make 5 cup cakes out of every $1\frac{1}{2}$ kg of flour. How many cup-cakes can she bake out of the flour she has?

- a) 21 b) 24 c) 30 d) 42

65) Pulse rate of a teenager is 12 beats in 10 sec. At this rate would his pulse rate more than, equal to or less than 100 beats per minute?

- a) less than b) greater than c) equal to d) not sufficient

66) $(4^{-1})^2$? 6^{-1}

- a) 12^2 b) 12^{-2} c) $(2)^{12}$ d) None of the above

67) Rajesh commutes daily by travelling $\frac{4}{5}$ of distance between his home and office by metro train, $\frac{3}{20}$ by auto and remaining 1 km on foot. What is distance between his home and office?

- a) 12 km b) 16 km c) 24km d) 20km

68) The value of $(8^{25} \cdot 8^{26})$ is

- a) $7 \cdot 8^{25}$ b) $7 \cdot 8^{26}$ c) $8 \cdot 8^{25}$ d) None

69) What is value of i^{34} ?

- a) -1 b) 1 c) 0 d) i

70) Evaluate: $(4.56^3 + 5.44^3)/(4.56^2 - 4.56 \cdot 5.44 + 5.44^2)$

- a) 0.88 b) -0.88 c) 1 d) 10

71) Rahul purchased 7 DVDs each of which costs Rs.17. He gave a five hundred rupee note to the shopkeeper. The amount returned to him is divisible by:

- a) 3 b) 7 c) 9 d) 11

72) What is the value of $25^{1.5}$?

- a) 325 b) 12.5 c) 32.5 d) 125

73) $0.00001 + 0.000001 + 0.00010 + 0.00100 =$

- a) 0.0001111 b) 0.00111 c) 0.001111 d) 0.0010111

74) Microscope of power 1000 X can make things appear 1000 times larger when placed under it. How large will an object of diameter $3 \cdot 10^{-4}$ mm appear when placed under it?

- a) 0.003mm b) 3mm c) 0.03mm d) 0.3mm

75) What is the value of square of $7\frac{1}{2}$ when it is expressed as a mixed fraction?

- a) $49\frac{1}{2}$ b) $49\frac{1}{4}$ c) $56\frac{1}{4}$ d) $14\frac{1}{4}$

76) If $abc4d$ is divisible by 4, what cannot be the value of d?

- a) 0 b) 4 c) 8 d) 2

77) If $m^n = 2401$, then $m/n =$

- a) $4/7$ b) $7/4$ c) $11/3$ d) $4/11$

78) Which of the following numbers is the smallest?

- a) $1/12$ b) $1/6$ c) $1/4$ d) $1/3$

79) Sara has 400 marbles. If she gives $\frac{1}{5}$ th of her marbles to Sam and Sam gives $\frac{3}{4}$ th of his marbles to David, then how many marbles does Sam have left?

- a) 80 b) 20 c) 60 d) 200

80) Which of the following must be added to 3651 so that it can be divisible by 21?

- a) 1 b) 2 c) 3 d) 4

81) Simplify $[\{(1/8)^{-1}\}^{-4}]^{-1}$

- a) 4906 b) 4096 c) 4960 d) 4690

82) The number $98181*6$ is completely divisible by 9. Smallest whole digit number in place of * can be?

- a) 0 b) 1 c) 2 d) 3

83) $3 \cdot (4^4 + 4^3 + 4^2 + 4 + 1) =$

- a) 1019 b) 1029 c) 1026 d) 1023

84) Solve : $\sqrt{9 - \sqrt{3 + \sqrt{5 - \sqrt{3 + \sqrt{169}}}}}$

- a) $\sqrt{7}$ b) 1 c) 0 d) $\sqrt{5}$ e) $\sqrt{2}$

85) Find the value of x if $8^{2x}/8^{-5} = 8^7$

- a) 1 b) 0 c) -1 d) None of the above

86) Among the following options which one does not lie in the given range: $1/6 < x < 17/12$

- a) $2/7$ b) $1/2$ c) $4/3$ d) $13/11$ e) $20/13$

87) Product of 2 odd numbers is :

- a) Always odd b) Always even

- c) Divisible by 6 d) Sometimes Odd & Sometimes even
- 88) A number when divided by 5 leaves a remainder 2, when the square of the number is divided by 5 the remainder will be:
a) 4 b) 2 c) 1 d) 3
- 89) What number should be divided by $(81)^{1/2}$ to give the result as 81?
a) 9 b) 81 c) 72.9 d) .9
- 90) The ascending order of rational numbers $-7/10, -5/8, -2/3$ is:
a) $-7/10, -2/3, -5/8$ b) $-7/10, -5/8, -2/3$
c) $-5/8, -7/10, -2/3$ d) $-2/3, -5/8, -7/10$
- 91) What is Z in $-0.196 / Z^2 = 10$
a) 0.14 b) 1.4 c) 0.014 d) 14
- 92) Number '1' is a
a) Prime number b) Composite number
c) Positive integer d) Both a & c
- 93) $4/5 \times 61/80 \times 10/9$
a) $61/90$ b) $90/61$ c) $60/91$ d) None of the above
- 94) What should be multiplied by 2880 to make it a perfect square?
a) 2 b) 3 c) 5 d) 7
- 95) What is the least number which should be added to 0.0282 to make it a perfect square?
a) 0.0007 b) 0.0042 c) 0.0002 d) 0.0003
- 96) A juice container was $4/5$ full. Ravinder poured 4 glasses from it and then poured two glasses back. The container now is $3/4$ full. How many glasses can be filled if the entire container is emptied?
a) 32 b) 36 c) 44 d) 40
- 97) About 4 out of 5 people are right handed, if there are 40 employees in an office how many would be right handed?
a) 40 b) 30 c) 32 d) 42
- 98) Sumithra put five grams of seeds in a bird feeder on Sunday. On Wednesday half of the seeds were eaten, so she put 3 more grams. On Friday she found half

- were eaten. How many grams were eaten in that week?
a) 3 g b) 2.5 g c) 2.75 g d) 5.25 g
- 99) Express the fraction $26/17$ up to three decimal points
a) 1.429 b) 1.535 c) 1.321 d) 1.529
- 100) What is the remainder if 8^{25} is divided by 7?
a) 25 b) 8 c) 1 d) 0
- 101) Which of the following is true for the value of $0.999\dots$?
a) It is equal to 1 b) It is less than 1
c) It is equal to 0.9 d) none of the above
- 102) Which of the following numbers is divisible by 11?
a) 1042 b) 1045 c) 1047 d) 1048
- 103) The population of a town three years ago was 'b' and the population of the town three years from now will be 'c'. What is the current population of the town, if it grows at the same rate?
a) \sqrt{bc} b) $b\sqrt{c}$ c) $c\sqrt{b}$ d) $b\sqrt{b/c}$ e) $\sqrt{\frac{b}{c}}$
- 104) The sum of the digits of a three digit number is subtracted from the number. The resulting number is divisible by
a) 6 b) 9 c) Both 6 & 9 d) All 3, 6 and 9
- 105) A petrol tank is already $(2/3)^{\text{rd}}$ filled. When 8 litre is added it is filled by $(5/6)^{\text{th}}$ of the tank. Find the tank capacity
a) 30 b) 24 c) 48 d) 32
- 106) $abc=9000$. (a,b)(b,c)(c,a) are pairs of co-prime numbers. Find, $a + b + c = ?$
a) 142 b) 1009 c) 119 d) None of these
- 107) Anand packs 304 marbles into packets of 9 or 11 so that no marble is left. Anand wants to maximize the number of bags with 9 marbles. How many bags does he need if there should be at least one bag with 11 marbles?
a) 36 b) 8 c) 24 d) 32
- 108) 1, 2, 3 and 4 can form 256 different four digit numbers. If digits repeated, two of them are 1111 and 1113. Then find the sum of 256 numbers.
a) 711040 b) 711000 c) 711038 d) 711042

109) $4^{85} + 2^{3383} + 4^n$. What is the value of n to make it a perfect square?

- a) 85 b) 170 c) 3297 d) 3285

110) Find the remainder : $(29)^{31} \div 9$

- a) 2 b) 9 c) 1 d) 8

111) $(3)^{87} + (5)^{87} \div 26$. Find the remainder.

- a) 22 b) 25 c) 1 d) 21

112) How many of the integers from 1 to 86 (inclusive) contain the digit 4 or have the digit sum divisible by 4?

- a) 40 b) 39 c) 24 d) 34

113) What is the Greatest Common Divisor (the largest number that will divide both numbers with no remainder) of the following two numbers. $X = 111111...(27810 \text{ times})$ and $Y = 11111111...(1750 \text{ times})$

- a) 1111 (4 times) b) 1111111111 (10 times)
c) 11111111111 (11 times) d) 11111111111111111111 (21 times)

114) For which of the following values of n , is the number $16^{41} + 2^{7925} + 16^n$ a perfect square?

- a) 3922 b) 3921 c) 3924 d) 3920

115) In this question, A^B means A raised to the power B . What is the remainder when 48^{565} is divided by 7?

- a) 1 b) 4 c) 6 d) 5

116) A number when divided by 50 leaves a remainder 43. The same number when divided by 320 leaves a remainder n . How many values can n take?

- a) 64 b) 6 c) 10 d) 32

117) What is the highest power of 91 that divides $78!$?

- a) 4 b) 3 c) 6 d) 13

118) What is the value of

$$\frac{44444445 \times 88888885 \times 44444442 + 44444438}{44444444^2}$$

Note: All numbers in the question and answer options are 8 digit numbers.

- a) 88888883 b) 88888884 c) 88888888 d) 44444443

119) The sum of 5 numbers in AP is 30 and the sum of their squares is 190. Which of the following is the third term?

- a) 5 b) 6 c) 8 d) 9

120) The least number which when divided by 48, 60, 72, 108 and 140 leaves 38, 50, 62, 98 and 130 as remainders respectively, is:

- a) 4562 b) 15110 c) 2135 d) 7589

121) A person starts writing all the 4 digit numbers, how many times he has written the digit 2?

- a) 4200 b) 4700 c) 3700 d) 3200

122) How many 2's are there between the terms 112 to 375?

- a) 313 b) 159 c) 156 d) 315

123) The sum of four consecutive two digit odd numbers, when divided by 10, becomes a perfect square. Which of the following can possibly be one of these four numbers?

- a) 67 b) 41 c) 25 d) 31

124) Consider the sequence of numbers 0, 2, 2, 4,...where for $n > 2$ the n th term of the sequence is the units digit of the sum of the previous two terms. Let S_n denote the sum of the first n terms of the sequence. What is the smallest value of n for which $S_n > 2771$?

- a) 692 b) 693 c) 694 d) 700

125) I bought a certain number of marbles at rate of 59 marbles for rupees 2 times M , where M is an integer. I divided these marbles into two parts of equal numbers, one part of which I sold at the rate of 29 marbles for Rs. M , and the other at a rate 30 marbles for Rs. M . I spent and received an integral number of rupees but bought the least possible number of marbles. How many did I buy?

- a) 870 b) 102660 c) 1770 d) 1740

126) Cora, a blue whale, participated in a weight loss programme at the behest of his girlfriend. At the end of every month, the decrease in weight from the original weight was measured and noted as 1, 2, 6, 21, 86, 445, 2676. While, Cora made a steadfast effort, the weighing machine showed an erroneous weight once. What weight was that?

- a) 445 b) 2676 c) 84 d) 2

127) How many different integers can be expressed as the sum of three distinct numbers from the set {3, 8, 13, 18, 23, 28, 33, 38, 43, and 48}?
a) 421 b) 20 c) 10 d) 22

128) $77!(77! - 2 \cdot 54!)^3 / (77! + 54!)^3 + 54!(2 \cdot 77! - 54!)^3 / (77! + 54!)^3$
a) $2 \cdot 77! + 2 \cdot 54!$ b) $77! - 54!$ c) $77! + 54!$ d) $2 \cdot 77! - 2 \cdot 54!$

129) $1 - 2 + 3 - 4 + \dots - 98 + 99 = ?$
a) -49 b) 0 c) 50 d) -50

130) When 'M' is divided by 6 it leaves a remainder 2 and when 'N' is divided by 6 it leaves a remainder 3. What will be remainder if 'M-N' is divided by 6? (M>N)
a) 1 b) 2 c) 4 d) 5

131) Which satisfies the condition P must be greater than Q? (i) $0.9^P = 0.9^Q$ (ii) $0.9^P = 0.92^Q$ (iii) $0.9^P > 0.9^Q$ (iv) $0.9^P < 0.9^Q$
a) I b) II c) III d) IV

132) There are 14 digits of credit card number to be filled. Each of the below three boxes contains continuous digits of 18 as sum. Given: 4th digit is 7 and 7th digit is x. Then what is the value of x?
a) 1 b) 7 c) 4 d) 2

133) What is the greatest possible positive integer n if 8^n divides $(44)^{44}$ without leaving a remainder?
a) 14 b) 28 c) 29 d) 15

134) Find the number of divisors of 1728.
a) 28 b) 21 c) 24 d) 18

135) Find the sum of the series given below $1(1!) + 2(2!) + 3(3!) + \dots + 2012(2012!)$.
a) $2013! + 1$ b) $2013! - 1$ c) $2012! + 1$ d) $2012! - 1$

136) How many number x (x being integer) with $10 \leq x \leq 99$ are 18 more than sum of their digits?
a) 12 b) 9 c) 18 d) 10

137) The mean of three numbers is 10 more than the least of the numbers and 15 less than the greatest of the three. If the median of the three numbers is 5, then the sum of the three is :

a) 5 b) 20 c) 30 d) 25

138) When numbers are written in base b, we have $12 \times 25 = 333$. The value of b is
a) 8 b) 16 c) None of these d) 7

139) For which of the following n is the number $2^{74} + 2^{2058} + 2^{2n}$ a perfect square?
a) 2020 b) 2011 c) 2012 d) 2100

140) Sum of the digits in the product of $(16^{100}) \cdot (125^{135})$ is
a) 2 b) 5 c) 3 d) 8

141) A sequence x_1, x_2 and x_3 is said to be in a harmonic progression if the reciprocals $1/x_1, 1/x_2$ and $1/x_3$ are in arithmetic progression. The 5th term and the 7th term for an harmonic progression are 30 and 50 respectively. What is the difference between the 6th and 4th term?
a) 16 b) 14.5 c) 13.4 d) 12.5

142) What is the remainder when $6^{17} + 17^6$ is divided by 7?
a) 1 b) 6 c) 0 d) 3

143) The first 44 integers are written in order to form the large number $N = 123456 \dots 424344$. What is the remainder when N is divided by 45?
a) 4 b) 9 c) 14 d) 18

144) The sum of 3 consecutive numbers of the four numbers A, B, C, D are 4613, 4961, 5010, 5099 then what is the largest number among A, B, C, D ?
a) 1948 b) 1463 c) 1601 d) 1550

145) In subtraction problem below, some single digits (not necessarily distinct) are replaced by letters. Find the value of $7 \cdot A + 5 \cdot B + 6 \cdot C \cdot D$

$$\begin{array}{r} A \ 5 \ C \ 5 - 1 \ B \ 8 \ 7 \ \underline{\hspace{1cm}} \ 6 \ 7 \ 4 \\ D \end{array}$$

a) 235 b) 242 c) 259 d) 230

146) There are 5 distinct integers a, b, c, d, e in ascending order. $(68-a)(68-b)(68-c)(68-d)(68-e) = 725$. What is $a + b + c + d$?
a) 34 b) 136 c) 306 d) 238

147) If $(3a+6b)/(5a+12b) = 12/23$ determine the value of $3a^2 + 5b^2 / ab$
a) $19/2$ b) $32/3$ c) 9 d) $31/3$

148) $2481 = (\pm 1 \pm 2 \pm 3 \pm \dots \pm n)$. Find the minimum value of n.

- a) 65 b) 69 c) 70 d) 71
- 149) In an arithmetic progression there are 6 terms and their sum is 3. The first term is 4 times the third term. The fifth term in the progression is
- a) -3 b) 9 c) -4 d) -9
- 150) What is the remainder when $2(8!) - 21(6!)$ divides $14(7!) + 14(13!)$?
- a) $9!$ b) 1 c) $8!$ d) $7!$
- 151) There is a set of 32 distinct points on a plane with the following characteristics: There is a subset A consisting of ten collinear points. Any subset of three or more collinear points from the 32 are a subset of A. How many distinct triangles with positive area can be formed with each of its vertices being one of the 32 points? (Two triangles are said to be distinct if at least one of the vertices is different.)
- a) 1540 b) 3850 c) 4960 d) 4840
- 152) When $(m+n)$ is divided by 12, remainder is 8. When $(m-n)$ is divided by 12, remainder is 6. What is the remainder when $(m \cdot n)$ is divided by 6?
- a) 1 b) 2 c) 0 d) 3
- 153) Find the remainder when $34^{31^{301}}$ is divided by 9.
- a) 2 b) 7 c) 0 d) 4
- 154) Out of a group of students, $49/5$ times the square root of the total numbers are playing cricket. Remaining 2 are idle. Find the total number of students.
- a) 100 b) 81 c) 144 d) 121
- 155) How many palindromes are there between 4000 and 83,000?
- a) 800 b) 790 c) 890 d) 780
- 156) If $f(x) = ax + b$, $f(f(f(x))) = 8x + 21$. Find the value of $a + b = ?$
- a) 2 b) 6 c) 5 d) 7
- 157) In this sequence 1, 22, 333, 4444, 11, 2222, 333333, 44444444, 111, 222222,.....What is 2170th term???
- a) 2 (1086 times) b) 3 (1084 times)
- c) 2 (542 times) d) 2 (543 times)
- 158) Find the greatest number that will divide 148, 246 and 623 leaving remainders 4, 6 and 11 respectively.

- a) 20 b) 12 c) 6 d) 48
- 159) Find the sum of prime numbers from 1 to 100 which when divided by 4 and 5 leaves the remainders 1 and 4 respectively.
- a) 220 b) 118 c) 260 d) 225
- 160) Find the last digit of $2^{1999} \times 2^{2013}$
- a) 2 b) 4 c) 6 d) 8
- 161) For any two numbers, we define an operation \$ yielding another number X \$ Y such that following condition holds: X \$ X = 0. Also for all X, X \$ (Y \$ Z) = X \$ Y + Z Find the Value of 2012 \$ 0 + 2012 \$ 1912
- a) 2112 b) 100 c) 5936 d) cannot be determined
- 162) If $A = x^3 y^2$ and $B = xy^3$, then find the HCF of A and B.
- a) $X^4 Y^5$ b) XY^2 c) XY d) X^3
- 163) There are 60 pebbles and 2 persons A and B. A takes the 1 pebble, B takes the 2 pebble, again A takes 3 pebble and B takes 4 pebbles and it goes on alternatively. Who takes the maximum number of pebbles?
- a) A b) B c) Equal pebbles d) Cannot be determined
- 164) In this question A^B means A raised to the power B. If $f(x) = ax^4 - bx^2 + x + 5$. $f(-3) = 2$. Then $f(3) = ?$
- a) 3 b) -2 c) 8 d) 1
- 165) In the sequence 1,2,2,3,3,3,4,4,4,4,1,1,2,2,2,3,3,3,3,3,4,4,4,4,4,4,1,1,1,2,2,2,2,2,.... what is the 2926th term?
- a) 1 b) 2 c) 3 d) 4
- 166) A number when successively divide by 5, 3, 2 gives a remainder of 0, 2 and 1 respectively in that order. What will be the remainder when the same number is divided successively by 2, 3 and 5 in that order?
- a) 4,3,2 b) 1,0,4 c) 2,1,3 d) 4,1,2
- 167) How many prime numbers are there which are less than 100 and greater than 3 such that they are of the following: (i) $4x + 1$ ii) $5y - 1$
- a) 11 b) 12 c) 7 d) None of these

168) On a 26 question test, 5 points were deducted for each wrong answer and 8 points were added for right answers. If all the questions were answered, how many were correct if the score was zero.

- a) 10 b) 11 c) 12 d) 13

169) A boy buys 18 sharpeners (brown or white) for Rs.100. For every white sharpener, he pays one rupee more than the brown sharpener. What is the cost of white sharpener and how much did he buy?

- a) 5,13 b) 5,10 c) 6,10 d) None of these

170) What is the remainder of $(16937^{30})/31$

- a) 1 b) 2 c) 3 d) 6

171) $8+88+888+\dots+8888\dots\dots8888$. There are 21 "8" digits in the last term of the series. Find the last three digits of the sum.

- a) 458 b) 648 c) 658 d) 568

172) If x^y denotes x raised to the power y, find last two digits of $(1941^{3843}) + (1961^{4181})$

- a) 2 b) 82 c) 42 d) 22

173) Assume that $f(1) = 0$ and $f(m+n)=f(m) + f(n)+ 4(9mn-1)$.For all natural numbers (integers >0) m& n. What is the value of $f(17)$?

- a) 5436 b) 4831 c) 5508 d) 4832

174) The numbers 272738 and 232342, when divided by n, a 2 digit number, leave a remainder of 13 and 17 respectively. Find the sum of the digits of n?

- a) 7 b) 8 c) 5 d) 4

175) 60, 48, 38, 28, 24, 20, 18. What is the wrong number in the sequence?

- a) 28 b) 38 c) 60 d) 18

176) What is the remainder of $(32^{31^{301}})$ when it is divided by 9?

- a) 3 b) 5 c) 2 d) 1

177) Which of the following numbers must be added to 5678 to give remainder of 35 when divided by 460?

- a) 980 b) 797 c) 955 d) 618

178) A number divided by 357 leaves 5 as remainder. If the number is divided by 17, what is the remainder?

- a) 9 b) 3 c) 5 d) 7

179) A girl entered a store and bought x flowers for y dollars (x and y are integers). When she was about to leave, the clerk said, If you buy 10 more flowers I will give you all For \$2, and you will save 80 cents a dozen. The values of x and y are:

- a) (15,1) b) (10,1) c) (5,1) d) Cannot be determined

180) In the given figure, if the sum of the values along each side is equal, find the possible values of a, b, c, d, e and f.

32	a	b	10
e			f
15	c	d	5

- a) 9, 7, 20, 16,6,38 b) 4,9,10,13,16,38

- c) 4,7,20,13,6,38 d) 4,7,20,16,6,33

181) How many positive integers less than 500 can be formed using the numbers 1, 2,3, and 5 for digits, each digit being used only once?

- a) 52 b) 68 c) 66 d) 34

182) In the sample subtraction problem below, single digits are replaced by letters. Find the values of $3*A + 7*B + 4*C*D = ?$ A 5 C 13 B 7 9 _____ 3 9 7 D

- a) 80 b) 95 c) 89 d) 96

183) In the sample subtraction problem below, single digits are replaced by letters. Find the values of $3*A + 7*B + 4*C*D = ?$ A 5 C 13 B 7 9 _____ 3 9 7 D

- a) 5/9 b) 4/9 c) 2/9 d) 1/9

184) An absentminded professor has a very peculiar problem, in that he cannot remember numbers larger than 15. However, he tells his wife, I can remember any number up to 100 by remembering the three numbers obtained as remainders when the number is divided by 3, 5 and 7 respectively. For example, (2,2,3) is 17. Professor remembers that he had (1,1,6) rupees in the purse, and he paid (2,0,6) rupees to the servant. How much money is left in the purse?

- a) 59 b) 61 c) 49 d) 56

185) $0 > a > b > c > d$. Which is largest?

- a) $(b+d)/(a+c)$ b) $(a+d)/(b+c)$ c) $(b+c)/(a+d)$ d) $(c+d)/(a+d)$

186) How many 5's will be there in the number 121122123... till 356?

- a) 51 b) 54 c) 50 d) 49

187) The rupee/coin changing machine at a bank has a flaw. It gives 10 ten rupee notes if you put a 100 rupee note and 10 one rupee coins if you insert a 10 rupee

note but gives 10 hundred rupee notes when you put a one rupee coin. Sivaji, after being ruined by his rivals in business is left with a one rupee coin and discovers the flaw in the machine by accident. By using the machine repeatedly, which of the following amounts is a valid amount that Sivaji can have when he gets tired and stops at some stage (assume that the machine has an infinite supply of notes and coins)

- a) 26975 b) 53947 c) 18980 d) 33966

188) 26ab5 is a five digit number divisible by 25. If the number formed from the two digits ab is a multiple of 13, then ab =?

- a) 52 b) 65 c) 10 d) 25

189) Find the number of zeroes in $11^{1*2^2*3^3*...48^{48}*49^{49}}$?

- a) 250 b) 225 c) 545 d) 135

190) In this question, A^B means A raised to the power B. If $x^y z < 0$, then which one of the following statements must also be true? I . $XZ < 0$. II . $Z < 0$. III. $XYZ < 0$.

- a) I and II b) III only c) None of above d) I only

191) The addition $641+852+973 = 2456$ is incorrect. What is the largest digit that can be changed to make the addition correct

- a) 5 b) 6 c) 4 d) 7

192) a, b, c are non-negative integers such that $28a + 30b + 31c = 365$. Then $a + b + c$ is:

- a) Greater than 13 b) Less than or equal to 11 c) 13 d) 12

193) A drinks machine offers three solutions Tea, Coffee or one of the two at random but the machine has been wired up wrongly so that each button does not give what it claims. If each drink costs Rs.50, what is the minimum amount of money that must be spent to determine with certainty the correct labelling of the buttons?

- a) Rs.100 b) Rs.50 c) Rs.150 d) Cannot be determined

194) P, Q, R, S are distinct integers that can take values from 1 to 12. What is the possible smallest value for $(P/Q) + (R/S)$?

- a) $1/12 + 2/11$ b) $1/11 + 9/10$ c) $1/11 + 2/12$ d) $1/10 + 1/11$

195) If $ab64ab$ is divisible by 12, then the least possible value of $a + b$ is?

- a) 4 b) 5 c) 6 d) 7

196) Find the odd man out: 2, 8, 20, 44, 83

- a) 8 b) 20 c) 44 d) 83

197) If $5+3+2 = 151022$, $9+2+4=183652$, $8+6+3 = 482466$ and $5+4+5 = 202541$, then $7+2+5$

- a) 143547 b) 132234 c) 2577224 d) 112321

198) If all the numbers between 11 and 100 are written on a piece of paper, how many times will the number '4' be used?

- a) 20 b) 19 c) 9 d) None of these

199) What is the value of A such that $X^2 - 11X + A$ and $X^2 - 14X + 2A$ will have a common factor?

- a) -1/2 b) 24 c) -2 d) 20

200) A man cannot remember numbers which are more than 15 till 100. Instead, he remembers a set of three numbers through which he can generate a given number. These 3 numbers are the remainders obtained by dividing the given number by 5, 7 and 13 respectively. Ex: Instead of remembering 17, he remembers it as (2,3,4) which are the remainders when 17 is divided by 5, 7 and 13 respectively. He has some amount in his purse which he remembers as (4,4,9) and he pays out some amount which he remembers as (3,0,2). What will be the amount that will be left in his purse?

- a) 40 b) 44 c) 46 d) 52

201) A man sold 12 candies in 10 \$ had loss of b % then again sold 12 candies at 12 \$ had profit of b % find the value of b.

- a) 9 b) 9.09 c) 10 d) 11

202) How many positive multiples of 10 that are less than 1000 are the sum of 4 consecutive integers?

- a) 51 b) 50 c) 49 d) None

203) The sum of two numbers is 2016 and their product is 32. The sum of their reciprocals is

- a) 63 b) 9 c) $32+\sqrt{2014}$ d) $32-\sqrt{2014}$

204) Sum of the two numbers is 45. The sum of their quotient and its reciprocal is 2.05. The product of numbers is

- a) 450 b) 205 c) 400 d) 500

205) Find the number of divisors of 1728 (including 1 and 1728)

- a) 28 b) 20 c) 30 d) 18

206) A number when divided by 406 leaves a remainder 115. What remainder would be obtained by dividing the same number by 29?

- a) 27 b) 7 c) 28 d) 19

207) If $(P/Q) - (Q/P) = 21/10$; $(4P/Q) + (4Q/P) = ?$

- a) $58/10$ b) $113/10$ c) $58/5$ d) $121/110$

208) Find a number such that when it is added to 7249 will be perfectly divisible by 12, 14, 21, 33 and 54.

- a) 8136 b) 9123 c) 8727 d) 9383

209) How many numbers are divisible by 4 between 1 to 100

- a) 24 b) 23 c) 22 d) 25

210) Find the unit digit of product of the prime number up to 50.

- a) 0 b) 2 c) 4 d) 8

211) How many five digit numbers are there such that two left most digits are even and remaining are odd.

- a) 2375 b) 2300 c) 2475 d) 2378

212) $13_46_8_180_210_75 = 64$. Use + and - in the empty places to make the equation holds good. Take m = number of + and n = number of - . Find m - n?

- a) 1 b) 0 c) -1 d) 2

213) Rahul took part in a cycling game $1/5$ were ahead of him and $5/6$ were behind him then total number of participants are?

- a) 28 b) 29 c) 30 d) 31

214) How many 4 digit numbers contain number 2.

- a) 3170 b) 3172 c) 3174 d) 3168

215) How many numbers are divisible by 4 between 1 to 100

- a) 24 b) 25 c) 26 d) 27

216) $(11111011)_2 = ()_8$

- a) 340 b) 373 c) 356 d) 387

217) $161?85?65?89 = 100$, then use + or - in place of ? and take + as m, - as n then find value of m-n.

- a) 1 b) -2 c) 3 d) -1

218) Find the unit digit of product of the prime number up to 50.

- a) 0 b) 1 c) 2 d) 3

219) If $[x^{(1/3)}] - [x^{(1/9)}] = 60$ then find the value of x.

- a) 53 b) 74 c) 49 d) 54

220) $x^2 - y^2 = 16$ and $xy = 15$ so find out $x + y$?

- a) 5 b) 6 c) 7 d) 8

221) Census population of a district in 1981 was 4.54 Lakhs, while in year 2001 it was 7.44 Lakhs. What was the estimated mid-year population of that district in year 2009.

- a) 8.6 lakhs b) 7.5 lakhs c) 6 lakhs d) 5 lakhs

222) Find the maximum value of n such that $50!$ is perfectly divisible by 2520^n .

- a) 6 b) 7 c) 8 d) 9

223) There is well of depth 30 m and frog is at bottom of the well. He jumps 3 m in one day and falls back 2 m in the same day. How many days will it take for the frog to come out of the well?

- a) 26 days b) 27 days c) 28 days d) 29 days

224) $(1 \times 5) + 1 / (5 \times 9) + 1 / (9 \times 13) + \dots + 1 / (221 \times 225)$ is

- a) $28/221$ b) $56/221$ c) $56/225$ d) None of these

225) The number of zeros at the end of the product of all prime numbers between 1 and 1111 is?

- a) 0 b) 1 c) 2 d) 3

226) Due to some defect in our elevator, I was climbing down the staircase. I'd climbed down just 7 steps when I saw a man on the ground floor. Continuing to walk down, I greeted the man and I was surprised to see that when I was yet to get down 4 steps to reach the ground floor, the man had already finished climbing the staircase. He perhaps climbed up 2 steps for every 1 of mine. How many steps did the staircase have?

- a) 11 b) 22 c) 33 d) 44

227) Marbles are to be distributed. Ann gets 1, Mary gets 2, Rose gets 3 and Lisa gets 4. John Brown gets as much as his sister. Tim Smith gets 2 times as much as his sister. Neil Johnson gets 3 times as much as his sister. Sam Paul gets 4 times as much as his sister. Find the surnames of Ann, Mary, Rose and Lisa?

- a) 32 b) 33 c) 34 d) 35

228) $XZY + XYZ = YZX$. Find the three digits

- a) 465 b) 764 c) 495 d) 654

229) In a 5 digit number, 3 pairs of sum is 11 each, last digit is 3 times first one, 3rd digit is 3 less than 2nd, 4th digit is 4 more than the second one. Find the number.

- a) 24186 b) 72622 c) 87361 d) 34321

230) An escalator is descending at constant speed. A walks down and takes 50 steps to reach the bottom. B runs down and takes 90 steps in the same time as A takes 10 steps. How many steps are visible when the escalator is not operating?

- a) 200 b) 300 c) 100 d) 400

231) The difference b/w the square of 2 numbers is 256000. The sum of 2 numbers is 1000. then the numbers are

- a) 600, 400 b) 628, 372 c) 640, 360 d) None

232) Sum of the marks of 4 sisters A, B, C, D are 45. When the mark 2 is added to a, 2 is subtracted from b's marks, multiplying 2 with c's marks and the d's is dividing by 2 the teacher gets same marks. Who scored lower marks?

- a) c b) a c) d d) none of these

233) The number is four less than 2 times of other number. The difference is 21. What is the greatest number?

- a) 50 b) 46 c) 31 d) 21 e) 38

234) A number which is divided by 8 gives 15 as quotient and 3 as remainder. Find that number?

- a) 205 b) 108 c) 138 d) 132 e) 123

235) On dividing a number by 75, we get 3 as remainder. What will be the remainder when the number is divided by 15?

- a) 9 b) 1 c) 3 d) 4

236) If all the number from 1 and 51 which is n divisible by 3 are arranged in descending order, which of the following numbers will come at the seventh and tenth from place from the top?

- a) 33, 27 b) 33, 21 c) 21, 30 d) 33, 24 e) 33, 27

237) The difference between the two integers is 5 and their product is 500. find the numbers.

- a) 15, 20 b) 20, 25 c) 24, 25 d) 21, 26

238) Which natural number is nearest to 8485, which is completely divisible by 75?

- a) 8475 b) 8500 c) 8550 d) 8525

239) The sum of a number and its reciprocal is one-eighth of 34. What is the product of the number and its square root?

- a) 8 b) 27 c) 32 d) None of these

240) A two digit number become five sixth of itself when the number is reversed. The number differs by 1. What is the number?

- a) 67 b) 54 c) 92 d) 79

241) The sum all even natural numbers between 1 and 31 is

- a) 16 b) 128 c) 240 d) 512

242) Find value of $51+52+53+54+\dots+100$

- a) 3775 b) 5050 c) 1275 d) 2525

243) $2056 \times 967 = ?$

- a) 1988152 b) 1954212 c) 1864212 d) 1874565

244) What is the Unit digit of $3^{65} \times 6^{59} \times 7^{71}$

- a) 1 b) 2 c) 4 d) 6

245) The sum of two numbers is 22. Five times of one number is equal to 8 times of other. The bigger of the two numbers is:

- a) 10 b) 12 c) 15 d) 16 e) None

246) If $\frac{2}{3}$ rd of numbers is 96, what will be the $\frac{3}{4}$ th of that number?

- a) 108 b) 198 c) 128 d) 48 e) 92

247) A two digit number B is taken. The digits are added together and squared. If is the value of A. If the difference between A and B is 27, then the two digit number B is:

- a) 24 b) 54 c) 45 d) either 54 or 45

248) The sum of two numbers is 158 and their difference is 24. Determine the numbers.

- a) (89,69) b) (92,66) c) (90,68) d) (91, 67)

249) What is the sum of first 10 terms of the following series?

6,12,20,30,42,.....

- a) 574 b) 572 c) 576 d) 570

250) Find the sum of first 15 terms of the following series.

20,3,22,9,24,27,26,81,.....

- a) 3245 b) 4585 c) 3495 d) 3845

251) Determine the number of terms in the expansion of $(-5x^5 + 2x^3 - 3)^4$.

- a) 15 b) 30 c) 42 d) 18

252) How many numbers less than 500 are divisible by 12 and 18?

- a) 14 b) 11 c) 10 d) 13

253) If 27 is added to a two digit number, its digits gets reversed. If the sum of the number and number obtained by reversing its digits is divisible by 7, then what is the sum of the digits of the number?

- a) 6 b) 10 c) 7 d) 8

254) How many 2-digit numbers leaves the remainder "1" when divided by 2?

- a) 18 b) 28 c) 45 d) 58

255) Determine the sum of all even factors of 680.

- a) 1215 b) 1125 c) 1512 d) 1152

SEQUENCE AND SERIES

1) Find the next number: 8,8,15,23, 38, ____

- a) 61 b) 57 c) 52 d) 69

2) Find the missing number in 25, 38, __, 64, -27, 90

- a) -1 b) 51 c) 39 d) -32

3) 70, 54, 45, 41..?

- a) 35 b) 36 c) 38 d) 40

4) What will be the next term in the series 1, 7, 8, 49, 50, 56, 57, 343?

- a) 344 b) 350 c) 2401 d) cannot be determined

5) Find the missing term(s) in the series given below.6,9,27,51,99.

- a) 15 b) 18 c) 9 d) 12

6) Find the missing terms in the series given below:22, 191, ?, 328, 364, 445, 509, 558.

- a) 215 b) 198 c) 228 d) 207

7) Find the missing terms in the series given below:55, 98, ?, 184, 235, 270, 325.

- a) 135 b) 145 c) 153 d) 146

8) Find the missing terms in the series given below:35, 260, ?, 550, 631, 680, 705

- a) 445 b) 414 c) 429 d) 420

9) What is the next number of the following sequence 7, 14, 55, 110,?

- a) 198 b) 121 c) 154 d) 157

10) Find the next term in the given series 47, 94, 71, 142, 119, 238, _ ?

- a) 331 b) 360 c) 215 d) 340

11) b, x, e, u, h, _?

- a) z b) w c) r d) t

12) 3, 5, 11, 29, 83, 245, _ ?

- a) 486 b) 543 c) 733 d) 327

13) 4, 6, 10, 14, 22, 26, 34, 38, 46, _ ?what is next term in the series.

- a) 55 b) 56 c) 57 d) 58

14) y, _?, q, m, i

- a) w b) u c) t d) l

15) What is the next number in the series 3, 7, 13, 19....

- a) 29 b) 30 c) 31 d) 32

16) What are the next three terms in the series 3, 6, 7, 12, 13, 18, 19, 24, _ _ _?

a) 25, 30, 31 b) 27, 56, 98 c) 28, 54, 102 d) None of these

17) What is the next number in the series? a, b, d, h, _?

a) p b) q c) r d) s

18) Find the letter that comes in the place of " - ": b, _, d, d, e, d, f, g, d.

a) e b) f c) c d) d

19) 3,4,7,10,13,16,19,22, . . . Find 10th term in series

a) 27 b) 28 c) 29 d) 30

20) a,d,i,p,? What is next term?

a) p b) q c) s d) y

21) 16, 36, 100, 324, _ ? Find the next term.

a) 1156 b) 2543 c) 1124 d) 1347

22) What is the next number of the following sequence 7, 14, 55, 110, _ ?

a) 120 b) 121 c) 119 d) 122

23) Next term in series 3, 32, 405, _

a) 6244 b) 6144 c) 6344 d) 6044

24) Complete the series..2 2 12 12 30 30?

a) 56 b) 72 c) 54 d) 52

25) 1, 11, 21, 1211, 111221, 312211, . . . what is the next term in the series?

a) 11312221 b) 13122112 c) 13112221 d) 13112222

26) Find the 8th term in series?2, 2, 12, 12, 30, 30, - - - -

a) 48 b) 50 c) 52 d) 56

27) Find the next three terms of the series;1, 4, 9, 18, 35 - - - -

a) 66,124,244 b) 72,144,512 c) 68, 133, 262 d) 66,110,198

28) What is the 8th term in the series 1, 4, 9, 18, 35, 68, . . .

a) 131 b) 262 c) 133 d) 135

29) 1, 1, 2, 3, 6, 7, 10, 11,?

a) 12 b) 13 c) 14 d) 15

30) 97, 86, 73, 58, 45, (?)

a) 34 b) 36 c) 38 d) 40

31) 12, 32, 72, 152,

a) 312 b) 325 c) 515 d) 613

32) 3, 5, 9, 15, 25, ?

a) 39 b) 40 c) 41 d) 42

33) ABC, ACE, ADG, ?

a) AEG b) AFH c) AEO d) AEI

34) A, E, I, M, Q ?

a) T b) U c) V d) W

35) DMP,FLN,HKL,JJJ,?

a) MIH b) III c) LIH d) MII

36) 1, 2, 4, 7,11,?

a) 11 b) 13 c) 15 d) 16

37) A, B, D, ? , K

a) C b) G c) H d) L

38) 8,12,24,60, ____

a) 120 b) 108 c) 142 d) 100

39) 79,64,26,15,____

a) 9 b) 6 c) 10 d) 8

40) 9,54,135,252,____

a) 400 b) 405 c) 380 d) 420

41) 2, 3, 6,18,108, ____

a) 54 b) 1002 c) 216 d) 1944

42) 2,4,12,48, ____

a) 240 b) 56 c) 64 d) 100

43) 10,7,12,10,14, ____

a) 14 b) 10 c) 13 d) 12

44) 3,15,35,63, ____
a) 99 b) 96 c) 72 d) 84 e) 108

45) 14,23,39,64, ____
a) 100 b) 125 c) 128 d) 148

46) 2, 4,12, 48, ____
a) 120 b) 240 c) 64 d) 96

47) 2, 5, 8, 11, 14, ____
a) 15 b) 16 c) 17 d) 18

48) 7, 10, 12, 10, 14, ____
a) 11 b) 7 c) 16 d) 13

49) 3,11, 25, 45, ____
a) 65 b) 71 c) 61 d) 75

50) 5, 11, 19, 29, ____?
a) 41 b) 51 c) 44 d) 39

51) 9, 3, 18, 6, 36, 12, ____
a) 24 b) 48 c) 60 d) 72

52) 5, 25, 51, 113, ____
a) 181 b) 121 c) 212 d) 241

53) 3, 7, 13, 21, ____
a) 36 b) 33 c) 41 d) 31

54) 10,14,23,39,64, ____
a) 100 b) 125 c) 128 d) 14

55) 18, 19, 21, 24, ____
a) 26 b) 27 c) 28 d) 29

56) 3,15,35,63, ____
a) 128 b) 99 c) 144 d) 100

57) 10, 7, 14, 10, 18 , ____
a) 11 b) 13 c) 22 d) 5

58) 10,7,12,14,____
a) 13 b) 15 c) 17 d) 9

59) Complete the series: 4, 20, 35, 49, 62, 74, ?
a) 76 b) 79 c) 83 d) 85

60) 11 23 47 83 131. What are the next three numbers?
a) 145 b) 178 c) 176 d) 191

61) Find the missing terms in the series given below: 21, 30, ?, 104, 185, 306, 475
a) 54 b) 55 c) 61 d) 56

NUMBER ANALOGIES

1) 7528 : 5306 :: 4673 : ?
a) 2367 b) 2451 c) 2531 d) 2489

2) 36:63:: 81:?
a) 108 b) 18 c) 99 d) 63

3) AFHO: OBOM::CHFM:?
a) GBLD b) GBJO c) GBLD d) GBDM e) IBDE

4) KMF: LLH::RMS:?
a) SLR b) SLU c) SSU d) SUS

5) MAR:RAMP:: INS : ?
a) MNOP b) SNIL c) JMPQ d) LYRD

6) DDFE: DFEE::JJCR:?
a) JCRR b) JCCR c) JRRC d) JJRC

7) BYDW:FVHT::GQIO
a) OUTR b) HYRE c) KNML d) OERE

PROBLEMS ON HCF AND LCM

1) The reciprocal of H.C.F and LCM of two number are $\frac{1}{12}$ and $\frac{1}{312}$ respectively. If one of the number is 24. Find the other number?
a) 126 b) 136 c) 146 d) 156

2) The product of two numbers is 9152 and their HCF is 8. Find the LCM.

- a) 1111 b) 1122 c) 1144 d) 1166

3) The LCM and HCF of two numbers are 2970 and 30 respectively. Prime factors of the product of two numbers are:

- a) 2, 3, 5, 11 b) 2, 3, 7, 11 c) 2, 4, 5, 11 d) 2, 3, 7, 1

4) If the sum of squares of two numbers is 2754, and their HCF is 9, LCM is 135, then the numbers are

- a) 27,36 b) 27,35 c) 28,45 d) 27,45

5) If the LCM and HCF of 2 numbers are 78 and 13 respectively, the product of 2 numbers can be expressed as

- a) $2 \times 3 \times 13 \times 11$ b) $2 \times 3 \times 13 \times 12$ c) $2 \times 3 \times 13 \times 13$ d) $2 \times 3 \times 13 \times 14$

6) If LCM and HCF of two numbers are 234 and 13 respectively. Then the smallest factor of the product of the two numbers is

- a) 2 b) 3 c) 4 d) 5

7) Product of two numbers is 5502, their LCM is 552. Find the HCF?

- a) 9 b) 8 c) 7 d) 6

8) HCF of two numbers is 11. And their LCM is 693. If one number is 77. Find the other number?

- a) 7 b) 9 c) 63 d) 99

9) If LCM of two prime numbers a and b ($a > b$) is 667 then the value of $7b - 5a$ is:

- a) 18 b) 16 c) 17 d) 12

10) The product of two numbers is 22806, the LCM is 552 and find the HCF?

- a) 42 b) 41.315 c) 89 d) 20

11) Find the least number which when divided by 5,7,13 leaves same remainder 3 in each case?

- a) 398 b) 453 c) 458 d) 463

12) Find the least number which when divided by 5,8 and 19 leaves remainders 2,5 and 16 respectively?

- a) 747 b) 757 c) 760 d) 767

13) What is the difference between the LCM and HCF of numbers 20,30 and 40?

- a) 100 b) 110 c) 120 d) 130

14) The square of one number is 25. If the HCF and LCM of two numbers are 5 and 35 respectively, Find the other number.

- a) 5 b) 7 c) 25 d) 35

15) The smallest number which when divided by 7,18,56 and 36 leaves a remainder zero?

- a) 504 b) 392 c) 390 d) 1012

16) The largest measuring cylinder that can accurately fill 3 tanks of capacity 98,182 and 266 litres each, is of capacity

- a) 2 litres b) 7 litres c) 14 litres d) 98 litres

17) What is the least amount that a person can have, such that when he distributes it into groups of Rs 16 or Rs.18 or Rs.20 or Rs.25, he is always left with Rs.4?

- a) Rs.1796 b) Rs.1804 c) Rs.2596 d) Rs.3604

18) Find the smallest number which when divided by 3, 5 and 7 leaves a remainder 2 in each case, and is divisible by 11

- a) 737 b) 735 c) 105 d) 107

19) HCF of 2472, 1284 and a 3rd number 'N' is 12. If LCM of these three numbers is $2^3 \times 3^3 \times 2^5 \times 5^1 \times 103 \times 107$, then 'N'?

- a) $2^6 \times 11^1 \times 17^1$ b) $2^6 \times 11^1 \times 71^1$
c) $2^6 \times 11^1 \times 103^1$ d) None

20) Which of the following can be the sum of the numbers whose LCM is 144 and HCF is 12?

- a) 144 b) 185 c) 176 d) 156

21) Find the smallest number which is divisible by 14, 22 and 26.

- a) 4004 b) 2002 c) 510 d) 1001

SURDS & INDICES

1) If $2^{2n-1} = (1/8^{n-3})$ then the value of n is

- a) 3 b) 2 c) 0 d) -2

2) $7^{a+4} \times 5^b = 1715$, then $ab = ?$

- a) 0 b) 2 c) -1 d) 4

- 3) Find the values of x if $8^{2x} - 8^5 = 8^7$
 a) 1 b) 0 c) -1 d) None
- 4) What is the value of $(a^3)^5 / (a^2)^4$
 a) $7a$ b) a^7 c) a^{-7} d) None of the above
- 5) Which of the following is the greatest among the four given values of X?
 a) $X = \sqrt{15}$ b) $X = 3\sqrt{25}$ c) $X = 4\sqrt{125}$ d) $X = 12\sqrt{625}$
- 6) What is the highest power of 2 in the following expression? $1800 * 25 * 48 * 212 * 41^{-2}$
 a) 19 b) 21 c) 20 d) 18 e) 17

SIMPLE INTEREST & COMPOUND INTEREST

- 1) What will be the final value of investment for the principal value of Rs. 80,000 for 4 years @ 10 % p. a. rate of interest?
 a) Rs.83,200 b) Rs. 1,12,000 c) Rs. 82,300 d) None of these
- 2) Ramakant wants to earn Rs.1500 interest on his deposit. He plans to buy a sack of grains with the interest. He puts Rs.5000 into his account that earns 2.5% interest .How long will he need to leave his money in the account to earn this interest that would help him by the sack of grains?
 a) 8 years b) 10 years c) 12 years d) 14 years
- 3) Sangeetha invested Rs.20, 000 at 8% per annum. If the interest is compounded half yearly, then total interest earned by Sangeetha at the end of year is:
 a) Rs.1,632 b) Rs.1,600 c) Rs.1,800 d) Rs.1,475
- 4) A man deposits Rs. 5000 in his bank account for 5 years to earn an interest of 12%. What amount will he get after 5 years
 a) 2000 b) 3000 c) 5300 d) 8000 e) 8300
- 5) Given that the interest is only earned on principal, if an investment of Rs.1000 amounts to Rs.1440 in 2 years, then what is the rate of interest earned?
 a) 20 b) 22 c) 21 d) 11 e) 44
- 6) A certain sum of money amounts to Rs.2500 in a span of 5years and further to Rs.3000 in a span of 7years at SI. Find the sum?
 a) 1000 b) 1200 c) 1050 d) 1250

- 7) The difference in simple interest and compound interest on a principal of Rs.10,00,000 in 3 years at 4% per annum is?
 a) 4000 b) 5000 c) 4864 d) 4500
- 8) What sum of money will accumulate Rs.5300 at 8% interest in 9 months?
 a) 5000 b) 5400 c) 4500 d) 4000
- 9) A bank advertises that you can double the money if you invest it with them for 8 years, what is the rate of Interest offered by them?
 a) 12.50% b) 10% c) 8.50% d) 14%
- 10) An investment earns 4 paise per rupee invested. If at the end of the year the interest earned by an investment is Rs100, then the investment is equal to:
 a) 2000 b) 2200 c) 1000 d) 2500 e) 4000
- 11) The simple Interest earned on a certain amount is double the money when invested for 15 years. What interest rate is offered?
 a) 26.66 % b) 12 % c) 30 % d) 13.33 %
- 12) A sum of money is borrowed and paid back in two annual instalments of Rs. 882 each allowing 5% C.I. The sum borrowed was:
 a) 1680 b) 1142 c) 640 d) 1640
- 13) If difference between the compound interest and simple interest on a sum of 5% p.a. for 2 years is Rs.20, then what is the sum?
 a) Rs.8000 b) Rs.4000 c) Rs.5000 d) Rs.6000
- 14) A person lent Rs.8000 at a rate of 15% p.a. compound interest. What is the interest received after 3 years?
 a) Rs.3847 b) Rs.4227 c) Rs.4167 d) Rs.4424
- 15) In how many years certain amount becomes thrice of itself at a rate of 12.5% p.a. simple interest?
 a) 24 years b) 14 years c) 20 years d) 16 years
- 16) What is the ratio of simple interest and compound interest earned on Rs.5000 at a rate of 10% p.a. in 2 years?
 a) 21:22 b) 20:21 c) 22:20 d) 21:20

PERCENTAGES

1) In an election between two candidates A and B, A won over B with 10% of the qualified votes. What is the percentage of total votes secured by B, if 20% of the polled votes were disqualified?

- a) 36% b) 44% c) 42% d) 45%

2) Manu invested 30% of his capital in petrol bonds and rest in life insurance plan. He has invested Rs.34000 more in life insurance plan than in petrol bonds. How much the total investment made by Manu?

- a) 25500 b) 59500 c) 85000 d) 95000

3) The price of rice increases by 30%, then by what percentage should its consumption be decreased so that the total expenditure remains same.

- a) 76.92% b) 23.07% c) 30% d) 25% e) 85%

4) A machine worth Rs.1,80,000 depreciates at the rate of 18% of the value of the machine per annum. The value of the machine in 18 months from now will be:

- a) Rs.2,31,516 b) Rs.1,34,316 c) Rs.1,50,000 d) Rs.1,00,000

5) A book store offers a 10% discount on all the books sold plus an additional discount of 5% on the total bill, if the total bill after the initial discount is more or equal to rs.1000. Dilshan bought 3 books worth Rs.450, Rs.520 and Rs.250 respectively. How much money was Dilshan able to save as a result of various discounts offered by the store?

- a) 102 b) 176.9 c) 61 d) 183

6) In a town of 2,00,000 citizens, if the population increases at a rate of 4% per annum, then what will be the population of the town in 2 years from now?

- a) 2,10,000 b) 3,55,555 c) 1,84,320 d) 2,16,000

7) A store has a banner of 25% off on MRP of all branded items. Sheetal goes into the store and buys a belt worth Rs.75, a shirt of Rs. 1,999 and a shawl of Rs.2,900. How much amount will she have to pay?

- a) 1234.50 b) 3730.50 c) 1245.65 d) 1245.89

8) A salesman has a record of selling even rejected piece to his customer without letting them know that the product is actually fault. His skills are rated with a probability of 80% efficiency. If he is given 20 faulty items, how many will be able to sell?

- a) 80 b) 20 c) 16 d) 4

9) The successive discounts of 6%, 10%, 15% are equal to a single discount of

- a) 25% b) 28.90% c) 30% d) 31% e) 28.09%

10) When the price of a pair of shoes is decreased by 10%, the number of pairs sold increased by 20%, what is the net effect on sales?

- a) 8% decrease b) 10% increase c) 10% decrease d) 8% increase

11) In an election the winning candidate won by 15% votes. If a total of 5000 votes were cast of which only 86% were eligible, then how many votes did the winning candidate get?

- a) 2000 b) 1800 c) 4000 d) 4300 e) 2300

12) The list price of an electric iron is Rs300, if two successive discounts of 15% and 10% is allowed its selling price will be:

- a) 229.50 b) 231.50 c) 232.50 d) 234.50

13) The population of a village decreases at the rate of 20% per annum. If its population 2 years ago was 10000. What is its present population?

- a) 6000 b) 7200 c) 6400 d) 7600

14) A television manufacturing company has decided to increase the sales in order to beat the economic slowdown. It decides to reduce the price of television sets by 25% as a result of which sales increased by 20%. What is the effect on the total revenue of the company?

- a) Decreased by 20% b) Increased by 20%
c) Increased by 10% d) Decreased by 10%

15) When 40 is subtracted from 50% of a number, the result is 50% of 500. Find one-tenth of the number.

- a) 29 b) 58 c) 75 d) 87

16) 60% of the companies are men. Remaining are women. If 25% of the men are given a salary of more than 3 lakh and if 25% of the company employees are given a salary of more than 3 lakh then what fraction of women are getting 3 lakh are lesser?

- a) $\frac{1}{10}$ b) $\frac{3}{10}$ c) $\frac{1}{5}$ d) $\frac{2}{3}$

17) The value of a scooter depreciates in such a way that its value at the end of each year is $\frac{3}{4}$ of its value at the beginning of the same year. If the initial value of the scooter is Rs. 39936. What is its value at the end of 4 years?

- a) 9984 b) 16848 c) 7488 d) 12636

18) A store is selling a jacket on sale at 30% off the marked price. A matching pair of pants is on sale at 50% off the marked price. If the marked price of the pants is Rs.11600 less than the marked price of the jacket and the total sale price of both items is Rs.14600, then what is the marked price of the jacket?

- a) 17000 b) 16700 c) 16900 d) 17100

19) A team won 80% of the games it played. It played 5 more games of which it won 3 and lost 2. Its loss percentage changed to 25%. How many games did it play overall?

- a) 20 b) 14 c) 16 d) 25

20) The value of a scooter depreciates in such a way that its value at the end of each year is $\frac{3}{4}$ of its value at the beginning of the same year. If the initial value of the scooter is Rs. 40,000. What is its value at the end of 3 years?

- a) Rs 23125 b) Rs 19000 c) Rs 13435 d) Rs 16875

21) There are 5 boxes in a cargo hold. The weight of the first box is 200 kg and the weight of the second box is 20% higher than the weight of the third box, whose weight is 25% higher than the first box's weight. The fourth box at 350 kg is 30% lighter than the fifth box. Find the difference in the average weight of the four heaviest boxes and four lightest boxes.

- a) 80 b) 75 c) 37.5 d) 116.8

22) A survey of n people in the town of Badaville found that 50 % of them prefer Brand A. Another survey of 100 people in the town of Chottaville found that 60% prefer Brand A. In total, 55% of all the people surveyed together prefer Brand A. What is the total number of people surveyed?

- a) 200 b) 150 c) 50 d) 100

23) Total income of 2003, 2004, 2005 is Rs. 36400. Every year the salary increases by 20%. What is the salary in 2003?

- a) 10,000 b) 12, 000 c) 8800 d) 5000

24) In a certain city, 60% of the registered voters are Congress supporters and the rest are BJP supporters. In an assembly election, if 75 % of the registered Congress supporters and 20% of the registered BJP supporters are expected to vote for Candidate A, what percentage of the registered voters are expected to vote for Candidate A?

- a) 53 b) 20 c) 60 d) 75

25) Two lumps of gold, silver and copper together weigh 20 Kg .one lump contains 75% gold and 31.25 grams silver per Kilogram. Another lump contains 85% gold and 30 grams silver per kilogram. The total quantity of silver in two lumps is 617.5 grams. If two lumps are melted to form one, the percentage of gold in it will be.

- a) 78% b) 75% c) 15.6% d) 87%

26) Mr.Raghuvendra's salary was increased by 40% and then in another quarter it was again increased by 40%. The original salary gets increased by:

- a) 40% b) 80% c) 88% d) 96%

27) If M is 30% of Q, Q is 20% of P, and N is 50% of P, then M/N is

- a) $\frac{4}{3}$ b) $\frac{3}{25}$ c) $\frac{6}{5}$ d) $\frac{3}{250}$

PROFIT AND LOSS

1) The cost of a chair and a table is in the ratio 2:3 . What is the total cost of ten tables and ten chairs if one chair and one table cost Rs. 500 together?

- a) Rs 5000 b) Rs 2500 c) Rs 1500 d) Rs 5500

2) A man sold a horse at a loss of 7 %. Had he been able to sell it at again of 9 %, it would have fetched Rs. 64 more than it did. What was the cost price ?

- a) Rs.600 b) Rs.700 c) Rs.500 d) Rs.400

3) Mathi purchased a walkman from her friend. She then sold it for Rs.90.Had it been sold for Rs.105. The gain would have been $\frac{1}{4}$ of the former loss. What is the cost price of the walkman?

- a) 82 b) 102 c) 114 d) 126

4) A man sells 12 candies for Rs.12 & loses Rs.2.40. If he sells 12 candies for Rs.16, how much does he gain or lose?

- a) Gains Rs.4 b) Loses Rs.6
c) Gains Rs.6.40 d) Loses Rs.1.60 e) Gains Rs.1.60

5) The book 40% is sold for Rs.480.What is the original price?

- a) 1000 b) 1200 c) 1400 d) 1600

6) Atul bought a machine for Rs.4,50,000 and sold it to Irfan at a profit. Irfan later sold the machine to Danish at a loss of 10% for Rs.4,95,000. The profit % earned by Atul is?

- a) 23% b) 21% c) 25% d) 22.22%

7) If at 15% of profit, the selling price of dozen pencils is Rs.13.80, then what is the cost price of a pencil?

- a) Rs 1.15 b) Rs 1 c) Rs 0.85 d) Rs 1.10

8) My friend collects antique stamps. She purchased two, but found that she needed to raise money urgently. So she sold them for Rs. 8000 each. On one she made 20% and on the other she lost 20%. How much did she gain or lose in the entire transaction?

- a) She lost Rs 500.67 b) She lost Rs 666.67
c) She gain Rs 666.67 d) She gain Rs 500.67

9) A woman sold 15 bed sheets for Rs.15,000. Hence gaining 5 bedsheets' cost prices. The cost per sheet is

- a) Rs.960 b) Rs.775 c) Rs.1000 d) Rs.800 e) Rs.750

10) CP of 8 articles is equal to SP of 10 articles. Find profit or loss.

- a) gain of rupees 2 b) loss of rupees 2
c) gain of rupees 4 d) loss of rupees 4

11) Riya sold the car for Rs.50,000 less than what she bought it for and lost 8%. At what price should she have sold the car, if she wanted to gain as much as she lost in the first transaction?

- a) 625000 b) 650000 c) 675000 d) 637500 e) 700000

12) When the price of a pair of shoes is decreased by 10%, the number of pairs sold increased by 20%. What is the net effect on sales?

- a) 8 % decrease b) 10% increase
c) 10% decrease d) 8% increase

13) The salesman has the liberty to sell a hair dryer in his store at a price between Rs.300 and Rs.700. The profit earned by selling the hair dryer for Rs.650 is twice the loss incurred when it is sold for Rs.350. What is the cost price of hair dryer?

- a) 550 b) 450 c) 350 d) 150

14) A milk-man has 300 litres of milk at a rate of Rs.19/lit. After adding 200 litres of water he sold 400 litres for Rs.20/lit and he added 10 litre of water to the remaining milk and sold it for Rs.15. What is his profit?

- a) 3950 b) 3954 c) 3952 d) 3951

15) On a festival season, a shopkeeper increases his products at a rate of 35% and gives two discounts 10% and 15% respectively. What profit or loss would the shopkeeper get at the end?

- a) 5.27% loss b) 3% gain c) 3.275% gain d) 8% loss e) 2% loss

16) Shobhit bought 300 litres of milk at Rs.19 per litre. He added 200 litres of water to it and sold 400 litres of milk at Rs.20 per litre. To the rest, he added 10 litres more water and then sold it for Rs. 15 per litre, if he used mineral water that costs Rs.10 per litre, then the total money earned by Shobhit is:

- a) Rs.4000 b) Rs.4150 c) Rs.1800 d) Rs.1850

17) In a scheme, a pack of three soaps with MRP Rs.45 is available for Rs.42. If it still gives a profit of 5% to the shopkeeper, then the cost price of the pack is:

- a) Rs.40 b) Rs.37 c) Rs.41 d) Rs.35

18) In an annual sale, there was a flat discount of 40% on all items. Komal bought a pair of jeans for Rs.480. What is the labelled price of the pair of jeans?

- a) Rs.799 b) Rs.699 c) Rs.899 d) Rs.720

19) A showroom offers 10% discount on a microwave, whose marked price is Rs8000 and also gives a blender worth Rs1200 as a complimentary gift with it. Even then the showroom earns a profit of 20%. The cost price per microwave is.

- a) 7200 b) 6000 c) 5000 d) 4000

20) A man bought 400m of cloth at Rs.40,000 and sold it at the rate of Rs200 per one and a half meter. What was his percentage profit or loss.

- a) 36% loss b) 25% profit c) 33% profit d) 27% loss

21) The printed price on a book is Rs400, a bookseller offers 10% discount on it. If he still earns a profit of 20%, then the cost price of the book is?

- a) 280 b) 352 c) 360 d) 300

22) A supplier supplies cartridges to a newspaper publishing house. He earns a profit of 20% by selling it at Rs.540. Find the cost price of the cartridges?

- a) 500 b) 480 c) 450 d) 400

23) A vendor purchases 12 binder clips for Rs.60. How many clips must he sell for Rs.60 for him to make a profit of 20%?

- a) 5 b) 8 c) 6 d) 10

24) Amit bought 10 cycles for Rs1750 each. He sold four cycles for Rs.8400, three for Rs1900 each at what price he should sell the remaining 3 so as to earn average profit of Rs 320 per cycle.

- a) 1900 b) 2000 c) 1800 d) 2050 e) 2200

25) A street seller bought maize corns for Rs 20 per kg. In one kg there is approximately 5 heads of corns. He sells roasted corns for Rs 8 per piece. How many corns should he sell in order to make a profit of Rs 200 in a day?

- a) 60 b) 50 c) 40 d) 80

26) If by selling 10 papayas, the cost price of 8 papayas is realized, then the loss percent is

- a) 20% b) 10% c) 8% d) 2%

27) The shopkeeper charged 12 rupees for a bunch of chocolate. but bargained to shopkeeper and got two extra ones, and that made them cost one rupee for dozen less than first asking price . How many chocolates I received in 12 rupees?

- a) 10 b) 16 c) 14 d) 18

28) The marked price of a coat was 40% less than the suggested retail price. Eesha purchased the coat for half the marked price at a fiftieth anniversary sale. What percent less than the suggested retail price did Eesha pay?

- a) 60% b) 20% c) 70% d) 30%

29) A shop sells chocolates. It used to sell chocolates for Rs.2 each, but there were no sales at that price. When it reduced the price, all chocolates sold out enabling the shopkeeper to realize Rs. 164.90 from the chocolates alone. If the new price was not less than half the original price quoted. How many chocolates were sold (at the reduced price)?

- a) 39 b) 97 c) 37 d) 71

30) A cow and a horse are bought for Rs 2,00,000. The cow is sold at a profit of 20% and the horse is sold at a loss of 10%. The overall gain is Rs.4000. The cost price of the cow is

- a) 130000 b) 80000 c) 70000 d) 120000

31) The price of a book in four different shops and the successive discounts offered for the books is given below. Select the option in which the price of the book is the least

- a) 10%, 5% & 5% discounts on a marked price of Rs. 195
b) 25% discount on a marked price of Rs. 200

c) 12.5% & 12.5% discounts on a marked price of Rs.

d) 10% & 15% discounts on a marked price of Rs. 190

32) In the GarbarJhala, Ahmadabad a shopkeeper first raises the price of Jewellery by x% then he decreases the new price by x%. After one such up down cycle, the price of a Jewellery decreased by Rs. 21025. After a second up down cycle the jewellery was sold for Rs. 484416. What was the original price of the jewellery?

- a) 525625 b) 653242 c) 873643 d) 734223

33) A vendor bought toffees at 6 for a rupee. How many for a rupee must he sale for gain 20%?

- a) 3 b) 4 c) 5 d) 6

34) The cost price 20 articles is equal to selling price of X articles. If the profit is 25% then the number of the articles.

- a) 15 b) 16 c) 18 d) 253

35) On investment of 2 items on gives 15%profit another gives 10% loss. If the ratio of investment 3:5 then the percentage of loss or gain?

- a) 0.625%loss b) 0.5%gain c) 0.5%loss d) 0.625%gain

36) Rajesh bought a scooter of Rs.4700 and spends Rs.800 for repair. The selling price is Rs.5800 then the gain

- a) 0.045 b) 0.0545 c) 0.4 d) 0.12

37) Subash brought 20 kg of rice of the rate of Rs.6 per kg.30 kg of rice of Rs.16 per kg. Two varieties together. What is the cost price is to gain 5% gain?

- a) 12.2 b) 12.4 c) 12.6 d) 12.8

38) A shopkeeper offers two successive 5% discounts to which the marked price of the product is Rs.80. What is the selling price?

- a) Rs. 72 b) Rs. 72.2 c) Rs. 88 d) Rs. 76.3

39) C.P of the article is 40% of S.P .then what percent is S.P to the C.P

- a) 67.82 b) 78.99 c) 71.42 d) None of these

40) I Sold 16 articles at the same price as I paid for 20 such articles. What is my gain percentage?

- a) 40% b) 35% c) 25% d) 30%

41) After selling a watch for Rs.2875, a person earned a profit of 15%. What must be the selling price of the watch to earn a profit of 25%?
a) Rs.3225 b) Rs.3125 c) Rs. 3015 d) Rs. 3425

42) A man bought 5 mangoes and 3 dozens of apples. He sold 3 mangoes and 2 dozens of apples at a profit of 15% and remaining at a loss of 10%. What is the net profit?
a) 13% b) 12% c) Cant determine d) 10%

43) Veronica sold an old table at a loss of 20%. If she had sold the table for Rs.40 more, she would have gained 5%. The selling price in the latter case was:
a) Rs.120 b) Rs.168 c) Rs.128 d) Rs.160

44) A shopkeeper gives the successive discounts of 20%, 15% and 10% on the marked price. What is the overall discount provided on the marked price?
a) 36.5% b) 41.25% c) 40.22% d) 38.8%

45) The ratio of the cost price to profit earned on selling an article is 4:1. How much the selling price is marked over the cost price?
a) 15% b) 35% c) 25% d) 20%

46) The cost price of two qualities of rice are Rs.25 and Rs.30 respectively. What is the ratio in which these two must be mixed to get 10% profit when sold for Rs.28 per kg?
a) 4:3 b) 2:3 c) 10:1 d) 1:10

47) Rajesh spends 25% of his income on food, 10% of the remaining on rent and gives 10% of the remaining for charity, what is his savings?
a) 60.75% b) 65.85% c) 62.33% d) 65.32%

48) A shopkeeper gives the successive discounts of 10%, 25% and 10% on the marked price. What is the loss suffered by the shopkeeper if he marked the article 20% above the marked price?
a) 27.1% b) 33.2% c) 28.5% d) 25.6%

AVERAGES

1) If Mini downloads three more songs in her mobiles, she will have songs with 512MB in her mobile. If on an average each song is 4 MB, how many songs did she initially have in her phone before downloading?
a) 125 b) 128 c) 120 d) 137

2) The average age of the state level cricket team of eleven is 22 years. The average age gets increased by 1 year when the coach is added. What is the coach's age?
a) 34 b) 23 c) 30 d) 60

3) The average of 7 numbers is 50. The average of first 3 is 40, while the average of last 3 is 60. What must be the remaining number?
a) 65 b) 55 c) 50 d) 45

4) In a match, awards are given to each of 11 members of the team and a trophy to the team. In all winning team gets 2.75kg weight awards, if the weight of match winning trophy is 1.275 kg. What is the weight of the award given to each player?
a) 200 grams b) 150grams c) 124 grams d) 134 grams

5) Rahul played well this season, his current batting average is 51. If he scores 78 runs in today's match his batting average will become 54, how many matches has he played in this season?
a) 8 b) 10 c) 9 d) 6

6) To clear a competition, Sonu needs an average score of 90 in three exams. His score in first two exams are 93 and 85. What score must he get in the third exam to clear the competition?
a) 90 b) 85 c) 95 d) 92

7) The average temperature of June, July and August was 31 degrees. The average temperature of July, August and September was 30 degrees. If the temperature of June was 30 degrees, find the temperature of September (in degrees).
a) 26 b) 27 c) 28 d) 25

8) What is the average of the first 200 terms of the series: 1, -2, 3, -4, 5, -6,
a) -0.5 b) -50.5 c) 0.5 d) 50

9) For a car there are 5 tyres including one spare tyre (4+1). All tyres are equally used. If the total distance travelled by the car is 40000 km then what is the average distance by the each tyre?
a) 10000 b) 40000 c) 32000 d) 8000

10) A mother, her little daughter and her just born infant boy together stood on a weighing machine which showed 74 Kg. How much does the daughter weigh if the mother weighs 46 Kg more than the combined weight of the daughter and the infant and the infant weighs 60% less than the daughter?
a) 4 kg b) 10 kg c) 46 kg d) 14 kg

11) The average marks of 3 students A, B and C is 48. When another student D joins the group, the new average becomes 47 marks. If another student E, who has 3 marks more than D, joins the group, the average of the 4 students B, C, D and E becomes 48 marks. How many marks did A get in the exam?

- a) 46 b) 43 c) 49 d) 52

12) Apples cost L rupees per kilogram for the first 30 kilograms and Q rupees per kilogram for each additional kilogram. If the price paid for 33 kilograms of apples is Rs.1167 and for 36 kilograms of apples is Rs.1284, then the cost of the first 10 kgs of apples is:

- a) Rs.117 b) Rs.1053 c) Rs.350 d) Rs.281

13) Of a set of 30 numbers, average of first 10 numbers = average of last 20 numbers. Then the sum of the last 20 numbers is?

- a) 2 X sum of last ten numbers b) 2 X sum of first ten numbers
c) Sum of first ten numbers d) cannot be determined with given data

14) Average salary of 17 teachers is 45000. 3 teachers went out and the average dropped by 2500. What is the sum of salaries of 3 teachers who left?

- a) 173000 b) 176000 c) 170000 d) 85000

15) The average marks of 3 students A, B and C is 48. When another student D joins the group the average becomes 46 marks. If another student E who has 3 marks more than D, joins the group, the average of the 4 students B, C, D and E becomes 45 marks. How many marks did A get in the exam?

- a) 46 b) 50 c) 39 d) 47

16) In a telecom assembly factory, there are 250 men and 150 women. The average productivity of all workers is 12 units per day. The average productivity of a man is 15 units per day. What is the average productivity of a woman per day?

- a) 6 b) 9 c) 7 d) 8

17) If a lemon and an apple together cost Rs.12.00, a tomato and a lemon cost Rs.4.00 and an apple cost Rs.8.00 more than a tomato or a lemon, then which of the following can be the price of a lemon?

- a) Rs.2 b) Rs.4 c) Rs.1 d) Rs.3

18) In the sixth, seventh, eighth and ninth basketball games of the session a player scored 23, 14, 11, 20 points respectively. Hereafter nine games than it was after the first five games. If her average after ten games was points per game average

was higher greater than eighteen what is the least number of points that she could have scored in the tenth game?

- a) 30 b) 26 c) 29 d) 28

19) Of the four Number, the first is twice of second, second is $\frac{1}{3}$ of third, 3rd five times of 4th, Find the average of these numbers, if the fourth number is 6.

- a) 9 b) 24.75 c) 19.25 d) 16.75

20) The average of 50 numbers is 38. if two members are 45 and 55 discarded. What is the average of remaining numbers?

- a) 37.5 b) 38.5 c) 39.5 d) 36.5

21) A group consisting of 25 teachers, 20 engineers, 10 doctors and 12 sales man visit the fair spends 1330 together. It was found 5 teacher spend as much as 4 engineers. 12 engineers spend as same as 9 doctor. 6 doctor spends same as 8 salesman. If every spend in a professional group spent same amount. Amount spent by each engineers is?

- a) 18 b) 17.50 c) 14 d) 21

22) The average score of a cricketer for ten matches is 38.9 runs. if the average for the first six matches is 42. then find the average for the last four matches:

- a) 33.25 b) 33.5 c) 34.5 d) 35

23) In school contains 800 students, the average age of boys is 20 and average age of girl is 12 and the average age of school is 16 years 6 months .then number of students will be:

- a) 150 b) 250 c) 350 d) 450

24) The average of 5 consecutive numbers is 17. find the largest of those numbers

- a) 15 b) 16 c) 19 d) 18

25) There are four numbers whose average is 60. one fourth of the sum of last three numbers is the first number. What is the first number?

- a) 15 b) 45 c) 48 d) 60 e) 25

26) A man spends on an average of Rs.269.47 for 7 months and Rs.281.05 for the next 5 months. Find his monthly salary if he saves Rs.308.46 during the whole year

- a) 400 b) 500 c) 300 d) 600

27) Out of three members the second numbers have twice the first and also one-third of the third number. If the average of three numbers is 54.find the second number:

- a) 36 b) 18 c) 100 d) 56

28) The average age of 8 persons in a committee is increased by 2 years when two men aged 35 years and 45 years are substituted by two women. Find the average age of these two women.

- a) 46 years b) 45 years c) 42years d) 48 years

RATIOS & PROPORTIONS

1) If a number is 4 times a number A and three times a number B equals to sum of number B and 7 times of the number A, Then what is the value of A:B?

- a) 2:3 b) 3:2 c) 4:3 d) 3:4

2) The Ratio between speeds of two trains is 5:3. If the first train runs 350 km in 2 hours, then what is the speed of the second train?

- a) 100 b) 115 c) 105 d) 210

3) 3 persons invested Rs.36000.Raj and Salim has 5:4 ratio and Salim and Rajesh has 8:9 ratio. What is the amount got by Rajesh?

- a) 2000 b) 4000 c) 5000 d) 8000

4) How many toffees were distributed in total among Ankit, Aniket and Anuj in the ratio 2:3:7, if Aniket receives 84 toffees in total?

- a) 300 b) 312 c) 324 d) 336 e) 345

5) Find the ratio of the distance covered by the car and the cyclist when it is given that the car moves 1.5 hours at 30 kmph and cyclist moves for 1 hour at 25 kmph.

- a) 6:5 b) 9:5 c) 5:2 d) 5:1

6) A bag contains coins of 1 rupee, 2 rupees, 5 rupees in the ratio 4:8:5. The total amount is Rs.90. The number of 5 rupee coins is?

- a) 8 b) 16 c) 15 d) 10

7) A sum of Rs. 20706 is distributed amongst A, B, and C. A gets $\frac{10}{123}$ of what B and C got together and C gets $\frac{1}{10}$ of what A and B got together, C's share is (approx)?

- a) 1782.3 b) 1885.0 c) 1882.4 d) 1456.8

8) A sum of Rs.3000 is distributed amongst A, B and C. A gets $\frac{2}{3}$ of what B and C got together and C gets $\frac{1}{3}$ of what A and B got together. C's share is

- a) 1200 b) 2250 c) 750 d) 1050

9) The savings of an employee equals income-expenditure. If the income of A, B, C are in the ratio 1:2:3, expenses 3:2:1 then what is the order of employees A, B, C in the increasing order of the size of their savings?

- a) A>C>B b) B>A>C c) B>C>A d) C>B>A

10) Two beakers are kept on a table. The capacity of the first beaker is x litres and that of the second beaker is 2x litres. Two thirds of the first beaker and one fourth of the second beaker is filled with wine. The remaining space in both the beakers is filled with water. If the content in both these beakers are mixed in a large beaker of volume 3x litres, what is the proportion of wine in the beaker?

- a) $\frac{11}{12}$ b) $\frac{11}{36}$ c) $\frac{7}{6}$ d) $\frac{7}{18}$

11) Raj divided 50 into two parts such that the sum of their reciprocal is $\frac{1}{12}$, we get the parts as

- a) 28,22 b) 24,36 c) 36,14 d) 20,30

12) In a class of 75 students the ratio of boys and girls is 2:3.how many more boys are needed to make ratio as1:1?

- a) 15 b) 30 c) 12 d) 24

13) If 510 be divided among a, b, c in such a way that a gets $\frac{2}{3}$ of what b gets and b gets $\frac{1}{4}$ of what c gets. Then their ratio is respectively?

- a) Rs.120, Rs.240, Rs.150 b) Rs.60, Rs.90, Rs.360
c) Rs.150, Rs.300, Rs.60 d) None of these

14) Two numbers are in the ratio 5:13. If the First is 40, what is the other?

- a) 94 b) 97 c) 117 d) 104

15) Incomes of A and B are in the ratio of 2:3 and each of them saves Rs.300. Find A's income, If the ratio of their expenditure is 1:2?

- a) Rs.400 b) Rs.350 c) Rs.600 d) Rs.300

16) If p:q is the sub-duplicate ratio of $(p-x)^2$: $(q-x)^2$ then x^2 is equal to

- a) $\frac{q}{(p+q)}$ b) $\frac{p}{(p+q)}$ c) $\frac{pq}{(p-q)}$ d) $\frac{pq}{(p+q)}$

PROBLEMS ON AGES

1) Ram is five years elder to his youngest sibling Shreya. Shreya is two years younger than her brother Ritesh. Ritesh is 13 years old and is Ram's brother. How old will Ram be in two years from now?

- a) 16 b) 17 c) 20 d) 15 e) 18

2) Ravi is 5 years elder than Sunil. Sunil is 2 years younger than Reeta. If Sunil's age is 11, then what will be the age of Ravi 2 years from now?

- a) 4 b) 8 c) 16 d) 64

3) Six years ago Raj's father's age is 6 times the age of Raj. The difference of present ages is 35. What is the sum of their present ages?

- a) 51 b) 61 c) 52 d) 62

4) At the end of 1994 Rohit was half as old as his grandmother. The sum of the years in which they were born is 3844. How old Rohit was at the end of 1999?

- a) 48 b) 55 c) 49 d) 53

5) 10 years ago, the average age of 10 people was 33 years. After 3 years, a person of age 40 died. After another 3 years, another person of age 40 died. After another 3 years, another person of age 30 dies. Find the present average age.

- a) 43 b) 44 c) 35 d) 40

6) After 6 years Raju's father's age will be twice that of his age and 2 years ago, his mother's age was twice that of Raju's age. What is the sum of Raju's parents' age?

- a) 4 less than four times Raju's age b) 2 more than four times Raju's age
c) 4 more than four times Raju's age d) 2 less than four times Raju's age

7) In 4 years Raj father will be twice Raj age then, whereas two years ago his mother was twice his age. If Raj is going to be 32 years old eight years from now then what is the sum of his parent's age now.

- a) 96 b) 100 c) 102 d) 98

8) Sum of the ages of mother and her daughter is 48. Also 12 years ago, the mother's age was 5 times of the daughter. What is the present age of mother and daughter?

- a) d-15 m-45 b) d-16 m-32 c) d-17 m-34 d) None of these

9) 3 years ago the average age 5 members in family was 17. The baby have being born, the average age of family have been same today. The age of baby

- a) 1 year b) 4 years c) 3 years d) 2 years

10) The ratio of father and son is 4:1. After 4 years the ratio will be 3:1. What is the sum of their age at present?

- a) 30 b) 35 c) 40 d) None of these

11) The sum of ages of a and b is 8 years. 1 year ago the age of a is n times of age of b. The present age of a = $S_n - 1(n-1)$, present age of b is $b = S_n + (n+1)(n-1)$

- a) 7 years b) 8 years c) 9 years d) cannot be determined

12) The age of father is 5 times of son, 5 years ago. Now 3 times of son. What is the age of father and son?

- a) s-10, f-30 b) s-5, f-23 c) s-15, f-45 d) None of these

13) 10 years ago, the average age of 4 members for 24 years. Two children have been born with 2 years difference present age of family is same. The present age of youngest child?

- a) 1 year b) 2 years c) 3 years d) 5 years

14) My age is two years more than twice than the Ram. If I am 34 years old, how old is Ram?

- a) 20 b) 18 c) 16 d) 14

15) A man is 24 years older than his son. In two years, his age will be twice the age of his son. The present age of his son is:

- a) 14 years b) 18 years c) 20 years d) 22 years

16) Present age of son and father is in ratio 2: 3. Three years ago their ratio was 3:5. What is the present ages of father and son

- a) 14 and 7 b) 12 and 18 c) 11 and 5 d) 11 and 7

17) The ages of P and Q are in the ratio 5:7 four years hence, the ratio will be 3:4. Their present ages are:

- a) 25 years, 35 years b) 10 years, 14 years
c) 20 years, 28 years d) 30 years, 42 years

PARTNERSHIPS

1) George, Paul and Hari start a business by contributing Rs.30000, Rs.40000 & Rs.50000 respectively. After $\frac{1}{2}$ a year George withdraws half his contribution. At the end of the year the business showed a profit of Rs. 90000 which divided amongst the 3 men proportionate to amount and duration of their investment in the enterprise. Paul got:

a) Rs. 25000 b) Rs. 18000 c) Rs. 32000 d) Rs. 24000

2) A sum of Rs.3000 is distributed amongst A, B and C. A gets $\frac{2}{3}$ of what B and C got together and C gets $\frac{1}{3}$ of what A and B got together. C's share is

a) 1200 b) 2250 c) 750 d) 1050

3) 'A' and 'B' started a business in partnership investing Rs 20000/- and Rs 15000/- respectively. After six months 'C' joined them with Rs 20000/-. What will be B's share in the total profit of Rs 25000/- earned at the end of two years from the starting of the business?

a) 6000 b) 7500 c) 8000 d) 8500

4) A sum of the Rs.1300 is divided amongst P,Q,R and S such that , P's share/ Q's share = Q' share/ R's share= R's share* S's share= $\frac{2}{3}$

a) 140 b) 160 c) 240 d) 320

5) A, B, C have started a business. A's share is twice of B's share. B's share is thrice of C's share. If they get the profit Rs.9000 then the b' share

a) 1500 b) 2000 c) 3000 d) 2500

6) If A B C invested a total of 1,20,000 Their profit ratio 3:4:5 the amount of B is?

a) 40000 b) 30000 c) 50000 d) 90000

7) If ram invests Rs.40000 in a business and after 6 month Ravi invests Rs.20000 If the annual profit Rs.5000 than Ravi's share:

a) 2000 b) 1000 c) 1200 d) 1800

8) Raj and ram invested in a business in the ratio of 2:5 respectively. Ram withdrew his amount after 6 months, but raj reinvested his profit again after a year. What is the profit earned by raj after two years, if the profit earned in the first year was Rs.18,000 and in the second year was Rs.15,000?

a) Rs.23,000 b) Rs.24,000 c) Rs.32,000 d) Rs.25,000

9) Carlson bought a house and invested Rs.50,000 on its repairs. He sold the house for 20% profit and bought two cars with that money. He then sold each car at a profit 10%.After all his business; he gets an overall profit of Rs.64,000.What is the initial investment of C?

a) 2,30,000 b) 2,00,000 c) 2,10,000 d) 2,40,000

10) If Rs. 1,360 have been divided among A,B,C such that A gets $(\frac{2}{3})$ rd of what B gets $(\frac{1}{4})$ th of what C gets, then B's share is:

a) Rs. 120 b) Rs.240 c) Rs.160 d) Rs.320

ALLIGATIONS AND MIXTURES

1) A vessel contains 30% of milk and 70% of water. Another vessel with double the capacity of first contains 70% of milk and 30% of water. If both are mixed what is the concentrations of the milk in the mixture?

a) 56.67% b) 46.67% c) 50.67% d) 42.67%

2) How many litres of a 90% solution of concentrated acid needs to be mixed with a 75% solution of concentrated acid to get a 30L solution of 78% concentrated acid?

a) 24L b) 22.5L c) 6L d) 17.5L

3) On a certain assembly line, the rejection rate for Hyundai i10s production was 4%, for Hyundai i20s production 8% and for the 2 cars combined 7%. What was the ratio of Hyundai i20 and i10 production?

a) 3/1 b) 2/1 c) 1/1 d) 1/3

4) Easha bought two varieties of rice, costing Rs.50 per kg and Rs.60 per kg each, and mixed them in some ratio. Then she sold the mixture at Rs.70 per kg, making a profit of 20%. What was the ratio of the mixture?

a) 1:10 b) 3:8 c) 1:5 d) 2:7

5) A beaker contains 180 litres of alcohol. On the first day, 60 litres of alcohol is taken out and replaced by water. On the second day, 60 litres of the mixture is taken out and replaced by water and the process continues day after day. What will be the quantity of alcohol in the beaker after the third day?

a) 40 litres b) 80 litres c) 53.33 litres d) 100 litres

6) How many litres of 90% concentrated acid needs to be mixed with 75% concentrated acid to get a 30 litres solution of 78% concentrated acid?

a) 3 b) 4 c) 6 d) 10

7) A merchant buys 20 kg of wheat at Rs.30 per kg and 40 kg of wheat at Rs.25 per kg. He mixes them and sells one third of the mixture at Rs.26 per kg. The price at which the merchant should sell the remaining mixture so that he may earn a profit of 25% on his whole outlay is

a) Rs.30 b) Rs.40 c) Rs.360 d) Rs.37

8) An alloy of Copper and Aluminium has 45% Copper. An alloy of Copper and Zinc has Copper and Zinc in the ratio 3:6. These two alloys are mixed in such a way that in the overall alloy, there is more Aluminium than Zinc, and Copper

constitutes a fraction x of this alloy. What is the minimum value of x (as a fraction)?

- a) $\frac{28}{73}$ b) $\frac{9}{20}$ c) $\frac{31}{73}$ d) $\frac{29}{73}$

9) Two alloys A & B are composed of two basic elements. The ratio of the composition of the two elements in the 2 alloys is 5:3 & 1:2. A new alloy X is formed by mixing the alloys A & B in the ratio 4:3. What is the ratio of the composition of 2 elements in alloy X?

- a) 1:1 b) 2:3 c) 5:2 d) 4:3 e) 7:9

10) How many kgs of wheat costing Rs.24/- per kg must be mixed with 30 kgs of wheat costing Rs.18.40/- per kg so that 15% profit can be obtained by selling the mixture at Rs.23/- per kg?

- a) 10 b) 11 c) 12 d) 13

11) There are two containers on a table. A and B. A is half full of wine, while B, which is twice A's size, is one quarter full of wine. Both containers are filled with water and the contents are poured into a third container C. What portion of container C's mixture is wine?

- a) 50% of wine b) 33.33% of wine c) 16.66% of wine d) 75% of wine

12) A rice with price 126 per kg. A rice with 135 per kg is mixed with another rice in the ratio 1:1:2. If the mixed rice is rs.153 per kg. What is the price of third variety of rice.

- a) 130.50 b) 175.50 c) 153.00 d) 165.50

13) 20 litres of mixture contains 10% water. How many more water is needed to make it 20%?

- a) 2 L b) 4 L c) 6 L d) 8 L

14) A vessel contains 33 litres of milk and water in the ratio of 7:4 respectively. If the mixture is replaced with 4 litres of milk, what is the quantity of milk in the mixture?

- a) 24.23 litres b) 22.45 litres c) 30.5 litres d) 20.55 litres

TIME AND WORK

1) 50 hens lay 200 eggs in 2 days and 20 hens lay 400 eggs in how many days?

- a) 5 b) 15 c) 10 d) 20

2) 4 men can do a work in 7 days. How many men are required to do it in 4 days?

- a) 7 b) 8 c) 9 d) 10 e) 4

3) An air container can cool the hall in 40 minutes while another takes 45 minutes to cool under similar conditions. If both air conditioners are switched on at same instance, then how long will it take to cool the room?

- a) About 22 minutes b) About 20 minutes
c) About 30 minutes d) About 25 minutes

4) Jagdish can build a wall in 10 days. Narender can build the same wall in 12 days while Sumit takes 15 days to do the same job. Which two of them should be employed to finish the job in 6 days?

- a) Jagdish and Narender b) Jagdish and Sumit
c) Sumit and Narender d) None of the above

5) Mary and John can do a piece of work in 24 days; John and Vino in 30 days; Vino and Mary in 40 days. If Mary, John and Vino work together they will complete the work in.

- a) 10 days b) 20 days c) 17 days d) 15 days

6) A can do a piece of work in 100 days, B and C together can do the same work in 20 days. If B can do the work in same time as that of C and A together then how long C alone can do the same work?

- a) 100 days b) 50 days c) 25 days d) 20 days

7) A man can complete a job in 12 days and his wife can complete the same job in 15 days. How long will they take to complete the job if they work together?

- a) $6\frac{2}{3}$ b) $6\frac{1}{2}$ c) $10\frac{1}{2}$ d) $10\frac{2}{3}$

8) Naresh completes a work in 10 days and Suresh does it in 12 days and John does it in 15 days. If the same job has been completed in 6 days who are the workers who completed the job in 6 days?

- a) Naresh, John b) John, Suresh c) Naresh, Suresh d) None of these

9) A does 80% of a work in 20 days. He then calls in B and they together finish the remaining work in 3 days. How long B alone would take to do the whole work?

- a) 23 b) 27 c) $37\frac{1}{2}$ d) 40

10) Ronald and Elan are working on an assignment. Ronald takes 6 hours to type 32 pages on a computer, while Elan takes 5 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages?

- a) 7hr 30min b) 7hr c) 8hr 15min d) 8hr

11) Two content Managers can complete developing questions for a module in 18 days .7days after they start working. 10 interns join them .How many days will they take to complete the remaining work if they are all equally efficient?

- a) $15\frac{5}{6}$ b) $11\frac{1}{144}$ c) 2 d) $21\frac{1}{6}$

12) A group of women can finish a piece of work in 50 days. In how many days will one-third the number of women be able to finish two-third of the work?

- a) 150 b) 75 c) 60 d) 100

13) A water pump takes 6 hrs to fill an overhead tank. Standby pump takes 10 hrs to fill the same overhead tank. If first pump fails after 2 hrs then how long will the standby pump take to fill the overhead tank?

- a) 6 hrs b) $8\frac{2}{3}$ hrs c) 8 hrs d) $6\frac{2}{3}$ hrs

14) A chemical mixture requires two chemicals, A and B in proportion 3:2.The mixture is to be prepared in a tank of capacity 50 litres .Pipe A can fill the tank with chemical A in 15 mins and pipe B can fill the tank with chemical B in 30 mins. If both pipes are opened when the tank is empty, then for how long should the pipes A and B run to obtain the mixture?(in mins)

- a) (10,10) b) (9,9) c) (12,12) d) (9,12) e) (12,9)

15) A large rubber cushion can be filled with air by pump A in 10 mins, another pump B can fill it in 12mins,if both pumps operate how long will it take to fill the cushion?

- a) $6\frac{5}{11}$ mins b) $5\frac{6}{11}$ mins c) $4\frac{5}{11}$ mins d) $5\frac{5}{11}$ mins

16) Rahul can finish one fifth of his homework in one hour. Neha can finish three seventh of her homework in one hour thirty mins, Riya can finish three fourth of her homework in three hours thirty mins.If all of them start their homework at 12.00pm,and can go to play as soon as they complete their work. When can they go to play if they take a break at 3.30pm for thirty minutes?

- a) 5.00pm b) 5.30pm c) 4.40pm d) 6.30pm e) 3.30pm

17) A can finish a job in 12 hours and B in 14 hours. A and B working alternatively, starting with A. If A earns Rs. 50 per hour, how much does A earn through this job?

- a) Rs. 400 b) Rs. 250 c) Rs. 300 d) Rs. 350

18) Two women Renu and Usha are working on an embroidery design. If Usha worked alone, she would need eight hours more to complete the design than if they both worked together. Now if Renu worked alone, it would need 4.5 hours more to

complete the design than they both working together. What time would it take Renu alone to complete the design?

- a) 10.5 hrs b) 12.5 hrs c) 14.5 hrs d) 18.5 hrs

19) X takes 4 days to complete $\frac{1}{3}$ of job, Y takes 3 days to complete $\frac{1}{6}$ th of the same work and Z takes 5 days to complete half the job. If all of them work together for 3 days and X and Z quit. How long will it take for Y to complete remaining work alone?

- a) 6 days b) 7 days c) 5.1 days d) 8.1 days

20) A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?

- a) 11 days b) 15 days c) 10 days d) 12 days

21) A completes 80% of a work in 20 days. Then B also joins and A and B together finish the remaining work in 3 days. How long does it need for B if he alone completes the work?

- a) $37\frac{1}{2}$ b) 32 c) $32\frac{1}{2}$ d) 37

22) A can complete a piece of work in 8 hours, B can complete in 10 hours and C in 12 hours. If A, B, C starts the work together but A leaves after 2 hours. Find the time taken by B and C to complete the remaining work.

- a) $2\frac{1}{11}$ hours b) $4\frac{1}{11}$ hours c) $2\frac{6}{11}$ hours d) 2 hours

23) 60 men can complete a piece of work in 40 days. 60 men start the work but after every 5 days 5 people leave. In how many days will the work be completed?

- a) 60 b) 80 c) 120 d) None of these

24) A, B, C can do some work in 36 days. A and B together can do twice as much work as c alone, and A and C together can do thrice as much work as B alone. Find the time taken by C to do whole work?

- a) 96 days b) 108 days c) 120 days d) 72 days

25) Father is 5 times faster than son. Father completes a work 40 days before the son. If both of them work together, when will the work get complete?

- a) 8 days b) $8\frac{1}{3}$ days c) 10 days d) 20 days

26) Each of A, B and C need a certain unique time to do certain work. C needs 1 hour less than A to complete the work. Working together they require 30 minutes to complete 50% of the work. The work also gets completed if A and B start

working together and A leaves after 1 hour and B works further 3 hours. How much work does C do per hour?

- a) 16.66% b) 66.66% c) 50% d) 33.33%

27) George and Mark can paint 720 boxes in 20 days. Mark and Harry in 24 days and Harry and George in 15 days. George works for 4 days, Mark for 8 days and Harry for 8 days. The total number of boxes painted by them is

- a) 252 b) 516 c) 348 d) 492

28) Raju can do a piece of work in 10 days, Vicky in 12 days, Tinku in 15 days. They all started work together, but Raju leaves after 2 days, Vicky leaves 3 days before the work is completed. In how many days work is completed?

- a) 7 b) 5 c) 9 d) 6

29) A box of fruits can be loaded in a truck in 9 minutes by a worker and 8 boxes fill a truck completely. How many trucks can be loaded completely in $1\frac{1}{2}$ hours if there are 16 men working together?

- a) 21 b) 20 c) 23 d) 22

30) George is two-third as efficient as Smith and Smith is three-fourth as efficient as John. In one day, what will be the fraction of the work done by George alone, compared to all of them working together?

- a) $\frac{2}{3}$ b) $\frac{2}{9}$ c) $\frac{4}{9}$ d) $\frac{1}{3}$

31) DrinkMoreCoffee is a coffee shop with a peculiar scheme. The shop keeps a weekly tally for each customer's first coffee costs Rs. 45, the second coffee costs Rs. 40.5, third costs Rs. 36 and so on. The cost decreases by Rs.4.5 until the price reaches Rs. 4.5. The remaining coffees that week are free for the customer. Ms. CoffeePriya is a coffee lover and in a two week period she consumed a total of 15 coffees at this shop. She paid a total of Rs. 333 for the coffees she drank during the two weeks. How many free coffees did she get during this week period?

- a) 2 b) 11 c) 0 d) 3

32) An airplane has four emergency exits. In an emergency, it requires 8 seconds per passenger to evacuate the plane, if the hand baggage is not carried by the passenger. How long will it take to evacuate 53 passengers in an emergency?

- a) 1 min 52 sec b) 1 min 44 sec c) 7 min 4 sec d) None of these

33) Thomas takes 7 days to paint a house completely whereas Raj would require 9 days to paint the same house completely. How many days will it take to paint the house if both of them work together (give answers to the nearest integer)?

- a) 3 b) 5 c) 4 d) 8

34) Jake can dig a well in 16 days. Paul can dig the same well in 24 days. Jake, Paul and Hari together dig the well in 8 days. In how many days Hari alone can dig the well?

- a) 32 days b) 48 days c) 96 days d) 24 days

35) Akbar, Benoit and Cinder takes 20, 80, 160 days respectively to complete a work. If each work one day alternatively, on which day will they compete the work?

- a) 40th b) 41st c) 42nd d) 43rd

36) A alone can finish the work in 10 hours, B alone can finish the work in 12 hours and C alone can finish the work in 15 hours. A, B and C together started working at 11'o clock. After 2 hours A leaves. When will B & C will together will finish the work?

- a) 4 'o clock b) 5 'o clock c) 4:20 d) 5:20

37) The wages of 24 men and 16 women amount to Rs 11600 per day. Half the number of men and 37 women earns the same money. The daily wages paid to each man is

- a) Rs. 375 b) Rs. 400 c) Rs. 350 d) Rs. 325

38) A alone can do $\frac{1}{4}$ th of the work in 2 days. B alone can do $\frac{2}{3}$ th of the work in 4 days. if all the three work together, they can complete it in 3 days so what part of the work will be completed by C in 2 days ?

- a) $\frac{1}{12}$ b) $\frac{1}{8}$ c) $\frac{1}{16}$ d) $\frac{1}{20}$

39) A certain sum of money is sufficient to pay either George wages for 15 days or Mark wages for 10 days .For how long will it be sufficient if both George and Mark work together?

- a) 5 b) 6 c) 8 d) 9

40) Babla alone can do a piece of work in 10 days. Ashu alone can do it in 15 days. The total wages for the work is Rs.5000. How much should be Babla be paid if they work together for an entire duration of work?

- a) 2000 b) 4000 c) 5000 d) 3000

41) George can do some work in 8 hours. Paul can do the same work in 10 hours while Hari can do the same work in 12 hours. All the three of them start working at 9 am while George stops work at 11 am and the remaining two complete the work. Approximately at what time will the work be finished?

a) 11.30 am b) 1 pm c) 12.30 pm d) 12 noon

42) A takes 12 hours to make a publication. B takes 10 hours to make a publication. Find the time taken by them to make two publications, working independently.

a) 12 hours b) 11 hours c) 22 hours d) 11 hours 40 minutes

43) A manufacturer of chocolates makes 6 different flavours of chocolates. The chocolates are sold in boxes of 10. How many different boxes of chocolates can be made? (NOTE: A box is considered different from another only if, regardless of the order, the box contains a different number of chocolates of at least one type)

a) 3003 b) 10^6 c) 3000 d) 6^{10}

44) It takes 52 days to complete an agreement deal by a certain number of men. After 17 days, 300 men are added and 21 days are reduced. How many men were working initially?

a) 250 b) 150 c) 200 d) None of these

45) A and B completed a work in 5 days. Had A worked at twice the speed of B and B as half the speed of A, it would have taken them 4 days to complete the job. How much time would it take for A alone to do the work?

a) 5 days b) 20 days c) 10 days d) 25 days

46) An engineer undertakes a project to build a road 15 km long in 300 days and employs 45 men for the purpose. After 100 days, he finds only 2.5 km of the road has been completed. Find the (approx.) number of extra men he must employ to finish the work in time.

a) 43 b) 45 c) 55 d) 68

47) Aravind can do a work in 24 days. Mani can dig the same well in 36 days. Aravind, Mani and Hari can do a work together in 8 days. Hari alone can do the work in

a) 12 days b) 18 days c) 16 days d) 24 days

48) Truck A and truck B move grain into a box at the rate of 20 kilos/ min and $13\frac{1}{3}$ kilos a minute respectively while Truck C removes grain from the box at the rate of 10 kilos/ min. If the capacity of the box is 2.4 tons, and Truck A, Truck B and Truck C are working simultaneously then the box will be filled in.

a) $1\frac{1}{2}$ hours b) $\frac{3}{5}$ hours c) $1\frac{5}{7}$ hours d) $2\frac{1}{8}$ hours

49) Four examiners evaluate certain number of papers in 8 days working 5 hours a day. If 2 examiners evaluate twice the number of papers in 20 days then how many hours per day should they work?

a) 8 b) 9 c) 4.5 d) 7

50) 4 men can repair a road in 7 hours. How many men are required to repair the road in 2 hours

a) 7 b) 14 c) 17 d) 10

51) 12 persons can complete the work in 18 days. After working for 6 days, 4 more persons added to complete the work fast. In how many more days they will complete the work?

a) 9 b) 8 c) 7 d) 10

52) There are three trucks A, B, C. A loads 10 kg/min. B loads $13\frac{1}{3}$ kg/min. C unloads 5 kg/min. If three simultaneously works then what is the time taken to load 2.4 tones?

a) 115mins b) 130mins c) 134mins d) 132mins

53) A completes a work in 2 days, B in 4 days, C in 9 and D in 18 days. They form group of two such that difference is maximum between them to complete the work. What is difference in the number of days they complete that work?

a) 14 days b) $14\frac{1}{3}$ days c) 15 days d) 16 days

54) Tia can paint a portrait in the same time in which Sia and pia together paint the same portrait. If tia and sia together paint the portrait in 10 days and pia alone can paint the same portrait in 50 days, then sia alone could paint the portrait in:

a) 25 days b) 20 days c) 30 days d) none

55) The ratio of times taken by Hari and Harsha to finish the same work is 2:3. Hari worked alone for 5 days and then Harsha joined him and worked for 5 days to finish the work. In how many days Harsha can finish the work alone?

a) 20 days b) 16.5 days c) 18 days d) 17 days

56) Shilpa can do a piece of work in 25 days. In how many weeks she can finish the work, working five days in a week?

a) 5 weeks b) 7 weeks c) 4 weeks d) 6 weeks

57) 5 men can do a work in 15 days. 5 men and 5 women can finish the same work in 10 days. In how many days 1 woman can finish the work alone?

a) 12 days b) 100 days c) 90 days d) 150 days

58) Anita, Bharti and Charu get Rs.2500 for a piece of work. Together Anita and Bharti are supposed to do $\frac{7}{8}$ th work. What is Charu's share?
 a) Rs.300 b) Rs.400 c) Rs.100 d) Rs.200

59) Trinka make a dress in 4 days. Dinka takes 6 days to make same dress while Pinka is very fast and can make the dress just in 2 days. If all of them start working together on the dress, how much time would they require?
 a) 1.09 days b) 0.8 days c) 1.23 days d) 1.67 days

60) Sarita and pooja do a piece of work for Rs. 200. Sarita alone could do it in 6 days. With the help of Karim, they finished it in 3 days. What is the Karim's salary?
 a) Rs 21 b) Rs 25 c) Rs 24 d) Rs 20

TIME, SPEED, DISTANCE

1) A man can row 8 kmph in soil water. If in a river running at 2 kmph, it takes him 45 minutes to row to a place and back, how far off is the place?
 a) 2.5 km b) 2.81 km c) 2.61 km d) 7.5 km

2) Yane and Lane are two cities, 390 km apart. Maha starts from Yane at 9 am and travels towards Lane at 24 kmph and Kavi starts from Lane towards Yane at 10 am running at 55 kmph. When would they meet each other passed there is only a single route connecting two cities?
 a) 2 pm b) 10.30 pm c) 11.30 am d) 2 am

3) The distance between two cities is 30 miles on motor way or 25 miles on the other roads. At the peak hours the average speed on the motorway is 36 mph and the average speed on the other roads is 37.5 mph. Which is the quicker journey?
 a) Motorway b) other roads
 c) Both journey takes the same time d) Data inadequate

4) A car is 250 metres behind the bus. The car and bus are moving with the speed of 60 kmph and 35 kmph respectively. The car will be ahead of bus by 250 metres in:
 a) 37 seconds b) 48 seconds c) 72 seconds d) 68 seconds

5) An emergency vehicle travels 10 miles at a speed of 50 miles per hour. How fast must the vehicle travel on the return trip if the round-trip travel time is to be 20 minutes?
 a) 75 miles per hour b) 70 miles per hour
 c) 65 miles per hour d) 80 miles per hour

6) A scuba diver descends at a rate of 40 feet per minute. The diver dives from a ship to search for a lost ship at the depth of 3000 feet below the sea level. How long will he take to reach the ship?
 a) 70 b) 72 c) 75 d) 76

7) Surekha travels 10 km to reach her office. She walks 0.5 km on foot at a speed of 8 kmph to catch her chartered bus which travels at a speed of 40 kmph. Time taken by her to reach the office is:
 a) 15 min b) 20 min c) 18 min d) 30 min

8) Sakhil travels first half of the distance 50m/s and second half at 75m/s. The total distance travelled is 3 km. Find his average speed of travels for the entire journey
 a) 60m/s b) 6.2m/s c) 55m/s d) 55.7m/s

9) Sachin travels from Albany to New York in 4 hours at a speed of 60 kmph. How long will it take if he averages 40 kmph during his drive?
 a) 2.8 b) 3.6 c) 3 d) 6

10) A boat travels 300 metres upstream in 15 mins. Its speed downstream is $\frac{8}{5}$ times its speed upstream. Which of the following options provides the correct relationship between speed of current and speed of the boat?
 a) Speed of the current = $\frac{12}{10}$ times the speed of the boat
 b) Speed of the current = $\frac{3}{13}$ times the speed of the boat
 c) Speed of the current = $\frac{12}{10}$ times the speed of the boat
 d) Speed of the current = $\frac{9}{13}$ times the speed of the boat

11) An Aeroplane flies along the sides of an equilateral triangle with the speeds of 300 km/hr, 200 km/hr and 240 km/hr. The average speed of the plane while flying along the triangle is?
 a) 250 km/hr b) 275 km/hr c) 200 km/hr d) 240 km/hr

12) Ram and Ravi were playing with a paper phone, frustums of which are attached to each other by a 95m long string. If both start moving in opposite directions at 18m/min and 20m/min respectively, after how many more mins both have to stop?
 a) 2 mins b) 2.5 mins c) 3 mins d) 3.5 mins

13) Mumbai Rajdhani express takes 16 hrs to reach Mumbai from Delhi, while Swaraj express takes 20 hrs to reach Mumbai. The ratio of their speeds is?
 a) 1:4 b) 4:5 c) 5:4 d) 3:2

14) Walking at $\frac{3}{4}$ of his usual speed, a man is 16 minutes late for his office. The usual time taken by him to cover that distance is?

- a) 48 min b) 60 min c) 42min d) 62 min

15) An Old man and a Young man are working together in an office and staying together in a nearby apartment. The Old Man takes 30 minutes and the Young 20 minutes to walk from apartment to office. If one day the old man started at 10:00AM and the young man at 10:05AM from the apartment to office, when will they meet?

- a) 10:15 b) 10:30 c) 10:45 d) 10:00

16) Ram and Shakil run a race of 2000m. First, Ram gives Shakil a start of 200 m and beats him by 1 minute. Next, Ram gives Shakil a start of 6 min and is beaten by 1000 metres. Find the time in minutes in which Ram and Shakil can run the race separately.

- a) 12, 18 b) 10, 12 c) 11, 18 d) 8, 10

17) George walks 36 Kms partly at a speed of 4kms per hour and partly at 3 km per hour. If he had walked at a speed of 3km per hour when he had walked at 4 and 4 Km per when he had walked at 3 he would have walked only 34 kms. The time (in hours) spent by George walking was:

- a) 8 b) 12 c) 5 d) 10

18) At 12:00 hours Jake starts to walk from his house at 6 km an hour. At 13:30 hours, Paul follows him from Jake's house on his bicycle at 8 km per hour. When will Jake be 3 km behind Paul?

- a) 19:00 hrs b) 18:30 hrs c) 20:00 hrs d) 19:30 hrs

19) A person walks at 4km/hr for a particular duration T_1 and 3km/hr for another duration T_2 and covers a total distance of 36 km. If he walks at 4km/hr for the duration T_2 and at 3km/hr for the duration T_1 , then he covers only 34 km. What will be the time taken by him to cover the one of the legs?

- a) 4 hrs b) 7 hrs c) 10 hrs d) 6 hrs

20) Megha drives along the perimeter of square field of side 10 kms. She drives along the first side at 10 kmph, along the second side at 20 kmph, along the third side at 30 kmph and along the fourth side at kmph. Her Average speed is

- a) 19.2 kmph b) 18 kmph c) 20 kmph d) 30 kmph

21) A person travels from Chennai to Pondicherry in cycle at 7.5 Kmph. Another person travels the same distance in train at a speed of 30 Kmph and reached 30 mins earlier. Find the distance.

- a) 5 km b) 10 km c) 15 km d) 20 km

22) For a car there are 5 tyres including one spare tyre (4+1). All tyres are equally used. If the total distance travelled by the car is 40000 km then what is the average distance travelled by each tyre?

- a) 10000 b) 40000 c) 32000 d) 8000

23) Jake and Paul walk each 10 km. Jake is 1.5 km faster than Paul because of which he covers the distance in 1.5 hrs faster than Paul. What is Jake's speed?

- a) 4 b) 6 c) 8 d) 2

24) Raj travels a part of journey by taxi paying 15 per km and rest by train paying 21per km. If he travels a total of 450 Km and pay Rs.8130 then the distance travelled by raj in train?

- a) 230 b) 260 c) 190 d) 180

25) Jake is faster than Paul. Jake and Paul each walk 24 km. The sum of their speeds is 7 kmph and the sum of time taken by them is 14 hours. Then, Jake's speed is equal to:

- a) 7 kmph b) 3 kmph c) 5 kmph d) 4 kmph

26) A and B start from their house at 10 am. They travel from their house on MG road at 20 kmph and 40 kmph. There is a T junction on their path A turn left at the T junction at 12:00 noon. B reaches the T junction earlier and turns right. Both of them continue travelling till 2:00 pm. What is the distance between A and B at 2:00 pm?

- a) 160 km b) 120 km c) 140 km d) 150 km

27) Car A leaves city C at 5 pm and drives at a speed of 40 kmph. 2 hours later another car B leaves city C and drives in the same direction as car A. In how much time will car B be 9 km ahead of car A if speed of car B is 60 kmph?

- a) 4.25 hours b) 4.17 hours c) 4.30 hours d) 4.45 hours

28) One day, Eesha started 30 minutes late from home and reached her office 50 minutes late while driving 25% slower than her usual speed. How much time in minutes does Eesha usually take to reach her office from home?

- a) 80 min b) 50 min c) 60 min d) 70 min

29) A travels at 40kmph and B travels at 60kmph. They are travelling towards each other and start at the same time. By the time they meet, B would have travelled 120km more than A. Find the total distance.

- a) 600 km b) 720 km c) 400 km d) 540 km

30) Suparna needs to browse through 75 pages of a novel before she gives her review to the class. She has 2.5 hours before the lecture. What should be her reading speed in pages /hour?

- a) 16 b) 30 c) 20 d) 22

31) Jack and Jill went up and down a hill. They started from the bottom and Jack met Jill again 20 miles from the top while returning. Jack completed the race 1 min a head of Jill. If the hill is 440 miles high and their speed while down journey is 1.5 times the up journey. How long it took for the Jack to complete the race?

- a) 12.6mins b) 12.8mins c) 12.4mins d) 12.2mins

32) Jake left point A for point B. 2 hours and 15 minutes later, Paul left A for B and arrived at B at the same time as Jake. Had both of them started simultaneously from A and B travelling towards each other, they would have met in 120 minutes. How much time (hours) did it take for the slower one to travel from A to B if the ratio of speeds of the faster to slower is 3:1?

- a) 4 hours 15 minutes b) 3 hours 20 minutes
c) 4 hours d) 3 hours

33) A dog takes 4 leaps for every 5 leaps of hare but 3 leaps of dog is equal to 4 leaps of hare compare speed?

- a) 13: 15 b) 15:17 c) 16:15 d) None of these

34) Albert and Fernandes have two leg swimming race. Both start from opposite ends of the pool. On the first leg, the boys pass each other at 18 m from the deep end of the pool. During the second leg they pass at 10 m from the shallow end of the pool. Both go at constant speed but one of them is faster. Each boy rests for 4 seconds at the end of the first leg. What is the length of the pool?

- a) 34 m b) 24 m c) 35 m d) 44 m

35) A train covered a distance at a uniform speed .if the train had been 6 km/hr faster it would have been 4 hour less than schedule time and if the train were slower by 6 km/hr it would have been 6 hours more. Find the distance.

- a) 720 km b) 700 km c) 600 km d) 590 km

36) A train leaves Meerut at 5 a.m. and reaches Delhi at 9 a.m. Another train leaves Delhi at 7 a.m. and reaches Meerut at 10.30 a.m. At what time do the two trains travel in order to cross each other?

- a) 7:56 am b) 7:50 am c) 7:30 am d) 7:36 am

37) A train goes from stations A to B. One day there is a technical problem at the very beginning of the journey & hence the train travels at $\frac{3}{5}$ of it's original speed and so it arrives 2 hours late. Had the problem occurred after 50 miles had been covered, the train would have arrived 40 min earlier (i.e., only $120-40 = 80$ min late). What is the distance between the 2 stations?

- a) 150 miles b) 160 miles c) 170 miles d) 180 miles

38) A, B and C start running around the circle from the same point, in the same direction and at the same time. The total distance is 1200 m. The speed is 3 kmph, 9 kmph, 27kmph. How long does it take for them to meet for the first time?

- a) 1440s b) 180s c) 720s d) 240s

39) A, B and C start running around the circle from the same point, in the same direction and at the same time. The total distance is 1200 m. The speed is 9 kmph, 27 kmph, 45 kmph. How long does it take for them to meet for the first time?

- a) 360s b) 480s c) 150s d) 240s

40) A, B and C start running around the circle from the same point, in the same direction and at the same time. The total distance is 1200 m. The speed is 9 kmph, 27 kmph, 15 kmph. How long does it take for them to meet for the first time?

- a) 360s b) 1440s c) 720s d) 240s

41) A motor cars takes 50 sec to travel 500m.what is its speed?

- a) 36m/sec b) 32m/sec c) 36km/hr d) 32km/hr

HEIGHT AND DISTANCE

1) Find the angle of depression of stick leaning against a wall of length 13m and the foot of the ladder is 6.5m from the wall.

- a) 30° b) 45° c) 60° d) 75°

2) When the angle of elevation of the sun increases from 30° to 60° , the shadow of a pole is diminished by 5 m. Then the height of the post is

- a) $\frac{2}{5}\sqrt{3}$ m b) $\frac{5}{3}\sqrt{3}$ m c) $\frac{3}{5}\sqrt{2}$ m d) $\frac{5}{2}\sqrt{3}$ m

PIPES AND CISTERNS

- 1) Pipe A fills in 10 min and pipe B fills in 15 min. If both the pipes are opened for 5 min and A closed. How much long will it take to fill the tank?
a) 150 s b) 300 s c) 450 s d) 100 s
- 2) A cistern can be filled by two pipes A and B in 10 and 15 hours respectively and then is emptied by the tank in 8 hrs. If all the pipes are opened together the cistern will be filled in?
a) 21 hrs b) 22 hrs c) 23 hrs d) 24 hours e) None of these
- 3) Two pipes A&B can separately fill a cistern in 220 minutes and 330 minutes. Together they can fill the cistern in
a) 1 hour 32 minutes b) 1 hour c) 2 hour 12 minutes d) 2 hours
- 4) There is a tank, and two pipes A and B. A can fill tank in 25 min and B can empty the tank in 20 min. If both the pipes are opened at same time. How much time required for the tank to be filled?
a) 15 min b) 18 min c) 13 min d) Never be filled
- 5) A pipe can fill a cistern in 1 hour 20 minutes but due to leakage in the bottom of the cistern, it is filled in 2 hours 10 minutes. If the cistern is full, how long will the leakage take to empty it?
a) 208 minutes b) 194 minutes c) 216 minutes d) 182 minutes
- 6) Three pipes A, B, and C can fill a tank together in 6 hours. A and B can fill the tank together in 9 hours. What is the time taken by pipe C to fill the tank alone?
a) 20 hours b) 18 hours c) 16 hours d) 19 hours

PROBLEMS ON TRAINS

- 1) A Train runs at speed of 42 m/s and takes 35 seconds to pass a tunnel. After travelling some distance. It takes 15 seconds to pass a pole. What is the length of the tunnel?
a) 162 m b) 630 m c) 840 m d) 240 m
- 2) A train Rajdhani starts from Suratkal at 5 am with the speed of 15kmph. Another train starts from Shatabi the same place in same direction at 7 am with the speed of 20kmph. At what time will both the trains meet each other?
a) 3.00pm b) 200pm c) 12.00pm d) 1.00pm

- 3) A train travelling at 30kmph takes $27\frac{1}{2}$ seconds in passing a certain point. Find the length of the train.
a) 112.5 m b) 115.1 m c) 113.3 m d) 111.2 m
- 4) The Meera runner takes 26 seconds to pass a platform running at a speed of 24 kmph. It takes 9 sec to cross a man who is walking at 4 kmph in opposite direction. Find the length of the platform.
a) 245 m b) None c) 255 m d) 265 m

RACES AND GAMES

- 1) In a potato race, 20 potatoes are placed in a line of intervals of 4 meters with the first potato 24 meters from the starting point. A contestant is required to bring the potatoes back to the starting place one at a time. How far would he run in bringing back all the potatoes?
a) 2400 b) 1440 c) 2480 d) 1240

CLOCKS & CALENDARS

1. There is an element which triplicates in every hour. Each of these 3 items in turn reproduces exactly 3 other items. If a single compound is kept in a container at noon and the container is full by midnight. After how many hours is the container $\frac{1}{3}$ full?
a) 11:00am b) 10:00pm c) 11:00pm d) 10:00am
- 2) The time showed by an analog clock at a moment is 11 am then 1234567890 hours later it will show the time as:
a) 11 am b) 11 pm c) 5 am d) 4 pm
- 3) Four bells begin to toll together and then each one at the intervals 6,7,8,9 respectively. The number of times they will be together in the next two hours is
a) 14 b) 15 c) 13 d) 11
- 4) A workman starts his work on Monday works for 8 days and takes every ninth day as his holiday. His 12th holiday will fall on
a) Monday b) Wednesday c) Thursday d) Tuesday
- 5) In a year N, the 320th day of the year is Thursday. In the year N+1, the 206th day of the year is also a Thursday. What is the 168th day in the year N-1?
a) Friday b) Thursday c) Tuesday d) Saturday

6) In 2003, there are 28 days in February and there are 365 days in the year. In 2004, there are 29 days in February and there are 366 days in the year. If the date March 11, 2003 is a Tuesday, then which one of the following would the date March 11, 2004 be?

- a) Tuesday b) Wednesday c) Monday d) Thursday

7) In a particular year, the month of January had exactly four Thursdays and four Sundays. On which day of the week did January 1st occur that year?

- a) Monday b) Tuesday c) Thursday d) Wednesday

8) Asha and Eesha – Eesha lies on Monday, Tuesday and Wednesday. Asha lies on Thursday, Friday and Saturday. Other days they will say the truth. Professor forgot and asked them what day it is. Both of them said yesterday I was lying and then professor got the day. What day it is?

- a) Tuesday b) Thursday c) Friday d) Cannot be determined

9) The minute hand of a clock is 9cm and that of hour hand is 7 cm. If they run for 3 days, how much distance is covered by both the hands?

- a) 1296[] b) 1380[] c) 84[] d) 1500[]

10) Supposing a clock takes 7 seconds to strike 7. How long will it take to strike 10?

- a) 1 hour b) 2 hours c) 3 hours d) 4 hours

11) What is day of last day in 2000?

- a) Sunday b) Monday c) Tuesday d) Wednesday

12) The angle between two hands at 3.45 is

- a) 110degree b) 115 degree c) 112 1/2 degree d) 157.5 degrees

PERMUTATIONS & COMBINATIONS

1) In a college's cultural festival, 6 programs are to be staged, 3 on a day, for 2 days. In how many ways could the program be arranged?

- a) 320 b) 675 c) 720 d) 360

2) In how many ways 8 apples can be divided between 3 friends such that each of them gets at least one apple?

- a) 20 b) 17 c) 21 d) 24

3) From the word abcd, how many ways are there to form permutation and combination of those words?

- a) 24,4 b) 22,2 c) 26,6 d) 23,3

4) What is the value of $15C_{13}$?

- a) 101 b) 102 c) 103 d) 104 e) 105

5) What is the combination of 3 balloons from a packet of 25 balloons? Are

- a) 2400 b) 2500 c) 2300 d) 2600

6) 12 members were present at a board meeting. Each member shook hands with all of the other members before & after the meeting. How many handshakes were there?

- a) 130 b) 134 c) 132 d) 135

7) 5 paramedics and 4 technicians are registered for a rescue team. How many possible combinations one can choose to make a rescue team of a paramedic and a technician?

- a) 9 b) 40 c) 20 d) 18

8) The causes of productivity loss are to be written around a circle in the annual report. In how many ways can analyst write them around the circle. If the no of courses are 5?

- a) 5! b) 5C5 c) 5P5 d) 4! e) 4C4

9) Out of 5 boys and 5 girls ,a group of 5 has to be formed containing at least 3 boys, In how many ways can this be done ?

- a) 100 b) 120 c) 25 d) 126

10) Ramesh, Abhijeet and Ajay are eligible to be the captain of the cricket team. Shad , John , Shisir and Nithin are eligible to be the co-captain. How many possible outcomes are there for choosing a captain and a co-captain?

- a) 12 b) 7 c) 5 d) 9

11) A company decides a new Identity code for all its employees. The identity code would comprise of five letters initials that can be formed using the alphabets of English language such that the fifth letter is always a consonant .How many such combinations are possible?

- a) $26^3 * 21^2$ b) $21^4 * 26$ c) $21^3 * 26^2$ d) $26^4 * 21$

12) How many 3 digit numbers can be formed using 2,3,4 and 5 with none of the digits being repeated

- a) 20 b) 45 c) 24 d) 10

13) The number of 6 digit numbers that can be formed from 0, 1, 5, 6, 7, and 8 in which the first digit is not 0 are

- a) 120 b) 600 c) 720 d) 800

14) In how many ways can at least 2 team members be selected for grade A out of 7 members in a group?

- a) $7C2$ b) $7C2 + 7C3 + 7C4 + 7C5 + 7C6 + 7C7$
c) $7P2 + 7P3 + 7P4 + 7P5 + 7P6 + 7P7$ d) $7C0 + 7C1$ e) $7P0 + 7P1$

15) I have kept six different books on a shelf. In how many different ways can i arrange them?

- a) 6 b) 24 c) 120 d) 720

16) How many ways can the team members be arranged for the team picture if all the males are always together and if the team comprises of 7 males and 6 females?

- a) $13!$ b) $7!7!$ c) $7!6!$ d) 14

17) In how many different ways can the letter of the word OPTICAL be arranged so that the vowels always come together?

- a) 120 b) 720 c) 4320 d) 2160 e) None of these

18) From a group of 8 men and 8 women ,8 members are to be selected for a team such that women constitute at least 50% of the team in how many ways can it be done?

- a) $8c4 * 8c4 + 8c5 * 8c3 + 8c6 * 8c2 + 8c7 * 8c1 + 8c8$ b) $84 * 84$
c) $8c4 * 8c4$ d) $84 * 84 + 83 * 85 + 82 * 86 + 87 * 8 + 1$

19) If $10 C_x = 1$, then what is the value of x if $x! = 0$?

- a) 1 b) 5 c) 10 d) 15

20) The number of 5 digit odd numbers that can be made from numbers 1, 2, 3, 4, 5 are

- a) 24 b) 32 c) 64 d) 72

21) In how many ways can the digit 2,3,5,7 and 9 be placed to form a 3digit number so that the higher order digit is always greater than lower order digits?(all are different digit)

- a) 8 b) 9 c) 10 d) 15

22) If from a deck of 52 cards, 4 cards are to be selected and one card of it should be a spade and another card should be heart, in how many ways can these cards be selected?

- a) $13^2 * {}^{50}C_2$ b) ${}^{52}C_4$ c) $26 * {}^{50}C_2$ d) ${}^{13}C_4$

23) Five people need to travel in a 5-passenger car. There are a driver's seat and a passenger seat in the front and three passenger seats in the back: a left seat, a middle seat, and a right seat. Two of the people are children and can sit only in the back. One of the three adults is busy reading a math book and refuses to drive. In how many ways can they get seated?

- a) 12 b) 24 c) 18 d) 6

24) Find the 32nd word in the list, where the word MONOS is permuted in all possible ways and arranged in alphabetical order.

- a) OSMON b) OSNOM c) OSMNO d) OSONM

25) There are 16 teams divided in 4 groups. Every team from each group will play with each other once. The top 2 teams will go to the next round and so on the top two teams will play the final match. Minimum how many matches will be played in that tournament?

- a) 43 b) 40 c) 14 d) 50

26) How many words are formed from DRAUGHTSLOTS if order of vowels do not change and no two vowels occupy consecutive places

- a) 76204800 b) 259459200 c) 17160 d) 15120

27) How many six digit even numbers can be formed from digits 1 to 7 such that the digits should not repeat and the second last digit should be even?

- a) 6480 b) 320 c) 2160 d) 720

28) In how many ways can the digit of the number 2233558888 be arranged so that the odd digits are placed in the even positions?

- a) 900 b) 450 c) 225 d) 360

29) When all possible six letter arrangements of the letters of the word "MASTER" are sorted in alphabetical order, what will be the 49th word?

- a) AREMST b) ARMEST c) AMERST d) ARMSET

30) If ABERSU are in sorted in alphabetical order, if 24 sorting are required for ABUSRE, 25 for AEBRSU, 49 for ARBESU, then how many sorting are required for AEUSRB?

- a) 45 b) 48 c) 47 d) 46
- 31) How many 6 digit even numbers can be formed from digits 1, 2, 3, 4, 5, 6, 7 so that the digit should not repeat and the second last digit is even?
a) 6480 b) 320 c) 2160 d) 720
- 32) The number of ways in which four persons A, B, C, D and six more persons can stand in a queue so that A always stands before B, B always before C and C always before D is:
a) 6! b) 7! c) 9! d) $10C4 \cdot 6!$
- 33) How many positive integer numbers not more than 4300 can be formed with the digits 0, 1, 2, 3, 4 if repetitions are allowed?
a) 560 b) 565 c) 575 d) 625
- 34) How many 6 digit even numbers can be formed from the digits 1, 2, 3, 4, 5, 6 and 7 so that digits do not repeat and the second last digit is even?
a) 2160 b) 720 c) 5040 d) 865
- 35) There are 5 letters and 5 addressed envelopes. The number of ways in which all the letters can be put in wrong envelope are?
a) 119 b) 44 c) 59 d) 40
- 36) In how many possible ways can you write 1800 as a product of 3 positive integers a, b and c.
a) 350 b) 360 c) 380 d) 450
- 37) How many vehicle registration plate numbers can be formed with digits 1,2,3,4,5 (no digits being repeated) if it is given that the registration number can have 1 to 5 digits?
a) 205 b) 100 c) 325 d) 105
- 38) There are 20 persons sitting in a circle. In that there are 18 men and 2 sisters. How many arrangements are possible in which the two sisters are always separated by a man?
a) $18! \times 2$ b) $17!$ c) $17 \times 2!$ d) 12
- 39) A number plate can be formed with two alphabets followed by two digits, with no repetition. Then how many possible combinations can we get?
a) 58500 b) 67600 c) 65000 d) 64320

- 40) The letters in the word "PLACES" are permuted in all possible ways and arranged in the alphabetical order. Find the word at position 48th in the permuted alphabetical order.
a) AESPLC b) ALCEPS c) ALSCEP d) AESPCL
- 41) In how many ways a team of 11 must be selected from 5 men and 11 women such that the team comprises of not more than three men?
a) 1234 b) 1565 c) 2456 d) 2256
- 42) In a staircase, there are 10 steps. A child is attempting to climb the staircase. Each time, she can either make 1 step or 2 steps. In how many different ways can she climb the staircase?
a) 10 b) 21 c) 36 d) None of these
- 43) In how many possible ways can you write 3240 as a product of 3 positive integers a, b and c.
a) 450 b) 420 c) 350 d) 320
- 44) The letters in the word ROADIE are permuted in all possible ways and arranged in alphabetical order. Find the word in the 44th rank.
a) AERIOD b) AERDOI c) AERODI d) AEODRI
- 45) An organization has three committees. Only two persons are members of all three committees, but every pair of committees has three members in common. What is the LEAST possible number of members on any one committee?
a) 4 b) 5 c) 6 d) 7
- 46) In how many ways can 2310 be expressed as a product of three factors?
a) 41 b) 56 c) 23 d) 46
- 47) In an office, at various times during the day the boss gives the secretary a letter to type, each time putting the letter on top of the pile in the secretary's inbox. When there is time, the secretary takes the top letter off the pile and types it. If there are five letters in all, and the boss delivers them in the order 1 2 3 4 5, which of the following could NOT be the order in which the secretary types them?
a) 2 4 3 5 1 b) 4 5 2 3 1 c) 3 2 4 1 5 d) 1 2 3 4 5
- 48) 6 task and 6 persons. P1 and P2 does not do task T1. T2 is assigned to P3 or P4. Each person should be assigned with at least 1 task. In how many ways the task can be assigned?

- a) 192 b) 360 c) 144 d) 180
- 49) 2 gears, one with 12 teeth and the other one with 14 teeth are engaged with each other. One tooth in smaller gear and one tooth in bigger gear are marked and initially those 2 marked teeth are in contact with each other. After how many rotations of the smaller gear with the marked teeth in the other gear will again come into contact for the first time?
- a) 7 b) 12 c) Data insufficient d) 84
- 50) There are 4 couples who go for a honeymoon together. At one of the places, they all have to cross a river but there is only one boat available. Wives are jealous and they don't like their husbands travelling with other woman. Husbands are also possessive and they don't like their wives travelling with other man. The number of minimum possible ways in which they will cross the river are:
- a) 16 b) 17 c) 18 d) 19
- 51) In how many ways can the letters of the English alphabet be arranged so that there are seven letters between the letters A and B, and no letter is repeated.
- a) ${}^{24}P_7 * 2$ b) $24! * 36$ c) ${}^{24}P_7 * 20!$ d) ${}^{24}P_7 * 7!$
- 52) A owes B a sum of Rs.50. He decides to pay back the loan but can pay back the loan by giving either a 10 rupee note or a 20 rupee note at a time. In how many ways, can he repay the loan such that he uses at least one note of each denomination?
- a) 5 b) 6 c) 7 d) 8
- 53) 10 people are there, they are shaking hands together, how many handshakes are possible, if they are in no pair of cyclic sequence
- a) 45 b) 9 c) 12 d) 30
- 54) The number of committees of size 10 that could be formed from 10 men & 10 women such that committee has at least 6 women is
- a) 60626 b) 210 c) 10210 d) None
- 55) 5 cars are to be parked in 5 parking slots. there are 3 red cars, 1 blue car and 1 green car. In how many ways the car can be parked?
- a) 10 b) 25 c) 20 d) 30
- 56) A set of football matches is to be organized in a "round-robin" fashion, i.e., every participating team plays a match against every other team once and only once. If 21 matches are totally played, how many teams participated?

- a) 6 b) 9 c) 8 d) 7
- 57) There are 16 hockey teams. find :
Number of matches when knockout of 16 team is to be played
- a) 14 b) 15 c) 16 d) 17
- 58) 15 tennis players take part in a tournament. Every player plays twice with each of his opponents. How many games are to be played?
- a) 190 b) 200 c) 210 d) 220 e) 225
- 59) If a refrigerator contains 12 cans such that 7 blue cans and 5 red cans. In how many ways can we remove 8 cans so that atleast 1 blue can and 1 red can remains in the refrigerator?
- a) 450 b) 455 c) 544 d) 500
- 60) In a cycle race there are 5 persons named as J, K, L, M, N participated for 5 positions so that in how many number of ways can M make always before N
- a) 60 b) 70 c) 80 d) 90
- 61) How many three digit numbers abc are formed where at least two of the three digits are same.
- a) 224 b) 234 c) 252 d) 200
- 62) In a cycle race there are 5 persons named as J, K, L, M, N participated for 5 positions so that in how many number of ways can M finishes always before N?
- a) 55 b) 57 c) 69 d) 60
- 63) If a refrigerator contains 12 cans such that 7 blue cans and 5 red cans. In how many ways can we remove 8 cans so that atleast 1 blue can and 1 red can remains in the refrigerator?
- a) 467 b) 489 c) 455 d) 469
- 64) There are 16 people; they divide into four groups, now from those four groups select a team of three members, such that no two members in the team should belong to same group.
- a) 256 b) 245 c) 287 d) 265
- 65) How many five digit numbers are there such that two left most digits are even and remaining are odd and digit 4 should not be repeated.
- a) 2567 b) 2375 c) 2875 d) 3765

66) 7 people have to be selected from 12 men and 3 women, Such that no two women can come together. In how many ways we can select them?

- a) 2772 b) 2654 c) 2975 d) 2764

67) Tennis players take part in a tournament. Every player plays twice with each of his opponents. How many games are to be played?

- a) 287 b) 266 c) 210 d) 254

68) Find the no of ways in which 6 toffees can be distributed over 5 different people namely A, B, C, D, E.

- a) 54 b) 55 c) 57 d) 56

69) A shop has 4 shelf, 3 wardrobes, 2 chairs and 7 tables for sell. You have to buy

- A. 1 shelf
B. 1 wardrobe
C. Either 1 chair or 1 table

How many selections can be made?

- a) 111 b) 108 c) 112 d) 110

70) How many ways can one arrange the word EDUCATION such that a relative position of vowels and consonants remains same?

- a) 2884 b) 2880 c) 2886 d) 2889

71) There are 8 digits and 5 alphabets. In how many ways can you form an alphanumeric word using 3 digits and 2 alphabets?

- a) 12984 b) 23433 c) 43200 d) 23412

72) A college has 10 basketball players. A 5-member team and a captain will be selected out of these 10 players. How many different selections can be made?

- a) 1260 b) 210 c) $10C6 * 6!$ d) $10C5 * 6$

73) 6 members have to be selected from different field. 10 from java, 5 from Microsoft, 8 from Oracle, 2 from IBM. What is the possible combination?

- a) 148000 b) 168000 c) 158000 d) 178000

PROBABILITY

1) A software Engineer creates a LAN game where a five digit code made up of 1,2,3,4,5,6,7,8 has to be decided on as a universal code. There is a condition that each number has to be used and no number can be repeated. What is the probability that first 4 digit of a code are even numbers?

- a) $1/70$ b) $1/840$ c) $1/8$ d) $1/40320$

2) A detergent powder company is having a contest. Each pack of 1kg contains one of the letters B, A, M, and O. In every 20 packs there are four B's, ten M's and one O. What is the probability that a pack will have a B?

- a) $1/4$ b) $1/2$ c) $1/5$ d) $1/20$

3) A quiz has one multiple choice question with a answer choices A,B and C ,and two true or false questions. What is the probability answering all questions correctly by guessing?

- a) $1/5$ b) $\frac{1}{4}$ c) $1/3$ d) $1/12$

4) Find the probability of even numbers that can be possible only with 1,2,3,4 in 4 digits?

- a) 1 b) $1/2$ c) $1/4$ d) $1/3$

5) In a pack of 52 cards, select 4 cards as like 1 spade and 1 heart. Find the probability?

- a) 0.022 b) 0.033 c) 0.001 d) impossible event

6) Varun is guessing which of the 2 hands holds a coin. What is the Probability that Varun guesses correctly 3times?

- a) $1/6$ b) $1/2$ c) $1/4$ d) $1/8$

7) Find the probability of forming 4 digits number using 1,2,3,4,5,6,7,8 without any repetition?

- a) 50 b) 60 c) 70 d) 80 e) 90

8) In a quiz competition, the host asked a question and provided three possible answers. What is the probability that the answer choice which Rohit selects for a question is wrong?

- a) $1/3$ b) $\frac{1}{2}$ c) $3C1 * \frac{3}{2}$ d) $2/3$

9) Ravi has a bag full of 10 nestle and 5 cadbury chocolates. Out of these, he draws two chocolates. What is the probability that he would get at least one nestle chocolate?

- a) $19/21$ b) $3/7$ c) $2/21$ d) $1/3$

10) In a bid, two firms A and B are competing against each other.if the probability of a bid amount quoted by B being lower than that of A is 0.8 and if it is known

that the bid is won by the one who quotes the lowest price, what is the probability that A wins the bid?

- a) 0.8 b) 0.004 c) 0.2 d) 0.001

11) One card is drawn from a pack of 52 cards each of the 52 cards being equally likely to be drawn. Find the probability that the card drawn is 9 of hearts?

- a) $1/13$ b) $1/26$ c) $1/52$ d) $3/52$

12) In a class of 25 students, the probability that any one girl will be absent on a given day is 0.2, the probability of one of the boys being absent is 0.3. Calculate the probability of that all students present on Tuesday.

- a) $0.3^{10} \cdot 0.2^{15}$ b) $0.7^{10} \cdot 0.8$ c) $0.8^{10} \cdot 0.7^{15}$ d) $0.2^{10} \cdot 0.3^{15}$

13) Both sruthi & pooja randomly choose a colour from red, orange and yellow. What is the probability that both choose orange?

- a) $1/3$ b) $1/6$ c) $1/9$ d) $2/3$

14) 8 friends a, b, c, d, e, f, g & h are to be seated around a round table. Find the probability that a & b never sit next to each other.

- a) $2/7$ b) $5/7$ c) $2/8$ d) $3/8$

15) If a coin with both heads is tossed then the probability of obtaining a tail is

- a) 0 b) $1/2$ c) $1/3$ d) 1

16) What is the probability of getting an odd sum of the scores in a throw of two dices?

- a) $1/3$ b) $1/2$ c) $2/5$ d) $2/3$

17) A bag contains 4 strawberries and 8 grapes. What is the probability that both the fruits drawn from it are strawberries

- a) $1/3$ b) $1/11$ c) $3/11$ d) $1/6$

18) Find the probability of getting a multiple of 3 in the throw of a dice,

- a) $1/2$ b) $1/3$ c) $2/3$ d) $1/4$

19) What is the probability that sharique's test would be fixed on monday or tuesday. In a week from monday to sunday?

- a) $2/7$ b) $1/5$ c) $2/3$ d) $5/7$

20) Coins of 1, 2 and 5 rupees are tossed. What is the probability of getting a head on 1 rupee, tail on 2 rupee and a head on 5 rupee coins?

- a) $1/2$ b) $1/4$ c) $1/8$ d) $1/16$

21) A bag contains Orange flavoured candies only. Malini takes out one candy without looking into the bag. What is the probability that she takes out an orange flavoured candy?

- a) 0 b) $1/2$ c) $1/3$ d) 1

22) In a game show there is 5 prize cards and 20 blank cards. A contestant is asked to choose a card at random. What is the probability that he won a prize?

- a) $3/5$ b) $2/5$ c) $1/5$ d) $4/5$

23) If a ball is drawn at random from a box containing 6 red, 4 blue and 5 white balls, What is the probability that the ball drawn is a red or blue?

- a) $1/3$ b) $2/3$ c) $7/15$ d) $2/5$

24) The boss accepts only one employee's leave request on a particular day. If five employees named Ronak, Mahesh, Shripal, Mohana Priya and Shreyans apply for leave on the occasion of Ganesh Chaturthi, What is the probability that Ronak's leave request be approved?

- a) $2/3$ b) 1 c) $4/5$ d) $1/5$

25) In a non leap year what is the probability that the last day of the year starts with the letter 't'?

- a) $4/7$ b) 1 c) 0 d) $2/7$

26) In a shooting competition the probability that Rahul will hit the target is $5/7$ and that Sheela will hit the target is $3/4$, so what is the probability that both of them will hit the target?

- a) $2/5$ b) $1/5$ c) $20/21$ d) $15/28$

27) A developed car in the workshop comprises of around 70 components. Each component has a probability of having a manufacturing error of 0.015. What is the probability that this developed car will get rejected due to manufacturing error in any of the component?

- a) $(0.015)^{70}$ b) $(0.956)^{70}$ c) $(0.985)^{70}$ d) $(0.015)^{70}$

28) 5 black balls and 3 red balls are there in a basket. What is the probability that red ball is taken in the 4th pick without replacement.

- a) 0.464 b) 0.375 c) 0.315 d) None of these

29) Two decks of cards are there. Each deck contains 20 cards, with numbers from 1 to 20 written on them. A card is drawn of random from each deck, getting the

numbers x and y What is the probability that $\log x + \log y$ is a positive integer. Logs are taken to the base 10.

- a) $3/200$ b) $29/200$ c) $7/400$ d) $1/50$

30) A bag contains 110 tickets numbered 1, 2, 3, ..., 110. If a ticket is drawn out of it at random, what is the probability that the ticket drawn has the digit 2 appearing on it?

- a) $22/110$ b) $20/110$ c) $21/110$ d) $31/110$

31) A box has 13 white chips, 7 blue chips and 6 green chips. What is the probability that, if 2 chips are drawn from the box in succession, one is blue and other is white?

- a) $8/30$ b) $7/25$ c) $7/50$ d) $20/16$

32) One card is lost from a pack of 52 cards. Two cards are drawn randomly. They are spade. What is the probability that the lost card is also spade?

- a) $1/52$ b) $1/13$ c) $1/4$ d) $3/13$

33) Tickets are numbered from 1,2,...,1100 and one card is drawn randomly what is the probability of having 2 as a digit?

- a) $29/11$ b) $32/11$ c) $30/110$ d) $22/110$

34) There is a school where 60% are girls and of which 45% are poor. Students are selected at random, what is the probability of selecting a poor girl out of total strength.

- a) 0.27 b) 0.45 c) 0.56 d) None of these

35) A bag contains six sticks of the following lengths 1 cm, 3 cm, 5 cm, 7 cm, 11 cm and 13 cm. Three sticks are drawn at random from the bag. What is the probability that we can form a triangle with those sticks?

- a) $11/20$ b) 1 c) $\frac{1}{4}$ d) $2/5$

36) Probability that leap year chosen at random will have 53 Sundays.

- a) $1/49$ b) $3/7$ c) $1/7$ d) $2/7$

37) From a box containing 3 white chips, 7 blue chips and 15 green chips, 2 chips are drawn at random. What is the probability that one is of the chips is blue and the other is white?

- a) $7/625$ b) $7/50$ c) $7/100$ d) $21/625$

38) Two people, Ranbir and Katrina decide to meet at a beach between 1 pm to 2 pm, given that both will surely turn up once in the given time frame. If Ranbir arrives, he waits for 15 minutes and then leaves feeling betrayed and similarly Katrina waits for 15 minutes after she arrives. So what's the probability that they meet?

- a) $1/4$ b) $1/16$ c) $7/16$ d) $9/16$

39) A pair of 8 sided dice has sides numbered 1 to 8. Each side has same probability or chance of landing face up. The probability that the product of 2 numbers on the sides that land face up exceeds 36 is

- a) $11/64$ b) $5/32$ c) $3/16$ d) $1/4$

40) Given the digits 1,3,6,9 find the probability that a 3 digit number formed by using them with no digit repeated is divisible by 4

- a) None b) $1/4$ c) $1/6$ d) $1/12$

41) Three cars, A, B and C are participating in a race. A is twice as likely as B to win and B is thrice as likely as C to win. What is the probability that B will win, if only one of them can win the race?

- a) $1/2$ b) $2/5$ c) $3/10$ d) $1/10$

42) Two dice are thrown. Find the probability of getting a multiple of 3 or 5 as the sum.

- a) $19/36$ b) $1/2$ c) $17/36$ d) $5/36$

43) 100 students appeared for two different examinations. 60 passed the first, 50 the second and 30 both examinations. Find the probability that a student selected at random failed in both examinations?

- a) 1.4 b) $4/5$ c) $1/5$ d) 0.4

44) From a bag containing 8 green and 5 red balls, three are drawn one after the other. The probability of all three balls being green if the balls drawn are replaced before the next ball is picked and the balls drawn are not replaced, are respectively:

- a) $512/2197$, $336/2197$ b) $512/2197$, $336/1716$
c) $336/2197$, $512/2197$ d) $336/1716$, $512/1716$

45) In how many ways a cricketer can score a double century (200 runs) with only boundaries (fours) and over boundaries (sixes)?

- a) 15 b) 16 c) 17 d) 18

46) A bag contains 8 white and 3 blue balls. Another bag contains 7 white and 4 blue balls. What is the probability of getting a blue ball?
a) $\frac{3}{7}$ b) $\frac{7}{22}$ c) $\frac{7}{25}$ d) $\frac{7}{15}$

47) There are 2 bags. One bag contains 5 white and 10 red balls. The other contains 10 white and 7 red balls. What is the probability of taking a red ball from one of the bags?
a) $\frac{55}{102}$ b) $\frac{17}{21}$ c) $\frac{15}{17}$ d) $\frac{7}{8}$

48) In a 3×3 square grid comprising 9 tiles, each tile can be painted in red or blue color. When the tile is rotated by 180° , there is no difference which can be spotted. How many such possibilities are there?
a) 16 b) 32 c) 64 d) 256

49) On a toss of two dice, A throws a total of 5. Find the probability that he throws another 5 before he throws 7.
a) 40% b) 45% c) 50% d) 60%

50) Three dice are rolled. What is the probability of getting sum of the numbers as 10?
a) $\frac{27}{216}$ b) $\frac{25}{216}$ c) $\frac{10}{216}$ d) $\frac{1}{11}$

51) In a horse racing competition there were 18 horses numbered 1 to 18. The organizers assigned a probability of winning the race to each horse, based on the horses' health. The probability that horse 1 would win is $\frac{1}{7}$, that 2 win is $\frac{1}{8}$ and that 3 would win is $\frac{1}{7}$. Assuming that tie is not possible, find chance that one of 3 will win the race.
a) $\frac{22}{392}$ b) $\frac{1}{392}$ c) $\frac{23}{56}$ d) $\frac{391}{392}$

52) Three dice are rolled. What is the probability of getting the sum as 13?
a) $\frac{19}{216}$ b) $\frac{21}{216}$ c) $\frac{17}{216}$ d) $\frac{23}{216}$

53) 4 men throw a die each simultaneously. Find the probability that at least 2 people get the same number.
a) $\frac{5}{18}$ b) $\frac{13}{18}$ c) $\frac{1}{36}$ d) $\frac{1}{2}$

54) $\frac{2}{3}$ rd of the balls in a bag are blue, the rest are pink. If $\frac{5}{9}$ th of the blue balls and $\frac{7}{8}$ th of the pink balls are defective, find the total number of balls in the bag given that the number of non defective balls is 146.
a) 216 b) 649 c) 432 d) 578

55) A Jar contains 18 balls. 3 blue balls are removed from the jar and not replaced. Now the probability of getting a blue ball is $\frac{1}{5}$ then how many blue balls jar contains initially?
a) 6 b) 9 c) 8 d) 7

56) There are 1000 junior and 800 senior students in a class. And there are 60 sibling pairs where each pair has 1 junior and 1 senior. 1 student is chosen from senior and 1 from junior randomly. What is the probability that the two selected students are from a sibling pair?
a) $\frac{7140}{800000}$ b) $\frac{800000}{7140}$
c) $\frac{7240}{800000}$ d) $\frac{7340}{800000}$

57) Rohit buys 12 bulbs out of which 6 are defective, his brother chooses 3 bulbs at random for three sockets in a room. Find the probability that the room is lighted.
a) 0.7 b) 0.8 c) 0.9 d) 1.0

58) The probability of Ronaldo shooting a goal is $\frac{3}{4}$. He takes 5 shots on the goal. What is the probability that he shoots a goal atleast 3 times?
a) $\frac{291}{364}$ b) $\frac{371}{464}$ c) $\frac{471}{502}$ d) $\frac{459}{512}$ e) $\frac{3}{5}$

59) A group of 4 members are selected from a group of 3 trainees. 3 of them are engineers and 5 of them are managers. What is the probability that exactly 3 are managers to get selected?
a) $\frac{5}{7}$ b) $\frac{4}{7}$ c) $\frac{3}{7}$ d) $\frac{6}{7}$

60) There are 10 pens out of which 4 are defective. If 3 pens are chosen at random what is the probability of choosing 1 as defective?
a) $\frac{2}{6}$ b) $\frac{5}{6}$ c) $\frac{1}{6}$ d) $\frac{3}{6}$

61) A bag contains 8 white, 4 blue and 6 orange balls. If three balls are picked at random one after the other with replacement, what is the probability that one of the balls is white and the other two are orange?
a) $\frac{8}{27}$ b) $\frac{73}{153}$ c) $\frac{85}{153}$ d) $\frac{4}{81}$

62) A bag contains 3 white, 3 black and 6 red balls. If a ball is picked at random, what is the probability that it is white?
a) 0.6 b) 0.3 c) 0.25 d) 0.4

63) What is the probability of getting a ticket with an even number from a box of tickets numbered from 100 to 200 (including 100, 200)?

- a) 51/101 b) 52/202 c) 50/101 d) 51/100

64) What is the probability of getting one 3 in the two successive throws of an unbiased dice?

- a) 5/18 b) 1/36 c) 1/6 d) 4/36

LOGARITHMS

1) If $\log_2 x + \log_4 x + \log_{16} x = 21/4$, then the value of "x" equals :

- a) 2 b) 4 c) 16 d) 8

2) If $\log_x(1/343) = -3$ then value of x equal to:

- a) 3 b) 7 c) -3 d) -7

3) What is the value of $\text{antilog}_{10}(100)$?

- a) 2 b) 10100 c) 100 d) 10

4) What's the value of $\log_7(1/49)$?

- a) 2 b) 1/2 c) -0.5 d) -2

5) If $\text{antilog}_x(5) = 30$, what can you infer about x?

- a) x is a number between 1 and 2 b) x is 305
c) x is a number between 2 and 3 d) None of these

6) Find the value of $\log_1 + \log_2 + \log_3$.

- a) 1 b) 2 c) 3 d) None of these

7) What is the value of $\log_{20} 1$?

- a) 0 b) 1 c) 20 d) None of these

8) Rajeev multiplies a number by 10, the log (to base 10) of this number will change in what way?

- a) Increase by 10 b) Increase by 1 c) Multiplied by 10 d) None of these

9) The value of p in $\log_p 25p = 2$ is

- a) 23 b) 24 c) 25 d) 26

10) If $\log(p+q) = 1$ then what is the value of $\log(p+q)(p^2 - q^2)$?

- a) 2 b) 1 c) -1 d) 0

11) If $\log_a(\log_3(\log_2(512))) = 1$ then a = ?

- a) 1 b) 2 c) 3 d) 4

12) If a=2 and b=1, then what is the value of $\log(a+b)(a^2 - b^2)$?

- a) 1 b) -1 c) 2 d) -2

13) What is the value of $\log_3 1.5 + \log_3 6$?

- a) 2 b) 2.7 c) 1.8 d) None

GEOMETRY, COORDINATE GEOMETRY (MENSURATION)

1) Radius of the circle is 15 cm and PQ is a chord which is at a distance of 12 cm from the centre. The length of the chord PQ is,

- a) 9 cm b) 18 cm c) 27 cm d) 25 cm

2) Two circles radii 9 cm and 11 cm touch externally at T. If a straight line is drawn through T and centre of the circles cuts the circles at M and N, then TM:TN is

- a) 11:9 b) 12:11 c) 9:11 d) 11:12

3) Determine the volume of a cone of base radius 8 cm and height 21 cm.

- a) 1408 cm^3 b) 1048 cm^3 c) 1480 cm^3 d) 1804 cm^3

4) G is the circumcenter of the Δ with circumradius 17 cm. Let NO = 30 cm and GD is perpendicular to NO. Then the length of GD is :

- a) 8 cm b) 12 cm c) 13 cm d) 60 cm

5) A fence has to be made. Posts are to be for every 6 m interval. They are at starting and ending point. Person brings some posts and there are 7 posts lacking. If they are 9 m interval the posts are sufficient. How many posts did the persons bring?

- a) 13 b) 14 c) 15 d) 16

6) If the length is 4 times the breadth and the area of the rectangle is 2500 square units. Find the length

- a) 25 b) 50 c) 75 d) 100

7) A rectangle's length is 4 times its breadth. It has an area of 2500 square yards. What is the length of the rectangle?

- a) 25 yards b) 625 yards c) 100 yards d) 5 yards

8) Find the value of P when the line through the points (2,2) and (5,7) is perpendicular to the line $3x + Py - 9 = 0$.

- a) 3/5 b) 5 c) 5/3 d) 3

9) Length and breadth of a rectangle are directly proportional .If length increases from 6 cm to 21 cm and if breadth now is 14 cm, then what was the breadth before any change in length occurred?

- a) 4 b) 15 c) 2 d) 6

10) In a mall 20% area is occupied by eateries, 60% area is open. In the remaining area of 1600 sq meter there are different showrooms. What is the total area occupied by the mall?

- a) 10000 Sq m b) 5000 Sq m c) 8000 Sq m d) 4800 Sq m

11) There is a set of 36 distinct points on a plane with the following characteristics:

1) there is a subset A consisting of fourteen collinear points.2) Any subset of three or more collinear points from the 36 are a subset of A. How many distinct triangles with positive area can be formed with each of its vertices being one of the 36 points? (Two triangles are said to be distinct if at least one of the vertices is different)

- a) 7140 b) 4774 c) 1540 d) 6776

12) Two circles with centers P and Q cut each other at two distinct points A and B. The circles have the same radii and neither P nor Q falls within the intersection of the circles. What is the smallest range that includes all possible values of the angle AQP in degrees?

- a) Between 0 and 90 b) Between 0 and 30
c) Between 0 and 60 d) Between 0 and 75

13) In the medieval times, the sheikdom of Al kurazi had a proud tradition of inventing their own measurements units. The unit for distance was du, and the unit of time was pu. Unfortunately exactly what these measurement units are in modern terminology has been lost. The sheikh of Al Kurazi had built a huge mansion in the desert (near an oasis) with a circular wall around it, and the wall had four gates pointing north, south, east and west. He had built three observation towers, one 144 du to the north of the north gate, one 135 du to the east of the south gate, and one $7\frac{1}{2}$ du to the east of the east gate. They had been aligned to be all in a straight line passing thru the oasis. What was the diameter of the wall that surrounded the city (in Du)?

- a) 178 b) 183 c) 180 d) 181

14) There is a set of 27 distinct points on a plane with the following characteristics:

1) there is a subset A consisting of fifteen collinear points. 2) Any subset of three or more collinear points from the 27 is a subset of A. How many distinct triangles

with positive area can be formed with each of its vertices being one of the 27 points? (Two triangles are said to be distinct if at least one of the vertices is different)

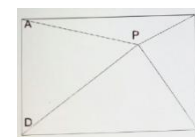
- a) 2200 b) 2470 c) 2925 d) 1210

15) A solid wooden toy is in the shape of a right circular cone mounted on a hemisphere, such that the circular base of the cone rests on the flat circular area of the hemisphere. The radius of the hemisphere is equal to the radius of the circular base of the cone. If the radius of the hemisphere is 4.2 cm and the total height of the toy is 10.2 cm, find the volume of the wooden toy (approximately to the nearest integer)

- a) 266cm^3 b) 104cm^3 c) 162cm^3 d) 427cm^3

16) A person standing inside a rectangular room ABCD and measures his distances from three of the corners as $PA = 10$, $PB = 3$ and $PC = 6$ m. What is his distance in meter from the other corner D?

- a) 7 b) 13 c) $\sqrt{127}$ d) $\sqrt{109}$



17) In the triangle $AB=15, AC=39, BC=36$. A perpendicular dropped from B meets the side AC at D. A circle of radius BD (with center B) is drawn. If the circle cuts AB & BC at P & Q respectively, the AP: QC is equal to.

- a) 1:17.1 b) 1:15.1 c) 1:19.1 d) 1:18.1

18) How many parallelograms are formed by a set of 4 parallel lines intersecting on other set of 7 parallel lines?

- a) 125 b) 126 c) 127 d) 128

19) Find the sum of angles 1, 2, 3, 4, 5.

- a) 180 b) 300 c) 360 d) 400



20) Consider a triangle drawn on the X-Y plane with its three vertices at (41, 0), (0, 41) and (0, 0), each vertex being represented by its (X, Y) coordinates. The number of points with integer coordinates inside the triangle (excluding all the points on the boundary) is

- a) 780 b) 800 c) 820 d) 741

21) There is a conical tent in which 10 persons can stand. Each person need 6m^2 to stand and 60m^3 air to breath. What is the height of tent?

- a) 60 b) 30 c) 20 d) 45

22) In a triangle ABC, the length of the sides AB and AC equal 17.5 cm and 9 cm respectively. Let D be a point on the line segment BC such that AD is perpendicular to BC. If AD = 3 cm, then what is the radius (in cm) of the circle circumscribing the triangle ABC?

- a) 17.05 b) 27.85 c) 32.25 d) 26.25

23) A tree of height 36 m at the edge of a road broke at a certain height. It fell in such a way that its top touched the other edge of the road. If the breadth of the road is 12 m, then what is the height at which the tree broke?

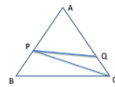
- a) 16 b) 24 c) 12 d) 18

24) A rectangle of height 100 squares and width 200 squares is drawn on a graph paper. It is colored square by square from top left corner and moving across in a spiral turning right whenever a side of the rectangle or a colored square is reached. Which square is colored last (give its row and column numbers – the bottom right square is on row 100 and column 200)

- a) 51, 150 b) 51, 50 c) 50, 150 d) 50, 50

25) Area of $\triangle ABC = 40 \text{ cm}^2$, $PB = (1/3) AB$, $QC = (1/4) AC$. Find the area of $\triangle PQC$.

- a) $20/3$ b) $40/3$ c) $80/3$ d) $85/3$



26) Two cylinders are covered with papers on the curved surfaces. The top and bottom regions of the cylinder are left exposed. If the length of the papers just covers the surface area of the cylinder (after cutting them if necessary), then what is the sum of the volumes of the two cylinders in cc? The height of the 1st cylinder and 2nd cylinder is 10cms and 12cms respectively. The area of the paper covering the first cylinder is $10\text{cm} \times 8\text{cm}$ and the second is $10\text{cm} \times 4\text{cm}$. The answers are to be correct to two decimal places.

- a) 61.54 b) 54.54 c) 65.43 d) 47.76

27) The length, breadth and height of a room are in the ratio 3:2:1. If the breadth and height are halved while the length is doubled, then the total volume of the of the room will:

- a) Decrease by 30% b) Decrease by 18.75%
c) Decrease by 13.6% d) Decrease by 50%

28) Two sides of plot measure 32m and 24m and angle between them is a perfect right angle. Other two sides are 25m and 25m and other 3 angles are not right angles. If the plot is convex, what is the area of the plot?

- a) 768 b) 534 c) 696.5 d) 684

29) An ant smartly moves across a staircase taking the shortest distance. Calculate the distance it takes to reach the top to B from A given that staircase consists of 2 steps. It is also known that the length, breadth and height is 6cm, 2cm and 1cm respectively.

- a) $6\sqrt{2}$ b) 6 c) 7 d) $2\sqrt{19}$

30) There is a conical tent in which 10 persons can stand. Each person need 10m^2 to stand and 60m^3 air to breath. What is the height of tent?

- a) 18 b) 12 c) 36 d) 9

31) There are 10 points on a straight line AB and 8 on another straight line AC none of them being point A. How many triangles can be formed with these points as vertices?

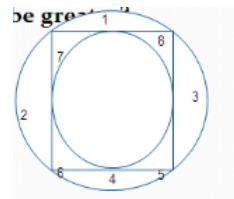
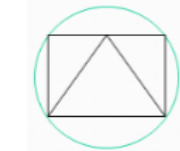
- a) 680 b) 720 c) 816 d) 640

32) Find the ratio of the area of square to area of triangle.

- a) 1:2 b) 2:1 c) 2:3 d) 3:2

33) Radius of the bigger circle is 1. Which area will be greater?

- a) 5 b) 4
c) Cannot be determined d) None of these



34) The figure shows an equilateral triangle of side length 5, which is divided into unit triangles. A valid path is a path from the triangle in the top row to the middle triangle in the bottom row such that the adjacent triangles in our path share a common edge and the path never travels up (from a lower row to a higher row) or revisits a triangle. An example of one such path is illustrated below. How many such valid paths are there?

- a) 120 b) 16 c) 23 d) 24

35) Perimeter of a equilateral triangle is equal to the perimeter of Hexagon. What is the ratio of their areas?

- a) 6:1 b) 1:6 c) 3:2 d) 2:3

36) There is a rectangle with dimension 400 x 300 ft. Inside the rectangle; there are 3 ants for every square inch. So, how many ants (approximately) will be there inside the rectangle?

- a) 5 million b) 50 million c) 50000 d) 500



37) There is a pool of radius X and there is a pathway around the pool with a width of 4 feet. Find the radius of the pool if the path area/ pool area = $11/25$.

- a) 12 b) 20 c) 25 d) 29

38) How many lattice points are there between (2,0) and (16,20)?

- a) 8 b) 10 c) 14 d) 15

39) Four parallel lines are drawn parallel to one side of an equilateral triangle such that it cuts the other two sides at equal intervals. The area of the largest segment thus formed is 27 m^2 . Find the area of the triangle.

- a) 100 b) 75 c) 81 d) 54

40) A circular swimming pool is surrounded by a concrete walk feet wide. If the area of the walk is $11/25$ of the area of the pool. Then the radius of the pool in feet is

- a) 50 b) 30 c) 16 d) 20

41) Length, Breadth and Height of a 3D figure is in the ratio 3:2:1. If the length is doubled and Breadth & Height are halved, then what is the % decrease in the volume of the solid?

- a) Decreased by 15% b) Decreased by 18%
c) Decreased by 30% d) Decreased by 50%

42) Two full tanks, one shaped like a cylinder and the other like a cone, contain liquid fuel. The cylinder tank held 500 litres more than the conical tank. After 200 litres of fuel is pumped out from each tank the cylindrical tank now contains twice the amount of fuel in the conical tank. How many litres of fuel did the cylindrical tank have when it was full?

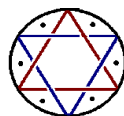
- a) 1200 b) 1000 c) 700 d) 1100

43) From a square of side 2 cm, equal triangles are cut from its corners to form a regular octagon. We will get an octagon. What is the area of that octagon?

- a) $4(\sqrt{2}) + 8$ b) $8(\sqrt{2}) - 8$ c) $2(\sqrt{2}) + 8$ d) $8(\sqrt{2}) + 4$

44) There is a circle with two equilateral triangles of side 12 cm inscribed in it in opposite direction making it a star as shown in the figure. What is the area of the remaining portion of the circle outside the star (dotted region)?

- a) $48(\pi - \sqrt{3})$ b) $48(\pi + \sqrt{3})$ c) $24(\pi - \sqrt{3})$ d) $24(\pi + \sqrt{3})$



45) The diagonal of a square is twice the side of an equatorial triangle. The ratio of the area of the triangle to the area of square is

- a) $\sqrt{3}:8$ b) $\sqrt{2}:4$ c) $\sqrt{2}:5$ d) $\sqrt{3}:6$

46) The number of different non congruent triangles with integer side and perimeter 15 is

- a) 9 b) 7 c) 10 d) 6

47) A man walking at the speed of 4 km/hr crosses a square field diagonally in 3 minutes. The area of the field (in m^2) is:

- a) 20000 b) 21000 c) 25000 d) 26000

48) A rectangle is divided into four rectangles with area 70, 36, 20 and X . The value of X is

- a) $350/9$ b) $350/7$ c) $350/11$ d) $350/13$

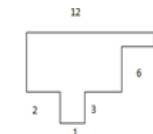
70	36
X	20

49) Ratio of the radii of the cylinder to the cone is 1:2. Assume, their heights are the same. Find the ratio of their volumes.

- a) 3:4 b) 1:2 c) 1:4 d) 4:1

50) Find the perimeter of the decagon with given dimensions.

- a) 32 b) 34 c) 44 d) 22



51) A hollow pipe has circumference 14 cm. A bug is on its wall (outside) at a distance of 48 cm from top. A drop of honey is on the wall (inside the pipe) at 24 cm from top but diametrically opposite to bug. Find the shortest distance bug has to travel to reach honey.

- a) 24 b) 25 c) 27 d) 29

52) If a ladder is 100 m long and distance between bottom of ladder and wall is 60. What is the maximum size of cube that can be placed between the ladder and wall?

- a) 34.28 b) 24.28 c) 21.42 d) 28.56

53) Arun makes a popular brand of cuboidal ice-cream bar of length, breadth and thickness of 3 cm, 5 cm and 2 cm respectively. To cut the cost company decided to reduce the volume by 19 %. Thickness remains the same but length and the width decreased by the same percentage. What is the new breadth?

- a) 4.5 cm b) 5.5 cm c) 6.5 cm d) 7.5 cm

54) 17 x 8 m rectangular ground is surrounded by 1.5 m width path. Depth of the path is 12 cm. Gravel is filled and find the quantity of gravel required in cubic meters.

- a) 5.5 b) 7.5 c) 6.05 d) 10.08

55) There is a circle which circumscribes three unit circles which are tangential to each other. What is the circumference of the bigger circle?

- a) $\pi(7+2\sqrt{3})/\sqrt{3}$ b) $\pi(5+4\sqrt{3})/\sqrt{3}$ c) $\pi(5+2\sqrt{3})/\sqrt{3}$ d) $\pi(4+2\sqrt{3})/\sqrt{3}$

56) Raj drives slowly along the perimeter of a rectangular park at 24 kmph and completes one full round in 4 minutes. If the ratio of the length to the breadth of the park is 3:2. What are its dimensions?

- a) 450m x 300m b) 150m x 100m
c) 480m x 320m d) 100m x 100m

57) Length, Breadth and Height of a cuboid is in the ratio 1:3:7. Volume of the cuboid is 27 m³. If the length is doubled and Breadth & Height are halved, then what is the change in the volume of the cuboids?

- a) Decreased by 15% b) Decreased by 18%
c) Decreased by 30% d) Decreased by 50%

58) In an Octagon the number of possible diagonals is?

- a) 10 b) 30 c) 20 d) 25

59) Find the radius of the circle inscribed in a triangle ABC. Triangle ABC is a right-angled isosceles triangle with the hypotenuse as $62\sqrt{2}$

- a) 4cm b) 2.5cm c) 2cm d) 3cm

60) One of the longest sides of the triangle is 20 m. The other side is 10 m. Area of the triangle is 80. What is another side of the triangle?

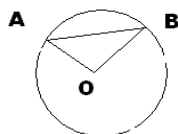
- a) $\sqrt{240}$ b) $\sqrt{230}$ c) $\sqrt{260}$ d) $\sqrt{262}$

61) A card board of size 34 × 14 has to be attached to a wooden box and a total of 35 pins are to be used on the each side of the card box. Find the total number of pins used.

- a) 130 b) 135 c) 136 d) 139

62) Triangle BOA, with O as centre of circle is given. Angle O = 20 degrees, OA = 5, BA = ?

- a) Cos 20 degrees b) $\sqrt{5^2}$
c) 5 d) Sin 5



63) If the difference between the length and breadth of a rectangle is 30m and its perimeter is 100 m, then calculate the area of the Rectangle.

- a) 300 m² b) 350 m² c) 400 m² d) 450 m²

64) Side PQ of a rectangle PQRS is divided into four Equal parts by points A,B and C .The ratio of the area of triangle ABR to the area of rectangle PQRS is:

- a) 1:7 b) 1:9 c) 1:8 d) 1:6

65) The ratio of the radius of a sphere to the height of a cylinder is 2:3. What is the ratio of their volumes, if the ratio of height to the base radius of the cylinder is 3:2?

- a) 1:1 b) 3:2 c) 8:9 d) 9:8

66) A cube of side 4cm is melted and is made into smaller cubes with their sides 1 cm. how many such cubes can be formed?

- a) 36 b) 16 c) 32 d) 64

67) A hollow cylinder having internal and external radii of 8cm and 10cm respectively and height of 8cm is melted into a solid sphere. What will be the side of the cube with maximum volume that can be cut from the sphere?

- a) $2\sqrt{3}$ cm b) $3\sqrt{3}$ cm c) $4\sqrt{3}$ cm d) $5\sqrt{3}$ cm

68) A circle of diameter 14cm is divided into three sectors with their areas in the ratio 2:1:3. What is the difference between the area of the smaller sector to that of the larger sector?

- a) 48.356cm² b) 75.462 cm² c) 90.332 cm² d) 51.288 cm²

69) A rectangular box of outer dimensions 4m*5m*6m is made with a thickness of 0.5m. What is the volume inside the box?

- a) 86.625 m³ b) 51.54 m³ c) 65.24 m³ d) 75.85 m³

70) A sphere is melted and is made into 64 small spheres each of radius 2m. What is the radius of the larger sphere?

- a) 4m b) 8m c) 6m d) 10m

TRIGONOMETRY

1) If $dy = [(\sec x - y) / \tan x]dx$, then the curve is:

- a) $y = x(\sin x)$ b) $y = x(\cos x)$ c) $y = x(\sec x)$ d) $y = x(\operatorname{cosec} x)$

ALGEBRA

1) 40 hens give 200 eggs in 2 days. 20 hens will give 400 eggs in how many days?
a) 30days b) 10 days c) 8 days d) 20 days

2) Micro sims Pvt. Ltd. produces 1200 phones every day. If out of these, $2\frac{1}{3}$ faulty and $4\frac{1}{3}$ are defective in packaging. Then how many non-faulty and non-defective packaged phones are produced every day?
a) 80 b) 120 c) 1080 d) 1120

3) Simplify: $(144^{-3} / 2)^{-1} / 6$
a) $2\sqrt{3}$ b) 6 c) $3\sqrt{2}$ d) 4

4) In the poultry farm, 50 hens give 200 eggs for 2 days. In how many days will 20 hens give 400 eggs?
a) 15 b) 10 c) 5 d) 0

5) Malini solved the following question in her Mathematics Examination $(\frac{6}{4} + \frac{5}{1/6} \text{ of } \frac{3}{7}) / (5 + 2\frac{1}{3})$ and her answer was $\frac{38}{77}$. By how much was her answer wrong?
a) 1 b) $\frac{1}{77}$ c) 2 d) $\frac{2}{77}$ e) $\frac{39}{77}$

6) $\frac{5}{11}$ of the paper produced can be recycled. If 6,42,000 tonnes of paper is produced. What is the quantity of recycled paper can be made after its use?
a) 3,92,000 tonnes b) 2,92,000 tonnes
c) 1,92,000 tonnes d) 4,92,000 tonnes

7) Find x: $(\frac{2}{7})^{-8} (\frac{7}{2})^{-2} = (\frac{2}{7})^{2x}$
a) 3 b) -3 c) -6 d) 2

8) If $x = 1 + 2^{1/2}$ and $y = 1 - 2^{1/2}$, the $x^2 + y^2$ is
a) 2 b) 3 c) 6 d) 0

9) What is the value of expression: $5 * (2 + 16) / 2 - 4 * (2 + 2) + 1/4$ of 16?
a) 26 b) 13 c) 34 d) 33

10) What is X if $8^{-1} * X = (-4)^{-1}$?
a) 2 b) 1 c) -2 d) -1

11) $(a^2 - b^2) / (a - b)^2 = 2$ and $a = 4$ then what is b?
a) $\frac{2}{3}$ b) $\frac{3}{2}$ c) $\frac{4}{2}$ d) $\frac{4}{3}$

12) find the value of x: $0.009/x = 0.01$
a) 0.0009 b) 0.09 c) 0.9 d) 9

13) A person goes to a bank and Quotes x Rs and y paise on a cheque. The cashier misreads it and gives y Rs and x paise. The man comes out and donates 5 paise to a beggar. Now, the man has exactly double the amount he has quoted on the cheque.
a) 35 Rs and 65 paise b) 32 Rs and 63 paise
c) 30 Rs and 65 paise d) 31 Rs and 63 paise

14) Grass in lawn grows equally thick and in a uniform rate. It takes 24 days for 70 cows and 60 for 30 cows. How many cows can eat away the same in 96 days?
a) 18 b) 20 c) 21 d) 19

15) $(a / b)^{x-1} = (b/a)^{x-3}$ then the value of x?
a) 1 b) 2 c) $\frac{1}{2}$ d) 4

16) Find n if $(2^{228} / 2^n) = 512$
a) 219 b) 218 c) 237 d) None

17) Simplify: If $y > a$, then $13 - 20 * 13y = 168 * 13 - 22$. What is the value of a and y?
a) 0,1 b) 2,1 c) 1,0 d) 2,2 e) 1,1

18) $1 / (\frac{2}{7})^8 * 1 / (\frac{7}{2})^2 = (\frac{2}{7})^{2x}$ Find x
a) 2 b) $\frac{2}{7}$ c) $\frac{7}{2}$ d) 10 e) 5

19) The correct relationship after eliminating x, y and z from $x + y = a$, $y + z = b$, $z + x = c$ and $x + y + z = m$ is:
a) $m = x + y + z$ b) $2m = a + b + c$
c) $m = x - y - z$ d) $2m = x - y - z$

20) What is the sum of the irrational roots of the equation $(x-1)(x-3)(x-5)(x-7) = 9$?
a) 10 b) 8 c) 6 d) 4

21) Find X when $X - Y = 3$ and $X^2 + Y^2 = 89$ where X and Y are integers.
a) 10 b) -5 c) -10 d) -3

22) $x^4y - xy^4 =$
a) $xy(x - y)(x^2 + xy + y^2)$ b) $xy(x + y)(x^2 - xy + y^4)$
c) $x(xy - 1)(x^2 - xy + y)$ d) $(x^3 + y^2)xy$

- 23) A bread making machine can make bread of 50kg dough in 3 mins. How many such machines are required to make bread of 300kg dough in 6 mins?
a) 6 b) 3 c) 4 d) 5
- 24) 3 empty CDs and 2 pen drives cost Rs.790.2 empty CDs and 3 pen drives cost Rs 1110.What is the cost of one pen drive?
a) 30 b) 350 c) 25 d) 300
- 25) Steward assigns $1/8^{\text{th}}$ of his monthly salary for food. Steward's total food bill for month is Rs.6500. What is Steward's yearly salary?
a) Rs.9750 b) Rs.12174 c) Rs.5,76,000 d) Rs.6,24,000
- 26) A contractor estimates that 3 people can paint Mr.khan's house in 4 days,f he uses 4 people instead of 3 how long will it take to complete the task?
a) 4 b) 2 c) 3 d) 5
- 27) If $ab + b + a = 135$, $bc + b + c = 47$, $ca + a + c = 101$. What is the value of $a + b + c$?
a) 30 b) 31 c) 28 d) 25
- 28) If $ab + b + a = 135$, $bc + b + c = 322$, $ca + a + c = 151$. What is the value of $a + b + c$?
a) 40 b) 41 c) 42 d) 43
- 29) $30L + 3Q = 1167$, $30L + 6Q = 1284$. Find L.
a) 30 b) 35 c) 40 d) 45
- 30) Three generous friends, each with some money, redistribute the money as follows: Sandra gives enough money to David and Mary to double the amount of money each has. David then gives enough to Sandra and Mary to double their amounts. Finally, Mary gives enough to Sandra and David to double their amounts. If Mary had 11 rupees at the beginning and 17 rupees at the end, what is the total amount that all three friends have?
a) 105 b) 60 c) 88 d) 71
- 31) The sum of the digits of a three digit number is 17, and the sum of the squares of its digits is 109. If we subtract 495 from that number, we shall get a number consisting of the same digits written in the reverse order. Find the number.
a) 773 b) 944 c) 863 d) 683

- 32) In a city there are few engineering, MBA and CA candidates. Sum of four times the engineering, three times the MBA and 5 times CA candidates is 3650. Also three times CA is equal to two times MBA and three times engineering is equal to two times CA. In total how many MBA candidates are there in the city?
a) 200 b) 300 c) 450 d) 400
- 33) A series of book was published at seven year intervals. When the seventh book was published the total sum of publication year was 13,524. First book was published in?
a) 1911 b) 1910 c) 2002 d) 1932
- 34) 3 mangoes and 4 apples costs Rs.85. 5 apples and 6 peaches costs Rs.122.6 mangoes and 2 peaches cost Rs.114. What is the combined price of 1 apple, 1 peach and 1 mango?
a) 37 b) 39 c) 35 d) 363
- 35) Raj writes a number. He sees that the number of two digits exceeds four times the sum of its digits by 3. If the number is increased by 18, the result is the same as the number formed by reversing the digits. Find the number.
a) 35 b) 42 c) 49 d) 57
- 36) In the equation $A+B+C+D+E = FG$, where FG is the two – digit number whose value is $10F+G$, and letters A, B, C, D, E, F, and G each represent different digits. If FG is as large as possible, what is the value of G?
a) 3 b) 4 c) 1 d) 5
- 37) Divide 50 into two parts, such that the sum of their reciprocals is $1/12$.
a) 25, 25 b) 10, 40 c) 20, 30 d) 15, 35
- 38) John told Mark that if Mark gives $1/3^{\text{rd}}$ of his money to him, he will have Rs.75. Mark told John that if John gives $1/2$ of his money to him, he will have Rs.75. How much money did they totally have?
a) 105 b) 125 c) 150 d) 75
- 39) Raj invested in Indigo, HUL and SBI shares at Rs.300, Rs.200 and Rs.5 per share respectively and purchased a total of 100 shares for Rs.10000. The number of Indigo and HUL shares he bought are
a) 15, 25 b) 23, 17 c) 17, 23 d) 17, 60
- 40) A man takes 9 minutes to load a box in a truck. 8 boxes can be loaded into a truck. If 16 men load for one and a half hours, how many trucks will be loaded?

- a) 20 b) 10 c) 15 d) 40
- 41) A series of books was published at 10 years intervals when the 10th book was issued the sum of publication years was 19,560 when was the 1st book published
a) 1910 b) 1914 c) 1911 d) 1909
- 42) According to the stock policy of a company, each employee in the technical division is given 15 shares of the company and each employee in the recruitment division is given 10 shares. Employees belonging to both committees get 25 shares each. There are 20 employees in the company, and each one belongs to at least one division. The cost of each share is \$10. If the technical division has 15 employees and the recruitment division has 10 employees, then what is the total cost of the shares given by the company?
a) 2650 b) 3180 c) 3250 d) 3120
- 43) 12 divides $ab313ab$ (in decimal notation), where a, b are digits > 0 , the smallest value of $a + b$ is
a) 7 b) 6 c) 2 d) 4
- 44) How many boys are there in the class if the number of boys in the class is 8 more than the number of girls in the class, which is five times the difference between the number of girls and boys in the class?
a) 30 b) 42 c) 40 d) 45
- 45) Mr. T has a wrong weighing pan. One arm is lengthier than other. 1 kilogram on left balances 8 melons on right, 1 kilogram on right balances 2 melons on left. If all melons are equal in weight, what is the weight of a single melon?
a) 220g b) 230g c) 200g d) 210g
- 46) a, b, b, c, c, c, d, d, d, d, Find the 288th letter of this series.
a) x b) y c) z d) w
- 47) Lucia is a wonderful grandmother and her age is between 50 and 70. Each of her sons have as many sons as they have brothers. Their combined number gives Lucia's present age. What is the age?
a) 56 b) 64 c) 60 d) 61
- 48) Reversing the digits of father's age we get son's age. One year ago father was twice the age of that of his son. Find their current ages?
a) F = 54, S = 45 b) F = 62, S = 26 c) F = 71, S = 17 d) F = 73, S = 37

- 49) Joe's age, Joe's sister's age and Joe's father's age sums up to a century. When son is as old as his father, Joe's sister will be twice as old as now. When Joe is as old as his father then his father is twice as old as when his sister was as old as her father. What is the age of her father?
a) 56 b) 58 c) 50 d) 57
- 50) An arithmetic progression or AP is a sequence where the difference between two successive terms is always a constant. The sum of 3 consecutive terms of an AP is 27 and the product of these 3 terms is 704. The first term of this AP is.
a) 9 b) $22/3$ c) $23/3$ d) $28/3$
- 51) A and B together have Rs.1210. If $4/15$ of A's amount is equal to $2/5$ of B's amount, how much amount does B have?
a) 460 b) 560 c) 484 d) 684
- 52) $x^2 - y^2 = 16$, $x + y = 2$ find xy .
a) $xy = 15$ b) $xy = -15$ c) $xy = 16$ d) $xy = -16$
- 53) $(x^2y^3 - xy) / (x^2y) = ?$. Where $x=5, y=2$
a) $19/10$ b) $19/5$ c) $5/19$ d) None of the above
- 54) $x^2 - y^2 = 14$, $x + y = 4$ find xy
a) $15/4$ b) $16/15$ c) $15/16$ d) $1/4$
- 55) $x^2 + y^2 = 16$, $x - y = 9$ then xy ?
a) -7 b) 1 c) -8 d) 8
- 56) $x^2 - y^2 = 16$, $x + y = 4$ Find the value of xy ?
a) 0 b) 1 c) 2 d) 3
- 57) $x^2 - y^2 = 9$, $x + y = 5$ find $xy = ?$
a) $25/136$ b) $17/5$ c) $8/5$ d) $136/25$
- 58) What is the value of xy ? If $x^2 - y^2 = 16$, $x + y = 8$
a) 3 b) 5 c) 7 d) 15
- 59) $x^3y^3 - x^2y / x^2y^3 = ?$ if $x=3, y=4$
a) Approx 2 b) 2 c) Approx 3 d) 3
- 60) Find the sum of roots of the following equation. $2x^3 - 24x^2 + 94x - 120 = 0$.
a) 60 b) 12 c) 47 d) 54

61) Find the value of 'a' in the following equation if its roots are real and equal.

$$X^2 + ax + 64 = 0$$

- a) ± 32 b) ± 4 c) ± 16 d) ± 8

62) The solution of the equation $\frac{6x}{x+1} + \frac{6(x+1)}{x} = 13$ are

- a) (-2,-3) b) (2,-3) c) (3,-2) d) (2,3)

63) The maximum possible sum of A.P series 40,36,32..... is,

- a) 320 b) 220 c) 232 d) 225

64) The sum of an A.P whose first term is -4 and the last term is 17. Determine value of n.

- a) 100 b) 101 c) 102 d) 99

65) Determine the number of terms in the A.P, whose first and fifth terms are -14 and 2 respectively and also the sums of the terms is 40.

- a) 10 b) 25 c) 8 d) 14

66) If $\frac{\sqrt{x+5}}{\sqrt{x+5}} + \frac{\sqrt{x-16}}{\sqrt{x-16}} = \frac{7}{3}$ then "x" equals,

- a) 10 b) 40 c) 30 d) 20

67) Which of the following cannot be a root of a polynomial in "x" of the form $(9x^3 + ax^2 + b)$, where x and y are integers?

- a) $1/3$ b) $1/4$ c) -5 d) -9

FUNCTIONS

1) What is the minimum value of $\text{abs}(187m - 396n - 526)$ as m, n take all integer values? Here abs is the absolute value function (that is, if $x > 0$, then $\text{abs}(x) = x$ and if $x < 0$, then $\text{abs}(x) = -x$).

- a) 0 b) 9 c) 2 d) 1

2) What is the minimum value of $\text{abs}(286m - 351n - 617)$ as m, n take all integer values? Here abs is the absolute value function (that is, if $x > 0$, then $\text{abs}(x) = x$ and if $x < 0$, then $\text{abs}(x) = -x$).

- a) 6 b) 3 c) 2 d) 4

3) What is the minimum value of $\text{abs}(779m - 1045n - 640)$ as m, n take all integer values? Here abs is the absolute value function (that is, if $x > 0$, then $\text{abs}(x) = x$ and if $x < 0$, then $\text{abs}(x) = -x$).

- a) 1 b) 0 c) 6 d) 13

4) What is the minimum value of $\text{abs}(578m - 910n - 541)$ as m, n take all integer values? Here abs is the absolute value function (that is, if $x > 0$, then $\text{abs}(x) = x$ and if $x < 0$, then $\text{abs}(x) = -x$).

- a) 1 b) 0 c) 6 d) 13

5) Let f be a function such that $f(f(x)) = f(x + 13) - 18$ for all integers x. If $f(241) = 259$ and $F(259) = 254$, then $f(267)$ is

- a) 308 b) 290 c) 295 d) 272

6) Function 'f' satisfies the equation $f(x) + 2 * f(6 - x) = x$ for all real numbers x. Value of $f(1)$ is

- a) 1 b) 2 c) 3 d) cannot be determined

7) $P(x) = (x^{2012} + x^{2011} + x^{2010} + \dots + x + 1)^2 - x^{2012}$, $Q(x) = x^{2011} + x^{2010} + \dots + x + 1$. The remainder when $P(x)$ is divided by $Q(x)$ is:

- a) 1 b) 0 c) $X+1$ d) $X-1$

8) How many polynomial functions f of degree ≥ 1 satisfy $f(x^2) = [f(x)]^2 = f(f(x))$?

- a) More than 2 b) 2 c) 0 d) 1

9) $f(f(n)) + f(n) = 2n+3$, $f(0) = 1$, Find $f(2012)$.

- a) 2011 b) 2013 c) 4095 d) 2012

10) For a real number x, $\text{int}(x)$ denotes the integral part of x, that is $\text{int}(x)$ is the largest integer less than or equal to x. Thus $\text{int}(1.2) = 1$ and $\text{int}(-2.4) = -3$, The value of $\text{int}(1/2) + \text{int}(1/2 + 1/100) + \text{int}(1/2 + 2/100) + \dots + \text{int}(1/2 + 99/100)$ is

- a) 50 b) 49 c) 51 d) 48

11) If $f(1) = 4$, $f(x+y) = f(x) + f(y) + 7xy + 2$ for $x > 0$ and $y > 0$, find $f(2) + f(5)$.

- a) 98 b) 120 c) 115 d) cannot be determined

12) If $X=2$ and $Y=-3$, what is the value of $F.G.H$? $F(x, y) = |x - y|$, $G(x, y) = -F(x, y)$

$$H(x, y) = |x + y|.$$

- a) 25 b) 36 c) -36 d) -25

13) What is the remainder when the polynomial $p(x) = (x^3 + x^2 + x + 1)$ is divided by $(x+1)$?
a) X b) 1 c) X+1 d) 0

14) $f(x) = x^3 - 3$ and $g(x) = (1/x) - x$
a) 5/4 b) -15/4 c) 0 d) -27/4

15) $f(t) = (t^3 - 1)$ and $g(t) = 1$ and $h(t) = -t^2$. The value of fohog at $t=3$.
a) -1 b) 0 c) -2 d) None of these

16) Consider the following given functions: $F_2(n) = 2n$, $F_2(n) = n^{3/2}$, $F_3(n) = n \log n$, $F_4(n) = n \log n$. Which among the following options correctly represents the increasing order of asymptotic complexity of the functions F_1 , F_2 , F_3 and F_4 respectively?
a) $F_2 < F_3 < F_1 < F_4$ b) $F_3 < F_2 < F_4 < F_1$
c) $F_3 < F_2 < F_1 < F_4$ d) None of these

REASONING APTITUDE

ODD MAN OUT

- | | | | |
|------------|--------|--------|--------|
| 1) a)AFB | b)MRN | c)KPL | d)RXS |
| 2) a)FHKO | b)CEHL | c)XZCG | d)ZBEJ |
| 3) a)DEB | b)FGD | c)PQN | d)TUS |
| 4) a)BCEH | b)PQSV | c)CDGK | d)STVY |
| 5) a)DED | b)FGD | c)PQN | d)TUS |
| 6) a)STV | b)XYA | c)KKT | d)BDE |
| 7) a)DFK | b)PRW | c)EGL | d)TVZ |
| 8) a)PRQ | b)ACB | c)TUV | d)QSR |
| 9) a)CEH | b)PRV | c)TVY | d)MOR |
| 10) a)ACFJ | b)SUXZ | c)PRUV | d)CEHL |

- | | | | |
|----------------|----------|------------|----------|
| 11) a)HIKJ | b)KLNLM | c)STVU | d)RSTU |
| 12) a)HKM | b)PSW | c) MPS | d)ADG |
| 13) a)BAD | b)FEH | c)POS | d)TSV |
| 14) a)AE5 | b)DF6 | c)KP18 | d)KN14 |
| 15) a)Rkoc | b)Prive | c)Adns | d)Lnda |
| 16) a)PRV | b)LMP | c)DGL | d)BEL |
| 17) a)AD5 | b)BC9 | c)HA9 | d)DB6 |
| 18) a)FU | b)DW | c)CX | d)NR |
| 19) a)DFE | b)PRQ | c)MPN | d)SUT |
| 20) a)AYW | b)LMP | c)SQO | d)IGE |
| 21) a)AFB | b)MRN | c)KPL | d)RXS |
| 22) a)CEH | b)PRU | c)PRV | d)MOR |
| 23) a)AEK | b)DFH | c)TWZ | d)MOQ |
| 24) a)BAK | b)DCM | c)HGQ | d)MNW |
| 25) a)DFE | b)PRQ | c)MPN | d)SUT |
| 26) a) EGK | b)BEN | c)CGP | d)AEU |
| 27) a)N3K | b)T4P | c)W5S | d)Q2O |
| 28) a)LABLOTOF | b)ONSEL | c)CEKTRIC | d)SNINET |
| 29) a)C54 | b)E6L | c)M4Q | d)T3W |
| 30) a)bbc MN | b)dde OP | c)ggf QP | d)mmn WX |
| 31) a)triangle | b)square | c)pentagon | d)circle |

e)None

- 32) a)N3K b)T4P c)W5S d)Q2O
- 33) a)AE5 b)DF6 c)HN14 d)KF18
- 34) a)OLIVE b)APPLE c)LITCHI d)EGG
- 35) a)PSRQ b)MNPO c)SVUT d)KNML
- 36) a)crok b)nads c)daln d)nikm
- 37) a)ABIJ b)DEHI c)MNQR d)STWX
- 38) a)FJN b)HLO c)CGK d)KOS

39) Cruesso's weight in a week is 5 kg, 15 kg, 30 kg, 135 kg, 405 kg, 1215 kg. Find the odd weight.

- a)15 b) 30 c) 135 d) 1215
- 40) a) 9875432 b) 98765 c) 98756 d) 987654
- 41) a)EF LM b)KJ SR c) XW HG d) ED YX
- 42) a)2,3,5,7 b) 17,19,23,29 c) 53,59,61,67 d) 37,41,43,49

43) 5,6,11,22,42,88,176

- a) 5 b) 42 c) 176 d) 11

44) KI,SQ,CA,VX

- a)KI b) SQ c) CA d) VX

45) a)sum- total b) now- present c) big- notion d)yes-agree

46) a) 60 b) 40 c) 50 d) 20

MATHEMATICAL OPERATIONS

1) Place 39, 73, 18, 9, 56, 38, 25, 77, 13, 71 in ascending order.

- a) 71, 13, 73, 25, 56, 77, 18, 38, 9, 39 b) 9, 13, 18, 25, 38, 39, 56, 71, 73, 77
- c) 13, 18, 25, 38, 39, 56, 71, 73, 77, 9 d) 77, 73, 71, 56, 39, 38, 25, 18, 13, 9

2) If $85 + 17 = 51$, $76 + 19 = 42$, $91 + 13 = 73$ then $120 + 15 = ?$

- a) 68 b) 84 c) 96 d) None of These

3) If Jasmine started with 81 dollars, and then saved 3 dollars every day for 5 days, how many dollars did she end up with?

- a) 95 dollars b) 96 dollars c) 97 dollars d) 99 dollars

4) If $9 + 7 + 8 = 2$, $8 + 5 + 7 = 6$, $7 + 4 + 6 = 2$ then $5 + 2 + 5 = ?$

- a) 4 b) 6 c) 5 d) 7

5) Which numbers are in order from smallest to largest?

- a) 84, 48, 68, 86, 54, 45 b) 45, 48, 54, 68, 84, 86
- c) 48, 45, 54, 68, 86, 84 d) 54, 84, 45, 86, 48, 68

6) In the UK, for a man to become a police officer, they used to have a requirement that his height should be at least 70 inches. Which of the following is correct?

- a) Height < 70 in b) Height ≤ 70 in c) Height > 70 in d) Height ≥ 70 in

7) Albert started with 54 marbles and added 4 more every week until he had 74 altogether. How many weeks did that take?

- a) 3 weeks b) 4 weeks c) 5 weeks d) 6 weeks

8) Which one of the following is the correct way to write seventy dollars?

- a) \$0.07 b) \$0.70 c) \$7.00 d) \$70.00

9) Joelene started with 39 ribbons and added 4 more every week until she had 55 altogether. How many weeks did that take?

- a) 4 weeks b) 5 weeks c) 6 weeks d) 7 weeks

CODING AND DECODING

1) In a certain code language "PLAYER" is coded as "QNDCJX", then how would "SINGER" be coded in the same code language?

- a)TKQXJK b) TKQKJX c) TKQKXJ d) TKJKQX

2) If in a certain code language "CERTAIN" is coded as "XVIGZRM" and "SEQUENCE" as "HVJPMXV", then how "REQUIRED" would be coded in the same code language?

- a) FJIVWVIR b) WVJREFVI c) VJIFWTRV d) IVJFRIVW

3) if GULMOHAR is coded as TFONLSZI, PIPAL will be coded as:

- a)QJQBM b)QJQBN c)KRKZO d)KIKZO

4) If RESULT is coded as SFTVMU ,then EXAM is coded as :

- a) FWBO b) DYZL c) FYBN d) DXZL

5) If 1022834 represent VACCINE, which word is represented by 4820548?

- a) ECHELON b) ECLIPSE c) ESCAPES d) ESTIMATE

6) If computer is coded as GKQLYPIN,what is the code for the senate?

- a) warexa b) waerxa c) warwxa d) waerax

7) In a certain code language SPECIFY is written as 1916539625 how is ABOUT written in that code.

- a)13162120 b) 12162120 c) 12152019 d) 12152120

8) If WORD is coded as 9753,than DOOR is coded as

- a)3579 b) 3559 c) 9357 d) 3775

9) In a certain code language SKILLFUL is written as LTMJGMMV how is STATED written in that code

- a) TUCUFD b) UTUCEF c) UTUBEF d) TUBUFE

10) DELHI can be written as CDKGH and MUMBAI can be written as?

- a) LTLAZH b) LTALHZ c) TLALXH d) HTLAZL

11) If NOBEL is coded as ONBEL, then GRAND is coded as

- a)HQMBE b) HMBQE c) QHBME d) HQMEB

12) STUMP is coded as PQRJM and PITCH is coded as?

- a) MFQZE b) QJUBI c) MEQAE d) RKVEK

13) If SAME is coded as VDPH, then IDENTICAL is coded as:

- a)KFHPVKEDN b) LACITNEDI c) LGHQWLFDO d) KACITNEDI

14) If TENNIS is coded as UDOMJR, then CRICKET is coded as:

- a) DPJBMDV b) DQJBMEU c) DQJBLDU d) BSHDJFS

15) If MATH can be coded as RFYM, what is the code for PHYSICS in that language?

- a) UMDXNHX b) UMDVNHV c) UMDYNHY d) UMDXHNX

16) If BLACK is coded as DNCCEM, then ORANGE is coded as

- a) QTCPIG b) PSCHF c) PSBOHF d) QTCOIG

17) If STICK is coded as RSHBJ then REPLY is coded as

- a)SFQNX b)QDOKX c)AFQMZ d)QDOMX

18) If “Apples are red” is coded as 541, “My eye swollen” is coded as 927, fear of dark” is coded as 368, then what does “Apples of my eye” stand for?

- a) 5692 b) 5690 c) 5962 d) 5672

19) If EXAM is coded as FYBN, then TEST is coded as

- a) NBYF b) UFTU c) SFTS d) SFRS

20) If YWUSQ IS 25-23-21-19-17, then MKIGF IS?

- a) 13-11-9-7-6 b) 1-2-3-5-7 c) 9-8-7-6-5 d) 7-8-4-5-3

21) The letters of the alphabet are numbered from 1 to 26 consecutively with 1 assigned to A and 26 assigned to Z. By 27th letter we mean A, 28th we mean B etc. In general 26m+n where m, n are positive integers is same as the letter numbered n. Let p = 6. The Strange County Military General sends his secret messages according to the following codification scheme. In codifying a sentence, the first time a letter occurs it is replaced by the Pth letter from it, second time it occurs it is replaced by p^{2nd} letter from it ,third time it occurs, it is replaced by p^{3rd} letter from it etc. What is the code word for ABBATIAL?

- a)GHMNZoor b)GHKJZOHR c)GHHGZOGR d)GHLKZOIR

22) If in a certain language FASHION is coded as FOIHSAN, how is PROBLEM coded in that code?

- a) PELBROM b) PRBOELM c) PELBORM d) RPBOELM

23) In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code?

- a) SDFHS b) QDFHS c) SHFDQ d) UJHFS

24) HERE = COMES – SHE, (Assume s = 8)

Find value of R + H + O

- a) 10 b) 11 c) 15 d) 14

25) HOW + MUCH = POWER Then P + O + W + E + R =?

- a) 10 b) 11 c) 13 d) 12

26) GOOD is coded as 164 then BAD coded as 21.if ugly coded as 260 then JUMP?

- a) 230 b) 240 c) 235 d) 236

27) If Ever + Since = Darwin then D + a + r + w + i + n is?
a) 20 b) 21 c) 22 d) 23

28) USA + USSR = PEACE; P + E + A + C + E =?
a) 10 b) 11 c) 12 d) 13

29) If POINT + ZERO = ENERGY, then E + N + E + R + G + Y =?
a) 15 b) 16 c) 17 d) 18

30) SEND + MORE = MONEY. Then what is the value of M + O + N + E + Y?
a) 13 b) 14 c) 15 d) 16

31) In a certain code, the symbols for 0 (zero) is @ and for 1 is \$. There are no other symbols for all other number greater than one. The numbers greater than 1 are to be written only by using the two symbols given above. The value of the symbol for 1 doubles itself every time it shifts one place to the left. Study the following examples:

'0' is written as @, '1' is written as \$, '2' is written as \$@, '@' '3' is written as \$ \$
'4' is written as \$@@ and so on

Which of the following represents 14?

a) \$@@@ b) \$\$\$@ c) \$\$@@ d) ##@#

32) In a certain language STORM is coded as KLGIE, How is MONSOON coded in the same language?

a) EGFKGGF b) EGKFGGF c) EGFKGFK d) EGFKGFG

33) Leo + Lee = all. Find l + o + l if a=3. All letters represents number 0 to 9
a) 5 b) 8 c) 7 d) 6

34) If CONDEMN is coded as CNODMEN. Then TEACHER can be coded as
a) TEACHER b) TAECHER c) TCAEEHR d) TAECEHR

35) If "black" is pink, "pink" is blue, "blue" is "brown" , brown is "orange", "orange" is "violet" , "violet" is "red", "red" is "black". Then colour of violet
a) Black b) Brown c) Orange d) Red e) Pink

36) In a certain language 8514 is coded as HEAD, 3045 is coded as RIDE, O57 is BEG. What will be the code for GRADE?
a) 71345 b) 73415 c) 74135 d) 73145

37) In code language COUNTRY is coded as KVSXUA, then INDIA will be coded as:
a) QUJNE b) QUINE c) RVKOF d) None of these

38) If in a certain code language "INNOVATIVE" is coded as "ELMMRVERGZ", then how "FILAMENT" would be coded in the same code language?
a) ZORUGMUN b) ZORUGMVM c) ZOSUGMVN d) ZORUGMVN

39) If in a certain code language "EXPLORER" is coded as "SFQNMQWD", then how would "DISCOVER" be coded in the same code language?
a) SFUNDSHC b) SFUNDTIC c) SFUNDTHC d) SFUNDTHD

40) If in a certain code language "GRADUATE" is coded as "SHYVGAHW", then how would "SCHOOL" be coded in the same code language?
a) GVRMMP b) GWSMMP c) GWRMNP d) GWRMMP

ANALOGIES

1) EHKN:FGLM::CFIL:

a) DEJK b) DGJM c) BEHK d) BGJM

2) QPS: TSV:: IHK: ?

a) LKN b) NQP c) MKN d) LOM

3) QDXM: SFYN::UIOZ:?

a) PAQM b) LPWA c) QNLA d) WKPA

4) ADWZ:FIBE::KNPM:

a) PSUT b) PSUR c) PSER d) PVUR

5) INVITE:JOWJUF::ATTEND:?

a) BUUFOE b) BUUGOF c) CUUFOE d) CUUGQF

6) AZP:ZAR::TAK : ?

a) SYM b) RXN c) TZN d) SMY

7) PSQR:SVTU::DGEF:?

a) IKHJ b) HJKI c) HKIJ d) IHJK

8) G3S:J3P::L4X:?

a) P3Y b) O3T c) P4T d) Q4S

9) AIE:FNJ::KSO:?

- a) PWU b) PXT c) LYT d) QXU
- 10) PROGRAM:QTRKWGT :: APPLIANCE:
a) BRSPNGUKO b) BRSQNGUKN c) BRSQNGUKO d) BRSPNGUKN
- 11) EKC:GMI::OUM:?
a) QWO b) UAO c) UAS d) QWS
- 12) 985:874::763:?
a) 641 b) 542 c) 722 d) 652
- 13) SHE:FLE :: JPM
a) OTP b) MTQ c) NSP d) OSP
- 14) 24:50::102:?
a) 204 b) 206 c) 152 d) 156
- 15) QPS:TSV::INK: ?
a) MRO b) AFB c) IFB d) KFC
- 16) D4T:H4P::L5R:?
a) P4N b) Q5M c) P4N d) Q4N
- 17) 215:474::537:?
a) 26 b) 27 c) 25 d) 22
- 18) A17R:D12P::G7N:?
a) H2K b) J3M c) J2L d) H3K
- 19) fan: regulator::air conditioner:
a) Remote b) cable c) power d) stabilizer
- 20) Reptile is to lizard as flower is to
a) petal b) stem c) daisy d) alligator
- 21) TAILOR : SUIT
a) scheme : agent b) edit : manuscript
c) revise: writer d) mention : opinion
- 22) CEHL:MORV::WYBF:?
a) GIKM b) GILP c) GJMP d) GHJM

- 23) P3M:N4J::R3P :?
a) Q3N b) P3N c) Q4N d) P4N
- 24) 865:532::976:?
a) 651 b) 642 c) 521 d) 643
- 25) 46:64::82:?
a) 100 b) 104 c) 48 d) 42
- 26) CEGI:JLNP::QS UW: _____
a) WCMS b) SXBD c) XZBD d) UZDH
- 27) CFI:LKM::UUU:____
a) OPQ b) ORP c) ORQ d) OQP

BLOOD RELATION

- 1) A man pointing to the photograph says” The lady in the photograph is my nephew’s maternal grandmother”. How the lady in the photo is related to the man’s sister who has no other sister?
a) Mother-in-law b) Mother c) Cousin d) Sister-in-law
- 2) Pointing to a photograph, a lady tells to vinod, “I am the only daughter of the lady and her son is your maternal uncle”. How is the lady related to vinod's father?
a) Sister b) Mother c) Wife d) Sister-in-law
- 3) X is wife of Y.Y is brother of Z.Z is son of P. How P is related to X?
a) Sister b) Aunt c) Father-In-Law d) Brother-In-Law
- 4) Pointing to girl child in a photograph woman said "Her mother’s sister is the wife of my son". How is the woman related to the child?
a) Mother b) Daughter c) Sister d) None of these
- 5) Pointing a man on photograph, another man said, ‘He is the father of my daughter’s son’. How is the man in the photograph to him?
a) Brother b) Son in law c) Father d) Son
- 6) A,B and C are the children of D and E. F is the spouse of A. G is the granddaughter of D whose father is F. B is a mother of H. Then who is the male children of D and E?
a) A b) E c) B d) C

7) If Mohan is the brother of Rohan's grandmother, how is Rohan related to Mohan?

- a) Brother-in-law b) Uncle c) Grandson d) Grandfather

8) Looking at the portrait, A girl said, 'he is the husband of the granddaughter of my mother'. How the man is related to the girl?

- a) Brother b) Son-in-law c) Father d) Cousin

9) Q is the wife of R. M is the mother of R and S. How is M related to Q?

- a) Father b) Mother-in-law c) Uncle d) Father-in-law

10) P is the son-in-law of S. T and Q are the children of P. M is the mother of T. How is M related to S?

- a) Daughter b) Son c) Mother d) Sister

11) A man goes to the park and sees a girl who he recognized to be his relative. The girl was the daughter of his sister's husband's wife. How is the girl related to the man?

- a) Niece b) Sister-in-law c) Sister d) Aunt

12) Pointing to women, a man said, 'Her father is the only son of my mother'. How is the man related to the women?

- a) Father b) Cousin c) Nephew d) Brother

13) Pointing to a man, a girl said, 'He is the husband of the granddaughter of the mother of the mother', how is the man related to the girl?

- a) Cousin b) Brother-in-law c) Brother d) Husband

14) Looking at the portrait, A girl said, 'He is the husband of the granddaughter of my mother'. How the man is related to the girl?

- a) Son b) Brother c) Son-in-law d) Nephew

15) Pointing towards a person in a photograph Pinki said, 'He is the cousin of my mother's husband'. How is that person related to pinki?

- a) Father b) Uncle c) Brother d) Brother-in-law

16) Q is the wife of R, M is the mother of R and S. How is M related to Q?

- a) Father b) Mother-in-law c) Uncle d) Father-in-law

17) P is the son-in-law of S. T and Q are the children of P. M is the mother of T. How is M related to S?

- a) Daughter b) Son c) Mother d) Sister

18) Aakriti went to her mother's brother's wife's daughter's paternal grandmothers only son in law's nephew's house, whose house did Aakriti go to?

- a) Son b) Brother c) Sister d) Cousin

19) Introducing a man, Women said "He is the only one son of the mother of my mother. "How is women related to man?

- a) Sister b) Mother-in-law c) Daughter d) Niece

20) Pointing to the man in the playground, Sheela said, 'He is brother of the father of my mother's son'. How is the man related to Sheela?

- a) Brother b) Uncle c) Cousin d) Father

21) Pointing a lady, a man said, 'she is the daughter of the woman who is the mother of the husband of my mother' how is the lady related to man?

- a) Grandmother b) Sister c) Mother d) Aunt

22) A is the only brother of B. P is the only nephew of B. How is P related to A?

- a) Son b) Daughter c) Brother d) can't say

23) Radha is the only daughter of Rakesh's father-in-law's wife. How is Radha related to Rakesh?

- a) Daughter b) Sister c) Cousin d) Wife

24) Introducing a woman, a man said, 'Her husband is the only son of my father'. How is the woman related to the man?

- a) Sister b) Mother-in-law c) Daughter d) Wife

25) Rahul went to his mother in law's only son's daughter's husband's son's maternal uncle and asked for some money. How is the person related to Rahul?

- a) Brother b) Cousin c) Uncle d) Father

26) Pointing to a man a girl said, 'He is the husband of the granddaughter of the mother of my mother'. How is the man related to the girl?

- a) Cousin b) Brother-in-law c) Brother d) Father

27) Pointing to a man in a photograph, another man said, 'He is the father of my daughter's son'. How is the man in the photograph related to the man?

a) Brother b) Son-in-law c) Father d) Son

28) A, S, O, D, F, T are the members of a family of 3 men and 3 women, among whom where are two married couples. We also know

O is the son of S

T is the daughter of A

F is the grandson of A

D is the mother of a girl and a boy

S is not the father of O

All the relationship mentioned above are between these six persons only

A) T's grandmother is?

a) D b) F's father c) A d) S

B) D's husband

a) O b) F c) A d) none of these

C) A's wife is

a) D b) T c) S d) none of these

D) O's father is

a) F b) D's father c) S d) A

29) P is daughter of Q. R is brother of P. S is father of R. How is Q related to S?

a) Wife b) Daughter c) Father d) Uncle

30) P is father Q and R. Q is the only son of P. What is the R's relationship with P?

a) Daughter b) Niece c) Son d) Nephew

31) P is the father of R but R is not his son. M is the spouse of R. How is M related to P?

a) Son-in-Law b) Wife c) Daughter-in-law d) Uncle

32) Mayank said "my mother is the sister of Rajan's brother. What is the Rajan's relationship with Mayank?

a) Cousin b) Maternal uncle c) Uncle d) Brother in law

33) R has two boys x and y and a daughter z. Billu has two boys A and B and daughter L. L has three children boy P and girl Q. Y is married to Q and J and K are children's of A and Z. How is k related to Y?

a) Cousin b) Sister c) Aunt d) None of these

DIRECTION SENSE

1) If North-West becomes East and North-East becomes south and so on, then what does east become?

a) South-West b) North-East c) North-West d) South-East

2) If North is called North-East, North-East is called east; East is called South-East and so on. What will South-East be called?

a) West b) North c) South d) East

3) Two friends X and Y starting a race X runs 12km East, then 18km South, y runs 2km South and 20km South-East. How far are they from each other now?

a) 0 b) 1 c) 2 d) 6

4) A lady runs 18km towards East and then 24km towards North. How far and in which direction is the lady from the starting point?

a) 42km North-East b) 42km East c) 6km East d) 30km North-East

5) Rajeswari walked 2km towards North then turned right and walked 3km then again turned right and walked 3.5km. She turned left and walked 1.5km finally. Then how far and in which direction is she from the starting point?

a) 3km East b) 4.5km West c) 5km East d) 3km West

6) 8 people namely A, S, D, F, G, H, J and K are sitting around circular table facing the center of the table. D is facing North-East and G is sitting 3 positions away from D in the clockwise direction. J is sitting adjacent to D and opposite to A. A is sitting adjacent to S on his right. K is sitting adjacent to S and F is not sitting opposite to D. Which direction is A facing

a) South-East b) North-West c) North-East d) South-West

7) I was facing north. I turned 100degrees in the anti-clockwise direction and then 155degrees in the clockwise direction which direction am I facing now?

a) East b) North-East c) North d) South-West

8) Two friends Raman and Rajan start a race and run together for 20km towards East. From there, Raman runs 10km towards North East and Rajan continues running in the East for 8km. How far are the two friends from each other?

a) 6km b) 20km c) 18km d) 30km

9) A child while coming home from his school first goes 4km towards South-East, then 8km towards West. He then goes 4km towards North-West. In which direction is he from his school?

a) East b) North c) South-east d) West

10) Charu is facing south. She walks 20m towards her left and takes a right turn to walk 10m, and then she takes another left turn to walk 30m. In which direction is she standing now from her starting point?

- a) South-East b) South-West c) North-East d) North-West

11) A baby crawls 8feet towards West and then 8feet towards North. It then moves 14feet towards East .How far and in which direction is the baby from the Starting point?

- a) 8feet towards East b) 10feet towards North-East
c) 6feet towards East d) 10feet towards South-East

12) If a women facing South-East direction at the degree of 155, then rotates in clockwise direction. Now she is on North-West, then she rotates on anti-clockwise for further 155degrees, what is the direction she is facing

- a) South-West b) North-East c) South-East d) North-West

13) If a person is facing south direction, then he walks 15m along that direction then turns left and walks 15m along that direction then turns left and walks 25m and turns left walks another 15m further and he turns left for 40m.what is the total distance

- a) East, 10km b) West, 10km c) West, 5km d) North, 5km

14) Ajith is standing on point A facing West . He walks straight for 15m and then takes a right turn and walks 8m to reach point B. What is the smallest distance between the two points and in which direction of point A does the point lie?

- a) 25m, West b) 8m, North-West c) 17m, North-West d) 17m, North-East

15) Rahim is facing south. He walks 15m forward, then turning to his left walks 25m, then turning again to his left he walks 15m. At last he turned left again and walked 40m. How far is he from the starting point and in which direction is he facing?

- a) West, 10m b) South, 5m c) West, 15 m d) South, 15 m

16) An angle facing South-East turns 180degrees clockwise and again 360degrees anti-clockwise and 270degrees clockwise. In which direction is it now?

- a) North b) South c) East d) West

17) X facing South turns anti-clockwise 135degrees and 45degrees clockwise. What is the direction at last?

- a) West b) East c) South- East d) South- West

18) Walking towards West 30m then turned left and walked 10m and again 40m left and turned left and walked 20m north. Which direction is he from the starting point?

- a) North b) South c) East d) West

19) A man is facing towards North-West, moves across 85degrees anti-clockwise, and then moving across 55degrees at same direction. Find the position where he is?

- a) South-West b) South c) South-East d) West

20) A tourist has strayed from his path while on his way to his hotel. He moves 28km towards South, then moves 20km towards West, then 4km towards North and then 2km towards East to reach his hotel. What is the distance of the shortest possible route?

- a) 45km b) 20km c) 18km d) 30km

21) Mayank travelled a distance of 80m towards North. Then he turns right and travels 65m, then again turns northwards and travels 45m. He further travels by turning 45 degrees clockwise. Towards which direction is he running now?

- a) North b) West c) South-West d) North-East

22) Raju starts walking towards south 15m and a turn left walking 25m and a turn left again to walk 15m and finally turns left and walks 40m. Now Raju is going in which direction and at what distance to his starting point?

- a) North b) South c) East d) West

23) Sagar walks 30m west and takes a left turn to walk 10m, then takes a left turn again and walks 40m, and takes another left turn and walks 20m. In which direction is he standing now from the starting point?

- a) North-East b) North-West c) South-East d) North

24) A lady is facing South-East. She turns 180degrees in the clockwise direction, then 360degrees in the anti-clockwise direction, and then another 270degrees in the clockwise direction. Which direction is she facing now?

- a) South b) South-West c) West d) South-East

25) A child has strayed from his path while coming home from school. He first goes 3km towards South from his school and then moves 5km towards East, he again moves 3 km towards North and then goes 2km towards West. How far is his school situated away from his house?

- a) 3km b) 1km c) 2km d) 8km

26) Meeru has lost her way home and was standing 25m away from her house in the South-West direction. He walks 20m North reaches point A. How far and in which direction would she have to walk to reach her house?

- a) 20m East b) 15m East c) 15m West d) 20m West

27) A boy is facing North-West. He turns 85degrees in the anti-clockwise direction and then 50degrees in the same direction. Which direction is he facing now?

- a) Southwest b) Southeast c) South d) North

28) One day Raja left home and cycled 5km Southwards, turned left and cycled 2km and turned left again and cycled 3km. then he turned right and cycled 5km. how many kilometres will he have to cycle to reach his home straight?

- a) Square root of 53 b) Square root of 54
c) Square root of 55 d) Square root of 56

29) Two friends A and B start walking from a common point. A goes 20 km towards North- East whereas B goes 16km towards East and then 12km towards North. How far are A and B from each other?

- a) 14km b) They are at same place at the finishing place
c) 15km d) data insufficient

30) Faizal is standing at a point and facing north. He walks 15m to his left and takes an about turn and walks 30m. How far and in which direction is he from starting point?

- a) 15m, West b) 15m, East c) 5m, East d) 45m, West

31) Manak was in Whimsical mood and to reach her home, from her office she took the following steps: 4 steps towards North, 3 steps towards East, 8 steps towards South, 6 steps towards West, 7 steps towards North, 5 steps towards East, 6 steps towards South, 4 steps towards West and finally reached her home taking 3 steps towards North. The location Manak's from her house with respect to office is

- a) 3 steps to the East b) 3 steps to the west
c) No steps d) 2 steps towards west

32) A man runs 4 km towards North, 20km towards East. Then he turns towards 4km south. How far is he from the initial point?

- a) 4km b) 20km c) 4km d) 16km

33) Suneeta moves a distance of 9m towards East, she then moves towards South and travels at a distance of 4m. From here she moves a distance of 6m towards West. How far is the starting point from her final position?

- a) 3 b) 4 c) 5 d) 7

34) Kumar starts walking towards North 50m and turn left and walk 20m long and turn right walk 10m. Which direction is Kumar now in?

- a) North b) South c) East d) West

35) A baby crawls 12feet towards East and then 4feet towards South. He then crawls 9feet towards West. How far is he from his initial position?

- a) 2 feet b) 9 feet c) 5 feet d) 16 feet

36) X walks 6km towards East from point A and from the same point A, Y walks 8km south. How far are the two friends from each other now?

- a) 14km b) 2km c) 10km d) 5km

37) There are three cities A, B and C. Two ways to reach C from A or B. Shortest distance from A to B is 66 km. shortest distance from B to C is 45 km. shortest distance from A to C is 50 km. There is another city called P. Shortest distance from P to A is 180 km. shortest distance from P to B is 200 km. Find the shortest distance between P to C.

- a) 230 b) 245 c) 291 d) 430

38) A child was looking for his father. He went 90 metres in the East before turning to his right. He went 20 metres before turning to his right again to look for his father at his uncle's place 30 metres from this point. His father was not there. From here he went 100 metres to the North before meeting his father in a street. How far did the son meet his father from the starting point?

- a) 90 b) 30 c) 80 d) 100

39) A girl leaves from her home. She first walks 30 metres in North-west direction and then 30 metres in South-west direction. Next, she walks 30 metres in South-east direction. Finally, she turns towards her house. In which direction is she moving?

- a) North-east b) North-west c) South-east d) South-west e) None of these

40) A lady runs 12 km towards north and 6 km towards a south and 8km in east direction how far she is from starting point and which direction?

- a) 5 km north – east b) 5 km east c) 10 km north – east d) 10 km west

41) Madhu goes 40 km north and turns right 80 km and turns right again 80 km how far from starting point if he goes straight 50 km and turns left to last 10 km?

- a) 10km b) 30km c) 40km d) 50km

SEATING ARRANGMENTS

Read the information given below carefully and answer the questions that follow:

1) Eight friends - Sanjana, jeetika, supna, kirti, Heena, Geeta, Kajal and Lily are sitting in a circle facing the center. Jeetika is sitting between Kajal and Kirti. Jeetika is third to the right of Lily. Sanjana is second to the left of Lily. Supna is sitting between Kajal and Sanjana. Jeetika and Monika are not sitting opposite to each other.

A) Who is sitting third to the right of supna?

- a) Kirti b) Sanjana c) Jeetika d) Lily

B) Who is sitting opposite to Kajal?

- a) Lily b) Jeetika c) Sanjana d) Geeta

C) Who is sitting opposite to kirti?

- a) Lily b) Jeetika c) Geeta d) Sanjana

2) Four working ladies A, B, C and D sitting around a table

A sits opposite to the cook

B sits on the right side of the beautician

Teacher is on the left side of an accountant.

D sits opposite to C

C is to the right of the accountant

A) What is the occupation of C?

- a) Beautician b) Teacher c) Accountant d) Cook

B) What are the occupations of A and B?

- a) Accountant and Beautician b) Accountant and cook

- c) Accountant and teacher d) Teacher and cook

C) What is the occupation D?

- a) Accountant b) Beautician c) Teacher d) Cook

D) Who is sitting to the left of beautician?

- a) Cook b) Accountant c) Teacher d) None of these

3) Suman, Vicky, Santosh, Mohan, Alok, Sagar, Shekar are standing on a wall and all of them are facing west.

Suman is on the immediate left of Alok

Mohan is at an extreme end and has Santosh as his neighbour.

Alok is standing third from the south end.

Sagar is between Santosh and Shekar.

A) Which of the following pairs of people is Shekar immediately standing in between?

- a) Suman and Sagar b) Alok and sagar
c) Suman and Santosh d) None of the above

B) Who is standing to the left of Santosh?

- a) Mohan b) Sagar c) Shekar d) Vicky

C) Name the person who should change his positions with Alok such that he gets the second place from the north end.

- a) Shekar b) Vicky c) Sagar d) Santosh

4) Six persons A, B, C, D, E, and F are invited to the party.

A accepts invitation only if B or F accepts.

C may accept if B accepts.

F will accept if B, C, and D accept

E and B may accept if D accepts.

What is the possible order in which they accept their invitations?

- a) DBECFA b) DABEFC c) DCBEFA d) BFDECA

5) Eesha invited 8 friends to her birthday party - Usha, Nisha, Aasha, Abilasha, Suresh, Ramesh, Naresh and Ritesh. They all arrived one after the other around the party time within 1 minute of each other - from 19:41 to 19:48 hours, one friend every minute.

Nisha joined the party before Naresh

Suresh joined the part before Abilasha

Naresh and Abilasha joined the party before Usha

Naresh joined the party before Ritesh

Abilasha joined the party before Ramesh

Usha joined the party before Aasha

Which one of the following is not possible?

- a) Usha 19:44 b) Nisha 19:41 c) Nisha 19:43 d) Ramesh 19:44

6) F, G, H, J, K, L, M and N are 8 people. They need to grouped into two with the following conditions:

F and J must be in the same group

G and N must be in different groups

H and L must be in the same group

M and G are not in the same group

Find the correct ordering of groups

- a) FJ, KL, MN, GH b) FH, JL, MN, GK c) FJ, HL, MN, GK d) FJ, HL, MN, GH

7) A city in the US has a basketball league with 3 basketball teams, the Aztecs, the Braves and the Celtics. A sports writer notices that the tallest player of the Aztecs is shorter than the shortest player of the Braves. The shortest of the Celtics is shorter than the shortest of the Aztecs, while the tallest of the Braves is shorter than the tallest of the Celtics. The tallest of the Braves is taller than the tallest of the Aztecs.

Which of the following can be judged with certainty?

X) Paul, a Brave is taller than David, an Aztec

Y) David, a Celtic, is shorter than Edward, an Aztec

a) X only b) Both X and Y c) Neither X nor Y d) Y only

8) In a family, there are four daughters, Aasha, Easha, Trisha and Usha. Each girl has exactly one necklace and one bracelet. Each of these eight ornaments was bought in either 2007, 2008, or 2009. The eight ornaments were bought in a manner consistent with the following conditions:

The necklace for each girl was bought either in an earlier year than or in the same year as the bracelet for that girl.

The necklace for Easha and the bracelet for Aasha were bought in the same year.

The necklace for Trisha and the bracelet for Usha were bought in the same year.

The necklace for Easha and the necklace for Trisha were bought in different years.

The necklace for Aasha and bracelet for Trisha were bought in 2008.

If the necklace for Trisha was bought in an earlier year than bracelet for Trisha was, then which one of the following statements could be true?

a) The necklace for Easha was bought in 2008

b) The necklace for Usha was bought in 2008

c) The necklace for Easha was bought in 2007

d) The bracelet for Usha was bought in 2008

9) In Loonyville, four people called Doctor, Engineer, Lawyer and Architect follow the professions of doctor, lawyer, engineer and architect. However, none of them follow the profession indicated by their name.

Lawyer does not like the doctor's habit of constantly interrupting others. Architect is shy, and gives no public talks. Engineer has a dog. The architect has no pets. The lawyer lives in a big house. Doctor plays golf regularly with the engineer every Saturday, unless it rains. The lawyer gives a lot of public talks on hygiene.

What is the profession of Lawyer?

a) An engineer b) An architect c) A doctor d) Cannot be determined

10) A very special island is inhabited only by knights and knaves. Knights always tell the truth, and knaves always lie. You meet four inhabitants: Usha, Eesha, Nisha and Asha. Usha tells you 'Eesha is a knave'. Eesha tells you 'Asha is a

knave'. Nisha claims, 'Eesha is a knight and Asha is a knave. 'Asha tells you, 'I and Nisha are different.'

Identify the knave(s)

a) Eesha only b) Usha only c) Eesha and Nisha d) Nisha and Asha

11) University of Vikramasila has enrolled nine Phd candidates – Babu, Chitra, Dheeraj, Eesha, Farooq, Gowri, Hameed, Iqbal, Jacob.

Farooq and Iqbal were enrolled on the same day as each other, and no one else was enrolled that day.

Chitra and Gowri were enrolled on the same day as each other and no one else was enrolled that day.

On each of the other days of hiring, exactly one candidate was enrolled.

Eesha was enrolled before Babu.

Hameed was enrolled before Dheeraj

Dheeraj was enrolled after Iqbal but before Eesha

Gowri was enrolled after both Jacob and Babu

Babu was enrolled before Jacob

Who were the last two candidates to be enrolled?

a) Gowri and Chitra

b) Babu and Chitra

c) Babu and Gowri

d) Eesha and Jacob

12) In a G6 summits beings held at London, a French, a German, an Italian, a British, a Spanish and a Polish diplomat represent their respective countries and participate in a round table conference to strengthen co-operation between these countries. There are exactly six chairs evenly spaced around a circular table. The chairs are numbered 1 through 6, with successively numbered chairs next to each other and chair number 1 next to chair number 6. Each chair is occupied by one of the diplomats. The following conditions apply:

-- Polish sits immediately next to British.

-- German sits immediately next to Italian, British or both.

-- French does not sit immediately next to Italian.

-- If Spanish sits immediately next to Polish, Spanish does not sit immediately next to Italian.

Which one of the following seating arrangements of the six diplomats in chairs 1 through 6 would NOT violate the stated conditions?

a) French, Polish, British, Italian, Spanish, German

b) French, German, Italian, Polish, British, Spanish

c) French, German, Italian, Spanish, Polish, British

d) French, Spanish, Polish, British, German, Italian

e) French, British, German, Spanish, Italian, Poitier

13) There are 5 sweets – jamun, kulfi, peda, laddu and jilabi that I wish to eat on 5 consecutive days – Monday through Friday, one sweet a day, based on the following self-imposed constraints :

Laddu is not eaten on Monday I

If jamun is eaten on Monday, then laddu must be eaten on Friday

If laddu is eaten on Tuesday, kulfi should be eaten on Monday

Peda is eaten the day following the day of eating jilabi

Based on the above, peda can be eaten on any day except?

a) Tuesday b) Monday c) Wednesday d) Friday

14) Three sisters are identical triplets. The oldest by minutes is Asha, and Asha always tells anyone the truth. The next oldest is Eesha, and Eesha always will tell anyone a lie. Usha is the youngest of the three. She sometimes lies and sometimes tells the truth.

Victor, an old friend of the family's, came over one day and as usual he didn't know who was who, as he asked each of them one question.

Victor asked the sister that was sitting on the left, "Which sister is in the middle of you three?" and the answer he received was, "Oh, that's Asha".

Victor then asked the sister in the middle, "What is your name?" The response given was, "I'm Usha."

Victor turned to the sister on the right, and then asked, "Who is that in the middle?" The sister then replied, "She is Eesha"...

This confused Victor; he had asked the same question three times and received three different answers.

Who was actually sitting in the middle?

a) Asha b) Eesha c) Usha d) Cannot be determined

15) Eight Friends A, B, C, D, E, F, G and H are sitting around a circle, facing towards the center. D is between A and E. F is second to the left of E. B is between C and G. F is between G and H.

A) Who is fourth right of B?

a) H b) D c) A d) None

B) In which of the following, Second person is the immediate left of first person?

a) H,E b) D,A c) B,G d) B,C

C) Which of the following is definitely true?

a) D is second left of H b) A is Second right of E
c) C is immediate right of G d) E is immediate left of C

D) Who is immediate left of E?

a) D b) A c) H d) F

E) Who is third right of G?

a) E b) A c) C d) D

DATA ARRANGEMENTS

Read the passage and answer the question based on the information given

1) A, B, C, D and E are five friends in a class. They have their birthday dates from Jan to May.

i) Each friend are born in one of these months

ii) Each one likes one particular item for his/her birthday out of rice, mutton, chicken, burger and pizza

iii) The one who likes pizza is born on March

iv) C does not likes pizza but brings rice for D in April

v) E who is fond of burger, is born in the next month immediately after B

vi) B does not like burgers or mutton

A) Which is the choice of A?

a) Burger b) Pizza c) Chicken d) Rice

B) Which of the following is true for B?

a) Chicken, January b) Chicken, February

c) Pizza, January d) Pizza, February

C) In which month was E born

a) January b) February c) March d) April

2) Nine family members sitting in a theatre in a row. they are J, K, L, M, N, O, P, Q, R. L is at the right of M and at the 3rd place at the right of N. K is at one end of row. Q is immediately next to O and P. O is the third place at the left of K. J is right next to the left of O.

A) Who is sitting center of the row?

a) L b) J c) O d) Q e) None of these

B) Who are sitting next to L?

a) A and O b) M and J c) M and O d) P and J e) None of these

C) Who is at the other end of row?

a) R b) J c) P d) N e) Q

3) A, B, C, D, E and F are organized for span of 7 days from Sunday to Saturday day there are 1 lecturer for one day. Accordance to this

1. A should not organized on Thursday

2. C should not organized after F

3. There should not be a gap between E and D.

4. One day there will not be not be a lecturer (not Friday) just before d will be organized

5. B should be Tuesday not next to D

How many lecturers b/w B and D?

- a) 4 b) 1 c) 2 d) 3

4) P,Q,R,S,T,U,V and Ware 8 friends sitting in the circle facing towards centre
W is immediately left to P but is not neighbour of T or S
U is immediately right to Q and V is neighbour of T
R is between T and U

Which of the following statement are true?

- a) T is b/w U and O b) U is neighbour of V c) V is b/w W and T
d) W is b/w P and S e) None of these

5) In a boy's row, Rajan is 10th from right and Suraj is 10th from left. When Rajan and Suraj interchange their position. Suraj will be 27th from left. Which of following will be the position of Rajan from right?

- a) 10th b) 26th c) 29th d) 25th e) none of these

6) Five friends P, Q, R, S and T like different subjects among mathematics, history, social studies, science and physics.

Q likes social studies and P does not like science.

T does not like history. R likes mathematics.

T does not like science.

A) Who likes science?

- a) None b) P c) R d) S

B) Who likes physics?

- a) P b) none c) Q d) S

C) What among the following is definitely true?

- a) P likes physics b) Q does not like science
c) R likes history d) S likes history

D) Who likes history?

- a) S b) P c) none d) Q

7) 6 friends A, B, C, D, E and F are sitting around a circular table. A is sitting far from C and B is sitting far from E. D is sitting to the left of A and to the right of E.

A) Who is sitting to the left of A?

- a) E b) C c) B d) F

B) Who is sitting to the left of C?

- a) F b) C c) E d) B

8) 6 friends Arjun, Bhaskar, Chandu, Omkar, Ester and faran are studying in same school. They were given ranks both for academics and sports.

1. Arjun is not the best player while Bhaskar didn't get the first rank in academics.

2. The person with the lowest rank in academics is the best player.

3. Bhaskar is good at academics than Omkar but plays better than Omkar.

4. Arjun is poor in studies than Omkar but plays better than Omkar.

5. Faran plays better than Bhaskar and Bhaskar plays better than Chandu.

6. Faran studies better than Arjun while Omkar plays better than faran.

A) Who is the best sports player?

- a) Ester b) can't be determined c) Bhaskar d) Arjun

B) What is the rank of Bhaskar in sports?

- a) Fifth b) third c) fourth d) can't say

C) Who performed best in academics?

- a) Chandu b) Bhaskar c) Omkar d) Ester

9) A, B, C, D, E, F and G are sitting on a bench facing north.

Exactly three and exactly five persons are sitting to the left of D and E respectively.

B is the only one in between F and C.

F and G are at the extreme ends.

A) Who is sitting at the middle?

- a) B b) C c) A d) D

B) Who is sitting at the extreme right end?

- a) G b) F c) B d) E

C) Who is sitting to the immediate left of D?

- a) A b) F c) B d) C

D) Who is sitting to the immediate right of A?

- a) C b) D c) E d) G

LOGICAL ORDER

Arrange the words to make a meaningful sentence

- 1) 1. Office 2. Cabin 3. City 4. Desk 5. Building
a) 4,2,1,5,3 b) 2,4,1,5,3 c) 4,2,5,3,1 d) 2,4,5,3,1

- 2) 1. Water 2. Kneading 3. Flour 4. Baking 5. Wheat
a) 5,3,1,4,2 b) 5,1,3,2,4 c) 5,3,1,2,4 d) 5,1,3,4,2

- 3) 1. Restaurant 2. Plan 3. Menu 4. Celebrate 5. Order
a) 1,2,3,4,5 b) 2,1,5,3,4 c) 1,2,3,5,4 d) 2,1,3,5,4

- 4) 1. Counter 2. Enjoy 3. Ticket 4. Money 5. Travel
a) 1,3,4,2,5 b) 3,1,4,5,2 c) 1,4,3,5,2 d) 3,1,4,2,5

- 5) 1. Garden 2. Earth 3. Grass 4. Forest 5. Tree
a) 5,3,1,4,2 b) 3,5,1,2,4 c) 3,5,1,4,2 d) 5,1,3,4,2

- 6) 1. Key 2. Door 3. Lock 4. Room 5. Light on
a) 5,1,2,4,3 b) 4,2,1,5,3 c) 1,2,3,5,4 d) 1,3,2,4,5
- 7) 1. Network 2. Talk 3. Mobile 4. Ring 5. Connection
a) 3,5,1,4,2 b) 3,1,5,4,2 c) 5,3,1,4,2 d) 5,1,3,4,2
- 8) 1. Tajmahal 2. India 3. Asia 4. Agra 5. Uttar Pradesh
a) 1,5,4,2,3 b) 1,4,2,5,3 c) 3,2,4,5,1 d) 3,2,5,4,1
- 9) 1. Lion 2. Dog 3. Duck 4. Insect 5. Deer
a) 4,2,3,5,1 b) 4,2,3,1,5 c) 4,3,2,5,1 d) 4,3,2,1,5
- 10) 1. Cry 2. Mother 3. Food 4. Hungry 5. Child
a) 5,4,1,2,3 b) 5,1,4,2,3 c) 5,4,1,3,2
- 11) 1. Earn 2. Shopping 3. Boy 4. Money 5. Job
a) 3,1,5,4,2 b) 3,4,5,1,2 c) 3,5,1,4,2 d) 2,3,5,1,4
- 12) 1. Judgment 2. Arrest 3. Police 4. Crime 5. Complaint 6. Court Hearing
a) 4,5,3,2,6,1 b) 4,3,2,5,6,1 c) 5,4,3,2,6,1 d) 4,3,5,6,2,1
- 13) 1. Community 2. Locality 3. Family 4. Country 5. Person
a) 4,1,2,3,5 b) 4,2,1,3,5 c) 5,3,2,1,4 d) 5,3,4,2,1
- 14) 1. Dough 2. Flour 3. Cake 4. Oven 5. Sell
a) 1,2,3,4,5 b) 1,3,2,4,5 c) 1,2,3,5,4, d) 1,3,5,2,4, e) 1,2,4,3,5
- 15) 1. Centigram 2. Megagram 3. Microgram 4. Milligram 5. Kilogram
a) 4,3,2,1,5 b) 3,4,1,5,2 c) 4,2,3,1,5 d) 3,2,1,4,5
- 16) Arrange them in descending order and find which comes second
1. Book 2. Library 3. Page 4. Paragraph 5. Alphabet.
a) Library b) page c) book d) alphabet
- 17) Which one would be the meaningful order of the following?
1. Probation 2. Interview 3. Selection 4. Appointment 5. Advertisement
6. Application
a) 564231 b) 563241 c) 562341 d) 654231

STATEMENT AND CONCLUSIONS

The given sign signify something and on that basis, assume the given statements to be true and find which of the two conclusions I and II is/are definitely true

1) $A + B$ means A equals to B

$A - B$ means A less than B

$A = B$ means A not equal to B

$A * B$ means A is greater than B

A / B means A is lesser than B.

Statements : $k - m$, k / l , $l + n$

Conclusions: **(1)** $m - l$ **(2)** m / n

a) Only 1 is true

b) Only 2 is true

c) Both are true

d) None of these are true

2) $@$ is =

is!

K is >

Statements : $P @ S$, $S \# T$, $P K R$

Conclusions: **(1)** $S k R$ **(2)** $P \# T$

a) Only i is true

b) Only ii is true

c) Both are true

d) Both are false

3) $A + B$ means A is equal to B

$A - B$ means A is not equal to B

$A \$ B$ means A is greater than B

$A * B$ means A is less than B

A / B means A is greater than equal to B

Statements : d / g , $g + f$, $f \$ e$

Conclusions: **(1)** $d + f$ **(2)** $e \$ g$

a) Only i is true

b) Only ii is true

c) Both are correct

d) none of these are true

4) 'A"B' means 'A is greater than B'.

'A|B' means 'A is neither smaller than nor equal to B'.

'A/B' means 'A is not smaller than B'.

'A\B' means 'A is neither greater than nor equal to B'.

'A? B' means 'A is neither greater than nor smaller than B'.

Statements: $m ? S | q | p$, r / p , $t \setminus p$

Conclusions : **(1)** $m | t$ **(2)** $q \setminus r$

a) Only conclusion I is true

b) Only conclusion II is true

c) Neither conclusion I nor II is true

d) both conclusion I and II are true

5) $A+B$ means A is greater than B
 $A-B$ means A is equal to B
 $A=B$ means A is less than or equal to B
 $A*B$ means A is less than B
 A/B means A is not equal to B

Statements : $m - p$, o / n , $n * m$

Conclusions: **(1)** $m = s$ **(2)** $n * p$

a) Only I is true b) Only II is true c) Both are correct d) none of these

6) $A - B$ means A plus B

$A \# B$ means A multiplied with B

A / B means A is greater than or equal to B

$A? B$ means A is less than B

Statements: $(v \# x) / (v - x)$, $x? y$ and z / y

Conclusions: **(1)** $x? z$ **(2)** $(v - x) ? (v \# x)$

a) Only I is true b) Only II is true c) Both are correct d) none of these

7) $A? B$ means A is equal to B

$A + B$ means A is more than twice of B

$A * B$ means A is 70 percent of B

A / B means A is less than B

Statements: $x + y$, $z * y$ and $z - a$

Conclusions: **(1)** z / x **(2)** a / x

a) Only I is true b) Only II is true c) Both are correct d) none of these

8) '!' denotes "greater than"

'*' denotes "equal to"

'+' denotes "less than"

'\$' denotes "not equal to"

'x' denotes "not less than"

'%' denotes "not greater than"

Then A! B! C does not imply

a) $B+A!$ C b) $C+B+A$ c) $C+A!$ B d) $B+A+C$

9) $a+b$ means A is greater than equal to B

$a-b$ means A is greater than B

$a=b$ means a is not equal to B

$a*b$ means A is less than B

a/b means A is equal to b

Statements : $s=t$, t/u , $u - v$

Conclusions: **(1)** $t+v$ **(2)** $u-v$

a) Only conclusion 1 is true

b) Only conclusion 2 is true

c) Neither conclusion 1 nor 2 is true

d) both conclusion 1 and 2 are true

10) "%" denotes "greater than"

">" denotes "equal to"

"=" denotes "not less than"

"@" denotes "not equal to"

"#" denotes "less than"

"*" denotes "not greater than"

Statements: $p > s$, $s @ t$, $p \# r$

Conclusions: **(1)** $s \% r$ **(2)** $p @ t$

a) Only conclusion 1 is true

b) Only conclusion 2 is true

c) Neither conclusion 1 nor 2 is true

d) both conclusion 1 and 2 are true

11) In the following questions, the symbol $<>$, $<\#>$, $<\%>$, $<\&>$ and $</>$ are used with the following meanings illustrated.

'A $<>$ B' means A is not greater than B

'A $<\#>$ B' means A is neither greater than nor equal to B

'A $<\%>$ B' means A is not smaller than B

'A $<\&>$ B' means A is neither smaller than nor equal to B

'A $</>$ B' means A is neither smaller than nor greater than B

Now assuming in the following question the given statements to be true, find which of the conclusions given below them is / are definitely true and give your answer accordingly.

Statements:

I. $P <\&> Q$

II. $Q <\%> R$

III. $R <\#> S$

Conclusions:

I. $R <\#> P$

II. $R <\&> S$

III. $S <\&> P$

a) Only either conclusion I or conclusion II follows

b) Only either conclusion II or conclusion III and conclusion I follow

c) Only either conclusion II or conclusion III follows

d) Only conclusion I follow

12) In the following questions, symbols ++, \$\$, ??, !! and && are used with different meanings as follows.

'A ++ B' means A is not greater than B

'A?? B' means A is neither greater than nor equal to B

'A \$\$ B' means A is not smaller than B

'A!! B' means A is neither smaller than nor equal to B

'A && B' means A is neither smaller than nor greater than B

Now assuming in the following question the given statements to be true, find which of the conclusions given below them is / are definitely true and give your answer accordingly.

Statements:

I. A??B

II. B&&C

III. C++D

Conclusions:

I. A++D

II. A??C

a) Only either conclusion I or conclusion II follows

b) Only either conclusion II or conclusion III and conclusion I follow

c) Only either conclusion II or conclusion III follows

d) Only conclusion I follow

13) In the following question, the symbol #, %, \$, © and * are used with the different meaning as follows:

'A # B' means 'A is equal to B'

'A © B' means 'A is greater than B'

'A % B' means 'A is smaller than B'

'A \$ B' means 'A is either smaller than or equal to B'

'A * B' means 'A is either greater than or equal to B'

Statements:

I. P \$ Q

II. N # M

III. M © R

IV. R * P

Conclusions:

I. P % N

II. Q \$ M

a) Only conclusion I follow

b) Only conclusion II follows

c) Either conclusion I or II is true

d) Neither conclusion I nor II follows

VENN DIAGRAMS

1) There are 100 in a class and they attend a test. 20 students are failed in both the subjects. 50 students pass in subject A. 60 students passed in subject B. How many students passed in subject A only.

a) 20

b) 30

c) 15

d) 25

2) In abhi's class of 44 students, 28 students speak Malayalam, 26 students speak tamil, 9 students speak none of the two languages. How many students speak both Tamil & Malayalam

a) 54

b) 38

c) 19

d) 10

3) In a survey of 80 patients in a hospital, 20 were listed as taking apple juice, 30 as taking orange juice and 15 were listed as preferring both apple as well as orange juice. Find how many patients were taking neither apple juice nor orange juice?

a) 45

b) 70

c) 65

d) 55

SYLLOGISM

Directions: Each question below consists of two statements (premises). Choose the most plausible conclusion that can be drawn from the premises.

1) All women are clever

Sania is a woman

a) Sania is not clever

b) Sania is clever

c) All women are not clever

d) none of these

2) All oranges are apples

All apples are pears

a) All pears are apples

b) All pears are oranges

c) Some oranges are pears

d) none of these

3) All rocks are locks

All locks are docks

a) All rocks are docks

b) Some rocks are locks

c) Some locks are docks

d) none of these

4) Some men swim

All men gamble

a) Some gamble are men

b) All men swim

c) All swim gamble

d) none of these

5) Sara is a painter

No painter flies

a) All painter flies

b) Some painter flies

c) Sara cannot fly

d) none of these

6) All cats are white
This is white

- a) All cats are not white b) Some cats are white
c) None of the both d) Both a and b

7) No A is B
Z is A

- All Z are A
a) Some B are Z b) No Z is A c) None of these

8) Rohan is a traveller
All travellers are photographers

- a) All Photographers are not travelers b) Rohan is a photographer
c) All travellers are not photographers d) None of these

9) All pencils are bricks
All bricks are bottles

- a) All bricks are not pencils b) All pencils are bottles
c) Some bottles are bricks d) none of these

10) All men are prisoners
No prisoner is educated

- a) All men are not educated b) No educated are prisoners
c) None of the both d) Both a and b

11) A. Some lids are nibs
B. All hooks are lids.
C. All hooks are nibs
D. No lid is a nib
E. No lid is a hook
F. No nib is hook

- a) EFD b) BCA c) DEA d) CDA

12) A. All Pens are knives
B. All knives are spoons
C. No knives are pens
D. No knives are spoons.
E. All pens are spoons.
F. All spoons are pens.

- a) ABE b) ABF c) AFE d) DBE

13) A. Some books are not novels.
B. All the novels are fictions
C. Some novels are fictions.
D. Only novels are fictions
E. Some books are not fictions

- a) ADE b) ABC c) CED d) DEA

14) A. All the nurses are in demand
B. No doctor is in demand
C. Some nurses are efficient
D. Some nurses are demand
E. Some in demand are efficient

- a) DEC b) CAE c) ABC d) DBC

Direction: Draw a Venn diagram for following set of Statements.

15) All animals are living things; Cat is an animal; Cat is a living thing.

16) Some flowers are green; rose is a flower; rose is green

17) No flower is green; rose is a flower; rose is not green

18) Some officers are engineers; No engineer is a criminal; Some officers are not criminals

19) Seaweeds are pink; All pink things are fruits; seaweeds are fruits.

20) Most Mexicans are chefs; some chefs are sailors; No Mexican is a sailor.

21) Some professors are swimmers; No swimmer is a typist; no typist is a professor.

22) Composers are lyricist; lyricists are directors; composers are directors.

23) Ovis is a university; some universities are not recognized; Ovis is not recognised.

24) Actors are models; Agassi is not an Actor; Agassi is a model

In each of the questions below, a set of three statements is given. Identify the sets in which the third statement can be deduced from

the preceding two. If the conclusion can be drawn mark (true) if not (false).

25) Doctors serve in army camps.
Sam served in army camp.
Sam is a doctor.

a) True b) False c) Cannot say

26) Some painters are singers.
All composers are singers.
Some painters are composers.

a) True b) False c) Cannot say

27) All politicians are honest.
Agassi is honest.
Agassi is a politician

a) True b) False c) Cannot say

28) All writers are singers.
Some writers are actors.
Some writers sing and act.

a) True b) False c) Cannot say

29) All sprinters run fast.
Fiama runs fast.
Fiama is a sprinter.

a) True b) False c) Cannot say

30) Vitamins are good for health.
Oranges are good for health.
Oranges contain vitamins.

a) True b) False c) Cannot say

31) All rivers are lakes.
All lakes are streams.
All rivers are streams.

a) True b) False c) Cannot say

32) Some women are not clever.
Rita is a woman.
Rita may be clever.

a) True b) False c) Cannot say

33) All who speak French know Russian.
Raju speaks Russian.
Raju speaks French.

a) True b) False c) Cannot say

34) All desks are made of wood.
Some benches are made of wood.
Some desks are benches.

a) True b) False c) Cannot say

Below are given statements followed by two conclusions. Take the given statements to be true, even if they contradict commonly known facts and determine the conclusion that logically follows from the statements.

35) Statements:

I. All biscuits are chocolates.
II. All chocolates are toffees.

Conclusions:

I. Some chocolates are definitely biscuits.
II.No chocolate is a biscuit.
a) Only conclusion I follow
b) Only conclusion II follows
c) Both conclusion I and conclusion II follow
d) Neither conclusion I nor conclusion II follows

36) Statements:

I. Some fruits are bananas
II. Some bananas are tasty.

Conclusions:

I. All tasty are bananas.
II. Some bananas are fruits.
a) Only conclusion I follow
b) Only conclusion II follows
c) Both conclusion I and conclusion II follow
d) Neither conclusion I nor conclusion II follows

37) Statements:

I. All files are documents
II. Some documents are word files.
III. All word files are excel files.

Conclusions:

- I. Some excel files are documents.
- II. Some word files are files.
- a) Only conclusion I follow
- b) Both conclusion I and conclusion II follow
- c) Neither conclusion I nor conclusion II follows
- d) Only conclusion II follows

38) Statements:

- I. All pink are sunny.
- II. All sunny are bright
- III. All bright are mixtures
- IV. Some mixtures are red.

Conclusion:

- I. All bright are pink.
- II. All mixtures are sunny.
- a) Only conclusion I follow
- b) Only conclusion II follows
- c) Both conclusion I and II follows
- d) Neither I nor II

39) Statements:

- I. Some boys are old.
- II. Some old are girls.

Conclusion:

- I. Some boys are girls.
- II. No boy is girl.
- a) Only conclusion I follow
- b) Only conclusion II follows
- c) Either conclusion I or II is true
- d) Neither conclusion I nor II follows

INFERRED MEANING

Based on the given passage find out which of the statement can be inferred from the passage.

1) European cars have traditionally been smaller and more fuel-efficient than their giant American cousins, but current policy explicitly stresses eco-friendliness. For example, recent British legislation has linked taxation to CO2 emissions with the lowest tax rate of 15 percent on the list price reserved for cars emitting less than 165 gms/km and rising by one percent for each 5 gm increase in CO2 levels.

- a) The British are unconcerned about the environment and rules have to be imposed upon them for maintenance of a clean environment
- b) The lesser the list price of a car, the greater is its fuel efficiency and so lesser the tax on it.
- c) The more fuel efficient a vehicle is, the more eco-friendly it will be.
- d) Fuel efficiency does not necessarily correlate with eco-friendliness

2) According to recent study, in the local municipal elections, the candidate who interacts more with the Residents Welfare Association and wins their trust will get the maximum name recognition in the election.

- a) Local Residents Welfare Associations are the most important factor in elections in the city.
- b) Maximum name recognition will help a candidate with a higher percentage of votes cast during the election.
- c) Resident's welfare associations exert a lot of influence over the voting population residing in the city.
- d) For maximum name recognition a candidate need not spend a lot of money on posters, banners and advertising campaigns.

3) Social Scientists have found that people who marry young are seldom prepared for marital roles. Also the men and women who marry as young adults live longer than those who never marry. According to a study, young adults who are about to get married have fewer unhealthy habits, like smoking and uncontrolled drinking of alcohol, as compared with the other people of the same age.

- a) The institution of marriage forces young men and women to quit smoking and drinking.
- b) Those who marry at an older age live a shorter life than those who get married at a younger age.
- c) People who marry at an older age are well prepared to take up marital roles.
- d) Young adults who are not about to marry are more likely to have unhealthy habits than those who are about to marry.

4) With new seasons of reality shows being telecast every month, the viewership of these shows has increased. Viewership and participation in reality TV show is mostly induced by two common motivators: fame and money. The shows transform common people who are otherwise obscure figures to household names. A few successfully manoeuvre their small stint with fame to become celebrities. Winners of Reality shows reap huge financial rewards for acts including eating large insects, marrying someone they barely know, and revealing their inner most thoughts to millions of people

- a) Reality shows owe their popularity to the fact that all their participants become rich and famous
- b) There are more reality shows on TV than regular shows as viewership of reality shows is higher
- c) The participation money in reality shows is linked to the bizarreness of the acts on the show
- d) Reality TV is one of the best things that has happened to television network in a long time
- e) The main attraction behind viewership of reality shows is to see unknown people become and famous

5) From Chennai to Himachal Pradesh, the new cultural vultures are tearing down acres of India's architectural treasures. Ancestral owner are often fobbed off with a few hundred rupees for an exquisitely carved door or window, which fetches fifty times that much from foreign dealers and yet more from the drawing shops sophisticates of the western countries. The reason for such shameless rape of the Indian architectural wealth can perhaps, not wrongly be attributed to the unfortunate blend of activist disunity and the local indifference.

- a) India provides a rich market for unscrupulous antique dealers
- b) Most Indian families have heirlooms which can be sold at high prices to Europeans and Americans
- c) Only Indians are not proud of their culture heritage and are hungry for foreign currency that is easily available in return of artifacts
- d) The environment created by three activist disunity and local indifference is the reason for antique dealers to thrive in India

6) Sceptics argue that flying saucers and UFOs that are believed to be guided by extra-terrestrial beings or aliens are creations of human imagination. They have demonstrated that a number of photo graphs that apparently show flying saucers are either phony or are misinterpret images of earthly are natural objects such as aeroplanes or meteors. However, there are scientists who have also contributed plenty of evidence and asserted that aliens do exist.

- a) Lack of credibility of photographic evidence should be taken as proof of non-existence of aliens.
- b) While the existence of flying saucers and UFOs has been denied, the possibility of alien being is still a reality
- c) UFOs and playing saucers, if a reality, are of the same shape and size as aeroplanes
- d) The fact that a number of photographs of flying saucers are fake cannot disprove the existence of aliens and UFOs

7) The World production of sugar has been reported to be very scarce as compared to the global sales for four years. The demand for the sugar is extremely high but the supply has been low for quite some time now. This could be because of the awful weather and also because some chief sugar growers have switched to high priced jute. The price of sugar has soared in response to the phenomena of the demand supply disparity. The price of sugar now equals that of jute

- a) Sugar production is profitable only when the price of sugar is as high as that of jute
- b) The sugar growers who had shifted to the higher priced jute, will now move back to producing sugar
- c) Demand for jute was higher than the demand for sugar, which made the sugar growers shift their production
- d) If there continues to be a shortfall in the production of sugar, the price of sugar may even exceed that of jute

8) E-mail over load has of-late become a great cause of concern in an organisation. We have reached a stage where our email habits controls us. We are obsessed with checking our mails every now and then. We feel bored of working and we glance into our mailbox hoping to have received "scintillating" mail. Obviously, it also gives us an illusionary impression that we working. Not missing any mail and replying to each one of them has become a custom. Our addiction to this leading to our ignorance of deadline, meetings, personal chat, with fellow employees. It is a shame that we have inculcated a habit of reading mails but not taking timely action on mails.

- a) Employees find reading mails to be more interesting than working
- b) Replying each and every mail is not a good habit
- c) Addition of reading and replying to every mail may have adverse effect On our performance
- d) All mails are sent on the premise that timely action taken on them.

9) The company encourages its managers to interact regularly, without preset agenda to discuss issues concerning the company and the society. This idea has been borrowed from the ancient Indian concept of religious congregation, called satsang. Designations are forgotten during these meetings; hence it is not uncommon in these meetings to find a management trainee questioning the Managing Director on some corporate policy or his knowledge of customers.

- a) The company is concerned about its reputation with its employees
- b) The company believes in fostering the spirit of dialogue without degenerating it into a positioning based debate
- c) The company had some inter personal problem in the past due to which it felt the need for these corporate satsangs

d) All of these above

10) A recent communication noted that India's foreign minister told officials in U.K that New Delhi intends to maintain and extend her open policy to the west. The minister also said that India would continue with her programme of political and economic changes despite a recent campaign against western ideas and foreign aid

a) Although internal changes in India may not follow western ideas, foreign trade with West shall continue

b) India would make amends to reconcile with the western ideas by following an open door policy

c) India's internal policies are not dependent on her foreign relations.

d) India would continue her open door policy with other western countries despite her issues with U.K

11) Efficiency is all right in its place, in the shop, the factory, the store. The trouble with efficiency is that it wants to rule our play as well as our work; it won't be content to reign in the shop, it follows us home.

a) Efficiency can become all pervading

b) Efficiency does not always pay

c) Efficiency can be more of a torture than blessing

d) None of these

LOGICAL DEDUCTIONS

1) A sealed envelope contains a card with a single digit written on it. Three of the following statements are true and one is false.

I. The digit is 1.

II. The digit is not 2.

III. The digit is not 9.

IV. The digit is 8.

Which one of the following must necessarily be correct?

A. II is false

B. III is true

C. IV is false

D. The digit is even.

E. I is true

a) A

b) B

c) C

d) E

2) A cinema multiplex MNOX has exactly three cinema screens: cinema1, cinema 2, and cinema 3. The multiplex prints three sets of tickets for September and three sets of tickets for October: one set for each of its cinemas for

each of the two months. The company's tickets are printed in a manner consistent with the following conditions:

1. Each of the six tickets is one of the following colours: green, blue, red, white.

2. For each cinema the September tickets are a different colour than the October tickets.

3. For each month, tickets for different cinemas are in different colours.

4. Exactly one set of September tickets is red.

5. For cinema 3 either the September tickets or the October tickets, but not both, are green.

6. The September tickets for cinema 2 are blue.

7. No October tickets are blue.

If the cinema 3 tickets for September are red, then which one of the following statements must be true?

a) The cinema 3 tickets for October are green

b) The cinema 1 tickets for October are red

c) The cinema 1 tickets for September are green.

d) The cinema 1 tickets for September are white.

3) Jain housing complex has a democratically elected governing council comprising of the president, secretary and the treasurer. During their annual meeting, they take up 3 different initiatives for discussion and voting, namely, painting of exteriors, 24 hour security, and additional water tank. They vote as below

1. Each member of the council votes for at least one of the initiatives and against at least one of the initiatives.

2. Exactly two members of the council votes for the painting initiatives

3. Exactly one member of the council vote for the security initiatives

4. Exactly one member of the council vote for the water tank initiatives

5. The president votes for the painting initiative and votes against security initiative

6. Security votes against painting initiative

7. Treasurer votes against water tank initiative

which one of the following statements could be true?

a) President and Secretary vote the same way on the water tank initiative

b) Secretary and Treasurer vote the same way on the painting initiative

c) Secretary and Treasurer vote the same way on the Security initiative

d) President votes for one of the initiatives and Secretary Votes for two of the initiatives

4) Three persons sail in a ship which got drowned near an island and they are struck there. One of them is a Knight who speaks only truth, one is a spy who speaks either a truth or a lie and other one is the knave who speaks only lies.

From the following statements made by 3 people A, B and C comprising the knight, spy and knave though not necessarily in that order, identify the spy.

A ---> I am knight

B ---> A is not knave

C ---> if you had asked me, I would say A is the spy

- a) A b) B c) C d) Cannot be determined

5) Ahmed, Babu, Chitra, David and Eesha each choose a large different number. Ahmed says, "My number is not the largest and not the smallest". Babu says, "My number is not the largest and not the smallest". Chitra says, "My number is the largest". David says, "My number is the smallest". Eesha says, "My number is not the smallest". Exactly one of the five children is lying. The others are telling the truth. Who has the largest number?

- a) Eesha b) David c) Chitra d) Babu

6) Ashok, Eesha, Farookh and Gowri ran a race.

Ashok said, "I did not finish 1st or 4th".

Eesha said, "I did not finish 4th".

Farookh said, "I finished 1st".

Gowri said, "I finished 4th".

There were no ties in the competition, and exactly three of the children told the truth. Who finished 4th?

- a) Ashok b) Gowri c) Farookh d) Eesha

7) A man asks 5 people to make a guess about the amount of money in his pocket which is less than Rs.50.

A guesses that the amount is a multiple of 10.

B guesses that the amount is a multiple of 12.

C guesses that the amount is a multiple of 15.

D guesses that the amount is a multiple of 18.

E guesses that the amount is a multiple of 30.

Which of the following guesses are correct?

- a) AE b) AB c) BC d) DE

8) On door A – It leads to freedom

On door B – It leads to Ghost house

On door C – door B leads to Ghost house

The statement written on one of the doors is wrong.

Identify which door leads to freedom.

- a) A b) B c) C d) None

9) In a group of 5, Anooj said "One of us is lying". Pooja said "Exactly two of us are lying". Bittoo said, "Exactly three of us are lying". Billa said, "Exactly four of us are lying". Chitra said, "Exactly five of us are lying". Which one said the truth?

- a) Billa b) Anooj c) Chitra d) Pooja e) Bittoo

10) 8 residents – Jagan, Kumar, Lawrence, Mahesh, Nitin, Omprakash, Pavanand and Qadir live in different apartments in an apartment complex that has only 8 apartments. The apartment complex has five floors. Each floor has either one or two apartments.

Jagan lives on a floor with two apartments.

Kumar lives on the floor directly above Pavan.

The second floor is made up of only one apartment.

Mahesh and Nitin live on the same floor.

Omprakash does not live on the same floor as Qadir.

Lawrence lives in the only apartment on his floor.

Qadir does not live on the first or second floor.

Which one of the following must be true?

- a) Nitin does not live on the second floor b) Qadir lives on the fifth floor
c) Lawrence does not live on the fourth floor d) Qadir lives on the third floor

Directions: Each question contains six statements. Write as many logical combinations as possible from the set of six. In each combination, the logical order should be

All men are clever

Sam is a man

Sam is clever

Illustration:

- A. The newt is an amphibian.
B. Amphibians can live on land and in water.
C. The newt is not an amphibian.
D. The newt lives on land and in water.
E. Amphibians can live on land.
F. The newt cannot survive on land.
b. ABD, FBC
c. ACD, BEF
d. BCD, AFE
e. None of these

Answer option: a

11) A. Cells are the basic units of organisms.

B. Organisms are made of cells.

C. All organisms contain RNA.
 D. All organisms contain DNA.
 E. All cells contain DNA.
 F. DNA is similar to RNA
 a) CBD, FAE b) BCD, AEF c) ACB, EDF d) None of these

12) A. Social behaviour is seen in colonies.
 B. Chimpanzees are known to be intelligent.
 C. Colonies require social behavior.
 D. Intelligence is required for social behavior.
 E. Primates are intelligent.
 F. Chimpanzees are capable of social behavior.
 a) ADF, CBE b) BCD, AFE c) BDF, ACF d) None of these

13) A. Saffron is a colouring dye.
 B. Most foods are coloured.
 C. Saffron causes cancer.
 D. Colouring dyes are often carcinogenous.
 E. Cancer has many sources.
 F. Eating food may cause cancer.
 a) DAC, BEF b) ABD, FCE c) BAC, DEF d) None of these

14) A. Nectar is found in flowers.
 B. The rose is not a true flower.
 C. Chrysanthemum is a flower.
 D. Nectar is found in roses.
 E. Chrysanthemum is not a flower.
 F. Nectar is found in chrysanthemum.
 a) ABF, EDB b) ACF, DBE c) ABD, CEB d) None of these

15) A. R and G are together taller than S.
 B. R and G are of the same height.
 C. S is shorter than R.
 D. G is taller than S.
 E. R,G and S are midgets.
 F. G is taller than T.
 a) FED, ACB b) CDE, FAB c) BDF, ACE d) None of these

16) A. All cars built after 1978 have seat belts.
 B. Only cars built after 1978 have seat belts.
 C. This car has seat belts.

D. After 1981, a new rule regarding seat belts was enforced.
 E. This car must have been built after 1978.
 F. This car must have been built after 1981.
 a) ABE, DCF b) ACD, FBE c) CAE, BDF d) None of these

17) A. in Bangalore, power is shut down for six hours every day.
 B. in Madurai, power is shut down thrice a day for two hours each time.
 C. Power shut downs affect HV users the most.
 D. Each power shut down in Bangalore is for half an hour.
 E. The power cuts in Bangalore are as long as those in Madurai.
 F. The temperature in Madurai makes power cuts unbearable.
 a) ABE, FDC b) EAB, CDF c) BAE, DCF d) None of these

18) A. Today there are 2.8 persons reported per household.
 B. The divorce rate has increased.
 C. In 1930, an average, there were 4.1 persons in a household.
 D. The birth rate has increased.
 E. Fewer people live in a household now than they did earlier.
 F. The population has decreased since 1930.
 a) CAE, BDF b) EAC, FBD c) ACE, DBF d) None of these

19) A. Some creatures are parasites.
 B. All creatures are cancer-causing.
 C. Some parasites are cancer-causing.
 D. No parasite is a creature.
 E. Some creatures are not cancer-causing.
 F. Most parasites are not cancer-causing.
 a) ABC, DEF b) BAC, EDF c) CAB, FED d) None of these

20) A. Japan now produces more semiconductors than the US does.
 B. Semiconductors is one of the fastest growing industry segments.
 C. A decade ago Japan was producing 22% and the US was producing 22% of the world's semiconductors respectively.
 D. Ten years ago, japan ranked third in terms of semiconductor production.
 E. During the last ten years, Japan's production of semiconductors has increased by 500% while that of the US has increased by 200%.
 F. Japan occupies an unassailable position in the semiconductor market today.
 a) ABC, DEF b) BCA, EFD c) BAC, DFE d) None of these

21) A. Bob is older than Dinku and Esther.
 B. Rahul is older than Dinku.

- C. Rahul is younger than Bob.
 D. Rahul is older than Esther.
 E. Dinku is older than Esther.
 F. Bob is older than Dinku.
 a) AEF, BCD b) EAF, CDB c) EFA, CBD d) None of these

- 22) A. Inhabitants of Cyprus Island speak only Konkani.
 B. Some Punjabis speak only Tulu.
 C. Some gypsies are inhabitants.
 D. Some Punjabis speak Konkani.
 E. Some gypsies speak only Konkani.
 F. Some Cyprus islanders speak Tulu.
 a) AEC, DBF b) ACE, BDF c) CEA, FBD d) None of these

- 23) A. In the last six months, the number of robberies at gun-point in the city has dropped by 18%.
 B. Guns are necessary protection against smugglers.
 C. Strict gun control laws cause a decrease in violent crime.
 D. Most crimes are committed with knives and guns.
 E. Six months ago, this city's council passed a gun control law.
 F. Violent crimes are on the rise in most cities across the country.
 a) BEA, DBF b) BAE, BDF c) AEB, BDF d) None of these

- 24) A. Fungi are known to reproduce.
 B. All living organisms reproduce.
 C. The river is similar to living organisms in several ways.
 D. Fungi are living organisms.
 E. The river has movement like an organism.
 F. This river is not a living organism.
 a) BAD, CEF b) DAB, FEC c) BAD, ECF d) None of these

- 25) A. All crows are birds.
 B. All birds are black.
 C. All crows are black.
 D. All crows have beaks.
 E. All crows lay eggs.
 F. All birds have claws.
 a) AED, CBF b) ADE, BCF c) DAE, FCB d) None of these

- 26) A. Good managers are intuitive.
 B. Some managers are women.

- C. Supriya is intuitive.
 D. Supriya is a woman.
 E. Some women are intuitive.
 F. Supriya is a good manager.
 a) FAC, EBD b) CAF, DBE c) ACF, BED d) None of these

- 27) A. Good people are educated.
 B. Some girls are bad.
 C. Ram is good.
 D. Ram and Lata are friends.
 E. Ram is educated.
 F. Lata is an educated girl.
 a) ACE, BDF b) CAE, FDB c) EAC, DFB d) None of these

- 28) A. Iran and Iraq are members of UN.
 B. Not all members of the UN are friends.
 C. Iran and Iraq are neighbors.
 D. Some UN members are friends.
 E. Iran and Iraq are not friends.
 F. No neighbors are friends.
 a) FCE, BAD b) CFE, ABD c) EFC, DAB d) None of these

- 29) A. Shyam won the game.
 B. Shyam lost in a chess game.
 C. One need not be intelligent to win a lottery.
 D. Shyam may be intelligent.
 E. One need not be intelligent to win a chess game.
 F. Shyam plays chess.
 a) FAE, BCD b) AFE, CBD c) EFA, BDC d) None of these

- 30) A. All apples are fruits.
 B. All fruits are sweet.
 C. All apples are sweet.
 D. All apples are priced.
 E. All apples are red.
 F. All fruits are available.
 a) CAB, FDE b) ABC, FED c) BAC, DFE d) None of these

- 31) A. All rax are dax.
 B. To be a dax you have to not be a sax.
 C. All sax are rax.

- D. All dax are rax.
E. No sax are rax.
F. All max are not sax.
a) BCA, EFD b) ABC, DEF c) CAB, FED d) None of these

- 32) A. Ram and Shyam are equally tall.
B. Ram is taller than gopal.
C. Gopal is shorter than Shyam.
D. Ram and Shyam are shorter than Arvind.
E. Arvind is taller than Gopal.
F. The difference in heights between Gopal and Ram and Gopal and Shyam is the same.
a) ABC, DEF b) BAC, EFD c) CBA, FED d) None of these

- 33) A. Tanos is 250km east of Lagos.
B. Tertia and Lagos are cities.
C. Lagos is 300km west of Tertia.
D. The distance from Tanos to Tertia is 550 km.
E. Tanos is between Lagos and Tertia.
F. The distance from Tanos to Tertia is 50 km.
a) ACD, BEF b) CAD, EBF c) DCA, FEB d) None of these

Directions: Each question has a main statement followed by four statements labelled A, B, C, and D. Choose the ordered pair of statement options which agrees with the given statement

- 34) Either Richard can go to school or he can go to the theatre.
A. Richard goes to the school
B. Richard didn't go to the theatre
C. Richard goes to the theatre
D. Richard didn't go to the school
a) AC and BD b) AB and DC c) AD and BC d) None of these

- 35) If you are lucky, you can hit the jackpot
A. You are lucky
B. You are not lucky
C. You can't hit the jackpot
D. You can hit the jackpot
a) AD and CB b) CA and DB c) CB and DA d) None of theses

- 36) Whenever the professors yells, we become silent
A. The professors are yelling

- B. We have become silent
C. The professors is not yelling
D. We are not silent
a) AB and DC b) BC and DA c) AC and BD d) None of these

- 37) Either Peter likes to play the piano or he likes to ride his bicycle
A. Peter likes to ride his bicycle
B. Peter likes to play the piano
C. Peter doesn't like to play the piano
D. Peter doesn't like to ride his bicycle
a) BC and DA b) AB and CD c) DB and AC d) None of these

- 38) Every time he cries, his eyes become red
A. He is crying
B. He is not crying
C. His eyes are not red
D. His eyes became red
a) AC and BD b) AB and CD c) AD and CB d) None of these

- 39) Only when you start earning, you will know the true value of money
A. You started earning
B. You will know the true value of money
C. You do not know the true value of money
D. You haven't started earning
a) AC and DC b) AB and CD c) CB and AD d) None of these

- 40) Ravi goes out with his friends only on weeks
A. It is a weekend
B. Ravi doesn't go out with his friends
C. It is not a weekend
D. Ravi goes out with his friends
a) AC and BD b) AD and BC c) AB and CD d) None of these

- 41) If you don't socialize, you will become a recluse.
A. You socialize.
B. You will become a recluse.
C. You will not become a recluse.
D. You don't socialize.
a) AB and CD b) AD and BD c) CA and DB d) None of these

- 42) Either Priya likes you or she is lying to you.

- A. Priya likes you.
B. Priya is lying to you.
C. Priya is not lying to you.
D. Priya does not like you.
a) AC and DB b) AB and CD c) BC and AD d) None of these

- 43) Whenever Rohit goes out, he takes his i-pod.
A. Rohit takes his i-pod.
B. Rohit doesn't go out.
C. Rohit goes out.
D. Rohit doesn't take his i-pod.
a) BA and CD b) CA and BD c) CB and AD d) None of these

- 44) When Mohan is not in the basketball team, he is in the cricket team.
A. Mohan is in the cricket team.
B. Mohan is not in the basketball team.
C. Mohan is in the basketball team.
D. Mohan is not in the cricket team.
a) AB and CD b) BC and D c) BA and DC d) None of these

- 45) You can either be a pragmatist or have no belief in the supernatural.
A. Arun believes in the supernatural.
B. Arun is a pragmatist.
C. Arun is not pragmatist.
D. Arun has no belief in the supernatural.
a) BA and CD b) AC and BD c) AD and CB d) None of these

- 46) If I don't go for a vacation, I gain weight.
A. I went for a vacation.
B. I did not gain weight.
C. I didn't go for a vacation.
D. I gained weight.
a) CD and BA b) AC and BD c) BC and AD d) None of these

- 47) Ramya is either not a dishonest girl or she is a shrew.
A. Ramya is a dishonest girl.
B. Ramya is a shrew.
C. Ramya is not a shrew.
D. Ramya is not a dishonest girl.
a) AB and CD b) DA and CB c) CD and BA d) None of these

- 48) Corrupt politicians do not take part in anticorruption campaigns.
A. Chatterjee did not take part in the anti-corruption campaign.
B. Chatterjee is corrupt.
C. Chatterjee took part in the anticorruption campaign.
D. Chatterjee is not corrupt.
a) AC and BD b) BA and CD c) AD and BC d) None of these

- 49) Either the principal is not in the college or he is working out in the gym.
A. The principal is working out in the gym.
B. The principal is not in the college.
C. The principal is not working out in the gym.
D. The principal is in the college.
a) AC and BD b) DA and BC c) AB and CD d) None of these

- 50) Either Warne played cricket or he played snooker.
A. Warne played snooker.
B. Warne played cricket.
C. Warne did not play cricket.
D. Warne did not play snooker.
a) AC and BD b) CD and AB c) CB and AD d) None of these

- 51) If he takes a bank loan, then he does not have to pay tax.
A. He took a bank loan.
B. He does not have to pay tax.
C. He has to pay tax.
D. He did not take a bank loan.
a) AB and CD b) CB and AC c) AD and BC d) None of these

- 52) Either the Indian team is not fixing matches or it is playing well.
A. The Indian team is playing well.
B. The Indian team is not fixing matches.
C. The Indian team is not playing well.
D. The Indian team is fixing matches.
a) AB and Cd b) BD and CA c) AD and BC d) None of these

- 53) Whenever Nitya arrives on time, she is greeted by her colleagues.
A. Nitya is not greeted by her colleagues.
B. Nitya did not arrive on time.
C. Nitya is greeted by her colleagues.
D. Nitya arrived on time.

a) AB and CD b) DC and AB c) BD and AC d) None of these

54) Every time Anil travels by bus, he suffers from a headache.

- A. Anil suffered from a headache.
- B. Anil did not suffer from a headache.
- C. Anil did not travel by bus.
- D. Anil travelled by bus.

a) DA and BC b) AB and CD c) BD and AC d) None of these

55) If dolly works hard then she can get A grade

- A. If dolly does not work hard then she can get A grade
- B. If dolly gets an A grade then she must have worked hard
- C. If dolly does not gets an A grade then she must not have worked hard
- D. Dolly wishes to get A grad

a) C, A b) B, C c) A, B d) C, D

56) A) Rose is a true flower.

- B) Flowers does not contain honey.
- C) True flower contains honey.
- D) Rose does not contain honey.
- E) Rose contains honey.

a) CBD b) CAD c) EDC d) CAE

57) A) Arun is eating sweets every day.

- B) Ajay owns a Sweet Stall.
- C) Eating sweets daily has the risks of diabetes.
- D) Arun has the risk of diabetes
- E) Arun does not eat Sweets.

a) ABC b) CAD c) EDC d) BDA

58) A) Mobile phones costs very high.

- B) Mobile phones costs very low.
- C) Mobile phone Blasts Sometimes.
- D) Android becomes very popular.
- E) Everyone uses mobiles.

a) CBD b) CAD c) EDC d) NONE

59) A) No Engineers are clever

- B) Rakesh is an Engineer.
- C) All Engineers are intelligent.
- D) Rakesh is clever

E) Rakesh is intelligent.

a) ACB b) CBD c) CBE d) EAB

60) A) All girls are beautiful

- B) No girls are Beautiful
- C) Geetha is a girl.
- D) Radha is a girl
- E) Geetha is beautiful.

a) ABC b) BCD c) CDE d) ACE

61) A) All flowers has honey

- B) Rose is a flower
- C) Jasmine is a flower
- D) Rose does not have honey
- E) Jasmine has honey
- F) Rose has honey

a) ABC b) ABF c) ACD d) CDE

62) A) No communist is a partisan

- B) Chartterjee is not a partisan
- C) Chartterjee is a communist
- D) Chartterjee is not a communist
- E) Chartterjee is a partisan

a) ACB b) ABC c) ADE d) ABE

63) A) Excess cholesterol is known to cause heart disease.

- B) Smoking may cause cancer
- C) Mr.Pater does not smoke
- D) Mr.Pater has excess cholesterol
- E) Excess cholesterol does not cause heart disease
- F) Mr.Pater runs the risk of having heart disease

a) BCF b) BDE c) DAF d) BDF

64) A) All girls are beautiful

- B) Rita is a girl
- C) All girls get angry
- D) Rita get angry
- E) Rita does not get angry
- F) Rita is beautiful

a) ACD b) ABC c) CBE d) ABF

- 65) A) Nectar is found in flowers
B) The rose is not a true flower
C) Chrysanthemum is a flower
D) Nectar is found in roses
E) Chrysanthemum is not a flower
F) Nectar is found in Chrysanthemum
a) BAD b) EAF c) EBA d) ACF

- 66) A) Lakme is a nail polish
B) Some nail polishes contain oil
C) All nail polishes do not contain oil
D) All nail polishes contain chemicals
E) Lakme has oil
F) Lakme contains chemical
a) BCE b) AEB c) FDA d) AEF

- 67) A. All MBA's are logical
B. Sudhir is rational.
C. Sudhir is a logical MBA
D. Sudhir is a man
E. Some men are MBA's
F. All men are rational.
a) DEC b) EAF c) BCF d) FDB

- 68) A. Competitive examinations are tough to pass.
B. There is heavy competition in any field.
C. No student can pass MAT
D. Very few students can pass MAT.
E. MAT is a competitive examination
F. MAT is tough to pass
a) AEF b) ABC c) DFB d) CDE

Below are given statements followed by two conclusions. Take the given statements to be true, even if they contradict commonly known facts and determine the conclusion that logically follows from the statements

69) **Statements:**

- I. Some physical games are sports
II. Some sports are played in stadiums.
III. Cricket is played in stadiums.

Conclusions:

- I. Cricket is a physical game.
II. Cricket is a sport.
a) Only conclusion I follow
b) Both conclusion I and conclusion II follow
c) Neither conclusion I nor conclusion II follows
d) Only conclusion II follows

70) **Statements:**

- I. The average age of students in a class is 15 years

Conclusions:

- I. The number of students in the class is 15 and sum of their ages is 225.
II. 5 members are above 15 years and 5 members are below 15 years exactly.
a) Only conclusion I follow
b) Both conclusion I and conclusion II follow
c) Neither conclusion I nor conclusion II follows
d) Only conclusion II follows

71) **Statements:**

- I. All Himalayas are hills
II. Some hills are peaks.

Conclusions:

- I. Some hills are definitely the Himalayas.
II. Some peaks are hills.
a) Only conclusion I follow
b) Both conclusion I and conclusion II follow
c) Neither conclusion I nor conclusion II follows
d) Only conclusion II follows

72) **Statements:**

- I. Some mobile are smart phones.
II. Some smart phones are Android programmed devices.
III. All the Android programmed devices are expensive.

Conclusions:

- I. Some Android programmed devices are smartphones.
II. Some mobiles are expensive.
a) Only conclusion I follow
b) Both conclusion I and conclusion II follow
c) Neither conclusion I nor conclusion II follows
d) Only conclusion II follows

73) **Statements:**

I. Raju must reach railway station by 5 a.m.

Conclusions:

- I. The train is scheduled at 5 a.m.
- II. The station will be closed after 5 a.m.
- a) Only conclusion I follow
- b) Both conclusion I and conclusion II follow
- c) Neither conclusion I nor conclusion II follows
- d) Only conclusion II follows

74) Statements:

I. For over three decades company X has been totally involved in energy conservation, its efficient use management.

Conclusion:

- I. The company X is yet to learn and acquire basic things in this area.
- II. It is dedication that is more important than knowledge and expertise.
- a) Only conclusion I follow
- b) Only conclusion II follows
- c) Both conclusion I and II follows
- d) Neither I nor II

MOST LOGICAL CHOICE

1) Zachary has invited his three buddies over to watch the basketball game on his wide-screen television. They are all hungry, but no one wants to leave to get food. Just as they are arguing about who should make the food run, a commercial comes on for a local pizzeria that delivers. The phone number flashes on the screen briefly and they all try to remember it. By the time Zachary grabs a pen and paper, each of them recollects a different number.

#1: All of the men agree that the first three numbers are 995.

#2: Three of them agree that the fourth number is 9.

#3: Three agree that the fifth number is 2.

#4: Three agree that the sixth number is 6; three others agree that the seventh number is also 6.

Which of the numbers is most likely the telephone number of the pizzeria?

- a) 995-9266
- b) 995-8266
- c) 995-9268
- d) 995-9336

2) The film director wants an actress for the lead role of Lucy who perfectly fits the description that appears in the original screenplay. He is not willing to consider actresses who do not resemble the character as she is described in the screenplay, no matter how talented they are. The screenplay describes Lucy as an average-sized, forty something redhead, with deep brown eyes, very fair skin, and a brilliant smile. The casting agent has four actresses in mind.

Actress #1 is a stunning red-haired beauty who is 5'9" and in her mid-twenties. Her eyes are brown and she has an olive complexion.

Actress #2 has red hair, big brown eyes, and a fair complexion. She is in her mid-forties and is 5'5".

Actress #3 is 5'4" and of medium build. She has red hair, brown eyes, and is in her early forties.

Actress #4 is a blue-eyed redhead in her early thirties. She's of very slight build and stands at 5'.

Which two actresses should the casting agent send to meet the director?

- a) 1,2
- b) 1,4
- c) 2,3
- d) 2,4

3) The film director wants an actress for the lead role of Lucy who perfectly fits the description that appears in the original screenplay. He is not willing to consider actresses who do not resemble the character as she is described in the screenplay, no matter how talented they are. The screenplay describes Lucy as an average-sized, forty something red head, with deep brown eyes, very fair skin and a brilliant smile and also have acted as sub role in film or in main role in drams.

If the candidate qualifies for all the conditions, she will have an interview with the director.

If the candidate qualifies for all the above characters but has not acted in drams or films, then she will have her interview with the assistant director.

A)Preethi has red hair, big brown eyes and a fair complexion. She is in her mid-forties and is 5'5". Had not acted in movies or dramas

- a) Interview with director
- b) Interview with assistant director
- c) Rejected
- d) Data insufficient

B)Susmitha is a blue-eyed redhead in her early thirties. She is of very slight build and stands at 5'.She has not acted in movies or dramas

- a) Interview with director
- b) Interview with assistant director
- c) Rejected
- d) Data insufficient

C)Rani is a stunning red-haired beauty who is 5'9" and in her mid-twenties. Her eyes are brown and she has an olive complexion. Have acted in leading role in "mahabartam" drama.

- a) Interview with director
- b) Interview with assistant director
- c) Rejected
- d) Data insufficient

D) Aishwariya is 5'4" and of medium build. She has red hair, brown eyes, and is in her early forties. Have acted in sub roles in many films.

- a) Interview with director
- b) Interview with assistant director
- c) Rejected
- d) Data insufficient

4) For the post of Business Manager of Sales & Operation department in London following are the eligibility criteria:

1. Candidate should have M.B.A degree.
2. Should have more than 4 to 7 Years of experience.
3. Having good Customer base and geographical knowledge.
4. Having fair idea about Ocean & Air Movements, Capable to handle the Global RFQs.
5. Candidate should be from Freight Forwarding Company, MNC & local candidate is preferred.
6. Experience in Air & Ocean Import & Export product

If the candidate satisfies first and last criteria and having less than 4 years of experience will have 2 rounds of interview with management team.

If the candidate satisfies first, second and last criteria will get spot appointment.

If the candidate satisfies only first three criteria will have written test followed by 2 rounds of interview.

A)Lalina 25 year old lady who had completed her master degree in business administration with sound knowledge about oceans and geography

- | | |
|--|--------------------|
| a) Interview with Management team | b) Got appointment |
| c) Written test with 2 rounds of interview | d) Rejected |
| e) Data inadequate | |

B)Raj an MBA graduate having 5 years of experience as business manager with good customer based and geographical knowledge

- | | |
|--|--------------------|
| a) Interview with Management team | b) Got appointment |
| c) Written test with 2 rounds of interview | d) Rejected |
| e) Data inadequate | |

C)Raju an MBA graduate who has a 5 years of experience in ocean import and Export Company with fair knowledge on his field.

- | | |
|--|--------------------|
| a) Interview with Management team | b) Got appointment |
| c) Written test with 2 rounds of interview | d) Rejected |
| e) Data inadequate | |

D)Ravi completed MBA in London and worked as a business manager in leading Air and ocean Import and Export Product Company for 2 years and has fair knowledge in ocean

- | | |
|--|--------------------|
| a) Interview with Management team | b) Got appointment |
| c) Written test with 2 rounds of interview | d) Rejected |
| e) Data inadequate | |

5) For the post of a manager of a leading call centre –Arkade Inc. - situated in Ludhiana, the following are the criteria the candidate must satisfy :

1. The candidate should have a Management Degree.
2. The candidate should have at least 4 years of similar experience at another call center.

3. The candidate should be more than 30 years of age as on the 1st of July 2003.
4. The candidate should have 6 months of international exposure, i.e. should have been posted in a foreign country.

If a candidate does not satisfy the 1st condition but has more than 2 years of international experience, then the VP operations, will interview him.

If a candidate does not satisfy the 4th condition, then the HR manager will interview him.

A)Salina has over 4 years of experience in Care Touch, a leading call center, as a manager. She completed her MBA from Ranchi and worked in Singapore for UNO for 2 years before joining Care Touch. She will be:

- | | |
|-------------------------------------|----------------------|
| a) Recruited | b) Rejected |
| c) Interviewed by the VP Operations | d) Data insufficient |

B)Shakuntala was selected for a managerial position in an international call center after she passed out from AIM Management Institute. After working for 3 years in the call center, she took a sabbatical. She is 29 years of age as on the date of application. She will be:

- | | |
|-------------------------------|-------------------------------|
| a) Interviewed only by the HR | b) Interviewed only by the VP |
| c) Rejected | d) Data insufficient |

C)Rajiv has been working as a Manager in Zephyr Inc. for 4 years now. He is an Engineering graduate from a premier engineering institute. His certificate lists his date of birth as 17/12/1974. He has worked in the hotel industry at the executive level. He is:

- | | |
|--------------------------|--------------------------|
| a) Give an aptitude test | b) Interviewed by the VP |
| c) Data insufficient | d) not considered |

D)Soma has 2 years of experience in Welsh Inc. and 2 years of experience in Franc Inc., both leading call centers, as a manager. She has a management degree from a premier management organization. She turned 30 this December (2002). She is a B.Com Graduate from St. Xavier's, Calcutta. If she applies for the post, she will:

- | | |
|---|----------------------------------|
| a) Be interviewed directly by the VP Operations | b) Not be considered |
| c) Be interviewed by the HR | d) Have to give an aptitude test |

6) For the post of a constable the following are the criteria the candidate must satisfy

Height-1.67mtrs,Weight-51.5Kgs, Chest-79cms with a minimum expansion of 5 cms

The candidates must not be less than 20 years and not more than 27 years (i.e. born not earlier than 02-01-1986 and not later than 01-01-1993).Upper Age limit is relaxable by 5 years for SC/ST and by 3 years for OBC candidates of West Bengal only

A degree of a recognized university or its equivalent.

The candidate who satisfies all the above condition have written test followed by training.

The candidates who satisfy all the above condition and have experience as watch man are selected directly.

A)Arun who is an graduate of M.A(economics)has height of 1.69mtrs and weight of 53 kg,chest -79 and he has born at 20-09-1987,with OBC certificate.

- a) Will be selected directly b) written test followed by the training
- c) Rejected d) data inadequate

B) Varun who has the qualification of higher secondary education and satisfies all the above conditions and have work experience of 3 years as security.

- a) Will be selected directly b) written test followed by the training
- c) Rejected d) data inadequate

C)Sumanth who has 3 years of work experience as watch man and moreover he is an graduate of an recognized university as on 2010.

- a) Will be selected directly b) written test followed by the training
- c) Rejected d) data inadequate

7) Eileen is planning a special birthday dinner for her husband's 35th birthday. She wants the evening to be memorable and like to present a gift which is always with him, but her husband is a simple man who would rather be in jeans at a baseball game than in a suit at a fancy restaurant.

A)Which restaurant below should Eileen choose?

- a) Alfredo's offers fine Italian cuisine and an elegant Tuscan decor. Patrons will feel as though they've spent the evening in a luxurious Italian villa.
- b) Pancho's Mexican Buffet is an all-you-can-eat family style smorgasbord with the best tacos in town.
- c) The Parisian Bistro is a four-star French restaurant where guests are treated like royalty. Chef Dilbert Olay is famous for his beef bourguignon.
- d) Marty's serves delicious, hearty meals in a charming setting reminiscent of a baseball clubhouse in honor of the owner, Marty Lester, a former major league baseball all-star

B)What kind of gift should she preferred for her husband?

- a) Beautiful flowers b) ring c) watch d) safari

8) Mark is working with a realtor to find a location for the toy store he plans to open in his town. He is looking for a place that is either in, or not too far from the center of town and one that would attract the right kind of foot traffic. Which of the following locations should Mark's realtor call to his attention?

- a) a storefront in a new high-rise building near the train station in the center of town whose occupants are mainly young, childless professionals who use the train to commute to their work.

b) a little shop three blocks away from the town's main street, located across the street from an elementary school and next door to an ice cream

c) a stand-alone storefront on a quiet residential street ten blocks away from the town's center

d) a storefront in a small strip mall located on the outskirts of town that is also occupied by a pharmacy and a dry cleaner

9) The school principal has received complaints from parents about bullying in the school yard during recess. He wants to investigate and end this situation as soon as possible, so he has asked the recess aides to watch closely.

Which situation should the recess aides report to the principal?

- a) A girl is sitting glumly on a bench reading a book and not interacting with her peers.
- b) Four girls are surrounding another girl and seem to have possession of her backpack.
- c) Two boys are playing a one-on-one game of basketball and are arguing over the last basket scored.
- d) Three boys are huddled over a handheld video game, which isn't supposed to be on school grounds.

10) Dr. Miller has a busy pediatric dentistry practice and she needs a skilled, reliable hygienist to keep things running smoothly. The last two people she hired were recommended by top dentists in the area, but they each lasted less than one month. She is now in desperate need of a hygienist who can competently handle the specific challenges of her practice.

Which one of the following candidates should Dr. Miller consider most seriously?

- a) Marilyn has been a hygienist for fifteen years, and her current employer, who is about to retire, says she is the best in the business. The clientele she has worked with consists of some of the wealthiest and most powerful citizens in the county.
- b) Lindy recently graduated at the top of her class from one of the best dental hygiene programs in the state. Prior to becoming a dental hygienist, Lindy spent two years working in a day care center.
- c) James has worked as a dental hygienist for three years in a public health clinic. He is very interested in securing a position in a private dental office.
- d) Kathy is an experienced and highly recommended dental hygienist who is also finishing up a degree in early childhood education, which she hopes will get her a job as a preschool teacher. She is eager to find a job in a pediatric practice, since she has always wanted to work with children.

11) Mrs Jansen recently moved to Arizona. She wants to fill her new backyard with flowering plants. Although she is an experienced gardener, she isn't very well-

versed in what plants will do well in the Arizona climate. Also, there is a big tree in her backyard making for shady conditions and she isn't sure what plants will thrive without much direct sunlight. Her favourite gardening catalog offers several backyard seed packages.

Which one should Mrs. Jansen choose?

- a) The Rainbow Collection is ideal for North-east gardens. It includes a variety of colorful perennials that thrive in cool, moist conditions.
- b) The Greenhouse Collection will blossom year after year if planted in brightly lit locations and watered regularly.
- c) The Tree house Collection will provide lush green plants with delicate colorful flowers that thrive in shady and partially shady locations.
- d) The Oasis Collection includes a variety of perennials that thrive in dry climates and bright sunlight.

12) The neighbourhood block association has received many complaints about people knocking on doors and soliciting money for an unknown charity organization even though door-to-door solicitation is prohibited by local laws. Three residents have provided descriptions of individuals who have come to their door asking for money.

Solicitor 1 is a white male, 20-25 years old, 5'9", 145 pounds, with very short brown hair. He was wearing a dark blue suit and carrying a brown leather briefcase.

Solicitor 2 is a white male, 25-30 years old, 6'2", 200 pounds, with a shaved-head. He was wearing a red T-shirt and jeans.

Solicitor 3 is a white male, approximately 23 years old, 5'10", slight build, with short brown hair. He was wearing a blue suit.

Three days after the block association meeting, a resident noticed a man knocking on doors in the neighborhood and phoned the police to report the illegal activity. This solicitor was described as follows:

Solicitor 4 is a white male, 22 years old, 140 pounds, about 5'10", with short brown hair. He was carrying a briefcase and wearing a dark suit.

Based on this description, which of the three solicitations was also likely carried out by Solicitor 4?

- a) 1, 2 and 3 b) 1 and 3 c) 1 d) 1 and 2

13) Rita, an accomplished pastry chef who is well known for her artistic and exquisite wedding cakes, opened a bakery one year ago and is surprised that business has been so slow. A consultant she hired to conduct market research has reported that the local population doesn't think of her shop as one they would visit on a daily basis but rather a place they'd visit if they were celebrating a special occasion.

Which of the following strategies should Rita employ to increase her daily business?

- a) Making coupons available that entitle the coupon holder to receive a 25% discount on wedding, anniversary, or birthday cakes
- b) Exhibiting at the next Bridal Expo and having pieces of one of her wedding cakes available for tasting
- c) Placing a series of ads in the local newspaper that advertise the wide array of breads
- d) Moving the bakery to the other side of town

PASSAGE AND INFERENCE

1) Smoking is very injurious to health. Not only the smoker but also the individuals surrounding them can be harmed by tobacco smoke. Children are put at further risk since they are three times likely to smoke if their parents do. One out of every two smokers who start smoking at a young age and continue throughout their lives will ultimately be killed by tobacco related diseases. With prolonged smoking, smokers have a death rate about three times higher than non-smokers at all ages. Stopping smoking decreases health risks associated with tobacco use. It can decrease the burden of diseases such as heart or respiratory diseases. There are clear health benefits including a longer life even for those who quit smoking at the age of 60 and above.

A) Smokers who start smoking at an early age are less likely to quit smoking.

- a) Inference is definitely true.
- b) Inference is probably true
- c) Inference cannot be determined.
- d) Inference is probably false
- e) Inference is definitely false

B) Non-smokers who are victims of passive smoking have one-third death rate as compared to smokers.

- a) Inference is definitely true.
- b) Inference is probably true
- c) Inference cannot be determined.
- d) Inference is probably false
- e) Inference is definitely false

C) Non-smoking adults who surround smokers constantly are less likely to be harmed.

- a) Inference is definitely true.
- b) Inference is probably true
- c) Inference cannot be determined.
- d) Inference is probably false
- e) Inference is definitely false

D) If parents stop smoking, then their children are less likely to give up smoking.

- a) Inference is definitely true.
- b) Inference is probably true
- c) Inference cannot be determined.
- d) Inference is probably false
- e) Inference is definitely false

E) Quitting smoking at an old age does not reduce the chances of health risks.

- a) Inference is definitely true.
- b) Inference is probably true

- c) Inference cannot be determined. d) Inference is probably false
e) Inference is definitely false

2) Construction industry in India has always had a special position. We have proved that India is in tune with the times and has not left any stone untouched to compete against the best in industrial market. Yet, it is the time when other powers are paying attention in developing this sector according to the international status. Foundation of an economy lies in its infrastructure. Construction industry has to play a vital role in road, house construction, ports, railways and others. Labor-intensive Indian construction industry has to pass through acute changes. It has to face challenges like advanced designing, growth of work in lesser time, better mechanization and intensive construction prevalent in other developed countries. The emphasis should be laid on adoption of modern technologies and high quality in less time.

A) The construction industries of developed countries is of better quality than India.

- a) Inference is definitely true. b) Inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false.

B) Construction industries in India has been labor oriented since years.

- a) Inference is definitely true. b) Inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false.

C) The Indian construction companies have to establish themselves in the international market.

- a) Inference is definitely true. b) Inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false.

D) Indian construction companies can put their gain to maximum by adopting modern equipment and by reducing time of project.

- a) Inference is definitely true. b) Inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false.

E) The policy makers in India have failed to understand the importance of construction industry.

- a) Inference is definitely true. b) Inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false.

3) Cotton acreage in India has fallen by 10% during the current year as the cotton growers have shifted to growing other cash crops. This is due to the excess supply

of cotton in world markets after August, 2010 and the consequent of slowdown in the world economy. But this scenario proved to be beneficial for the yarn manufacturers as they get higher price for their products. Some yarn manufacturers had stocked-up low priced cotton in the previous year. The combined effect of all this is evident in the rise in net profits of yarn manufacturers.

A) The land used for growing cotton in India is conducive to grow other cash crops.

- a) Inference is definitely true. b) Inference is probably true
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false

B) The yarn manufacturers have marginally suffered during post-August 2010 period.

- a) Inference is definitely true b) inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false.

C) There has been a huge drop in the supply of cotton during the current year.

- a) Inference is definitely true b) inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false

D) There has been a shortage of cotton in the world market last year.

- a) Inference is definitely true b) inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false

E) World economy witnessed an upward trend during pre-August 2010 period.

- a) Inference is definitely true b) inference is probably true.
c) Inference cannot be determined. d) Inference is probably false.
e) Inference is definitely false

4) Air pollution leads to slow death. Regular exposure to vehicular and industrial pollution leads to life threatening diseases like asthma, cancer, heart diseases and many more disorders. The vehicular and industrial pollution is growing rapidly not only in the metropolitan cities but also in small towns and villages. This is because the western technological models, built on heavy use of energy, are highly toxic. They produce a huge amount of pollutants which can be controlled only if there is a proper choice of technology and considerable discipline in its use.

A) The air pollution in foreign countries is more than that in India.

- a) Inference is definitely true b) inference is probably true.
c) Inference is cannot be determined. d) Inference is probably false.
e) Inference is definitely false

B) Proper planning in use of modern technologies leads to reduction in air pollution.

- a) Inference is definitely true b) inference is probably true.
 c) Inference is cannot be determined. d) Inference is probably false.
 e) Inference is definitely false
 C) The industries which use higher level of energy create more air pollution.
 a) Inference is definitely true b) inference is probably true.
 c) Inference is cannot be determined. d) Inference is probably false.
 e) Inference is definitely false
 D) The smaller industrial units contribute proportionately to higher air pollution.
 a) Inference is definitely true b) inference is probably true.
 c) Inference is cannot be determined. d) Inference is probably false.
 e) Inference is definitely false
 E) The spread of air pollution has increased rapidly in the recent past.
 a) Inference is definitely true b) inference is probably true.
 c) Inference is cannot be determined. d) Inference is probably false.
 e) Inference is definitely false

DATA SUFFICIENCY

Directions: Following questions have a question followed by two statements. You have to check if the given statements are sufficient to answer the question and with the following key for A, B, C, D, E in mind choose the right option.

A-Statement 1 alone sufficient

B-Statement 2 alone sufficient

C-Both statements put together are sufficient

D- Either of the statements taken individually is sufficient in answering the problem question

E-Both statements put even together are not sufficient

1) Ionization energy decreases with the increasing size of metal atom out of caesium, lithium, potassium and sodium which will have the lowest ionization energy?

Statements:

1. Lithium has the smallest size
 2. The size of potassium and caesium is greater than Lithium
 a) A b) B c) C d) D e) E

2) What is the monthly salary of my father?

Statements:

1. My father's and mother's salary are in the ratio 5:2 respectively
 2. My mother's salary is 40% of my father's salary
 a) A b) B c) C d) D e) E

3) When is Rahul's birthday

Statements:

1. His birthday is before 25th and after 22nd November
 2. His birthday is after 23rd and before 26th November.
 a) A b) B c) C d) D e) E

4) What is the monthly salary of Raghu?

Statements:

1. The salaries of Raghu and his brother are in the ratio 5:6 respectively
 2. The salary of Raghu's brother is Rs.32000 per month
 a) A b) B c) C d) D e) E

5) There are four friends Akash, Manoj, Nithesh and Piyush. They are standing in increasing order of their height facing towards North. At what position is Manoj standing?

Statements:

1. Akash is taller than Piyush and Piyush is taller than Manoj. Manoj is not shortest.
 2. Nithesh is smaller than Manoj and Piyush. Nithesh is the shortest and Piyush is the tallest
 a) A b) B c) C d) D e) E

6) If product of two numbers is given, find the number.

Statements:

1. Difference of the numbers is given
 2. Sum of the numbers is given
 a) A b) B c) C d) D e) E

7) What is the area of the top of the table?

Statements:

1. The top of table is rectangular in shape
 2. The length of the top of the table is 35 cm
 a) A b) B c) C d) D e) E

8) What is the selling price of sofa set?

Statements:

1. The cost price of sofa set is given
 2. The selling price of two sofa sets is given.
 a) A b) B c) C d) D e) E

9) Vikas ranks 9th in the class. How many students are there in the class?

Statements:

1. His friend got the 35th rank which is the last rank.
2. His rank from the last is 27th.

a) A b) B c) C d) D e) E

10) The salaries of A and B are in the ratio 2:3. What is the salary of A?

Statements:

1. The salary of B is Rs. 8000
2. The total salary of A and B is Rs. 15000

a) A b) B c) C d) D e) E

11) What is the value of A+B+C

Statements:

1. A + B is twice the value of C and C is a positive square root of 49
2. A, B and C are equal and their sum is a multiple of 5

a) A b) B c) C d) D e) E

12) Who is the son of R?

Statements:

1. R is the sister of P.
2. Q is the son of P

a) A b) B c) C d) D e) E

13) When is Mohit's birthday?

Statements:

1. He was born after 19th but before 25th September
2. He was born in a leap year.

a) A b) B c) C d) D e) E

14) In a code 'cit pit' means 'get ready' what is the code for 'ready'

Statements:

1. 'Cit lit pit' means 'make it ready'
2. 'Fitcit' means 'ready-made'

a) A b) B c) C d) D e) E

15) I have four friends .What is my age?

Statements:

1. Average of our ages is 85 years
2. All of us are of the same age

a) A b) B c) C d) D e) E

16) How is Mr.Sharma related to Santhosh

Statements:

1. Santhosh's mother has two daughters
2. Santhosh's sister is the wife of Mr.Sharma's son

a) A b) B c) C d) D e) E

17) What is the 5th number?

Statements:

1. 1st and 2nd are 1 and 2 respectively
2. 3rd and 4th are 3 and 4 respectively

a) A b) B c) C d) D e) E

18) How old is Giya?

Statements:

1. Giya's age is three times Amil's age plus Bob's age.
2. Bob was of Amil's age fifteen years ago.

a) A b) B c) C d) D e) E

19) Sushil, a salesperson, was asked by his sales manager to meet one of their high profile clients. Due to his ill health, the sales manager was unable to take updates from Sushil about the meeting. Sushil's phone was also switched off. On which day did Sushil meet the client?

Statements:

1. Ravi, one of the sales manager's colleagues tells him that Sushil did not visit the client either on Tuesday or on Thursday.
2. Vikash, one of the sales manager's colleague tells him that Sushil visited the client two days before Ravi contacted the client which was the day after Monday.

a) A b) B c) C d) D e) E

20) Is P divisible by 12?

Statements:

1. P is divisible by 8.
2. P is divisible by 3

a) A b) B c) C d) D e) E

21) What is the amount of cement exported from china?

Statements:

1. China's export to America is 65,000 tonnes and this is 8% of the total cement exports
2. China's total export tonnes of cement is 15% of the total of 1 million tonnes.

a) A b) B c) C d) D e) E

22) How many sisters does mamta have?

Statements:

1. Mamta does not have any brother
2. Mamta's mother has 4 daughters

a) A b) B c) C d) D e) E

23) Who is the nephew of X?

Statements:

1. Y is sister of X
2. Z is son of Y

a) A b) B c) C d) D e) E

24) What is the Mohan's rank in the class?

Statements:

1. There are 30 students in the class
2. There are 6 girls who have scored less than Mohan.

a) A b) B c) C d) D e) E

25) Who is the fastest among the three workers?

Statements:

1. X and Y together take 12 minutes to paint a room
2. X,Y and Z together can complete the work in 17 minutes

a) A b) B c) C d) D e) E

26) Is the product of x and y greater than 60?

Statements:

1. The sum of x and y is greater than 60.
2. Each of the variables is greater than 2.

a) A b) B c) C d) D e) E

27) What is the value of y ?

Statements:

1. $y - 3 = 2$
2. $y^2 = 25$

a) A b) B c) C d) D e) E

28) What was the percent increase of Company A's stock between June 1 and June 30, 2000?

Statements:

1. The stock gained \$5 in value during June 2000.
2. The stock rose 12% during the first half of the month.

a) A b) B c) C d) D e) E

29) Is x a prime number?

Statements:

1. x is an even number.
2. x cannot be divided evenly by an odd number other than 1.

a) A b) B c) C d) D e) E

30) If the average size of 3 accounts is \$1 million, is the smallest account less than \$500,000?

Statements:

1. The largest account is \$1.3 million.
2. One of the accounts is \$0.7 million.

a) A b) B c) C d) D e) E

31) Is X a prime number, given that X is a positive integer?

Statements:

1. $X^4 > 3000$
2. $X^4 < 10,000$

a) A b) B c) C d) D e) E

32) What is the value of X , if X and Y are two distinct integers and their product is 30?

Statements:

1. X is an odd integer
2. $X > Y$

a) A b) B c) C d) D e) E

33) Is m divisible by 6?

Statements:

1. m is divisible by 3
2. m is divisible by 4

a) A b) B c) C d) D e) E

34) A, B, C, D have to stand in a queue in descending order of their heights. Who stands first?

Statements:

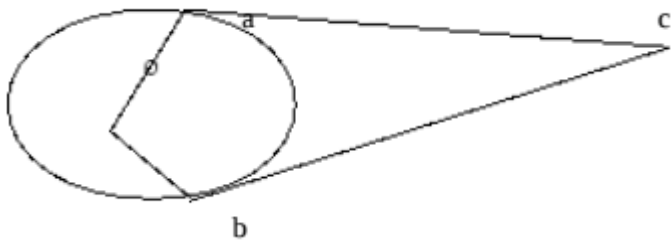
1. D was not the last, A was not the first.
2. The first is not C and B was not the tallest.

- a) A b) B c) C d) D e) E
- 35) What are the speeds two trains' travels with 80 yards and 85 yards long respectively? (Assume that former is faster than later)
Statements:
1. They take 75 seconds to pass each other in opposite direction.
2. They take 37.5 seconds to pass each other in same direction
a) A b) B c) C d) D e) E

- 36) Is w a Whole number?
Statements:
1. $3w$ is an Odd number.
2. $2w$ is an Even number
a) A b) B c) C d) D e) E

- 37) An 8m rod is divided into 3 parts. Find the longest part out of 3?
Statements:
1. Smallest 2.5 m
2. One of the divisions is 4.1 m
a) A b) B c) C d) D e) E

38)



Given O is the center of the circle, ca and cb are tangents
What is the angle of acb?

- Statements:
1. Angle aob = 70 degree
2. Angleoac = angle obc
a) A b) B c) C d) D e) E

- 39) Does a person get 5000 as interest on a sum?
Statements:
1. If he increases rate of interest by 5% he would get 200 more rupees
2. If the year doubles he might have gotten 500 more rupees

- a) A b) B c) C d) D e) E
- 40) What will be the interest for Rs.5000?
Statements:
1. If he Charges 2% more for the Sum of 5000 he gets 200 more
2. If he deposits half yearly for some years, he gets 500 more.
a) A b) B c) C d) D e) E

- 41) What is the value of xy ?
Statements:
1. $x^2 + y^2 = 16$
2. $x^2 - y^2 = 8$
a) A b) B c) C d) D e) E

- 42) How many 5 paisa coins does Mahesh have?
Statements:
1. Mahesh has a collection of 5 paisa coins and 10 paisa coins valued at Rs.3.75
2. He has 6 more 10 paisa coins than 5 paisa coins
a) A b) B c) C d) D e) E

- 43) What is the ratio of the circumferences of a smaller circle to that of a larger circle?
Statements:
1. The radius of larger circle is 6 inches
2. The radius of one circle is half another
a) A b) B c) C d) D e) E

- 44) What is sumit's position from the right end of a row of children?
Statements:
1. There are 10 children between sumit and rajan.
2. Rajan is twentieth from the left end of the row of children.
a) A b) B c) C d) D e) E

- 45) How is supri related to shyam?
Statements:
1. Shalu is the friend of supri.
2. Supri is the sister of shyam.
a) A b) B c) C d) D e) E

- 46) What is the height of Mount Everest?
Statements:

1. The height of Mount Everest is 12,500 meters.
 2. The height of Mount Everest is half of that of Mount Everest.
- a) A b) B c) C d) D e) E

47) What is the quantity of milk in the vessel?

Statements:

1. The vessel contains milk and water in the ratio 1:2.
2. Full capacity of vessel is 5 liters.

a) A b) B c) C d) D e) E

48) Is quadrilateral PQRS is a parallelogram?

Statements:

1. Adjacent lines PQ and QR have the same length.
2. Adjacent sides RS and SP have same length.

a) A b) B c) C d) D e) E

49) What is the colour of mixture when red and Black is mixed in the ratio 1:2?

Statements:

1. Brown color will be appeared.
2. Dominant color will be appearing when red and black are mixed.

a) A b) B c) C d) D e) E

50) How many smaller cubes are formed from a larger cube?

Statements:

1. The side of larger cube is 15 m.
2. The surface area of smaller cube is 150 m².

a) A b) B c) C d) D e) E

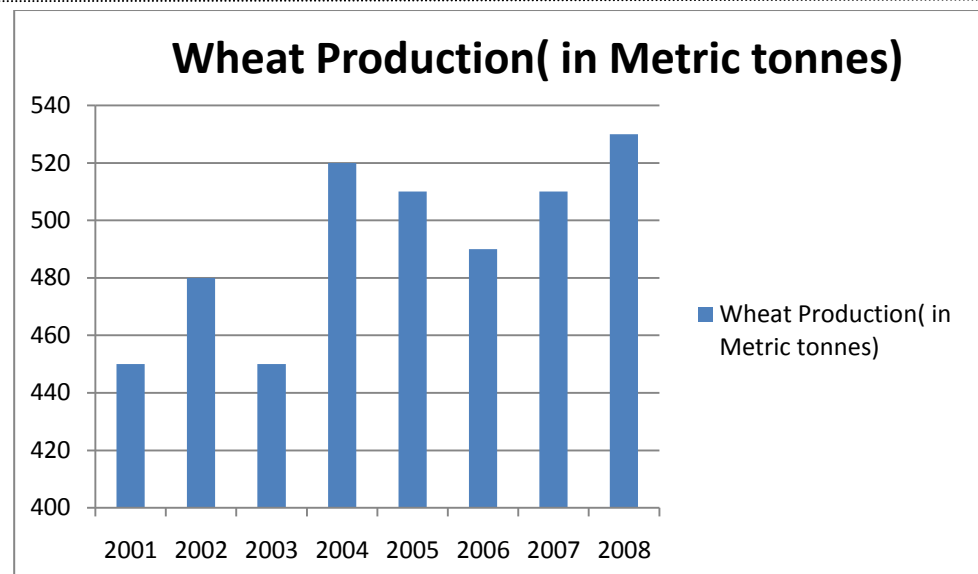
51) What will be the cost of fencing a rectangular compound if the wire costs Rs.20 per metre?

- a. area = 40 m²,
- b. Length= 2* breadth

a) Only1 b) only2 c) either 1 or 2 d) both 1&2

DATA INTERPRETATION

1) Consider the following graph on the production of wheat(in metric tonnes) For the years 2001 to 2008 and answer the question that follow:



A) What is the ratio of wheat production in 2002 and 2004?

- a) 12 : 13 b) 14 : 15 c) 13 : 14 d) 15 : 16

B) What is the percentage decline in production of wheat in tonnes from the year 2002 to 2003?

- a) 2.08% b) 3.01% c) 4.011% d) 5%

C) What is the percentage growth of wheat production from year 2001 to 2002?

- a) 8.16% b) 6.67% c) 7.67% d) 5.65%

2) Chart

Student	Maths	Physics	Chemistry	Tamil	English
R1	53	46	73	55	65
R2	65	55	66	42	55
R3	45	55	85	42	56
R4	88	62	74	45	72

Max marks in Maths, Physics, Chemistry=100

Max marks in Tamil, English=150

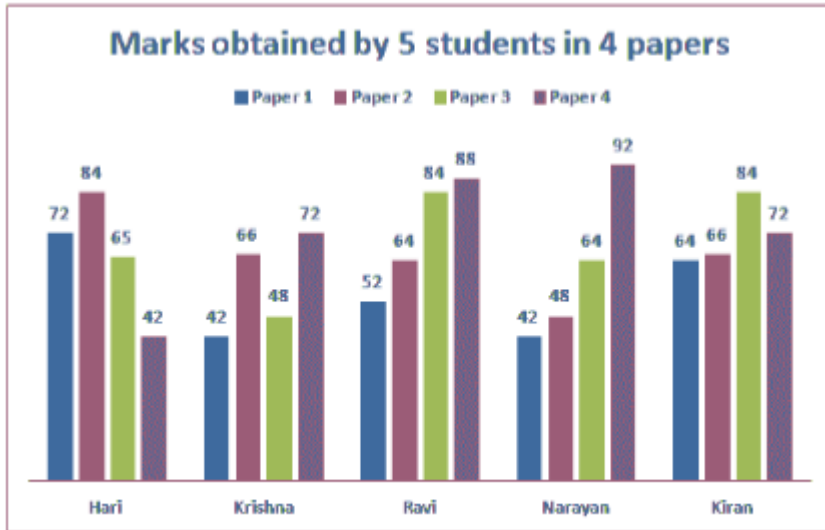
A) What is the difference between percentage marks secured by 4 students in Tamil, English and percentage of marks secured in all?

- a) 12.5% b) 20.4% c) 18.6% d) 14.8%

B) What is the appropriate difference between average marks secured by 4 students in Tamil, English secured in all?

- a) 15 b) 12 c) 18 d) None of these

3) Study the following graph and answer the questions that follow.



A) What is the percentage of Ravi in the four papers?

- a) 76% b) 72% c) 82% d) 74%

B) Who is the topper when all of the four papers are considered together?

- a) Narayan b) Kiran c) Krishna d) Ravi

C) Who is proficient in paper 1 and paper 3 together?

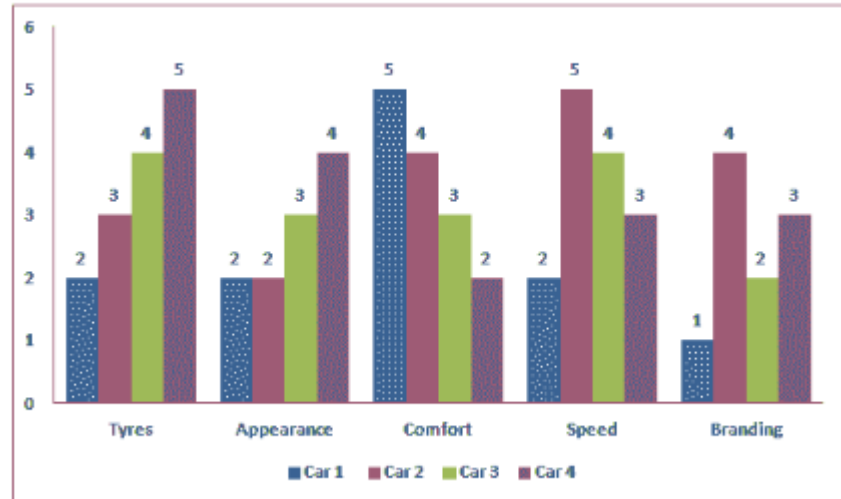
- a) Narayan b) Krishna c) Kiran d) Ravi

D) What is the least percentage recorded in all the papers taken together for each individual?

- a) 57% b) 72% c) 66.25% d) 54.75%

4) Study the following graph and answer the questions that follow.

Cars rated in the scale of 5 according to their performance



A) Raju wants to buy a car with best tyres, comfort and good appearance. Which one should he buy?

- a) Car 4 b) Car 2 c) Car 1 d) Car 3

B) Rakesh wants to buy a car with best tyres, comfort and good appearance. Which one should he buy?

- a) Car 4 b) Car 3 c) Car 1 d) Car 2

C) Suresh wants to buy a car with best tyres, comfort and good appearance. Which one should he buy?

- a) Car 4 b) Car 3 c) Car 2 d) Car 1

D) Suresh wants to buy a car whose overall rating is good. Which one must he buy?

- a) Car 1 b) Car 2 c) Car 3 d) Car 4

5) **Study the following table and answer the questions based on it.**

Expenditures of a Company (in Pesetas) per Annum Over the given Years.

Year	Item of Expenditure				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

A) What is the average amount of interest per year which the company had to pay during this period?

- a) 32.43 b) 33.72 c) 34.18 d) 36.66

B) Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

- a) 62 b) 69 c) 66 d) 71

C) The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

- a) 0.1 b) 0.5 c) 1.0 d) 1.5

D) The ratio between the total expenditure on Taxes for all the years and the total expenditure on Fuel and Transport for all the years respectively is approximately?

- a) 4:7 b) 10:13 c) 15:18 d) 5:8

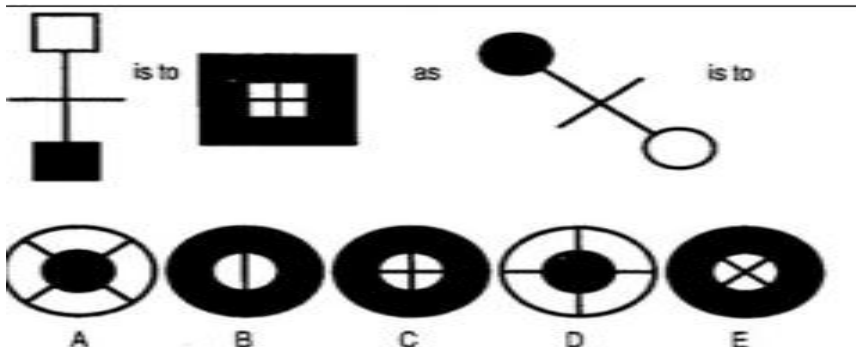
E) The total expenditure of the company over these items during the year 2000 is?

- a) 544.44 b) 5.1.11 c) 446.46 d) 478.87

IMAGE BASED PROBLEMS

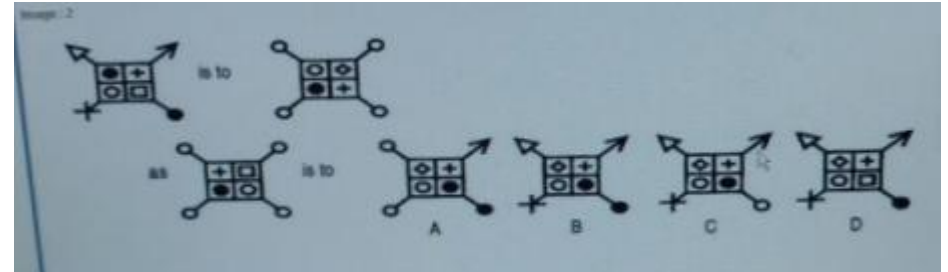
1) Which is correct?

- a) A b) B c) C d) D e) E



2) Which is correct?

- a) A b) B c) C d) D



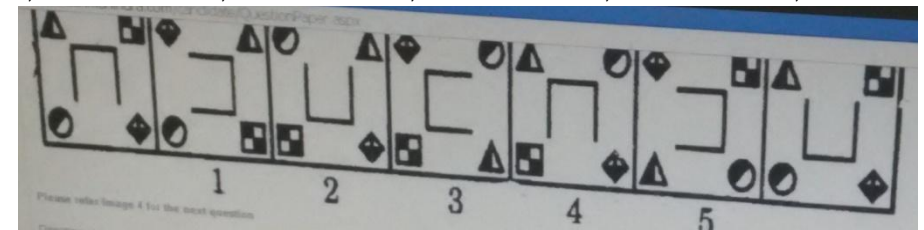
3) In this first five are PROBLEM FIGURES and second HALF are ANSWER FIGURES .Take answer figures as 1,2,3,4,5 respectively .find out which figure comes in the place of “?”

- a) 1 b) 2 c) 3 d) 4 e) 5



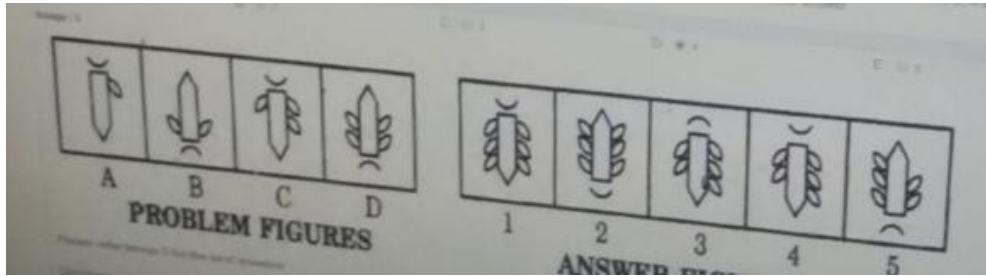
4) In each of the following questions there are seven figures the first and the last are unnumbered and the remaining are numbered as 1,2,3,4,5.these seven figures form a series however one of the numbered figures does not fit the series. The number of that figure is the answer.

- a) 1 b) 2 c) 3 d) 4 e) 5



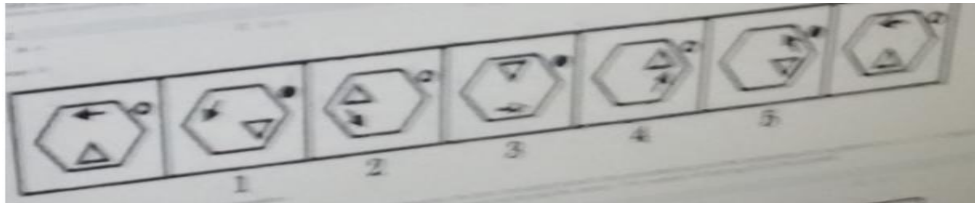
5) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) 1 b) 2 c) 3 d) 4 e) 5



6) In each of the following questions there are seven figures the first and the last are unnumbered and the remaining are numbered as 1,2,3,4,5. these seven figures form a series however one of the numbered figures does not fit the series. The number of that figure is the answer.

- a) 1 b) 2 c) 3 d) 4 e) 5



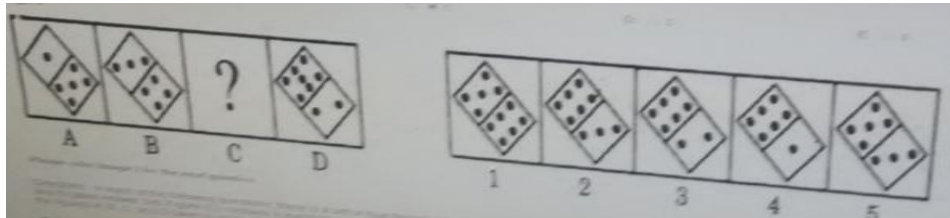
7) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) 1 b) 2 c) 3 d) 4 e) 5



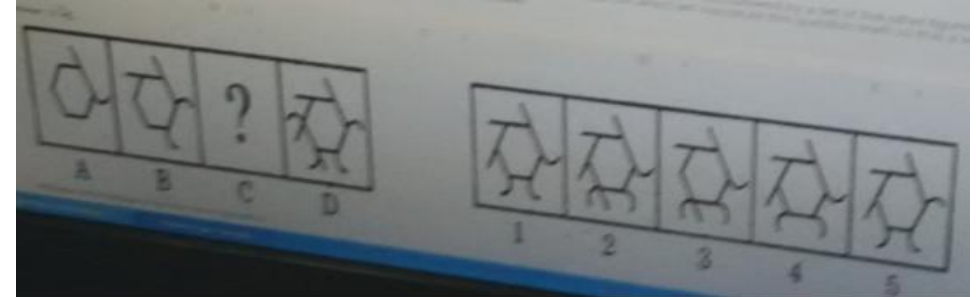
8) Select the correct figure from 1,2,3,4,5 which could come in place of C

- a) 1 b) 2 c) 3 d) 4 e) 5



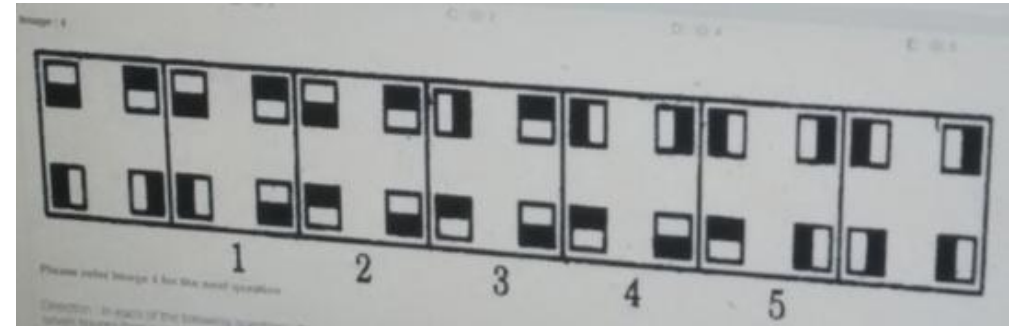
9) Select the correct figure from 1,2,3,4,5 which could come in place of C

- a) 1 b) 2 c) 3 d) 4 e) 5



10) In each of the following questions there are seven figures the first and the last are unnumbered and the remaining are numbered as 1,2,3,4,5. These seven figures form a series however one of the numbered figures does not fit the series. The number of that figure is the answer.

- a) 1 b) 2 c) 3 d) 4 e) 5



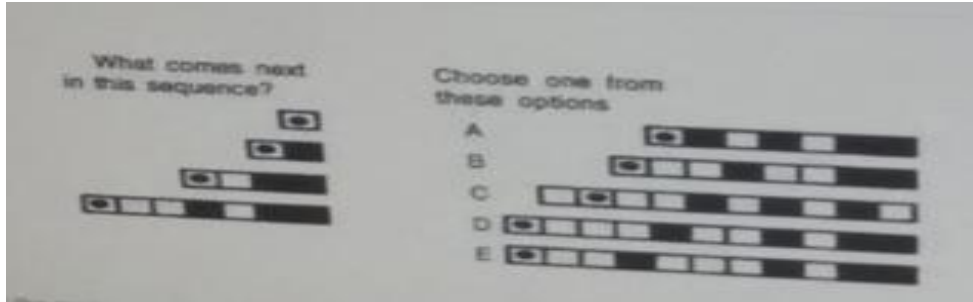
11) In this first five are PROBLEM FIGURES and second HALF are ANSWER FIGURES .take answer figures as 1, 2, 3, 4, 5 respectively .find out which follow the PROBLEM FIGURE series.

- a) 1 b) 2 c) 3 d) 4 e) 5



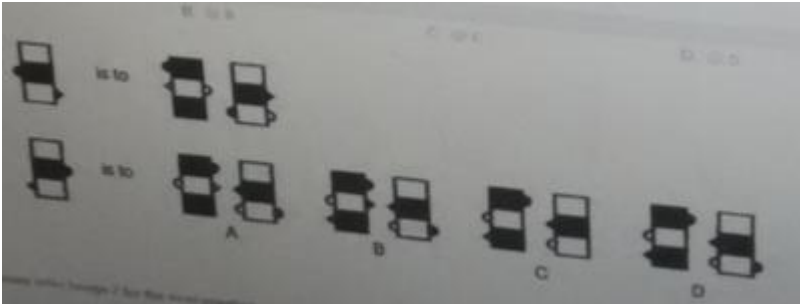
12) Which comes next in the sequences

- a) A b) B c) C d) D e) E



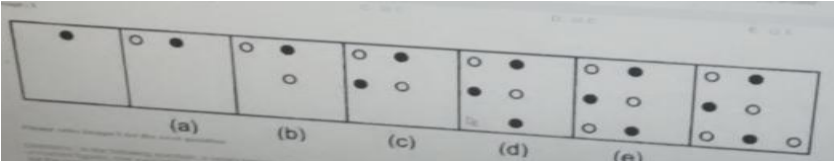
13) Which is correct

- a) A b) B c) C d) D e) E



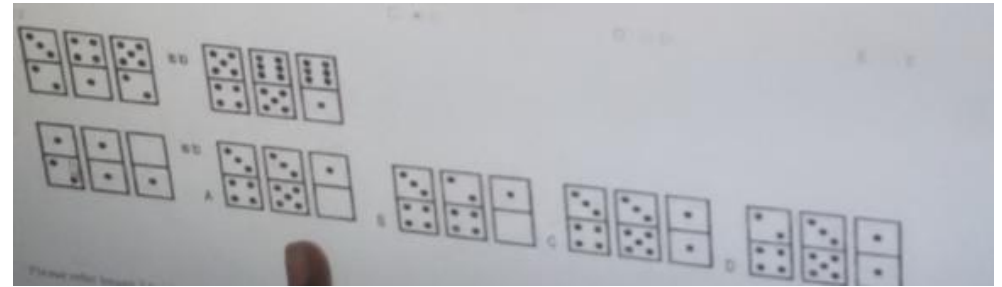
14) In each of the following questions there are seven figures the first and the last are unnumbered and the remaining are numbered as a, b, c, d, e. these seven figures form a series however one of the numbered figures does not fit the series. The number of that figure is the answer.

- a) a b) b c) c d) d e) e



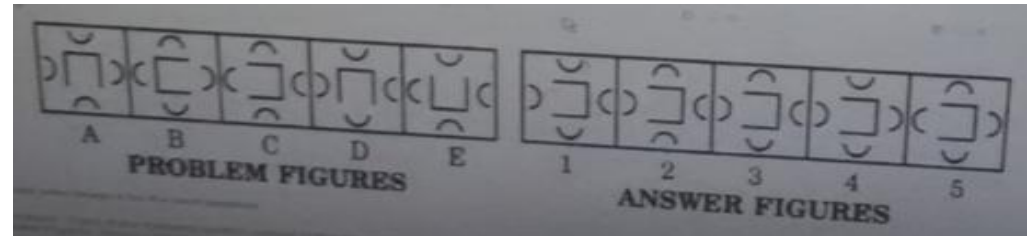
15) Which is correct

- a) A b) B c) C d) D e) E



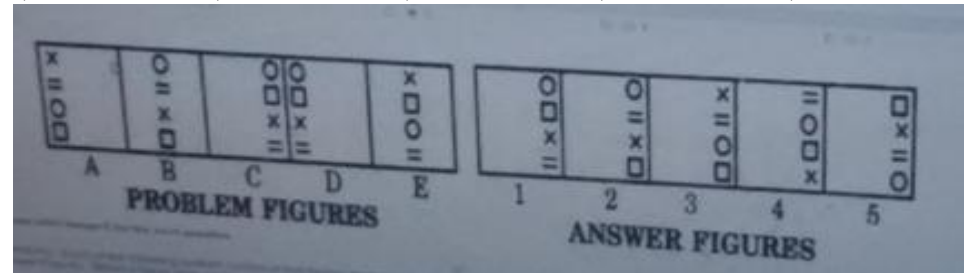
16) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) A b) B c) C d) D e) E



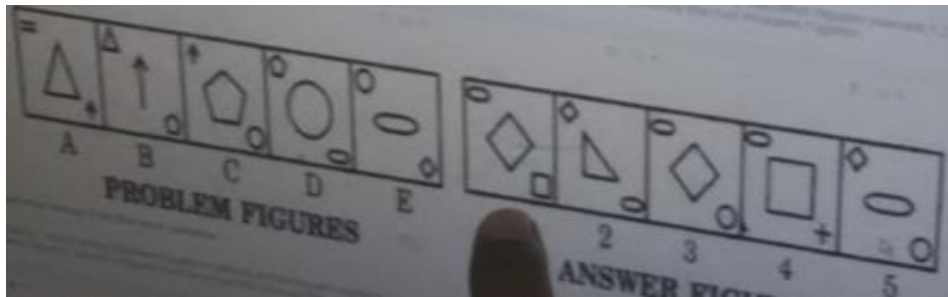
17) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) 1 b) 2 c) 3 d) 4 e) 5



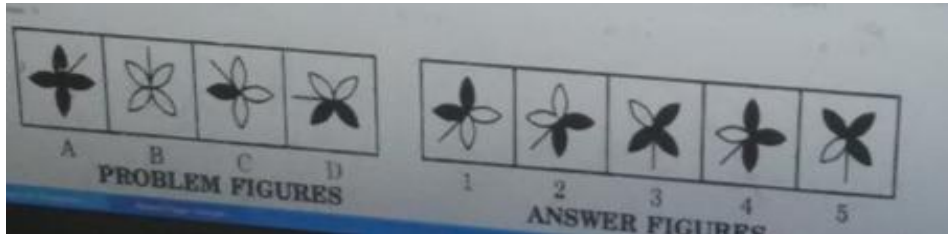
18) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) 1 b) 2 c) 3 d) 4 e) 5



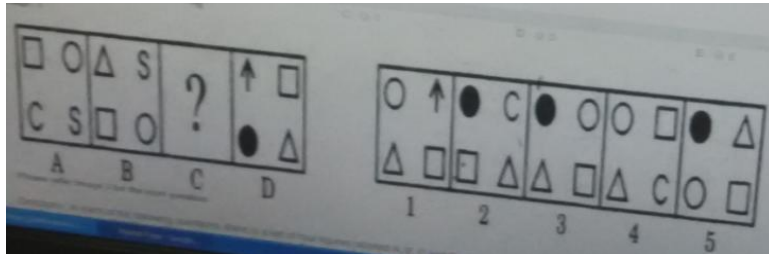
19) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) 1 b) 2 c) 3 d) 4 e) 5



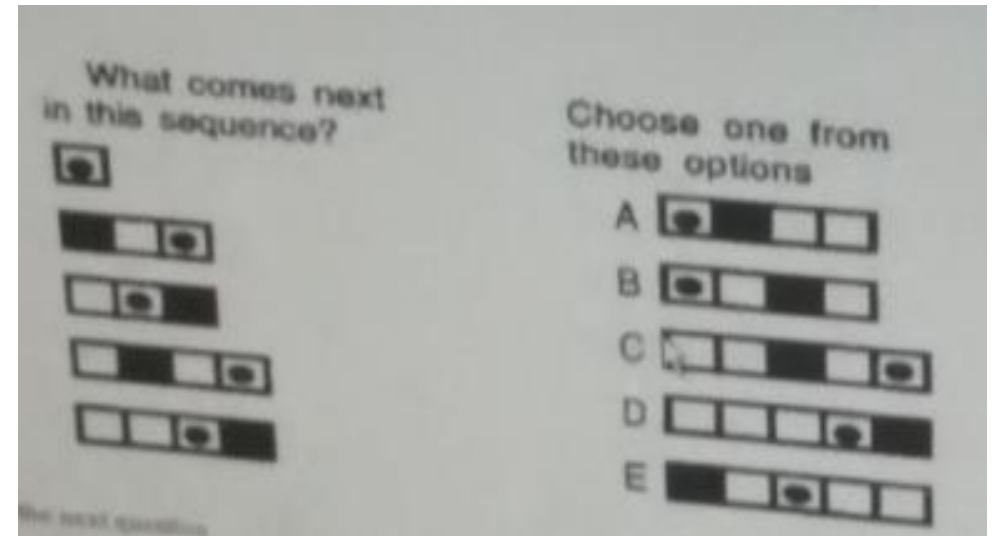
20) Select the correct figure from 1,2,3,4,5 which could come in place of ?.

- a) 1 b) 2 c) 3 d) 4 e) 5



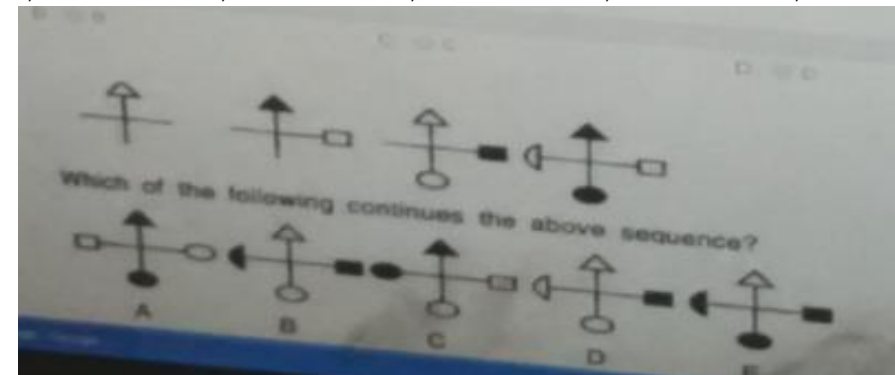
21) What comes next to the sequence?

- a) A b) B c) C d) D e) E



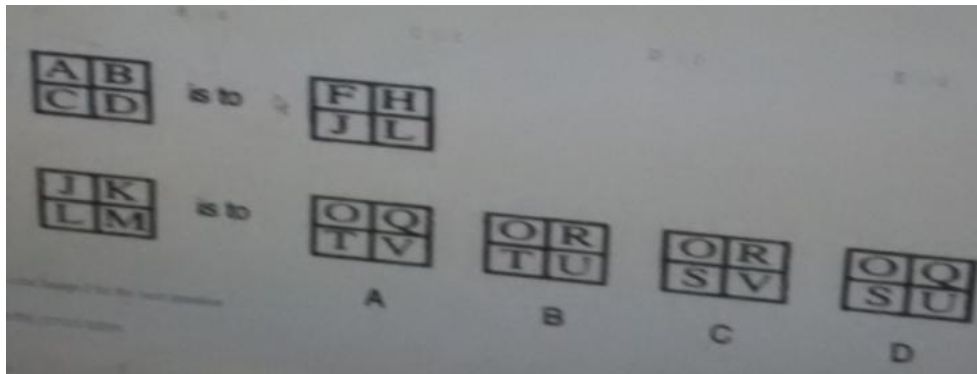
22) Which of the following continues the above sequence?

- a) A b) B c) C d) D e) E



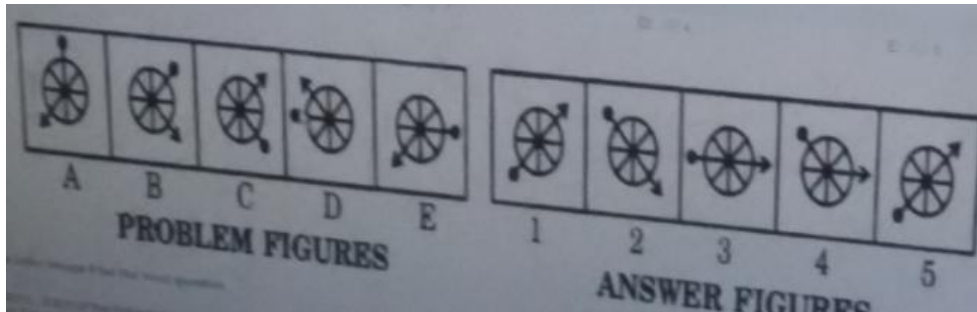
23) If the boxes with A B C D is to boxes with F H J L then boxes with J K L M is to=??

- a) A b) B c) C d) D



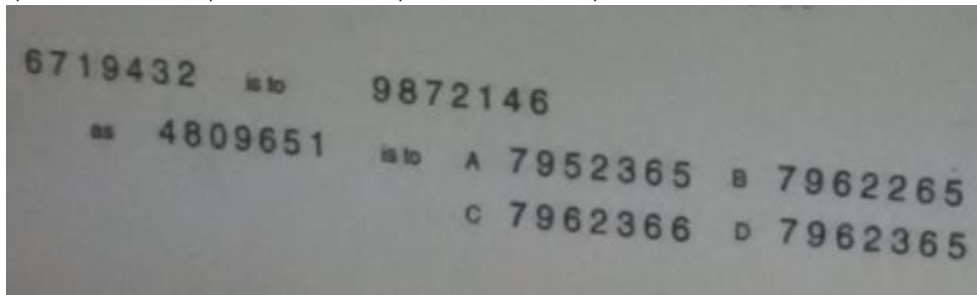
24) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D,E

a) 1 b) 2 c) 3 d) 4 e) 5



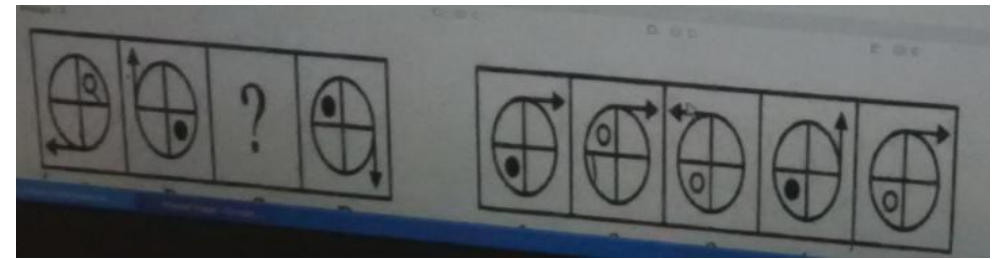
25) Which is correct

a) A b) B c) C d) D



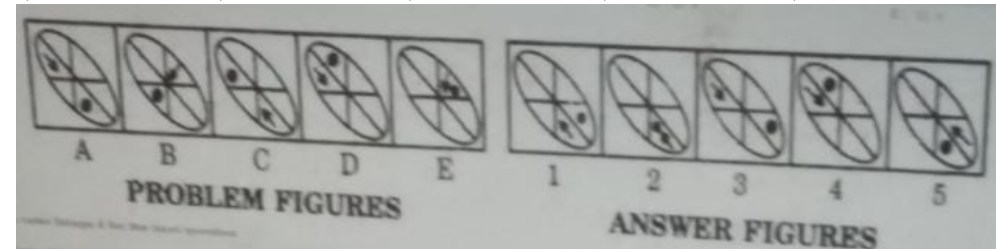
26) Select the correct figure from 1,2,3,4,5 which could come in place of C

a) 1 b) 2 c) 3 d) 4 e) 5



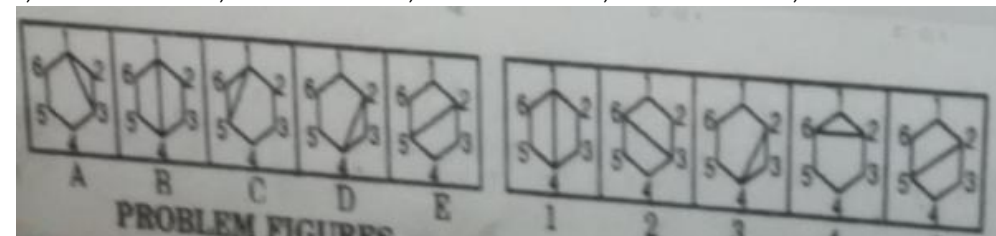
27) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D,E

a) 1 b) 2 c) 3 d) 4 e) 5



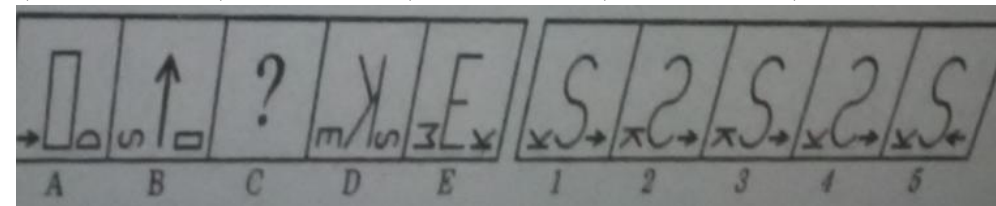
28) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D,E

a) 1 b) 2 c) 3 d) 4 e) 5



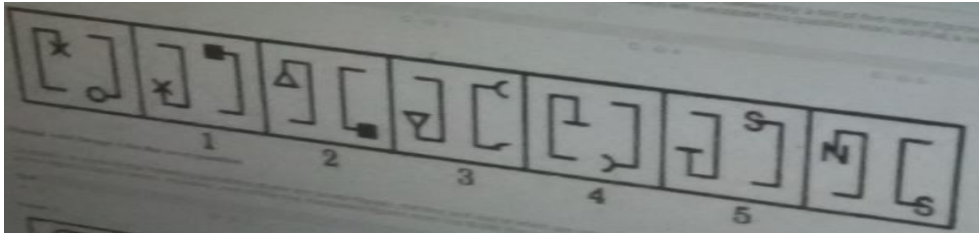
29) Select the correct figure from 1,2,3,4,5 which could come in place of C

a) 1 b) 2 c) 3 d) 4 e) 5



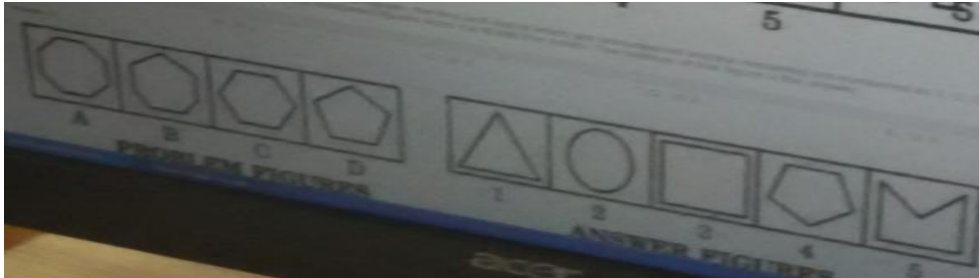
30) In each of the following questions there are seven figures the first and the last are unnumbered and the remaining are numbered as 1,2,3,4,5. these seven figures form a series however one of the numbered figures does not fit the series. The number of that figure is the answer.

- a) 1 b) 2 c) 3 d) 4 e) 5



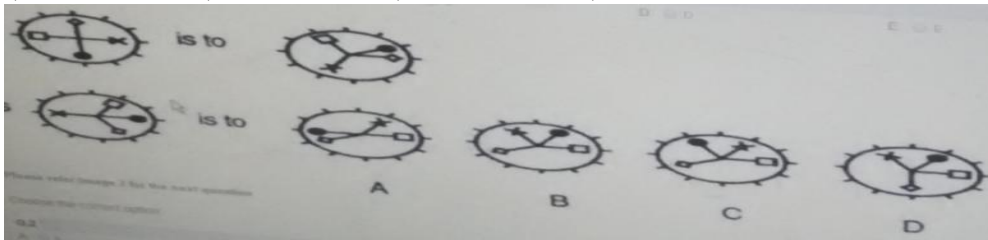
31) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D

- a) 1 b) 2 c) 3 d) 4 e) 5



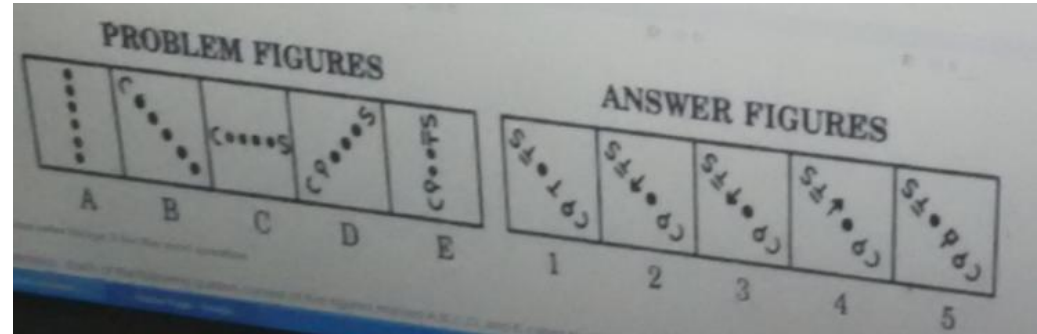
32) Which is correct

- a) A b) B c) C d) D



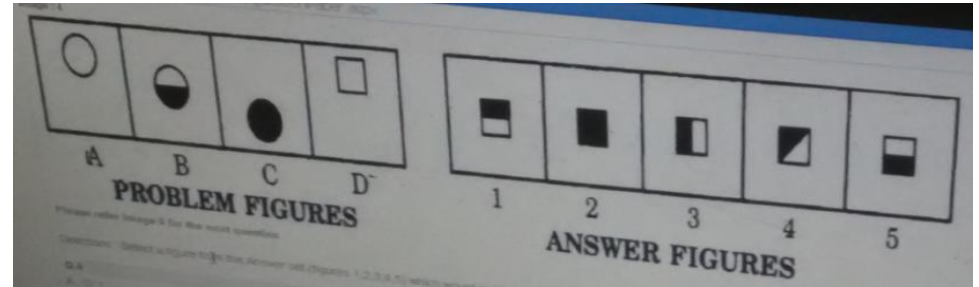
33) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D,E

- a) 1 b) 2 c) 3 d) 4 e) 5



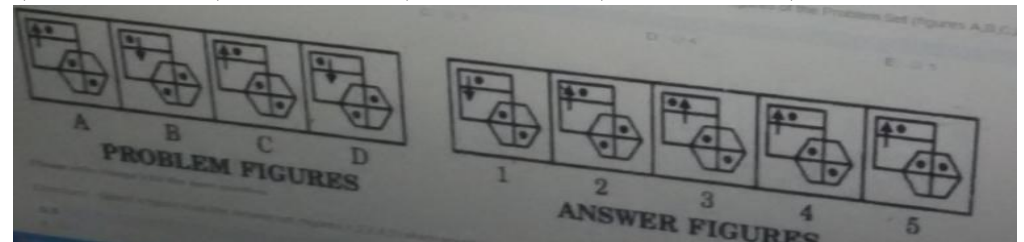
34) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D,E

- a) 1 b) 2 c) 3 d) 4 e) 5



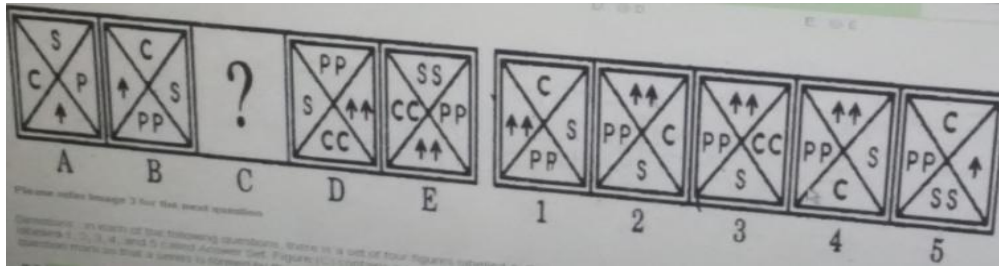
35) Select the correct figure from 1,2,3,4,5 which would follow the series A,B,C,D,E

- a) 1 b) 2 c) 3 d) 4 e) 5



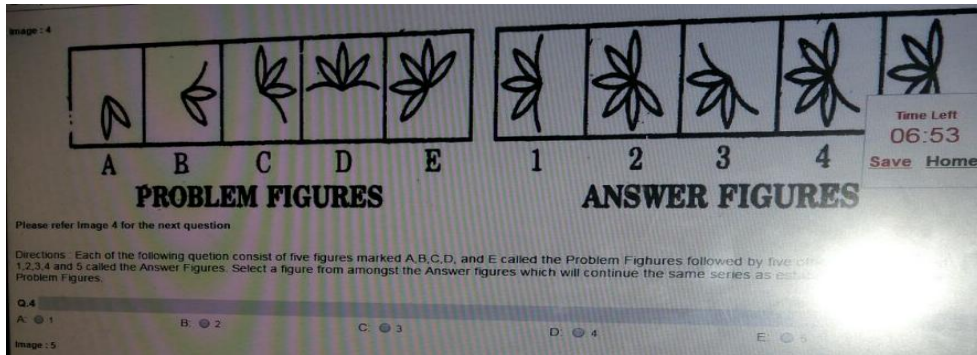
36) Select the correct figure from 1,2,3,4,5 which could come in place of C

- a) 1 b) 2 c) 3 d) 4 e) 5



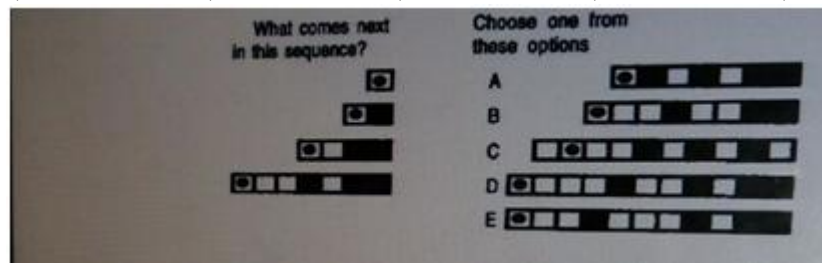
37) What will be the next one?

- a) 1 b) 2 c) 3 d) 4 e) 5



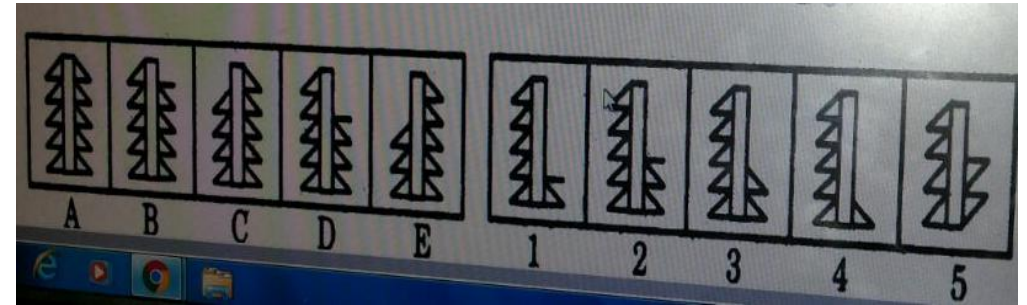
38) What will be the next one?

- a) A b) B c) C d) D e) E



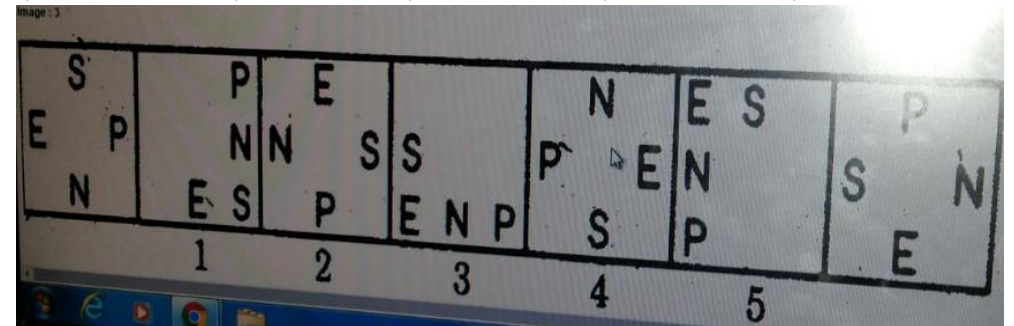
39) What will be the next one?

- a) 1 b) 2 c) 3 d) 4 e) 5



40) What will be the next one?

- a) 1 b) 2 c) 3 d) 4 e) 5

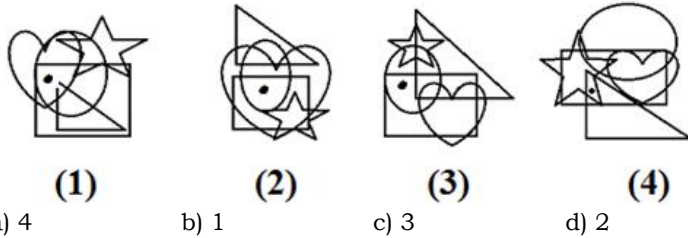


41) In the following question, the problem figure is given with dots placed in it. Out of the four response figure (1), (2), (3) and (4) only one is to be chosen as to make possible the placement of the dots satisfying the same conditions as in the problem figure. Mark the answer accordingly.

Problem Figure:

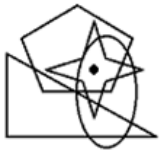


Response Figure:

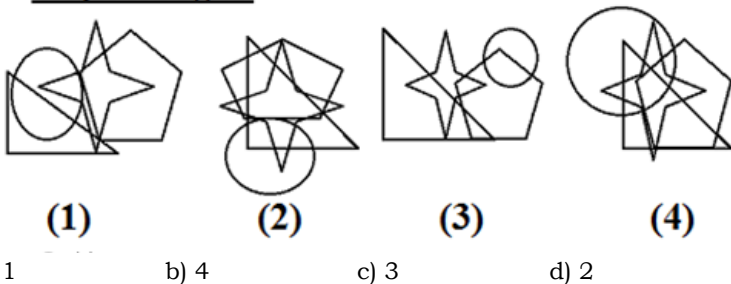


42) In the following question, the problem figure is given with dots placed in it. Out of the four response figure (1), (2), (3) and (4) only one is to be chosen as to make possible the placement of the dots satisfying the same conditions as in the problem figure. Mark the answer accordingly.

Problem Figure:



Response Figure:



43) From the response figure identify which should complete the sequence given in the Problem Figure.

Problem Figure:



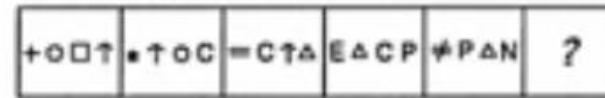
Response Figure:



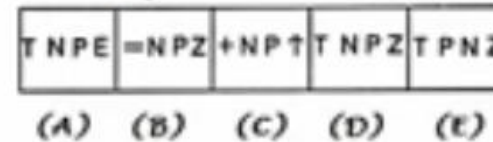
a) 3 b) 4 c) 2 d) 1

44) From the **Answer figure** identify which should complete the sequence given in the **Question figure**:

Question Figure:



Answer Figures:



a) B b) A c) D d) E e) C

FLOWCHART & LOGICAL GATES

1) Follow the instructions depicted in the diagram given below and answer the questions that follow

A) What number is stored in box 12 at the end of the flowchart?

a) 1 b) 0 c) 24 d) 73

B) Is (number in box 10) greater than (number in box 3)?

a) Yes b) No c) Cannot be determined

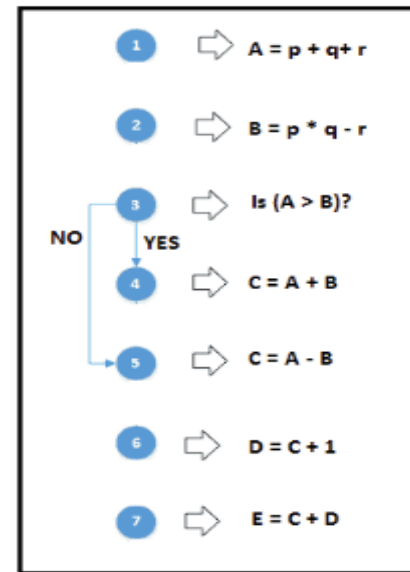
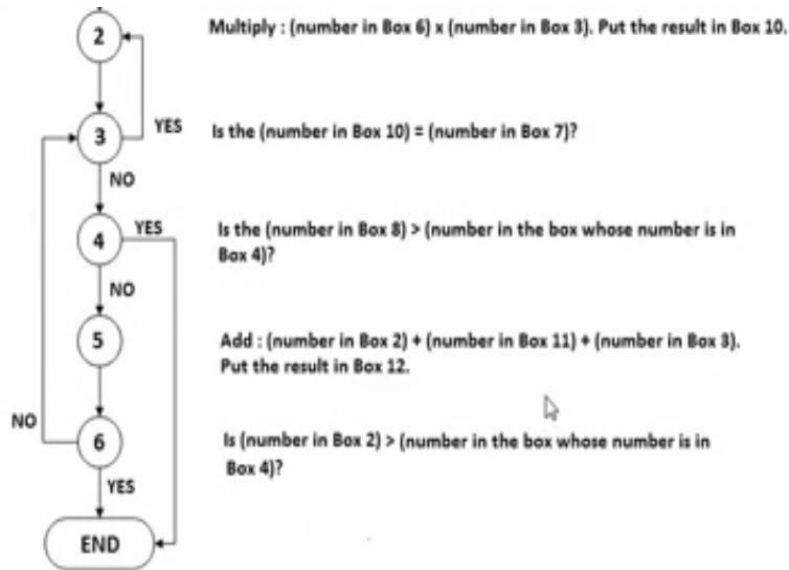
C) How many Loops are executed in the given flowchart?

a) 1 b) 2 c) 0 d) 3

Box no:

20	5	12	8	18	2	12	1	15	14	36	24
----	---	----	---	----	---	----	---	----	----	----	----

1	2	3	4	5	6	7	8	9	10	11	12
---	---	---	---	---	---	---	---	---	----	----	----



2) Follow the instructions depicted in the diagram given below and answer the questions that follow

A) As per the flow given below, what will be the value of “D” for the values of $p=1, q=2, r=3$?

1->2->3->6

a) 8 b) 5 c) 6 d) 7

B) As per the flow given below, what will be the value of “E” for the values of $p=1, q=2, r=3$?

1->2->3->6->7

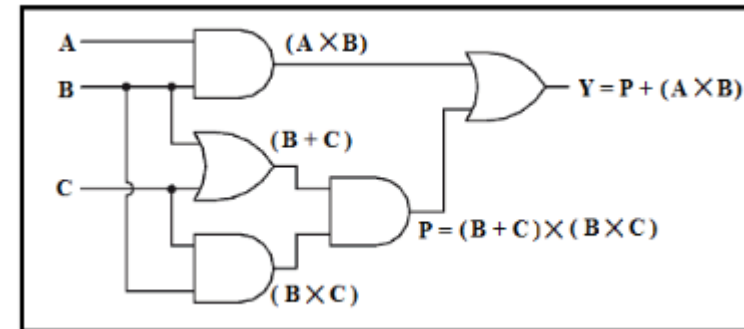
a) 9 b) 12 c) 10 d) 11

C) As per the flow given below, what will be the value of “ $(A+B+C+D+E)$ ” for the values of $p=1, q=2, r=3$?

1->2->3->6->7

a) 27 b) 26 c) 25 d) 24

3) Study the flow given below and answer the questions that follow.



A) What is the value of “Y”, if $A=2, B=3$ and $C = (A+B)$?

a) 125 b) 124 c) 126 d) 128

B) What is the value of “P”, if $A=2, B=3$ and $C = (A-B)$?

a) -6 b) -3 c) 6 d) 3

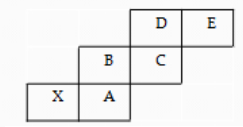
C) What is the value of “ $(Y+P)$ ”, if $A=2, B=3$ and $C = (A*B)$?

a) 330 b) 338 c) 340 d) 332

CUBES & CUBOIDS

1) If the given sheet is folded to form a cube, which side will be opposite to X?

- a) B b) C c) D d) E



2) A cube is divided into 729 identical cubelets. Each cut is made parallel to some surface of the cube. But before doing that the cube is coloured with green colour on one set of adjacent faces, red on the other set of adjacent faces, blue on the third set. So, how many cubelets are there which are painted with exactly one colour?

- a) 288 b) 292 c) 296 d) 294

3) 125 small but identical cubes are put together to form a large cube. This large cube is now painted on all six faces.

A. How many of the smaller cubes have no face painted at all.

- a) 27 b) 64 c) 8 d) 36

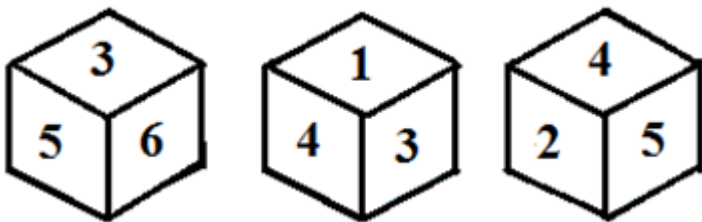
B. How many of the smaller cubes have exactly three faces painted?

- a) 98 b) 100 c) 96 d) 95

C. How many of the smaller cubes have at least one side painted?

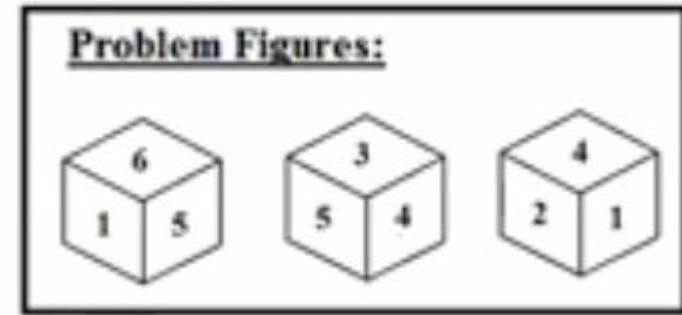
- a) 4 b) 8 c) 9 d) 27

4) The following figures shows the faces of an unbiased dice numbered with 1 to 6, then which number is on the opposite face to the one numbered with 1?



- a) 3 b) 4 c) 5 d) 2

5) Following figure shows the faces of an unbiased dice numbered with 1 to 6, then which number is on the opposite face numbered with 6?



- a) 5 b) 4 c) 3 d) 2+

PUZZLES

1) In which of the following sentences vowels occurs the most number of times?

- a) The early bird catches the worm. b) Be loyal to your country.
c) How many girls are sitting around you? d) Simplicity is the best policy.

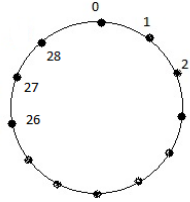
2) In the following Ken Ken puzzle, each cell is to be filled with a digit between 1 and 4. On each row and column, each digit (between 1 and 4) appears exactly once. Groups of heavily-outlined adjacent cells are called cages. Clues are provided in the top left corner of each cage, in the form of result and (optionally) a result using the specified mathematical operator. Note that more than two cells may be there in a cage only if the operator is "+" or "x". If no mathematical operator is specified in a cage, the number at the top left corner of the cage is the value to be filled in the cage (the cage will have only one cell). In the following Ken Ken puzzle, find the values at the cells denoted by x_1 , x_2 and x_3 and determine the value of $-x_1 - 2x_2 - 3x_3$

- a) -22 b) -27 c) -29 d) -8



3) A circle has 29 points arranged in a clock wise manner numbered from 0 to 28, as shown in the figure below. A bug moves clockwise around the circle according to the following rule. If it is at a point i on the circle, it moves clockwise in 1 second by $(1+r)$ places, where r is the remainder (Possibly 0) when i is divided by 11. Thus

if it is at position 5, it moves clockwise in one second by $(1+5)$ places to point 11. Similarly, if it is at position 28 it moves $(1+6)$ or 7 places to point 6 in one second. If it starts at point 23, at what point will it be after 2012 seconds?



- a) 1 b) 7 c) 15 d) 20

4) There is a set of 9 numbers that relate to each other in a certain way. Find the way the first set of boxes works. The numbers in the second set work in exactly the same way. Find the number that must

- a) 16 b) 9 c) 12 d) -21

20	6	22
5	8	12
75	42	102

12	15	3
6		12
54	81	45

5) Find $13X+13Y$

8	1				7		3
x			6		7		8
9		2	3	1		6	
	4			7		5	6
		7	9	y	1	2	
	6	3		4			9
		4		9	2	1	6
6			5		4		
7		8				5	9

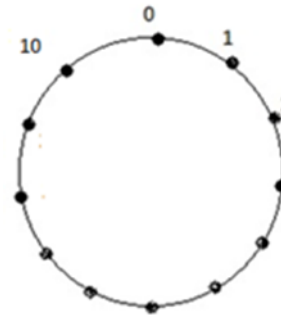
- a) 117 b) 169 c) 91 d) 130

6) A Farmer has a rose garden. Every day he either plucks 7 or 6 or 24 or 23 roses. The rose plants are intelligent and when the farmer plucks these numbers of roses, the next day 37 or 36 or 9 or 18 new roses bloom in the garden respectively. On Monday, he counts 189 roses in the garden. He plucks the roses as per his plan on consecutive days and the new roses bloom as per the intelligence of the plants

mentioned above. After some days which of the following can be the number of roses in the garden?

- a) 4 b) 37 c) 7 d) 30

7) A circle has 11 points arranged in a clock wise manner numbered from 0 to 10, as shown in the figure below. A bug moves clockwise around the circle according to the following rule. If it is at a point i on the circle, it moves clockwise in 1 second by $(1+r)$ places, where r is the remainder (Possibly 0) when i is divided by 2. Thus if it is at position 5, it moves clockwise in one second by $(1+1)$ places to point 7. Similarly, if it is at position 10 it moves $(1+0)$ or 1 places to point 0 in one second. If it starts at point 4, at what point will it be after 2012 seconds?



- a) 7 b) 9 c) 5 d) 1

8) The sticks of same length are used to form the triangles as shown below. If 87 such sticks are used then how many triangles can be formed?

- a) 43 b) 86 c) 29 d) 58



9) We are given the following sequence

PROBLEMSOLVINGPROBLEMSOLVINGPRO..... If the pattern continues, what letter will be in the 2015th position?

- a) G b) N c) B d) O

10) Three reporters Jack, Kerry and Lanny are supposed to visit France from Spain for covering international conference .The duration of the conference is 8 days. Each day only one reporter will cover the event. Each reporter will be at the conference for atleast 2 consecutive days out of the 8 day event. Jack does not cover the event for the sixth day. Kerry attends on the third day.

A) If Kerry only covers the event for 2 days, which one of the following must be true?

- a) Jack attends on the first day
- b) Jack attends on the eighth day
- c) Lanny attends on the fourth day
- d) Kerry attends on the Seventh day
- e) Lanny attends on the sixth day.

B) If jack does not cover the event on the first, second, third and fourth day, which one of the following must be true?

- a) Lanny will attend on the Second day
- b) Kerry will attend on the sixth day
- c) Jack will attend on the Seventh day
- d) Jack will attend on the fifth day
- e) Lanny will attend on the fourth day

C) If Kerry covers the conference on the fifth day, which one of the following cannot be true?

- a) Lanny attends on the Saturday
- b) Jack attends on the second day
- c) Lanny attends on the eighth day
- d) Jack attends on the first day
- e) Kerry attends on the seventh day

D)What the maximum number of days any reporter can cover the conference?

- a) 2
- b) 3
- c) 4
- d) 5
- e) 6

E)If Kerry covers the conference on the first , second and eighth day , how many different schedules are possible?

- a) 1
- b) 2
- c) 3
- d) 4
- e) 5

11) Three football teams are there. Given below is the group table. Fill in the x's

P – Played

W – Won

L - Lost

D - Draw

F - Goals For

A - Goals Against

	P	W	L	D	F	A
A	2	2	x	x	x	1
B	2	x	x	1	2	4
C	2	x	x	x	3	7

12) A bird keeper has got P pigeons, M mynas and S sparrows. The keeper goes for lunch leaving his assistant to watch the birds. Suppose $p = 10$, $m = 5$, $s = 8$ when the bird keeper comes back, the assistant informs the x birds have escaped. The bird keeper exclaims: "Oh no! All my sparrows are gone."

A)How many birds flew away?

- a) 29
- b) 28
- c) 23
- d) 25

B)When the bird keeper comes back, the assistant told him that x birds have escaped. The keeper realized that at least 2 sparrows have escaped.

- a) 15
- b) 17
- c) 18
- d) 19

C)What is minimum no of birds that can escape?

- a) 12
- b) 13
- c) 16
- d) 17

13) A person is 80 years old in 490 and only 70 years old in 500 in which year is he born?

- a) 400
- b) 550
- c) 570
- d) 440

14) A family X went for a vacation. Unfortunately it rained for 13 days when they were there. But whenever it rained in the mornings, they had clear afternoons and vice versa. In all they enjoyed 11 mornings and 12 afternoons. How many days did they stay there totally?

- a) 16
- b) 24
- c) 18
- d) 26

15) A Lorry on a daily basis for 7 days of a week starts from Bangalore to Mysore at 6.00 a.m., 7.00 a.m., 8.00a.m. ...10.00pm. Similarly another Lorry on the other side starts from Mysore to Bangalore at 6.00 a.m., 7.00 a.m., 8.00 a.m. ... 10.00pm. A Lorry takes 9 hours to travel from Bangalore to Mysore and vice versa.

1. A Lorry which has started At 6.00 a.m. will cross how many Lorries on its way.

2. A Lorry which has started At 6.00 p.m. will cross how many Lorries on its way.

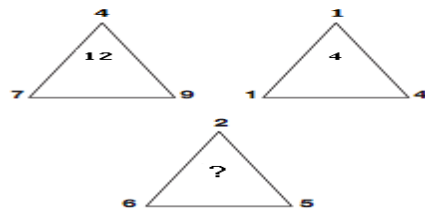
- a) 11,13
- b) 9,10
- c) 10,13
- d) 10,12

16) A person went to shop and asked for change for 1.15 paise. He said that he wanted the change in 50p, 25p, 10p and 5p without missing on any of the given denominations. How many coins did he have in each denomination?

- a) 50p-2, 25p-1, 10p-1, 5p-1
- b) 50p-1, 25p-2, 10p-1, 5p-1
- c) 50p-2, 25p-1, 10p-2, 5p-1
- d) 50p-2, 25p-2, 10p-1, 5p-1

17)

Which number replaces the question mark?



18) A man has 53 socks in his drawer: 21 identical blue, 15 identical black and 17 identical red. The lights are fused and he is completely in the dark. How many socks must he take out to make 100 per cent certain he has a pair of black socks?

- a) 35 b) 40 c) 45 d) 50

19) Gordon is twice as old as Tony was when Gordon was as old as Tony is now. The combined age of Gordon and Tony is 112 years. How old are Gordon and Tony now?

20) Joe's age, Joe's sister's age and Joe's father's age sums up to a century. When son is as old as his father, Joe's sister will be twice as old as now. When Joe is as old as his father then his father is twice as old as when his sister was as old as her father?

- a) 20, 30, 50 b) 30, 20, 50 c) 25, 25, 50 d) 30, 15, 55

21) Three friends divided some bullets equally. After all of them shot 4 bullets the total no. of remaining bullets is equal to that of one has after division. Find the original number divided.

- a) 18 b) 20 c) 40 d) 34

22) Gautham passes through seven lanes to reach his school. He finds that YELLOW lane is between his house and KAMA lane. The third lane from his school is APPLE lane. PEACOCK lane is immediately before the PARK lane. He passes ASH lane at the end. KAMA lane is between YELLOW lane and PEACOCK lane. The sixth lane from his house is RAO lane.

A) How many lanes are there between KAMA lane and RAO lane?

- a) one b) two c) three d) four

B) After passing the park lane how many lanes does Gautham cross to reach the school?

- a) 4 b) 3 c) 2 d) 1

C) After passing the YELLOW lane how many lanes does Gautham cross to reach the school?

- a) 4 b) 6 c) 2 d) 1

D) Which lane is between PARK lane and RAO lane?

- a) YELLOW lane b) KAMA lane c) APPLE lane d) PEACOCK lane

E) If the house of Gautham, each lane and his school are equidistant and he takes 2 min to pass one lane then how long will he take to reach school from his house?

- a) 18 min b) 16 min c) 14 min d) 12 min

23) Four persons A, B, C, D were there. All were of different weights. All Four gave a statement. Among the four statements only the person who is lightest in weight of all others gave a true statement.

A Says: B is heavier than D.

B Says: A is heavier than C.

C Says: I am heavier than D.

D Says: C is heavier than B.

Find the lightest and List the persons in ascending order according to their weights?

- a) A b) B c) C d) D

Directions:

Each analytical puzzle contains

(i) a description of a set of 3-7 relationships between fictitious persons, places, things or events.

(ii) Two or more questions to test the understanding of these relationships and implications.

The questions may pertain to relationships already defined or may involve additional constraints and conditions.

Each question is independent and hence the conditions and constraints defined in one question should never be used in other questions.

24) There is an unique missing system followed in the Kimberly mines in south Africa.

tunnel 1 is linked to tunnels 2 and 3

tunnel 4 is linked to tunnels 2,5 and 7

tunnel 5 is linked to tunnels 9

tunnel 3 is linked to tunnels 6

tunnel 6 is linked to tunnels 9 and 8

tunnel 9 is linked to tunnels 8

The distance between two successive tunnels is constant

A) Find the shortest distance between tunnel 4 and 8

- a) 3-1-2-8 b) 4-5-9-8 c) 1-2-3-8 d) 5-3-8-1

B) A miner is in tunnel 9, find the shortest distance to reach tunnel 1.

- a) 1-3-5-4 b) 8-5-4-7 c) 9-6-3-1 d) 3-4-9-8

25) Some children play with fire crackers and they decide to light the six fire crackers in a specific order. Six crackers are green, yellow, blue, red, purple and magenta.

1. Greencolor should be lit at the start.
2. Purplecolor should be lit at the last.
3. Yellow should follow red
4. Blue should follow green color immediately.

A) After what color will the children light the magenta coloured cracker?

- a) Green or yellow b) Blue or Green
c) Blue or yellow or red d) None of these

B) How many possible combinations are possible?

- a) 4 b) 5 c) 6 d) 7

26) Seven different books are to be arranged in a rack. Two books are related to philosophy. Two books are related to history. Two books are related to medicine. One book is related to computer.

1. The two medical books should be placed together.
2. The two history related books should not be placed together.
3. Computer book cannot be next to a philosophy book.
4. The third book should be a philosophy book.

A) If the second book is a medical book, then list all the position where the computer book can be placed.

- a) 3, 4, 5 b) 5, 6, 7 c) 4, 5, 6 d) None of these

B) If the fifth book is the philosophy book then what will be placed after it?

- a) Medical books b) Computer books c) History d) None of these

27) Seven children A, B, C, D, E, F and G are in 2 study groups. Group 1 has 3 members and group 2 has 4 members.

1. A cannot be in the same group as C
2. If B is in group 1, D must be in group 1.
3. If E is in group 1, C must be in group 2.
4. F is in group 2.

A) If A is in group 2, then who all must be in group 2?

- a) E, A, F b) D, A, C c) F, A, D d) None of these

B) If C and E are in the same group, then list all the pairs of people who must not be together?

- a) A and C b) B and G c) F and E d) None of these

C) If B is in group 1, then who must be in group 2?

- a) 1 b) 2 c) 3 d) 4

28) Six chairs are placed in a meeting for A, B, C, D, E and F. They sit according to the following conditions.

1. F and E in the extreme ends.
2. A and C sit together.
3. B sits to the immediate left of E.
4. D and F don't sit together.

A) Who sits next to F?

- a) B or D b) C or A c) A or D d) None of these

B) If another person G enters the room & sits next to B what will be his position?

- a) 2nd b) 3rd c) 4th d) 5th

29) If 1. P is taller than Q.

2. R is taller than P

3. S is taller than T but shorter than Q, then who among them is the tallest?

- a) P b) Q c) R d) S

30) given options can be formed using the letters of the following set only once? {t, b, o, a, z, p, r, m, y, d, v, l}

- a) boast b) loved c) moarn d) board

31) Which of the following words can be formed using the set of alphabets given below? {a, a, l, e, z, o, u, g, h, n, k}

- a) cough b) ought c) enough d) plough

32) Which among the following sentence is formed with least number of vowels?

- a) Sometimes be honest with your enemies. b) Do not forget to remember
c) Always be responsible d) Every time be resourceful

33) Platinum is sold in bars of weights ranging from 17 grams to 1760 grams in 7 gram increments. Each bar is sealed in an opaque box weighing 47 grams. The box used for packaging has no marks on it indicating the weight of the bar inside.

The precious metals merchant selling the boxes has put the packed bars into shelves based on weight. However, to be certain, he weighs the packed box in an equal arms two pan balance, and a set of weights (which is common for all the bars and which he considers as "standard" weights.). Each of these weighs an integral number of grams, and have their weight marked on them. The merchant, a superstitious man, always places the packed box of platinum on the left pan, and

places the appropriate weights in the left pan or the right pan or both until balance is achieved. This suffices hi m to tell the weight of the packed bar.
What is the minimum number of “standard” weights the merchant must have to be able to accurately determine the weight of all his packed boxes?
a) 5 b) 3 c) 8 d) 6

VERBAL APTITUDE

SYNONYMS

- 1) VENT
a) Opening b) Stodgy c) End d) Past tense of Go
- 2) MUSTY
a) Stale b) Necessary c) Indifferent d) Nonchalant e) Vivid
- 3) CONCISE
a) Verbiage b) compact c) correct d) short
- 4) FAUX PAS
a) Blunder b) problem c) worry d) examine
- 5) PROFUSE
a) Defuse b) Ample c) Flimsy d) Declare e) Accept
- 6) AVERT
a) Defend b) Attack c) Resign d) Surrender
- 7) TYPIFY
a) Typing b) Disembody c) Misrepresent d) Forewarn e) Exemplify
- 8) CELLAR
a) Loft b) Attic c) Basement d) Roof
- 9) CREDULITY
a) Credible b) Discipline c) Gullible d) Weakness
- 10) VOGUE
a) Deviation b) Non conforming c) Unfashionable d) Prevalent

- 11) ENFORCE
a) Administer b) Accomplish c) Abandon d) Exert
- 12) INFER
a) Deadly b) Deduce c) Interfere d) Envious
- 13) IRONIC
a) Inflexible b) Bitter c) Good natured d) disguisedly sarcastic
- 14) ABSORPTION
a) Suction b) Disconnection c) Separation d) Filtration
- 15) VEHEMENT
a) Intense b) Mild c) Placid d) Pardonable
- 16) BIFID
a) Divided b) Divided into two c) Timid d) None
- 17) ABSURD
a) Absent b) Present c) Equitable d) Level e) Insane.
- 18) DEBAUCH
a) Demoralize b) Encourage c) Cultivate d) None
- 19) QUARANTINED
a) Immunized b) butchered c) secluded d) mingled
- 20) MONOTONOUS
a) Assorted b) Spirited c) Mixed d) Tedious
- 21) PHOTOGRAPHIC
a) Distant b) Exact c) Distinguish d) Similar
- 22) FURIOUS
a) Swift b) Calm c) Angry d) Attentive
- 23) BIFURCATE
a) Break b) Split c) Bridge d) Pass
- 24) OUTLIVE
a) Survive b) outstay c) banish d) outspend

25) GENERIC	a) Standard	b) Brand	c) Specific	d) Individual	a) Arrogant	b) False	c) Deceive	d) Misconception	
26) VULNERABLE	a) Respectable	b) weak	c) decayed	d) immature	39) NOVICE	a) Neophyte	b) beginner	c) probationer	d) greenhorn
27) UNLATERAL	a) Sloping	b) one-sided	c) parabola	d) immutable	40) PERENNIAL	a) Frequent	b) regular	c) lasting	d) rare
28) VANISH	a) Evacuate	b) Decrease	c) Disappear	d) Harm	41) FICKLE	a) Fiddle	b) stable	c) volatile	d) lame
29) ACCENTUATE	a) Exaggerate	b) Increase	c) Suppress	d) Low	42) STERILIZE	a) Freshen	b) potent	c) Mitigate	d) Disinfect
30) WRETCHED	a) Poor	b) Foolish	c) Insane	d) Strained	43) ARID	a) Dry	b) separated	c) arrogant	d) superfluous
31) SUFFOCATE	a) Stifle	b) burn	c) breath	d) a fixate	44) PRIMAL	a) Approved	b) cardinal	c) precise	d) permanent
32) AGITATE	a) Stir	b) calm	c) irritate	d) compose	45) VANISH	a) Evacuate	b) decrease	c) disappear	d) none
33) AFFABLE	a) Idiotic	b) uptight	c) rising	d) breezy	46) INVINCIBLE	a) Voluble	b) victorious	c) visible	d) vulnerable
34) ONRUSH	a) Emergence	b) Surge	c) Flight	d) None	47) CONCEITED	a) Arrogant	b) false	c) deceive	d) misconception
35) CONTAGIOUS	a) Communicable	b) preventive	c) harmful	d) survival	48) APPETITE	a) Hunger	b) Revulsion	c) Antipathy	d) Fasting
36) BASIS	a) Foundation	b) Words	c) Explanation	d) Correlate	49) TRUST	a) Insincere	b) Faith	c) Lie	d) Tease
37) ADVENTURER	a) Explorer	b) Homely	c) Native	d) Aimless	50) UNYOKE	a) Merge	b) Split	c) Federate	d) Amalgamate
38) CONCEITED					51) EMPLOY	a) Ignore	b) Satire	c) Use	d) Busy

52) SWAP

- a) Take form b) Exchange c) Back off d) Slide

53) TAMPER

- a) Attach b) Timing c) Interfere d) Build

54) HATE

- a) Abuse b) Abhor c) Nasty d) Tardy

55) LACE

- a) Paper b) Cloth c) Wood d) Person

56) CEASE

- a) Hold b) Capture c) Stop d) Siege

57) LUMINOUS

- a) Transparent b) Dull c) Glowing d) Lamé

58) NOMINAL

- a) Significant b) Minimal c) Actual d) Dear

59) ADORN

- a) Decorate b) Enjoy c) Admire d) Hate

60) COURAGEOUS

- a) Brave b) Hungry c) Sincere d) Good looking

61) PARTIAL

- a) Decorate b) Enjoy c) Admire d) Hate

62) HISTORIC

- a) Insignificant b) Notable c) Unremarkable d) Dull

63) CORRESPONDENCE

- a) Agreements b) Contracts c) Documents d) Letters

64) FAMISHED

- a) Finished b) Full c) Hungry d) Thirsty

65) EMANATE

- a) End b) Culminate c) Originate d) Retreat

66) SHABBY

- a) Pure b) Dirty c) Interesting d) Curious

67) BESTIAL

- a) Humane b) Wrong c) Earthy d) Rough

68) Which of the following explains the meaning of the proverb “Every cloud has a silver lining”?

- a) When the cloud has a silver lining after the rain
b) Every sad or difficult situation has a positive side
c) Good times follow difficult ones.
d) A need to face the difficult times with courage

69) He has a **propensity** for getting into debt.

- a) Natural tendency b) Aptitude c) Characteristic d) Quality

70) PRODUCT

- a) Result b) Cause c) Resource d) Split

71) Photograph

- a) Remember b) Delete c) Shoot d) Capture

72) Battle

- a) Conflict b) Organization c) Liberate d) Kindle

73) Danger

- a) Safety b) Dare c) Peril d) Outrage

74) Addicted

- a) Muggle b) Woot c) Dependent d) Coruscating

75) Malevolent

- a) Hateful b) Tough c) Evil d) Foul

76) Levigate

- a) Build b) Free c) Liberate d) Granulate

77) Impulse

- a) Sudden force b) Flatter c) Print d) Comply

78) Sadistic

- a) Savage b) Bling c) Faulty d) Listlessness

79) Champion

- a) Conqueror b) Developer c) Capable d) Forsake

80) Climb

- a) Ascend b) Descend c) Decrease d) Drop

81) Adaptability

- a) Tranquility b) Fertility c) Complexity d) Flexibility

82) Valuable

- a) Existence b) Spade c) Strange d) Expensive

83) Potent

- a) Actual b) Existent c) Latent d) Effective

84) Workshop

- a) Small workplace b) Small ground c) Machine d) Invent

85) Prerequisite

- a) Requirement b) Favor c) Employment d) Worship

86) Shock

- a) Vigilant b) arrogant c) forsake d) disappointing surprise

87) Elementary

- a) Complicate b) Basal c) Refusal d) Watchful

88) Rigid

- a) Lenient b) Plastic c) Firm d) Clear

89) Recurrence

- a) Repetition b) Persuasion c) Emendation d) Occasion

90) Ecstasy

- a) Shrill b) Bliss c) Condone d) Dry

91) Impose

- a) Foist b) Tie c) Shift d) Shy

92) Allow

- a) Authorize b) Chaotic c) Feeble d) Indecency

93) Delight

- a) Pain b) Revel c) Disgust d) Loathe

94) Sadistic

- a) Indulge b) Funny c) Tremble d) Brutal

95) Below

- a) Under b) Behind c) Over d) Submit

96) Cache

- a) Hoard b) Blunder c) Rough d) Different

97) Offensive

- a) Derogatory b) Lethargy c) Extremity d) Frugality

98) Genesis

- a) Commencement b) Furore c) Synopsis d) Vigour

99) Extrovert

- a) Shoot b) Terror c) Socialite d) Humility

100) Hypothetical

- a) Coral b) Conjectural c) Mineral d) Alien

101) Interim

- a) Interlude b) Permanent c) Error d) Appropriate

102) Candid

- a) Specious b) Morose c) Ingenuous d) Hide

103) Capable

- a) Able b) Incompetent c) Caper d) Contest

104) Compel

- a) Coerce b) Comply c) Resist d) Plead

105) Incompatible

- a) Capable b) Reasonable c) Faulty d) Indifferent e) Contradictory
- 106) Lethargy
a) Serenity b) Listlessness c) Impassivity d) Laudy
- 107) Inspired
a) Overwhelmed b) Poor c) Resist d) Coruscating
- 108) Abandon
a) Forsake b) Wicked c) House d) Lower
- 109) Danger
a) Safety b) Dare c) Peril d) Outrage
- 110) Submerge
a) to walk on b) to sink c) to appear d) to join together
- 111) Fictitious
a) False b) Fraud c) Foul d) Flattering
- 112) Ingenious
a) Misleading b) False c) Clever at inventing d) Intoxicated
- 113) Incidence
a) Stubbornness b) Occurrence c) Anecdotes d) Conclusion
- 114) Valuable
a) Vain b) Solemn c) Moral d) Precious
- 115) Allow
a) Permit b) Allowance c) Total d) Confess
- 116) Vagabond
a) Abode b) Dono c) Vain d) Avon
- 117) Delight
a) Happiness b) Sadness c) Delicious d) Delicate
- 118) Careless
a) Spotless b) Faceless c) Negligent d) Vigilant

- 119) Incessant
a) Irritated b) Overflowing c) Extreme d) Cooperative
- 120) Duplicity
a) Innocence b) Cleverness c) Double-dealing d) Repetition

ANTONYMS

- 1) IGNITE
a) Extinguish b) Wet c) Soak d) Drench
- 2) UNIVERSAL
a) Earthly b) Ethereal c) Cosmic d) Local
- 3) PETTY
a) Liberal b) Moderate c) Lite d) Magnanimous
- 4) AGITATE
a) Soothe b) Refresh c) Disturb d) Suppress
- 5) BENEDICTION
a) Antidote b) Intonation c) Endowment d) Anathema
- 6) LITERAL
a) Factual b) Usual c) Ordinary d) Unbiased e) Figurative
- 7) RUDE
a) Detest b) Beastly c) Respectful d) Hideous
- 8) WORSEN
a) Complicate b) Relive c) Aggravate d) Intensify
- 9) HINDER
a) Hold Back b) Motivate c) Accomplish d) Push
- 10) PREMEDITATED
a) Ingenuous b) Artless c) Spontaneous d) Natural
- 11) ADVENT
a) End b) Dawn c) Flexible d) Emergence e) Adamant
- 12) ALTRUISM

a) Conservative b) Repugnant c) Combateness d) Selfishness

13) FUTILE
a) Useful b) Handy c) Functional d) Positive

14) SEMBLANCE
a) Resemblance b) Pretense c) Appearance d) Aura e) Dissimilarity

15) JAUNTY
a) Youthful b) Ruddy c) Strong d) Unravellled e) Sedate

16) DIASPORA
a) Spread b) Movement c) Focus d) Scattering

17) FICKLE
a) fiddle b) stable c) volatile d) lame

18) UNIVERSAL
a) Earthly b) Ethereal c) Cosmic d) Local

19) GAURISH
a) Cheap b) Flashy c) Costly d) None

20) DELIBERATE
a) Unintended b) Targeted c) Focused d) None

21) INSTIGATE
a) Stimulate b) Prompt c) Ferment d) Deceive e) Prevent

22) CONSTITUENT
a) Whole b) Component c) Element d) Citizen

23) STARTLED
a) Amused b) Relaxed c) Endless d) Astonished

24) VETERAN
a) old b) inexperienced c) expert d) undisciplined

25) EXTRAODINARY
a) Exceptional b) Unusual c) Spectacle d) Common

26) ENFORCE
a) Administer b) Accomplish c) Abandon d) Exert

27) HYMNS
a) Sounds b) Chants c) Humming d) Stones

28) SET OFF
a) Set out b) Set in c) Get on d) Get back

29) HUMOROUS
a) Entertaining b) Witty c) Comical d) Depressing

30) REQUISITE
a) Vital b) Avoidable c) necessary d) basic

31) AGRARIAN
a) Suburban b) Cosmic c) Area d) Urban

32) PROVOCATION
a) Vocation b) pacification c) peace d) destruction

33) PENDING
a) Unerring b) unending c) settled d) permanent

34) VOCATION
a) Occupation b) Hobby c) Business d) Education

35) PREMEDIATE
a) Plan b) chaos c) disorder d) go

36) DISCRETE
a) Linked b) disconnected c) disorder d) free

37) CLARIFY
a) Analyze b) Simplify c) Confuse d) Resolve

38) POMPOUS
a) Benevolent b) boastful c) modest d) opulent

39) AFFABLE
a) Rude b) ruby c) needy d) useless

40) GHOULISH	a) Gruesome	b) pleasant	c) peevish	d) garrulous	a) Approve	b) Revoke	c) Oppose	d) Reveal	e) Expose	
41) HAMPER	a) Hinder	b) Impede	c) Bolster	d) Promote	54) BROADLY	a) Specifically	b) Individually	c) Separately	d) Hardly	
42) ABET	a) Prevent	b) Aid	c) Pacify	d) Risk	55) PRANKISH	a) Whimsical	b) Machiavellian	c) Impish	d) Serious	
43) STATIONARY	a) Active	b) Mobile	c) Rapid	d) Busy	56) TENTATIVE	a) Faltering	b) Probationary	c) Speculative	d) Confident	e) Trial
44) SUCCUMB	a) Break down	b) Give in	c) Cease	d) Conquer	57) FIGURATIVE	a) Symbolic	b) illustrative	c) Literal	d) Pictorial	
45) ARCHAIC	a) Ancient	b) Modern	c) Fresh	d) Prese	58) EMPATHY	a) Care	b) Sympathy	c) Discontent	d) Indifference	
46) MIGRANT	a) Foreigner	b) Industrious	c) Native	d) Lazy	59) SPLENDID	a) Unimpressive	b) Bad	c) Ugly	d) Radiant	
47) SETTLED	a) Stationary	b) Fixed	c) Inactive	d) Mobile	60) SORROW	a) Sympathy	b) Joy	c) Woe	d) Empathy	
48) STERN	a) Lenient	b) Crabby	c) Unreasonable	d) Tenant	61) GIGANTIC	a) huge	b) invisible	c) zero	d) tiny	
49) WORTHLESS	a) Costly	b) Important	c) Valuable	d) Beneficial	62) GRATIFY	a) Oblige	b) Humor	c) Indulge	d) Upset	
50) REQUISTIE	a) Vital	b) Avoidable	c) Necessary	d) Basic	63) IMMINENT	a) Impending	b) Eminent	c) ending	d) Distant	
51) MINOR	a) Big	b) Major	c) Tall	d) Heavy	64) DISPARITY	a) Timidity	b) Bigotry	c) Likeness	d) Influence	
52) INVINCIBLE	a) Voluble	b) Victorious	c) Visible	d) Vulnerable	65) ELUSION	a) Confront	b) Skirting	c) Evasion	d) Illusion	
53) ENDORSE					66) TORTURE	a) friendly	b) aid	c) generous	d) one	

67) GAUNT

- a) Emaciated b) Sombre c) Plump d) Piquant

68) TRANSIENT

- a) Temporal b) Persistent c) Emigrating d) Transitory

69) Bashful

- a) Coy b) Bold c) Timid d) Fecund

70) Come

- a) Reach b) Attain c) Deteriorate d) Ensue

71) Autonomous

- a) Subservient b) Sovereign c) Crunk d) Laudy

72) Hidden

- a) Obvious b) Ill c) Ray d) Intoxicated

73) Latent

- a) Observant b) Handsome c) Embezzle d) Manifest

74) Brazen

- a) Stout b) Intelligent c) Secret d) Public

75) Exhilarate

- a) Gladden b) Inspirit c) Agitate d) Vitalize

76) Disappointment

- a) Dismay b) Adversity c) Indict d) Satisfaction

77) Exhume

- a) Bury b) Hide c) Disinter d) Reaction

78) Forceful

- a) Dominant b) Eulogy c) Slovenly d) Submissive

79) Fill in the blank with the word that is OPPOSITE in meaning to the word given in bold. Anita was not happy with the bank's interest rate policy. They offered a **fixed** rate on all loans while she wanted a _____ rate.

- a) Moving b) Floating c) Free d) Market

80) The **altercation** between two families attracted the attention of neighbours.

- a) Animosity b) Incompatibility c) Concord d) lexibility

IDIOMS AND PHRASES

1) To live in a clover

a) To live in great comfort and luxury

b) To live a carefree live

c) To be surrounded by a cares and worries

d) To live in great difficulty

2) Our school within a stone's throw away from railway station

a) Within a certain radius

b) At a short distance

c) Within a definite circumferences

d) Very far off

ODD WORDS

1) a) Excited b) Ecstatic c) Elated d) Exclude

2) a) Fair b) Lair c) Hair d) Pair

SELECTING WORDS

1) All the faculty members except HoD _____ to the new curriculum proposed by Prof. Bhasin

- a) Agrees b) Agreed c) Proceed d) Satisfied

2) The tiring trip to hills of Shivpuri _____ the entire group exhausted.

- a) Cancelled b) Failed c) Left d) Remains

3) It is sad, the way she has _____ a 'once a lifetime' opportunity

- a) Squandered b) Missed c) Sacrificed d) Remains calm

4) Many employees feel that the economic situation should not be a _____ to the performance management system of any organization.

- a) Deterrent b) Encouragement c) Problem d) Symptom

5) He worked really hard and thus _____ to be promoted.

- a) Warranted b) Deserve c) Deserves d) Merit

- 6) Microsoft created a revolution _____ making the personal computer affordable for middle class.
a) Following b) After c) By d) Through
- 7) There was _____ in the country when their cricket team won the world cup.
a) Happiness b) Energy c) Shock d) Jubilation
- 8) Funds are scarce, so _____ are needed to re-build homes destroyed by the flood.
a) Patience b) Volunteers c) Workers d) Materials
- 9) The experiment lead to emission of _____ vapor, which resulted in immediate termination of the research
a) Noxious b) Non toxic c) Innocuous d) Bland
- 10) When we found her _____ the romantic ruins and back packers, she was busy chasing dogs.
a) Amidst b) Between c) Among d) Beyond e) Outside
- 11) A true salesperson needs to be ready for any argument about his product, for which he must be _____ with it inside out
a) Known b) Amazed c) Clear d) Acquainted
- 12) _____ being poor, Kaveri still dresses more appropriately than most of her group mates.
a) Despite b) Although c) Since d) However
- 13) New concerns about growing religious tension in northern India were _____ this week after at least fifty people were killed and hundreds were injured or arrested in riots between Hindus and Muslims.
a) Lessened b) Invalidated c) Restrained d) Dispersed
- 14) In the first 10 years after the _____ of the UGC Act, eight institutions were granted deemed university status.
a) Implication b) Enactment c) Statement d) Issue
- 15) This hotel has a good _____ service. They park the cars safely.
a) Bellboy b) callboy c) valet d) doorman
- 16) Unless new reserves are found soon, the world's supply of coal is being _____ in such a way that with demand continuing to grow at present rates, reserves will be _____ by the year 2050.

- a) Consumed – completed b) depleted - exhausted
c) Reduced – argument d) burnt – destroyed

- 17) As wild orchids plants are believed to have medicinal value, their populations in forests have been _____ ruthlessly
a) Guarded b) Picked c) Reforested d) Plundered

- 18) He has _____ sense of words. Therefore, the sentence he constructs are always _____ with rich meaning.
a) Profound – pregnant b) distinguished - loaded
c) Terrific – tempted d) meaningful – full

- 19) Whether it be shallow or not, commitment is the _____ the bedrock of any _____ loving relationship.
a) Expression – perfunctory b) foundation - genuinely
c) Manifestation – deep d) key – alarmingly

- 20) If you are _____ you tend to respond to stressful situations in a calm, secure, steady and _____ way.
a) Resilient – rational b) obdurate – manageable
c) Propitious – stable d) delectable – flexible

- 21) The teacher must _____ the unique style of a learner in orders to _____ it to the desired knowledge.
a) advocate-direct b) perpetuate-develop
c) appreciate-focus d) discover-harness

- 22) There are many textile producing mills in the market that compete with each _____ to gain the largest share of the market.
a) Person b) Other c) Contestants d) Individual

- 23) Many people take spirituality very seriously and _____ about those who don't, worrying about them and _____ them to believe.
a) Think – criticizing b) pride – appraising
c) Rationalize – enabling d) wonder – prodding

- 24) If you are an introvert, you _____ to prefer working alone and, if possible, will _____ towards projects where you can work by yourself or with as few people as possible.
a) Like – depart b) advocate - move
c) Tend – gravitate d) express – attract

25) Not all countries benefit _____ from liberalization. The benefits tend to _____ first to the advantaged and to those with right education to be able to benefit from the opportunities presented.

- a) Equally – generate b) richly – downgrade
c) Suitably – ascribe d) uniformly – percolate

26) _____ to be good swimmer you should know how to hold your breath for a while.

- a) for while b) However since c) in place d) in order

27) Management can be defined as the process of _____ organizational goals by working with and through human and non-human resources to _____ improve value added to the world.

- a) Getting – deliberately b) managing - purposefully
c) Targeting – critically d) reaching – continuously

28) The guest wanted to know _____ the hotel was offering him an extra overnight stay that they promised him.

- a) For b) Was c) Whether d) As

29) He was an _____ musician, had been awarded the George Medal during the second world war and _____ with the title of Rai Bahadur.

- a) Outstanding – popularized b) underestimated - declared
c) Accomplished – honoured d) obdurate – proclaimed

30) He finished his novel _____ I was getting ready _____ office.

- a) Because,for b) While,for c) While,for d) While,for

31) Scientists believe that during initial years of the _____ of the earth. Water bodies increased in size due to continues rainfall

- a) Formative b) formations c) formation d) formed

32) _____ I have car sickness ,I prefer to travel by train

- a) Though b) Since c) However d) Despite

33) Heritage languages which form a part of India's rich culture are becoming _____

- a) Extinctive b) Extinguish c) Extinction d) Extinct

34) We as human beings get easily _____ by materialistic pleasures of modern age

- a) Distracted b) Attentive c) Devoted d) Diligent

35) This new technology has the potential to provide handsome returns, even though it is at a _____

- a) Turbulent b) Peculiar c) Nascent d) unknown

36) Residents of north pole have different lifestyle and requirements than _____ living in other parts of the world

- a) their b) them c) those d) residents

37) The shipment should not be **dispatched** if there are any quality issues

- a) Packed b) Received c) Opened d) Send

38) Rashid was **taken aback** when he got his health reports

- a) surprised b) shocked c) afraid d) worried

39) He has a _____ for getting into debt.

- a) Natural tendency b) Aptitude c) Characteristic d) Quality

40) The contract must be honoured. You cannot on it.

- a) back out b) give up c) renege d) renounce

41) In India, women _____ only three percent of senior management

- a) Contain b) Involve c) Comprise d) Contains e) Comprises

42) Her hands are too rough, now. I remember last year they were very

- a) Nice b) Firm c) Smooth d) Fair

43) The monk wanders here and there in search of silence and peace .his life is a _____ life

- a) Nomadic b) boring c) religious d) busy

44) The labour union decided to go on strike since the management was adamant and did not agree to their terms .the discussion had reached an _____

- a) Climax b) obstacle c) impetus d) impasse

45) The efforts put in by the top management to retain him went in _____ as he decided to shift to Competitor Company.

- a) Failure b) futility c) waste d) vain

46) Our bright and beautiful environment is being systematically destroyed under the pressure of a _____ population

- a) Proliferating b) Expanding c) Widening d) Enlarging

47) As per the recent ethical rules laid down by National Institute of the Health, Diseases which cannot be treated _____ would qualify for treatment involving human gene manipulation.

- a) Dangerous b) similar c) alternatively d) Uncommon

48) Performance appraisals that contain ____ criticism are appreciated.

- a) Constructive b) Scathing c) Soft d) Indirect

49) His recent success him more arrogant than what he used to be.

- a) Make b) have make him c) has made d) was making

50) It's always good to carry some cash as some shops _____ not accept credit cards.

- a) do b) did c) could d) should

51) The simple absence of grief and indignation at our national tragedy can be termed as _____ of moral responsibility.

- a) Acceptance b) concurrence c) credence d) abdication

52) He _____ his chances at the university interview by wearing a pair of jeans and t-shirt.

- a) Lowered b) improved c) jeopardized d) enhanced

53) The opinions _____ by various individuals regarding the problems faced by them helped the government in formulating changes.

- a) expresses b) expressed c) expression d) expressive

54) While still in school, Richard Nixon's debate coach noticed the young debater's ability to answer questions _____ and noted that Nixon rarely seemed to address anything _____.

- a) Audaciously ... brazenly b) ambiguously ... disingenuously
c) Unequivocally ... absolutely d) obliquely ... directly
e) Bluntly ... explicitly

55) Mrs. Rubin was taken aback by Timothy's _____, as she had never before seen a child disrespect his elders so blatantly.

- a) Jauntiness b) Reverence c) Impudence d) Humility e) Obsequiousness

56) Many states use a point system in which each driving infraction is worth a certain number of points, and if one exceeds a certain number of cumulative points in a year, his or her driving privileges are _____ until a later date, at which time the driver may reapply for his or her license.

- a) Revoked b) Recuperated c) Reprimanded d) Curbed e) Instituted

57) Though usually _____, my neighbor's cat was quite _____ when it came to defending what she considered her territory; luckily for her, she would often win the fights she started.

- a) Antagonistic ... placatory b) cantankerous ... belligerent
c) Serene ... amicable d) aggressive ... pacifistic e) Peaceful ... pugnacious

58) The councilwoman accused the city manager of _____, alleging that he abused his power to help secure a contract beneficial to his own personal bank account.

- a) Malfeasance b) Unscrupulousness c) Depravity d) Bribery e) Misconduct

59) Though not appreciated in the author's own lifetime, Thomas Paine's The Age of Reason has come to be recognized as a _____ work, one that profoundly impacted Western theology for generations.

- a) Controversial b) Negligible c) Seminal d) Trifling e) Provocative

60) Most felt that Carlton's _____ made him incredibly unpopular, since people seldom wish to be friends with someone who constantly looks down on them.

- a) Superciliousness b) Apathy c) Gregariousness d) Modesty e) Insensitivity

SPOTTING ERRORS

1) When the captain called the crew (B) Each of the crew members run together (C) to the deck of the ship

- a) A b) B c) C d) No Error

2) (A) Fatimah is a girl of principle and she (B) would never go against her values (C) to get admission in that institute

- a) A b) B c) C d) No Error

3) (A) Guilt and self pleasure are (B) two most strong drivers (C) of any human act.

- a) A b) B c) C d) No error

4) (A) Yauhan do not understand (B) the importance of money as (C) he never had to earn himself

- a) A b) B c) C d) No error

5) (A) The phrase 'Be the change you want (B) to see in the world' was (C) said through Mahatma Gandhi

a) A b) B c) C d) No error

6) (A) A tie is a very important (B) part of formal dressing (C) for every men.

a) A b) B c) C d) No change

7) (A) Jeet is a very nice boy (B) and he always listen carefully (C) to what his parents have to say

a) A b) B c) C d) No error

8) (A) Juhu beach in Mumbai was filled with (B) innumerable people who had gathered there (C) to see discovered newly ancient temple

a) A b) B c) C d) No error

9) (A) We've been saying it separately up till (b) now, but we thought it would be (c) better if we spoke in one voice

a) A b) B c) C d) No error

10) (A) Fishermen is (B) spotted catching fish on (C) the bank of the river

a) A b) B c) C d) No error

11) (A) Big brands like Sony, Samsung and (B) Nokia have been launched many phones having latest (C) features like facebook application, orkut tool and much more

a) A b) B c) C d) No error

12) (A) India is a vast country (B) that offers immeasurable experience (C) to all visitors

a) A b) B c) C d) No error

13) (A) As Maria returned home (B) she found the hall to be empty as (C) everyone were hiding in the kitchen

a) A b) B c) C d) No error

14) (A) Harish likes to play cricket (B) and riding bicycle besides (C) playing videogames

a) A b) B c) C d) No error

15) (A) Besides, he adds (B) that students can easily (C) access libraries of other institutes.

a) A b) B c) C d) No error

16) (A) Everyone need to understand(B) that it is important to(C) respect one's parents

a) A b) B c) C d) No error

17) (A) Green home cleaning can be a tiny B) and Imperative step in C) Balancing & preserving our nature.

a) A b) B c) C d) No error

18) (A) Cellular mobility for rural women may be at (B) a nascent stage in india, but those who have it (c) swore by the freedom it has brought them.

a) A b) B c) C d) No error

19) (A) Western culture have (B) influenced many people in (c) India in a very powerful way

a) A b) B c) C d) No Error

20) (A) These decisions provides (B) firm ground for all players in (C) the equality rights arena.

a) A b) B c) C d) No error

21) (A) One need to acquire many talent and master (B) plenty of disciplines to make (C) a profitable and reputed business

a) A b) B c) C d) No error

22) (A) The teacher whom we met yesterday (B) is highly qualified and (C) with very good reputation.

a) A b) B c) C d) No error

23) (A) The study did not said (B) how the countries would (C) implement the plan.

a) A b) B c) C d) No error

24) (A) I feel that Mary will going (B) for the closing ceremony of (C) the commonwealth games.

a) A b) B c) C d) No error

25) (A) All the guests on the (B) boat got frightened (C) when they heard the alarm.

a) A b) B c) C d) No error

26) (A) Christmas give us a opportunity to (B) rekindle our friendship with friends and relatives (C) who are otherwise forgotten in our daily chores.

- a) A b) B c) C d) No error

27) (A) The kid stopped crying (B) as soon as his mother (C) bringed chocolates for him.

- a) A b) B c) C d) No error

28) (A) Not surprisingly, most of (B) them have proved (C) to being spectacular.

- a) A b) B c) C d) No error

29) (A) Regardless of location, (B) internet have been a milestone in bringing various (C) people, technology, resources and academic together.

- a) A b) B c) C d) No error

30) A) She always offer her (B) food to the poor (C) and needy.

- a) A b) B c) C d) No error

31) A) in the film fraternity , there are many people .(B) who likes to be in the lime light. But many just want (C) to stay away from any kind

- a) A b) B c) C d) No error

32) A) I was so surprised that B) I told me I was imagining things, c) but later others confirmed that they too had seen the same sight

- a) A b) B c) C d) No error

33)

- a) A number of trainees who b) take this course every year find
c) That their d) knowledge of mathematics is inadequate.
e) No error

34)

- a) Either of the solutions you have b) Proposed are
c) Acceptable to the union, whose d) Members are willing to compromise.
e) No error

35)

- a) The last man on earth will b) abandon his ruined house for
c) a cave, and d) his woven clothes for an animal's skin.
e) No error

36)

- a) The station was a hive b) Of bustling activity
c) The arrival of the train was the most important
d) Event of the day in that remote place. e) No error

37)

- a) My grandmother's legacy is b) Substantial, especially
c) If the value of the rare stamps are d) Taken into consideration. e) No error

38)

- a) Neither Bradley, nor more b) Recent critics who have written
c) On Shakespeare's tragedies, has
d) been able to give a convincing explanation for the timing of events in *Othello*.
e) No error

39)

- a) The bridal gown was most b) Unique; the c) Bridegroom designed it
d) And his mother provided the lace fabric. e) No error.

40)

- a) For a successful career as b) A beautician, one
c) Must be prepared to dissemble
d) You must not tell your client the unvarnished truth about his or her appearance
e) No error

41) A) Every language has a lot of different words with similar but slightly differing meanings.

B) Words are used with each other in fairly fixed ways in every language.

C) Words do not only have meanings, they also have associations

D) At an advanced level of any language, it is important to develop an impression of what connotations certain words have

- a) A only b) A and C c) A, B and C d) All of the above are correct
e) Only B

42) A) It's something I feel powerfully about.

B) If I remember perfectly, it happened at about six thirty

C) It is useful to learn which adverbs most typically modify particular types of objectives

D) The majority of these adjectives has a negative connotation.

- a) C only b) B and C c) A only d) None of the above
e) All of the above are correct

- 43) A) A brash walk before dinner helps to enforce the appetite.
B) The death tally in the Pakistan earthquake has now risen to 300,000.
C) Let's take a sluggish stroll along the beach, shall we?
D) If you want to stay at home tonight, that's perfectly OK with me.
a) A only b) B only c) C only d) D only e) A and B only

- 44) A) The firefighters managed to save the people trapped in the burning third-floor flat.
B) The countryside round here is terribly flattened and boring.
C) To join the Luck now Golf Club you pay a flattened fee of Rs.5 lacs.
D) He was able to erect the child's toy in five minutes flat.
a) B and C only b) A only c) A and D d) None of the above
e) A and B

- 45) A) Whereas nineteenth century Darwinists saw evolution
B) As the story of the ascent of man from his British origins
C) Today's Darwinists want
D) To tell the tale rather of the fall of man back to beastliness
E) It is the story of ascent of man and descent of humanity.
a) A, B and E b) B, C and E c) C and D d) A and E e) A, C and D

- 46) A) The project was underfunded from the outset.
B) During the cruise, a small cat fell board and drowned
C) Cooperation across the fronts has been very good
D) Cross-border cooperation has been exemplary good
a) A only b) B only c) D and C d) None of the above
e) Only A and B

SENTENCE CORRECTION

- 1) Its best to **attribute his bad mood on tiredness** and just forgot it.
a) Attribute his bad mood to tiredness
b) Contribute his bad mood to tiredness
c) Attribute his bad mood with tiredness
d) No change
2) They were going home **when it was starting to rain**.
a) When it started to rain b) When it was raining
c) When it is starting to rain d) No change
3) Get out of the building! **It sound like the generator is going to explode**
a) It is sounding like the generator is going to explode

- b) It sounds like the generator is going to explode
c) It sounds like generator exploded
d) No Changes

- 4) As soon as **I turn the ignition key**, the engine caught fire.
a) I turn an ignition key b) I turned the ignition key
c) I was turning the ignition key d) No change

- 5) The appropriate atmospheric conditions made it feasible for the astronomers to see the stars **and they could even distinguish the sizes**
a) And even distinguish the sizes b) And they were even distinguishing the sizes
c) And he could even distinguish the sizes d) And even distinguishing the sizes

- 6) The most obvious downside to this pessimism is that **it is coming at their expenses**
a) It is coming at their expense b) It is costing at their expense
c) It will be expensive d) It was coming at their expense

- 7) Munnar **is the most refreshing and tranquil** hill station in the state of Kerala
a) Is most refreshing and tranquillity b) Is most refresh and tranquil
c) Is a most refreshing and tranquil d) No improvement needed

- 8) America's leadership will look to identify and **hunt down** perpetrators of this heinous crime.
a) hunt in b) hunting down
c) hunt them down d) No correction required

- 9) Markets like Janpath and Connaught Place **have a lots of shops selling** very trendy clothes.
a) Have lots of shops selling. b) Have lot many number of shops selling
c) Have a lot number of shops that were selling d) No improvement needed

- 10) **A belief in superstitious people is that** birth marks are the signs of influence on the mother before childbirth
a) A belief in superstitious people that b) Superstitious people beliefs are that
c) Among superstitious people the belief is that d) Superstitious people believe that

- 11) Tonight I am going to check that **Raju will do his homework correctly**
a) Raju must be doing his homework correctly
b) Raju shall do his homework correctly c) Raju does his homework correctly
d) No change

12) Chicago is widely known for its stuffed pizza and pizza pie **joints have always busting** with innumerable people

- a) Joints which were always busting
- b) Joints that are always supposed to the busting
- c) Joints that have always been busting
- d) No improvement needed

13) People working in high positions in companies **tend to shifting their work** burden by delegating tasks to their subordinates.

- a) Tend for shifting their work
- b) Tend to shift their work
- c) Tend as to shifting their work
- d) No improvement needed

14) According to the recent research by experts, many **women become** victims of trafficking

- a) Women are becoming
- b) Women becomes
- c) Women became
- d) No improvement needed

15) What **we have got for dinner?**

- a) We have got for the dinner
- b) We have got for a dinner
- c) We gotten for dinner
- d) No change

16) The quality and texture of jeans **produced in California would be a very good.**

- a) Produced in California are very good
- b) Produced into California is very good
- c) Produced in California is very good
- d) No improvement needed

17) The appropriate atmospheric conditions made it feasible for the astronomers to see the stars **and they could even distinguish the sizes.**

- a) And even distinguish the sizes
- b) And they were even
- c) And he could even distinguish the sizes.
- d) And even distinguishing the sizes

18) **Due to these reasons** we are all in favour of universal compulsory education.

- a) Out of these reasons
- b) For these reasons
- c) By these reasons
- d) No improvement needed

19) Ranthambore National Park houses endangered species of tiger that **cannot be find anywhere else in the** whole country

- a) Cannot be found anywhere else in the
- b) Cannot be found anywhere other in
- c) Cannot found any other place in the
- d) No improvement needed

20) It is also proof that no government now can justify its existence without giving topmost priority to **the common people and there problem.**

- a) The common people and their problems
- b) The common people and other problems
- c) The common people and his problems
- d) The common people and the other problems

21) For as long as she could remember, Divya has loved **to cook, to dance, and, until her poor vision made it impossible for her to do so**, reading books.

- a) To cook, to dance, and, until her poor vision made it impossible for her to do so.
- b) Cooking, to dance, and, until her poor vision made it impossible for her to do so.
- c) Cooking, dancing, and, until her poor vision made it impossible for her to do so.
- d) To cook, to dance, and, until she lost her vision
- e) Cooking, dancing, and, until she lost her vision

22) But which director from bollywood would remake this film, **will be made secret** for the time being.

- a) Is being kept a secret
- b) Is being secret
- c) Can be secret
- d) Will be kept the secret

23) A conjunction is used to connect words and sentences together.

- a) words and sentences together
- b) words or sentences together
- c) words and sentences
- d) words or sentences
- e) words to sentences.

24) Antony, coming alongside Cleopatra's ship, climbed aboard without seeing or being seen by her.

- a) climbed aboard without seeing or being seen by her.
- b) climbed aboard without seeing Cleopatra or being seen by her
- c) climbs aboard without Cleopatra seeing him
- d) boarded without being seen by her
- e) boarded without seeing Cleopatra.

25) Bombast is when high sounding words for effect, not suitability, are used.

- a) is when high sounding words for effect, not suitability, are used.
- b) is the use of high-sounding words for effect rather than for suitability.
- c) is where high-sounding words are used for effect not suitability.
- d) is the using of high-sounding words for effect only.
- e) is when you use high-sounding words for effect rather than for suitability.

26) I would like to thank whoever it was that wrote that piece of music; it has given me so much pleasure.

- a) I would like to thank whoever it was that wrote that piece of music
- b) I would like to thank whomever it was that has written that piece of music

- c) I would like to thank whomever it might be that wrote that piece of music
 d) Whoever it was that wrote that piece of music, I would like to thank because
 e) I would like to thank whoever it was that wrote that piece of music

27) Your taking a loan to buy a car annoyed Father.

- a) Your taking a loan to buy a car annoyed Father
 b) Your taking a loan to buy a car aggravated Father.
 c) You taking a loan to buy a car irritated Father.
 d) You taking a loan to buy a car annoyed Father.
 e) Father was annoyed by you taking a loan to buy a car.

28) In the initial stages of learning a new language we learn more through listening and attempting to copy speech patterns and not through reading grammar books.

- a) and attempting to copy speech patterns and not through reading grammar books.
 b) and attempting to copy speech patterns than through reading grammar books.
 c) and attempts to copy speech patterns than through reading grammar books.
 d) and attempts at copying speech patterns than through reading grammar books.
 e) and attempts at copying speech patterns and not grammar books.

29) Between you and I, I doubt that he will come

- a) and I, I doubt that he will come. b) and I, I doubt that he would come.
 c) and me, I doubt that he will come d) and me, I doubt that he would come.
 e) and me, I doubt whether he will be coming.

30) Work that is not finished is not work at all, it is merely a botch, a failure.

- a) all, it is merely a botch, a failure. b) all, it is a botch merely, and a failure.
 c) all; it is merely a botch, a failure. d) all; the work merely is a botch and a failure.
 e) all; the work being merely a botch, a failure.

SENTENCE COMPLETION

Select the correct option that fills the blanks to make the sentence meaningfully complete.

1) The teacher announced in the exam hall, 'All you have hour'.

- a) is an b) are an c) is the d) a

2) Months have passed and no action been taken for a dowry harassment case filed against the in-laws

- a) has b) have c) had d) none

3) Aspirations of minorities cannot be kept in check the gun.

- a) with b) through c) by d) from

4) A person's shadow _____ always beside him/her, no matter what.

- a) is b) stays c) walks d) be

5) The room is more expensive because it has a spectacular view the beach

- a) of b) from c) for d) to

6) The note book used by _____ Ever green society are made by recycled paper.

- a) a b) an c) the d) all

7) What were the servants dogs doing when the robbery _____ place

- a) Take b) Took c) Was in d) Were in

8) Nothing convinced her to cancelled her trip to goa.

- a) could have b) have c) had d) has been

9) His coach tells me that he _____ in the league since he was sixteen years old

- a) has played b) will be playing c) is playing d) has been playing

10) She studied _____ entire chapter for an hour before the examination

- a) In the b) the c) of the d) for the

11) After being promoted ,she is not bothered_____the office gossip about her private life

- a) for b) in c) from d) by

12) The meeting in the office was held behind _____ doors

- a) close up b) closing c) close d) closed

13) Rima is afraid of travelling by flight as she fears during take _____ and landing

- a) on b) up c) off d) away

14) There was a lot of cheating_____ the test in the class

- a) in b) at c) around d) during

15) Had to look up for another hotel as Hotel Paradise did not have any rooms. They were completely _____

- a) booked b) vacant c) closed d) filled

16) Microsoft created a revolution _____ making the personal computer affordable for the middleclass.

- a) Following b) After c) By d) Through

17) We need more effective leaders and therefore we need to groom _____ leaders.

- a) Enhanced b) Good c) Better d) Best

18) The rival team won the match _____ they played well

- a) but b) because c) and d) for

19) All the efforts of the batsman went _____ vain as the bowlers failed to perform well.

- a) in b) and c) for d) off

20) Mentally he not been the same after his near fatal accident

- a) Has b) Was c) Have d) Is e) Had

21) USA based industry experts should focus more _____ the agriculture sector from a farmer's viewpoint.

- a) to b) at c) on d) for e) in

22) Today _____ the inaugural day of the pub, the drinks were served free of cost.

- a) Was b) Been c) Is d) Being

23) The business _____ incurring losses since early September

- a) Is being b) Had being c) Has been d) Is been

24) The bellboy is responsible _____ the morning wakeup calls.

- a) to b) for c) of d) in

25) But now a few of them are being _____ to offer tourists a comfortable stay in an ecological setting.

- a) Spruced b) Spruced up c) Spruced on d) Spruced at

26) She has _____ in Chennai, since she was 8.

- a) been living b) live c) lives d) lived

27) Countries which _____ still undergoing the economic processes _____ known as developing countries.

- a) were, are b) are, were c) are, are d) is, are e) are, is

28) He _____ the position of group leader because of his effective leadership skills.

- a) Got b) Get c) Gotten d) Getting

29) _____ the shirt was washed twice, still he refused to wear it

- a) Though b) Because c) However d) Since e) While

30) Salim could not make it to the party as he _____ to finish his assignment.

- a) Has b) Had c) Have d) want

31) He had no interest in _____ obligatory dinners and social events.

- a) Attend b) Attending c) Attends d) Attend to

32) Sunitha has a flair _____ music

- a) At b) To c) With d) For

33) The glass lay _____ on the table

- a) Not touched b) Untouched c) Untouching d) Not touch

34) All members will have a fixed five year

- a) Tenet b) Tenor c) Tenure d) Tenement

35) The car is in such terrible state It can cause serious damage.

- a) thus b) since c) that d) so

36) negligence of the transport company, lot of our goods were damaged in transit.

- a) Since the b) Due to c) Despite of d) Reason being

37) Sincere people remain loyal their friends in all circumstances.

- a) Against b) in c) by d) with e) to

38) We urgently need to recruit a counsellor the vacant position.

- a) On b) for c) at d) in

39) All is the fastest runner all the students.

- a) Between b) in middle of c) among d) in between

40) We were thinking it something like a requiem for our age.

- a) For, because b) for, as c) of, since d) of, as

41) If Mr. Sharma didn't stop hunting better deals now, he would lose the opportunity buy this attractive mobile phones.

- a) For, to b) in, to c) to, for d) for, that

42) Suddenly, the television blacked out as there was some issue in the signal

- a) Transmission b) transfer c) transformation d) transition

43) Successful people inspire many others to follow path

- a) Ones b) their c) his d) the

44) It was a see-saw battle but Manpreet ahead in the third round for the win.

- a) Flowed b) ebbed c) perched d) surged e) receded

45) The magazine is all style and little

- a) Readability b) substance c) worth d) meaning

46) The power of music is known us all capacity to improve our holistic health is perhaps underestimated.

- a) by, but the b) by, but its c) to, but its d) to, but it has e) by, but it has

47) Hardly a day goes when I don't remember all those great people who had gathered my home on his birthday.

- a) out, in b) by, in c) through, on d) for, on

48) "We need to call this, " Monika demanded.

- a) out b) at c) off d) away

49) The company wants to ... cost-cutting measures before it starts to incur losses.

- a) reduce b) modify c) moderate d) initiate

50) All the history books belonging to the Mughal period have been from Sanskrit to English

- a) transferred b) dictated c) translated d) dubbed

51) An honest man never to lies in order to fulfill his goals.

- a) helps b) tells c) resorts d) forms

52) The protracted illness has reduced him skeleton.

- a) Till b) round c) through d) to e) from

53) Films are becoming a medium of cultural contacts, good relations and among different countries.

- a) wars b) love c) harmony d) conformity

54) Do not move towards the car you've finished your milk.

- a) As b) while c) until d) inspite

55) The student searched the book, he was certain that it was somewhere his cupboard.

- a) of, in b) for, on c) for, in d) in, in

56) I always wanted a basket ball and I-Pod in my collection.

- a) the b) a c) an d) none of the above

57) The institute reserves the right to make any change in the items in the itinerary.

- a) Contains b) contained c) contain d) include

58) The origin of Attention Defecit Disorder (ADD), as believed by many medical experts can be congenital, whereas others believe it to be

- a) exogenous b) deleterious c) pathological d) environmental e) celestial

59) In any case, it seems like a travesty to reduce Gandhian values to a ban on liquor.

- a) prosaic b) characterizes c) imaginative d) outdated

60) Astronauts have completed a major mission in space. It was a replacement of the fuel tank in one of the space stations.

- a) concerns b) concern c) concerning d) concerned

61) The great epics of ancient India took shape in the course of several 100 years, and many additions were made to them.

- a) Following b) then c) subsequently d) otherwise

62) Usually the room tariff in this hotel is higher. At present, it is low because of the season.

- a) peak b) off c) down d) slow e) full

63) The climate hotter day by day because of global warming.

- a) was getting b) were getting c) is getting d) was gotten

64) My computer needs upgradation since it _____ a very old version.

- a) is b) was c) were d) must

65) The market was full of people _____ attractive clothes of different styles.

- a) having b) showing c) wearing d) watching

66) Rakesh had bought the book for me. I _____ him Rs.500.

- a) Owe b) lend c) give d) borrow

67) She _____ at a shop.

- a) works b) work c) working d) be working

68) I _____ been regularly exercising for quite a few days now

- a) Had b) Has c) Will have d) Have

69) Did you _____ cereal for breakfast?

- a) Had b) Have c) Ate d) Eaten

70) The new television set was delivered _____ damage condition.

- a) From b) At c) On d) In

71) The leaves _____ yellow and dry.

- a) is b) was c) were d) are

72) That is a moving story -----

- a) that had survived the centuries b) that has survived the centuries
c) which is survived by the centuries. d) that is a survival in the centuries

73) The long, lone hours on the trail gave doug a chance -----

- a) to get himself to know better b) for getting to know himself better
c) to get to know himself better d) in getting better to know himself

74) He had -----his face grow larger than they should.

- a) A unique disease that made bones from
b) a rare disease that made the bones of
c) an unnatural disease that will make the bones of
d) a special disease that made bones in

75) The girl ----- a defect in her nervous system

- a) was unable in feeling pain because of b) was disabled to feel pain in
c) was incapacitated to feel pain because of d) was unable to feel pain because of

76) As soon as the plane ----- to a hospital

- a) landed,he was rushed b) was landing ,he was rushed
c) was grounded,he was rushed d) could be landed,he went rushing.

77) You try to -----when you want to control your laughter

- a) put a brave face b) make a face
c) keep your hair on d) keep a straight face

78) They ----- TV ever since they came.

- a) Watched b) have watched
c) have been watching d) should watch

79) A Pakistan cricketer last played a match in Jan 2006. _____ from his ankle fracture

- a) Yet he is recovered. b) he has still recover.
c) he is yet to recover. d) he is yet to recovered.

80) He is -----to acquire knowledge but also to display it.

- a) not only anxious b) anxious not only
c) only anxious not d) only not anxious

81) Mary goes to work _____

- a) By walking b) By walk c) On foot d) While walking

82) I always _____ the same mistake

- a) Seem to do b) Prefer to make
c) Seem to make d) Appear to do

83) _____ Bangalore is an expensive city

- a) Majority of the people tell b) Most people are telling
c) Most of the people speak d) Majority of the people say

84) A rather _____ students having trouble in economics

- a) Large amount b) Large group
c) Large proportion d) Large number

85) The books are inlibrary.

- a) The b) An c) A d) None of these

86) We jumped ---- the water

a) Into b) Onto c) Upto d) Through

87) The passengers stood ----- the burnt bus

a) On b) Near c) Up d) To

88) I will try not to let the words ----- me

a) Out of b) Into c) Onto d) Upto

89) The bells ----- loudly

a) Rang b) Rings c) Has rang d) Are rang

90) Do you have ----- dictionary that I can borrow?

a) An b) A c) Either d) None of these

91) The major and governor ____ that the bill will soon become a law

a) Announced b) Announce c) Will announced d) Announcing

92) The boy dressed ____ well

a) Impeccably b) Shoddy c) Impious d) Iniquitous

93) He _____ his camera on the railway.

a) Laid b) lay c) lain d) None of these

94) After the present Tax holiday period _____ the power cost to users may become _____

a) starts, unreasonable b) sets, perishable
c) ends, less d) enhances, negligible e) ends, intolerable

95) I have a distaste _____ publicity

a) For b) about c) against d) at

96) Of the two proposal put forward, I prefer the _____

a) Late b) other c) later d) latter e) None of these

97) My mother has been _____ in bed all morning.

a) Lying b) lieing c) laying d) laid e) None of these

98) It's usually hotter _____ this in July.

a) Than b) then c) them d) there e) None of these

99) Jane is _____ interesting person. You should meet her.

a) a b) an c) the d) thee e) None of these

100) The books from the library _____ to be returned by Friday

a) need b) needs c) needed d) needs

101) The group of children from that school _____ never seen the ocean

a) has b) have c) is d) are

102) Johny together with his friends, _____ going out

a) enjoy b) enjoys c) enjoying d) have

SENTENCE SELECTION

1) Which of the following sentence is grammatically correct?

- a) Younis has played twenty matches last year
- b) Younis have played twenty matches last year
- c) Younis have been played twenty matches last year
- d) Younis had been played twenty matches last year

2) Which of the following sentences is grammatically correct?

- a) Some of the books lying on the table is not needed for this exam
- b) Some of the books lying at the table is not needed for this exam
- c) Some of the books lying at the table are not needed for this exam
- d) Some of the books lying on the table are not needed for this exam
- e) Some of the books lying over the table is not needed for this exam

3) a) Men in my office love to take longer coffee breaks.

b) The men in my office love taking long coffee breaks

c) Men at my office take long coffee breaks and they love it.

d) Taking long breaks for coffee is what men in my office love to do

4) a) My laptop was stolen at the airport yesterday while I was waiting

b) They had stolen my laptop yesterday at the airport while I was waiting

c) I was waiting at the airport yesterday when they stole my laptop.

d) While I was waiting at the airport yesterday, my laptop was stolen

5) a) The hostess found out that there was no more drink in Arvind's glass.

b) The hostess noticed that there was no more drink in Arvind's glass.

c) The hostess noticed that Arvind's glass could contain no more drink

d) The hostess identified that Arvind's had no more to drink in his glass.

6) a) General intelligence is essential for outstanding achievement because it involves one's natural ability to comprehend difficult concepts quicker and to analyze them clearly.

b) General intelligence is essential in outstanding achievement because it involves the natural ability of one in comprehending difficult concepts more quicker and to analyze them clearly

c) General intelligence is essential for outstanding achievement because it involves one's natural ability to comprehend difficult concepts quicker and analyzing them with clearness

d) General intelligence is essential for outstanding achievement because it naturally involves one's ability to comprehend difficult concepts quicker and an analysis of them clearly.

7) a) I enjoyed a visit to the museum; It was far interesting than I expected

b) My visit to the museum was by far interesting so I enjoyed it

c) I enjoyed the visit to the museum; It was far more interesting than I had expected

d) I enjoyed our visit to the museum as it was far more interesting than we expected.

8) a) This year's college trip to Simla was the most enjoyable vacation I have ever had.

b) This year's college trip to Simla was a more enjoyable vacation I had.

c) The most enjoyable college trip I ever have was the Simla trip of this year.

d) I have enjoyed this year's college trip in Simla to the utmost.

9) a) To prepare himself, he subjected himself to two weeks of intensive training on the Indonesian island of Java, climbing the volcano near Bandung 25 times, spend nights in the open and to test to see how long he could hold out without food.

b) To prepare himself, he subjected himself to two weeks of intensive training on the Indonesian island of Java, climbing the volcano near Bandung 25 times, spending nights in the open and to test to see how long he could hold out without food

c) In preparation for himself, he subjected himself to two weeks of intensive training on the Indonesian island of Java, climbing the volcano near Bandung 25 times, spending nights in the open and testing to see how long he could hold out without food

d) To prepare himself, he subjected himself to two weeks of intensive training on the Indonesian island of Java, climbing the volcano near Bandung 25 times, spending nights in the open and testing to see how long he could hold out without food.

10) a) If Ram doesn't pay the mortgage to his house on time, he will be out in the street.

b) Ram will be out in the streets if he does not pay mortgages of his house in time.

c) If Ram does not pay mortgage to his house he will be out of the streets on time

d) If Ram does not pay the mortgage on his house on time, he will be out on the streets.

11) a) At a time when so many skilled workers are out of work, it will be easy to fill the vacancy

b) When so many skilled workers are not working, it will be easy to fill the vacancy

c) To fill the vacancy won't be a problem, as so many workers are there

d) With so many skilled workers being there, it won't be a problem filling vacancies

JUMBLED SENTENCES

In the question each passage consists of six sentences. The first and the sixth sentences are given in the beginning. The remaining are jumbled up and assigned labels : P,Q,R & S.

1) S1: Once upon a time an ant lived on the bank of river.

P: The dove saw the ant struggling in water in a helpless condition.

Q: All its efforts to come up is failed.

R: One day it suddenly slipped in to water.

S: A dove lived in the tree on the bank not far from the spot.

S6: She was touched.

a) RQSP

b) QRPS

c) SRPQ

d) PQRS

2) S1: Rajeev and his friends went for river rafting.

P: Rajeev forced him to have some medicine.

Q: They tried persuading him to join them for rafting, but he had severe stomach ache.

R: Which he refused adamantly

S: Among all his friends, Kunal backed out at the last moment.

S6: Later they all came to know that he is aqua phobic.

a) PSQR

b) QPRS

c) RQSP

d) SQPR

3) S1: The three colonial cities - Calcutta, Bombay and Madras were born at around the same time.

P: Sadly today it has also become the most virulent symbol of the violent trends in body politic that is tearing apart the society along suicidal lines.

Q: Of the three, Bombay had been most enterprising in industrial and commercial exploration.

R: Whether it is one caste against other or the most pervasive of all trends - Hindus against Muslims.

S: It is indeed a metaphor for modern India.

S6: This is about two tales of a city.

a) PQRS b) QPRS c) QSRP d) SPQR

4) S1: He plans to start his own business.

P: All of them have refused his application for being a novice.

Q: He has approached several banks for a loan.

R: Now he plans to acquire essential business skills first.

S: For that he needs some initial investment.

S6: Mastering adequate business skills is of utmost importance.

a) PSQR b) QSPR c) SQPR d) SPRQ

5) S1: Samina has won a competition.

P: She had to recognize the name of the movie through its famous dialogue.

Q: This was the first time she was lucky and won herself a free trip to Goa.

R: She has never won any contest.

S: They were running it on the television for weeks.

S6: Unfortunately she has already been to Goa twice.

a) SPRQ b) QPSR c) PRSQ d) SQPR

6) S1 : Venice is a strange and beautiful city in the north of Italy.

P: There are about 400 old stone bridges joining the island of Venice.

Q: In this city there are no motor cars, no horses and no buses.

R: These small islands are near one another.

S: It is not an island but a 117 islands.

S6: This is because Venice has no streets.

a) PQRS b) PRQS c) SRPQ d) PQSR

7) S1: Hunger lurks unseen in every village and city of our country.

P: What goes unrecognized is that death of starvation is only the most dramatic manifestation of a much more invisible malaise-of pervasive, stubborn, chronic hunger.

Q: Yet it surfaces into public consciousness only transiently, in moments when there are troubling media reports of starvation deaths.

R: Among these are entire communities, utterly disenfranchised and asset less.

S: And, that there are millions of forgotten people in India who live routinely at the very edge of survival, with hunger as a way of everyday life.

S6: Like the Musahaars, a proud and savagely oppressed Dalit community in Bihar and Uttar Pradesh, who own not even the land on which their tenuous homesteads are built

a) RQPS b) QSPR c) PSRQ d) QPSR

8) S1: I keep on flapping my big ears all day.

P: They also fear that I will flip them all away.

Q: But children wonder why I flap them so.

R: I flap them so to make sure they are safely there on either side of my head.

S: But I know what I am doing.

S6: Am I not a smart, intelligent elephant?

a) SRQP b) QPSR c) QPRS d) PSRQ

9) S1: There is difference between Gandhiji's concept of secularism and that of Nehru's.

P: Nehru's idea of secularism was equal indifference to all religions and bothering about none of them.

Q: According to Gandhiji, all religions are equally true and each scripture is worthy of respect

R: Such secularism which means the rejection of all religions is contrary to our culture and tradition.

S: In Gandhiji's view, secularism stands for equal respect for all religions S6: Instead of doing any good, such secularism can do harm instead of good.

a) SQPR b) PSQR c) QSPR d) PRSQ

10) I saw that

P: but seeing my host in his mood

Q: i deemed it proper to take leave

R: as i had frequently done before

S: it had been my intention to pass the night there

a) QPRS b) QRPS c) SPQR d) SRPQ

11) S1: Hi sandeep, hope all is well with you

P: We all went for a short trip last weekend to rishikesh for camping and drafting.

Q: It was a lot of fun as we all stayed in camp at the river side.

R: Everybody here is doing great.

S: There weren't many rapids in the river this year due to less rain

S6 : Nonetheless we had great fun while rafting

a) PSRQ b) SPQR c) RPQS d) QPRS

12) S1: Politeness is not a quality possessed by only one nation or race.

P: One may observe that a man of one nation will remove his hat or fold his hands by way of greetings when he meets someone he knows.

Q: A man of another country will not do so.

R: It is a quality to be found among all peoples and nations in every corner of the earth.

S: Obviously each person follows the custom of his particular country

S6: In any case, we should not mock at others habits

a) RPQS b) RPSQ c) PRQS d) QPRS

13) S1: Sameer has not been coming to office since last week.

P: Doctors have advised him complete bed rest for 15 days.

Q: He had six fractures and was rushed to the hospital.

R: He met with a serious accident a few days ago.

S: I think he would be on leave for this whole month.

S6: Since his plaster will be removed after 30 days.

a) RQPS b) PSQR c) SPRQ d) QPRS

14) S1: Take the case of a child raised under slum conditions, whose parents are socially ambitious and envy families with money, but who nevertheless squander the little they have on drink.

P: Common sense would expect that he would develop the value of thrift ; he Would never again endure the grinding poverty he has experienced as a child.

Q: He may simply be unable in later life to mobilize a drive sufficient to overcome these early conditions

R: But in fact it is not so.

S: The exact conditions are too complex but when certain conditions are fulfilled, he will thereafter be a spendthrift.

S6: This is what has been observed in a number of cases.

a) SRQP b) PQRS c) PRSQ d) QPRS

15) S1: Rahul has been trying to lose weight

P: as regular morning walks keep our body fit and healthy

Q: the trainer has suggested him to start with regular morning walk

R: he has not yet started his daily walk

S: he says that because of the late night work, it is hard for him to get up early

S6: i think it is just a lame excuse for his laziness

a) PRSQ b) QPRS c) RQPS d) SQRP

16) S1: Ms. Parasuram started a petrol pump in Madras

P: A total of twelve girls now work at the pump

Q: She advertised in newspapers for women staff

R: They operate in two shifts

S: The response was good

S6: Thus she has shown the way for many others

a) PQRS b) RSPQ c) PRSQ d) RSQP

17) People

P: at his dispensary

Q: went to him

R: of all professions

S: for medicine and treatment

a) QPRS b) RPQS c) RQSP d) QRPS

18) S1: On vacation in Tangier, Morocco, my friend and I sat down at a street café.

P: At one point, he bent over with a big smile, showing me a single gold tooth and a dingy face.

Q: Soon I felt the presence of someone standing alongside me.

R: But this one wouldn't budge.

S: We had been cautioned about beggars and were told to ignore them.

S6: Finally a man walked over to me and whispered, "Hey buddy... this guy's your waiter and he wants your order"

a) SQRP b) SQPR c) QSRP d) QSPR

19) He told us that

P: and enjoyed it immensely

Q: in a prose translation

R: he had read Milton

S: which he had borrowed from his teacher

a) RSQP b) QRPS c) RQSP d) RQPS

20) S1: My uncle,

P: that has been built in the country districts of India

Q: camping out in the inspection Bungalows

R: who is a government engineer

S: frequently has to stay for several days in very remote places.

S6: for this purpose.

a) SRQP b) RSQP c) RQSP d) RSPQ e) SQPR

21) S1: Today in the morning, I did not feel like having breakfast.

P: By the time I reached office, my head was spinning

Q: I ate only one apple and left for my work

R: The doctor prescribed me a few medicines, and told me to have a nutritious meal

S: I was rushed to see the doctor, as I had fainted on my desk.

S6: Finally, I ended up having a huge supper before going to bed.

a) RSPQ b) SPQR c) QPSR d) QSRP

22) S1: My daughter was born in the year 2005

P: She was a quick learner from the beginning

Q: She could recite poems at two years of age.

R: We put her in kindergarten when she was two and a half years old.

S: She started walking when she was eleven months old

S6: She was one of the brightest kids in her whole class.

a) RQSP b) SQPR c) QSRP d) PSQR

23) S1: Soumitra lost his wallet today in the market

P: He had all his cards and money in the wallet

Q: This surely would avoid any kind of credit card forgery

R: He is more worried about the credit cards than the money

S: The best thing would be to call the bank and block all his cards

S6: Apart from calling the bank, he should also launch an FIR.

a) RSQP b) PRSQ c) QPRS d) SQPR

SENTENCE FORMATION

1) A. to B. he talked C. after D. he learned E. study regularly

a) BCDAE b) DAEBC c) CDBAE d) CBDAE

2) It was

P: In keeping with mood

Q: a soft summer evening

R: as i walked sedately

S: in the direction of the new house

a) SRPQ b) QRPS c) QPRS d) SQPR

3) We have to

P: as we see it

Q: speak the truth

R: there is falsehood and darkness

S: even if all around us

a) RQSP b) QRPS c) RSQP d) QPSR

4) A. disappointed if B. not fulfilled C. do not be D. or E. promises are
F. friends let you down

a) CFDAEB b) CABDEF c) CAFDBE d) CAFDEB e) CBAEDF

5) A. nor Raj B. is going C. to attend the class D. neither Rahul

a) DBCA b) ABCD c) DABC d) ADBC e) CDAB

SENTENCE IMPROVEMENT

Improve the sentence by selecting the correct alternative to the italicized part of the sentence.

1) As per the weather *prediction*, it will rain heavily for the next one week.

a) Observation b) report c) forecast d) news

2) There is a *plethora* of flora and fauna in the Indian subcontinent

a) Destruction b) dearth c) uniformity d) abundance

3) The election *verdict* was quite surprising as the ruling party was re-elected for the first time in fifty years.

a) Judgment b) order c) chaos d) decision

4) But which director from bollywood would remake this film, *will be made secret* for the time being.

a) is being kept a secret b) is being secret
c) can be secret d) will be kept the secret

5) Suraj *tipped* the policeman to avoid legal implications of breaking the traffic rules.

a) Begged b) cheated c) bribed d) fooled

6) Contrary to my belief, he turned out to be *peevish*.

a) Proud b) irritable c) selfish d) greedy

7) He lost all the money gambling, primarily because of his *avarice*

a) Greed b) Negligence c) Foolishness d) Luck

PARAGRAPH FORMATION

1)

1. A study to this effect suggests that the average white-collar worker demonstrates only about 25% listening efficiency.

2. However, for trained and good listeners it is not unusual to use all the three approaches during a setting, thus improving listening efficiency.
 3. There are three approaches to listening: listening for comprehension, listening for empathy and listening for evaluation.
 4. Although we spend nearly half of each communication interaction listening, we do not listen well.
 5. Each approach has a particular emphasis that may help us to receive and process information in different settings.
- a) 15432 b) 23451 c) 35241 d) 43215

VERBAL ANALOGIES

- 1) Battle : war ::
 a) Voice: vibration b) Ribbon: Printer
 c) Trance: narcotic d) shred: wood
- 2) Museum is related to curator in the same way prison is related to?
 a) Monitor b) Manager c) Jailor d) Warden
- 3) Mine is to I as his is to?
 a) Him b) He c) His d) None of these
- 4) Surplus is to sufficient then ___ is to need
 a) Gathering b) Demand c) Excess d) Storage
- 5) Laughter : Happiness
 a) Suffering: dejection b) tears: sorrow
 c) joy: elevation d) knowledge : capability
- 6) Haemoglobin: blood
 a) Chlorophyll: plant b) chloroplast: cell
 c) microtin: lymph d) bile: hormone
- 7) Agreement: Dissent
 a) Latitude: Resistance b) Schism: Diverge
 c) Impasse: Concede d) Touchdown: Penalty
- 8) Horse is to grass automobile is to
 a) brake oil b) petrol c) water d) None of these
- 9) "Horse" is related to "Hoof" in the same way "Eagle" related to
 a) leg b) foot c) clutch d) claw

10) DAM is related to WATER in the same way as EMBARGO is related to
 a) over b) trade c) stream d) liver

11) CELL is related to TISSUE in the same way as TISSUE is related to:
 a) Object b) Ear c) Organ d) Limb

CHOOSING THE CORRECT WORD

- 1) Choose the correct word
 a) kaleidoscope b) Kaleidoscope c) Kaleidocope d) Kaleidoscope
- 2) choose the correct one
 a) adhesive b) abusive c) applauses d) accomplice e) all are correct
- 3) choose the wrong one
 a) corruption b) eruption c) emidite d) erroneous e) all are correct

THEME DETECTION

Read the passage below and then choose the best answer to the question. Answer the question on the basis of what is stated or implied in this passage.

1) Experienced truck drivers often travel in a convoy--a group of trucks that are traveling to the same Part of the country Convoys can help truckers to stay alert. The author implies that professional long-distance truck drivers may avoid traveling alone because:
 a) They might drive too fast.
 b) They want to arrive before anyone else.
 c) Accidents happen more frequently to lone truck drivers than to car drivers who travel alone.
 d) Long-distance travel can cause drowsiness

2) Huge beasts such as the dinosaur have never really become extinct. Mothra, a giant caterpillar who later becomes a moth, destroys Tokyo, and stars in the 1962 Japanese film named for him. Mothra is born, dies, and reborn regularly on classic movie channels. In Japan Mothra is one of the most popular films ever made. Mothra has survived the creation of more current scary creatures such as giant apes, extraterrestrial beings and swamp creatures. More than 30 years after his creation, Mothra still lives.
 The main subject of the passage is:
 a) the reasons that fads do not endure

- b) the lasting appeal of Mothra
- c) the difficulty of marketing good horror movies
- d) old models for creatures are still used because making new monsters is expensive

3) The Earth's past climate--including temperature and elements in the atmosphere--has recently been studied by analyzing ice samples from Greenland and Antarctica. The air bubbles in the ice have shown that, over the past 160,000 years, there has been a close correlation between temperature changes and level of natural greenhouse gases carbon dioxide and methane. One recent analysis from Greenland showed that at the end of the last glacial period (when the great ice sheets began to retreat to their present position), temperatures in southern Greenland rose from 5 to 7 degrees in about 100 years.

Air bubbles are not the only method of determining characteristics of the Earth's ancient climate history. Analysis of dust layers from ancient volcanic activity is another such method; as is the study of ice cores, which interpret past solar activity that may have affected our climate.

1) This passage states that:

- a) the Greenhouse effect is destroying the planet's atmosphere.
- b) temperatures in Greenland have been unusually stable over the past 100 years.
- c) there is more than one kind of information that scientists can use to determine the characteristics of the Earth's early climate.
- d) solar energy is the wave of the future.

4) Before video cameras were widely used, home and business owners had to rely only on written reports and photos as a way to document their valuables for insurance purposes. This form of documentation was difficult for some insurance policy holders. They found it was easy to lose lists, forget to add new items they purchased, or delete items they no longer had. As a result these insurance inventories were often inaccurate.

While videotaping is not an option for every home or business owner, this kind of insurance documentation is helpful for some.

1) How are these passages related?

- a) They repeat the same idea.
- b) They contradict one another.
- c) They compare two forms of written documentation.
- d) They present a problem and a solution.

5) French physicist Charles Fabry found ozone gas in the atmosphere in 1913. At room temperature, ozone is a colorless gas; it condenses to a dark blue liquid at -170 F. At temperatures above the boiling point of water, 212 F, it decomposes.

Ozone is all around us. After a thunderstorm, or around electrical equipment, ozone is often detected as a sharp odor. Ozone is used as a strong oxidizing agent, a bleaching agent, and to sterilize drinking water. This gas is also highly reactive. For example, rubber insulation around a car's spark plug wires will need to be replaced eventually, due to the small amounts of ozone produced when electricity flows from the engine to the plug.

These passages imply that:

- a) Ozone is the result of pollution.
- b) High ozone levels in the atmosphere will cause large numbers of people to buy new car batteries.
- c) Ozone has no practical uses.
- d) Ozone is a natural part of the Earth's atmosphere.

6) Many people who have come close to death from drowning, cardiac arrest or other causes have described near-death experiences--profound, subjective events that sometimes result in dramatic changes in values, beliefs, behavior, and attitudes toward life and death. These experiences often include a new clarity of thinking, a feeling of well being, a sense of being out of the body, and visions of bright light or mystical encounters. Such experiences have been reported by an estimated 30 to 40 percent of hospital patients who were revived after coming close to death and about 5 percent of adult Americans in a nationwide poll. Near-death experiences have been explained as a response to a perceived threat of death (a psychological theory); as a result of biological states that accompany the process of dying (a physiological theory); and as a foretaste of an actual state of bliss after death (a transcendental theory).³

1) The primary purpose of this passage is to:

- a) Entertain b) persuade c) inform d) express disbelief in the afterlife

7) In most cases little birds lay little eggs. The kiwi is an astonishing exception to this rule--it is a smallish bird that lays a big egg. The kiwi, a flightless bird found in New Zealand, weighs about four pounds, and its egg weighs, believe it or not, about one pound. That is one-fourth of the bird's body weight! If an ostrich laid an egg that was in the same proportion to the ostrich as the kiwi egg is to the kiwi, an ostrich egg would weigh a whopping seventy-five pounds instead of the usual three pounds.

1) Which statement below best describes the organizational method used in this passage?

- a) Description b) comparison/contrast c) Chronological d) cause/effect

8) Harold a professional man who had worked in an office for many years had a fearful dream. In it, he found himself in a land where small slug-like animals

with slimy tentacles lived on people's bodies. The people tolerated the loathsome creatures because after many years they grew into elephants which then became the nation's system of transport, carrying everyone wherever he wanted to go. Harold suddenly realized that he himself was covered with these things, and he woke up screaming. In a vivid sequence of pictures this dream dramatized for Harold what he had never been able to put in to words; he saw himself as letting society feed on his body in his early years so that it would carry him when he retired. He later threw off the "security bug" and took up freelance work.

- 1) In his dream Harold found the loathsome creatures
- a) in his village
 - b) in his own house
 - c) in a different land
 - d) in his office

9) Today perhaps your only association with the word 'polio' is the Sabin Oral Vaccine that protects children from the disease. Fifty five years ago this was not so. The dreaded disease, which mainly affects the brain and spinal cord, causing stiffening and weakening of muscles, crippling and paralysis - which is why I am in a wheelchair today. If somebody had predicted, when I was born, that this would happen to me, no one would have believed it. I was seventh child in a family of four pairs of brothers and sisters, with huge 23 year gap between the first and last was so fair and brown haired that I looked more look like a foreigner than a DawoodBohri. I was also considered to be the healthiest of the brood.

- 1) In this passage, the word 'brood' refers to
- a) Polio victims
 - b) Foreign children
 - c) Children in the family
 - d) Indian Children

10) A bar code consists of a printed series of wide, vertical lines that represent a numerical code. The Universal Product Code (UPC) is the standard bar-code format that lists the manufacturer's identification number and a product identification number. An optical scanner can read the bar code and the attached computer can match the product number with a list in its database.

- 1) According to this passage, a bar code
- a) is the same thing as a UPC.
 - b) is an optical scanner.
 - c) is put on products to discourage forgery.
 - d) Represents a numerical code.

11) Shooting a cat with a BB gun or anything else is animal cruelty and is illegal. The recent incident in our neighborhood should be reported to the Society for the Prevention of Cruelty to Animals, the local humane society, or the police. We must as a community band together to find the perpetrators, prosecute them, and get the person or persons into some serious counseling program. It's

important for all of us to be watchful and to speak up about this horrific behavior. These incidents must be stopped before these individuals cause even more serious harm.

- 1) In the above paragraph, which of the following best describes the author's tone?
- a) Happy about the situation
 - b) Biased in favor of cats
 - c) Angry about the situation
 - d) Depressed about the situation

12) Piccadilly Circus was full of loneliness. It seethes and echoes with it. To live near it. Looking down on it is a discomforting exercise. You can't feel the pulse of London here, though people expect to. To Londoners it is a maddening obstruction between one place and another, and few voluntarily linger there. The only locals are those who live off the lingerers; the lingerers are primarily sightseers, with a fair sprinkling of people hoping to draw attention to themselves - both typically from the provinces. They have come to see the heart of London and expect to see spectacle, glamour and vice.

- 1) Piccadilly circus is
- a) the name of a circus company
 - b) a lonely and resounding old building
 - c) a centrally located area in London
 - d) a huge heap of ruins

13) Bologna, Italy, is a city with 26 miles of covered walkways dating from the 1200s. The atmosphere of this beautiful city and its residents envelope you like a warm hug. In the center piazza of the city are two leaning towers, forming the most notable landmarks. Around the corner is the famous Roxy coffee bar, a hangout for many of the young university students who are studying medicine and political science. The nearby open marketplace bustles with color and excitement. Listening closely; you can hear many languages spoken by the tourists who visit each year.

- 1) In the paragraph above, which of the following best states the main idea of the passage?
- a) Bologna is an old city.
 - b) University students love Bologna.
 - c) Bologna is an interesting place to visit.
 - d) Bologna has two leaning towers.

14) Thomas Alva Edison is one of the most well-known inventors in history. He is most famous for inventions like the phonograph, the motion picture camera, and the light bulb. However, even Edison failed in a few attempts at invention, namely in trying to develop a better way to mine iron ore during the late

1880s and early 1890s. He was tenacious in his attempts to find a method that worked, but he eventually gave up after having lost all the money he had invested in iron-ore mining projects.

1) In this context, the word tenacious means

- a) angry b) persistent c) lazy d) happy.

15) I felt the wall of the tunnel shiver. The master alarm squealed through my earphones. Almost simultaneously, Jack yelled down to me that there was a warning light on. Fleeting but spectacular sights snapped into and out of view, the snow, the shower of debris, the moon, looming close and big, the dazzling sunshine for once unfiltered by layers of air. The last twelve hours before re-entry were particular bone-chilling. During this period, I had to go up in to command module. Even after the fiery re-entry splashing down in 810 water in south Pacific, we could still see our frosty breath inside the command module.

1) The word 'Command Module' used twice in the given passage indicates perhaps that it deals with

- a) an alarming journey
b) a commanding situation
c) a journey into outer space
d) a frightful battle

16) Mathematics allows us to expand our consciousness. Mathematics tells us about economic trends, patterns of diseases and the growth of population. Math is good at exposing the truth, but it can also perpetuate misunderstanding and untruths. Figures have the power to mislead people.

- a) The power of numbers is that they cannot lie.
b) The study of mathematics is more important than other disciplines.
c) The study of mathematics can be both beneficial and confusing
d) The study of mathematics is dangerous.

READING COMPREHENSION

Read the passage and answer the questions given below

1) Since the late 1970s when the technology for sex determination first came into being, sex selective abortion has unleashed a saga of horror. Experts are calling it "sanitised barbarism". Demographic trends indicate India is fast heading towards a million female fetuses aborted each year.

Although foetal sex determination and sex selection is a criminal offence in India, the practice is rampant. Private clinics with ultrasound machines are doing brisk business. Everywhere, people are paying to know the sex of an unborn child. And paying more to abort the female child. The technology has even reached remote areas through mobile clinics. Dr. Puneet Bedi, obstetrician and specialist in

foetal medicine, says these days he hardly sees a family with two daughters. People are getting sex determination done even for the first child, he says.

If the 1991 Census showed that two districts had a child sex ratio (number of girls per thousand boys) less than 850; by 2001 it was 51 districts. Child rights activist Dr. Sabu George says foeticide is the most extreme form of violence against women. "Today a girl is several times more likely to be eliminated before birth than die of various causes in the first year. Nature intended the womb to be a safe space. Today, doctors have made it the most unsafe space for the female child," he says. He believes that doctors must be held responsible "They have aggressively promoted the misuse of technology and legitimised foeticide."

Researchers and scholars use hard-hitting analogy to emphasise the extent of the problem. Dr. Satish Agnihotri, senior IAS officer and scholar who has done extensive research on the issue, calls the technology "a weapon of mass destruction". Dr. Bedi refers to it as genocide: "More than 6 million killed in 20 years. That's the number of Jews killed in the Holocaust."

Akhila Sivadas, Centre for Advocacy and Research, Delhi, feels that the PCPNDT Act (Pre-Conception and Pre-Natal Diagnostic Techniques? Regulation and Prevention of Misuse) is very well conceived and easy to use. The need of the hour is the legal literacy to ensure the law is implemented. The demand and supply debate has been going on for some time. Doctors say there is a social demand and they are fulfilling it. They argue that social attitudes must change. However, in this case supply fuels demand. Technology will have to be regulated. Technology in the hands of greedy, vested interests cannot be neutral. There is a law to prevent misuse and we must be able to use it,' she says.

On the 'Demand' side, experts such as Dr. Agnihotri argue that women's participation in workforce, having disposable incomes and making a contribution to the larger society will make a difference to how women are seen. Youth icons and role models such as Sania Mirza are making an impact, he says.

Others feel there needs to be widespread visible contempt and anger in society against this 'Genocide' - 'the kind we saw against the Nithari killings,' says Dr. Bedi. 'Today nobody can say that female foeticide is not their problem.' Time we all did our bit to help save the girl child. Time's running out.

A) What does the word 'sanitised' imply in the first paragraph of the passage?

- a) Unforgivable b) Legitimate c) Free from dirt d) None of these

B) What is the Doctors explanation for foeticide?

- a) They think it is legitimate b) They do it because people demand it
c) The technology is available and there is no harm using it d) None of these

C) Which of the following will Dr. George agree to?

- a) The girl child is as safe in the mother's womb as after birth

- b) The girl child is safe in the mother's womb in comparison to after birth
c) The girl child is safer after birth as compared to mother's womb
d) None of these

D) Which “demand” the author refers to in paragraph 5?

- a) Demand for principled doctors b) Demand for high income jobs for women
c) Demand for youth icons d) Demand for sex determination and abortion

E) Which of the two people mentioned in the passage suggest similar solution to the problem?

- a) Dr. Agnihotri and Dr. George b) Dr. Bedi and Dr. Agnihotri
c) Dr. George and Dr. Bedi d) Dr. George and Miss. Sivasdas

F) What is the solution to the problem of female foeticide as envisioned by Dr. Bedi?

- a) Effective use of law b) Mass public outrage
c) Comparison with Nithari killing d) Contempt towards doctors

2) Indian government's intention of introducing caste based quotas for the 'Other Backward Classes' in centrally funded institutions of higher learning and the prime minister's suggestion to the private sector to 'voluntarily go in for reservation', has once again sparked off a debate on the merits and demerits of caste-based reservations. Unfortunately, the predictable divide between the votaries of 'social justice' on one hand and those advocating 'merit' on the other seems to have once again camouflaged the real issues. It is necessary to take a holistic and non-partisan view of the issues involved.

The hue and cry about sacrificing merit is untenable simply because merit is after all a social construct and it cannot be determined objectively in a historically unjust and unequal context. The idea of competitive merit will be worthy of serious attention only in a broadly egalitarian context. But then, caste is not the only obstacle in the way of an egalitarian order. After all, economic conditions, educational opportunities and discrimination on the basis of gender also contribute to the denial of opportunity to express one's true merit and worth. It is interesting to note that in the ongoing debate, one side refuses to see the socially constructed nature of the notion of merit, while the other side refuses to recognise the multiplicity of the mechanisms of exclusion with equal vehemence.

The idea of caste-based reservations is justified by the logic of social justice. This implies the conscious attempt to restructure a given social order in such a way that individuals belonging to the traditionally and structurally marginalised social groups get adequate opportunities to actualise their potential and realise their due share in the resources available. In any society, particularly

in one as diverse and complex as the Indian society, this is going to be a gigantic exercise and must not be reduced to just one aspect of state policy. Seen in this light, caste-based reservation has to work in tandem with other policies ensuring the elimination of the structures of social marginalisation and denial of access. It has to be seen as a means of achieving social justice and not an end in itself. By the same logic it must be assessed and audited from time to time like any other social policy and economic strategy.

Hence, it is important, to discuss reservation in the holistic context of much required social restructuring and not to convert it into a fetish of 'political correctness'. Admittedly, caste remains a social reality and a mechanism of oppression in Indian society. But can we say that caste is the only mechanism of oppression? Can we say with absolute certainty that poverty amongst the so-called upper castes has been eradicated? Can we say that the regions of Northeast, Jharkhand, Chattisgarh are on par with the glittering metros of Delhi and Mumbai? Can we say that a pupil from a panchayat school in Bihar is equipped to compete with an alumnus of Doon School on an equal footing, even if both of them belong to the same caste group? One of my students once remarked that he was regularly compelled to swim across a rivulet in order to reach his school, and the rivulet in question did not distinguish between Brahmins and dalits.

Incidentally, this young man happens to be a Brahmin by birth! Can we also say that gender plays no role in denial of social opportunities? After all, this society discriminates against girls even before they are born. What to talk of access or opportunities, they're denied birth itself. Such discrimination exists across religious and caste lines.

Moreover, the question is: do we want to eliminate caste as a factor of social relations and political processes or do we want to perpetuate it forever? Is it not true that by treating caste as the only medium of oppression and hence by focusing all remedial measures on caste alone, we have only added to the longevity of caste as the determining factor of social identity? Individuals have been virtually turned into the epitomes of the caste of their birth, denying the multiple identities that every individual perforce carries. This also helps the powerful amongst the generally disempowered sections to corner most of the benefits of caste-based reservation. Caste, which in reality is only one of the features of identity at the individual level and the manifestation of an abhorrent social order at the social and structural level, has been turned into the essential identity of individual citizens. Such a situation helps only those politicians who are in search of shortcuts to power. It is harmful for the cause of a modern social democracy as well as to the cause of individuals in need of social justice and related affirmative action.

A) What does the statement “and not to convert it into a fetish of 'political correctness'” in the passage imply?

- a) Reservation issue should not be converted into a political propaganda.
- b) Reservation issue should not be based on caste alone.
- c) Reservation issue should be left to the ruling government
- d) None of these

B) What is the author most likely to agree with?

- a) Caste-based reservation is the answer to India's problems.
- b) Gender-based reservation is the answer to India's problems.
- c) There is no solution to bridge the gap between privileged and under-privileged.
- d) None of these

C) Sacrificing means referring to

- a) Killing merit
- b) Selection on the basis of merit
- c) Encouraging reservation
- d) None

D) What do you mean by the word 'Egalitarian'?

- a) Characterized by belief in the equality of all people
- b) Characterized by belief in the inequality of all people
- c) Another word for reservations
- d) Growth

3) Give people power and discretion, and whether they are grand viziers or border guards, some will use their position to enrich themselves. The problem can be big enough to hold back a country's development. One study has shown that bribes account for 8% of the total cost of running a business in Uganda. Another found that corruption boosted the price of hospital supplies in Buenos Aires by 15%. Paul Wolfowitz, the head of the World Bank, is devoting special efforts during his presidency there to a drive against corruption.

For most people in the world, though, the worry is not that corruption may slow down their country's GDP growth. It is that their daily lives are pervaded by endless hassles, big and small. And for all the evidence that some cultures suffer endemic corruption while others are relatively clean, attitudes towards corruption, and even the language describing bribery, is remarkably similar around the world. In a testament to most people's basic decency, bribe-takers and bribe-payers have developed an elaborate theatre of dissimulation. This is not just to avoid detection. Even in countries where corruption is so common as to be unremarkable and unprosecutable and even when the transaction happens far from snooping eyes a bribe is almost always dressed up as some other kind of exchange. Though most of the world is plagued by corruption, even serial offenders try to conceal it.

One manifestation of this is linguistic. Surprisingly few people say: 'You are going to have to pay me if you want to get that done.' Instead, they use a wide variety of euphemisms. One type is quasi-official terminology. The first bribe paid

by your correspondent, in Ukraine in 1998, went to two policemen so they would let him board a train leaving the country. On the train into Ukraine, the customs officer had absconded with a form that is needed again later to leave the country. The policemen at the station kindly explained that there was a *shtraf*, a 'fine' that could be paid instead of producing the document. The policemen let him off with the minimum *shtraf* of 50 hryvnia (\$25).

A second type of euphemism dresses up a dodgy payment as a friendly favour done by the bribe-payer. There is plenty of creative scope. Nigerian policemen are known to ask for "a little something for the weekend". A North African term is "un petit cadeau", a little gift. Mexican traffic police will suggest that you buy them a refresco, a soft drink, as will Angolan and Mozambican petty officials, who call it a *gazoso* in Portuguese. A businessman in Iraq told Reuters that although corruption there is quite overt, officials still insist on being given a "good coffee"

Double meaning can help soothe the awkwardness of bribe-paying. Baksheesh, originally a Persian word now found in many countries of the Middle East, can mean "tip", "alms" and "bribe". Swahili-speakers can take advantage of another ambiguous term. In Kenya a machine-gun-wielding guard suggested to a terrified Canadian aid worker: "Perhaps you would like to discuss this over tea" The young Canadian was relieved: the difficulty could be resolved with some chai, which means both "tea" and "bribe".

Along with the obscurantist language, bribe-taking culture around the world often involves the avoidance of physically handing the money from one person to another. One obvious reason is to avoid detection, which is why bribes are known as "envelopes" in countries from China to Greece. But avoidance of a direct hand-over is common even where there is no chance of detection. There will always be some officials who will take money right from a bribe-payer's hands, but most seem to prefer to find some way to hide the money from view. A bribe to a border guard may be folded into a passport. A sweetener to a traffic cop is often placed in the ticket-book that is handed to the driver. Parag Khanna, who is writing a book about countries on the edge of the rich world that are trying to get rich themselves, describes a bribe-taker he spotted in Georgia who he was sure was a rookie. Why? The scrawny young soldier, forgoing any subtleties, merely rubbed his fingers together in an age-old gesture.

Rich Westerners may not think of their societies as plagued by corruption. But the definition of bribery clearly differs from person to person. A New Yorker might pity the third-world businessman who must pay bribes just to keep his shop open. But the same New Yorker would not think twice about slipping the maitre d' \$50 to sneak into a nice restaurant without a reservation. Poor people the world over are most infuriated by the casual corruption of the elites rather than by the underpaid, "tip"-seeking soldier or functionary.

A) What is the author most likely to agree to?

- a) People generally do not try to hide money taken as bribe.
- b) People hide money taken as bribe primarily to avoid detection
- c) People hide money taken as bribe from view even if detection possibility is low.
- d) None of these

B) What is the author likely to agree to, in the following?

- a) some cultures suffer corruptions while others do not
- b) social factors incline a society towards corruption
- c) bribery is not a cultural phenomena
- d) none of these

C) In summary what does the passage primarily suggest and provide evidence for?

- a) corruption is always concealed in some way, both linguistically and in the process
- b) corruption exists only in developing economics
- c) corruption is an unethical practice
- d) corruption shows down GDP growth

D) Which of the following the author does not identify as linguistic manifestation of corruption?

- a) asking for a favour
- b) use of double meanings
- c) use of quasi-official terminology
- d) relate to food item

E) What is bribe generally called in China?

- a) hand-over
- b) refresco
- c) envelopes
- d) baksheesh

4) Sixty years ago, on the evening of August 14, 1947, a few hours before Britain's Indian Empire was formally divided into the nation-states of India and Pakistan, Lord Louis Mountbatten and his wife, Edwina, sat down in the vice regal mansion in New Delhi to watch the latest Bob Hope movie, "My Favorite Brunette." Large parts of the subcontinent were descending into chaos, as the implications of partitioning the Indian Empire along religious lines became clear to the millions of Hindus, Muslims, and Sikhs caught on the wrong side of the border. In the next few months, some twelve million people would be uprooted and as many as a million murdered. But on that night in mid-August the bloodbath-and the fuller consequences of hasty imperial retreat-still lay in the future, and the Mountbatten probably felt they had earned their evening's entertainment.

Mountbatten, the last viceroy of India, had arrived in New Delhi in March, 1947, charged with an almost impossible task. Irrevocably enfeebled by the Second World War, the British belatedly realized that they had to leave the subcontinent, which had spiraled out of their control through the nineteen-forties. But plans for brisk disengagement ignored messy realities on the ground. Mountbatten had a

clear remit to transfer power to the Indians within fifteen months. Leaving India to God, or anarchy, as Mohandas Gandhi, the foremost Indian leader, exhorted, wasn't a political option, however tempting. Mountbatten had to work hard to figure out how and to whom power was to be transferred.

The dominant political party, the Congress Party, took inspiration from Gandhi in claiming to be a secular organization, representing all four hundred million Indians. But many Muslim politicians saw it as a party of upper-caste Hindus and demanded a separate homeland for their hundred million co-religionists, who were intermingled with non-Muslim populations across the subcontinent's villages, towns, and cities. Eventually, as in Palestine, the British saw partition along religious lines as the quickest way to the exit.

But sectarian riots in Punjab and Bengal dimmed hopes for a quick and dignified British withdrawal, and boded ill for India's assumption of power. Not surprisingly, there were some notable absences at the Independence Day celebrations in New Delhi on August 15th. Gandhi, denouncing freedom from imperial rule as a "wooden loaf," had remained in Calcutta, trying, with the force of his moral authority, to stop Hindus and Muslims from killing each other. His great rival Mohammed Ali Jinnah, who had fought bitterly for a separate homeland for Indian Muslims, was in Karachi, trying to hold together the precarious nation-state of Pakistan.

Nevertheless, the significance of the occasion was not lost on many. While the Mountbattens were sitting down to their Bob Hope movie, India's constituent assembly was convening in New Delhi. The moment demanded grandiloquence, and Jawaharlal Nehru, Gandhi's closest disciple and soon to be India's first Prime Minister, provided it. "Long years ago, we made a tryst with destiny," he said. "At the stroke of the midnight hour, while the world sleeps, India will awaken to life and freedom. A moment comes, which comes but rarely in history, when we step out from the old to the new, when an age ends, and when the soul of a nation, long suppressed, finds utterance."

Posterity has enshrined this speech, as Nehru clearly intended. But today his quaint phrase "tryst with destiny" resonates ominously, so enduring have been the political and psychological scars of partition. The souls of the two new nation-states immediately found utterance in brutal enmity. In Punjab, armed vigilante groups, organized along religious lines and incited by local politicians, murdered countless people, abducting and raping thousands of women. Soon, India and Pakistan were fighting a war-the first of three-over the disputed territory of Kashmir. Gandhi, reduced to despair by the seemingly endless cycle of retaliatory mass murders and displacement, was shot dead in January, 1948, by a Hindu extremist who believed that the father of the Indian nation was too soft on Muslims. Jinnah, racked with tuberculosis and overwork, died a few months later, his dream of a secular Pakistan apparently buried with him.

- A) In the view of author what is the phrase 'tryst with destiny' symbolize today?
- a) a celebration of Indian independence b) An inspirational quote
 - c) A reminder of Gandhi's assassination d) A symbol of ills of the partition

- B) What does the author imply about the future of Pakistan?
- a) It becomes a secular country b) It becomes unsecular
 - c) It is unprosperous d) It becomes a rogue state

- C) Why was Gandhiji assassinated?
- a) Because he was favouring the Muslim
 - b) His assassin thought he was partial to the Muslim
 - c) He got killed in the violence after partition d) None of these

- D) The author persists on talking about the 'bob Hope Movies' in the article. Why?
- a) Because the movie was a classic of 1947
 - b) He thinks it caused the partition of the sub-continent
 - c) He uses it to show the apathy of the britishers towards the sub-continent
 - d) It was Mountbatten's favourite movie

5) For its new fridge, Whirlpool Corp. spent months inventing a shelf with microscopic etching so it can hold a can of spilled soda.

The technology is just one weapon against a dirty kitchen secret: Most Americans clean their fridges only once or twice a year.

Whirlpool hopes that increasing the amount of storage space might help. The company's new shelves to be released later this year are 25% roomier than previous models. And the microscopic etching creates surface tension, causing liquids to bubble up around the perimeter instead of spilling over, it says. Currently, shelves in Whirlpool's refrigerators have a plastic rim to help contain spills. Unfortunately, the rims have "the side effect of crud getting stuck in there," says Carolyn Kelley, brand manager of Whirlpool refrigeration. The new shelves available on new Whirlpool models that cost from \$1,199 to \$1,499-would eliminate that problem because they don't require a rim to stop leaks.

Since people tend to throw out appliance manuals without reading them, Sub-Zero placed the card in a prominent spot in the fridge: the inside of the door. "It's not in your face, but it's pretty conspicuous," Mr. Leuthe says.

Indeed, when consumers are told how to organize their fridges, they tend to tidy up. In a 2005 study, Pennsylvania State University researchers inspected fridges in the homes of 28 consumers in Centre County and Huntingdon County, Pa. They found temperatures were on average about three degrees higher than the recommended 40 degrees Fahrenheit. Fridges were also packed so tightly that air

flow, which is necessary to keep food cold, was impeded. And then there was the "ick" factor: In one home, researchers found that a study participant's dog was licking the bottom shelf when the door was open.

During that first visit, researchers told study participants about harmful bacteria that could exist in the fridge and gave tips on how to keep it clean. When the researchers returned to the same homes a month later, they found that things had improved markedly. People had spread out their items, and air flow had improved. People also said they intended to clean their fridges more often.

But the hassle factor can override even the strongest good intentions. "It's a pain" to clean the refrigerator, says Catherine Cutter, associate professor and food safety extension specialist at Penn State. "It is a daunting task to get in there, clean and sanitize."

And the task is too easy to avoid, says Debra Johnson, training manager at Merry Maids LP, a cleaning service headquartered in Memphis, Tenn. The mess is "out of sight, out of mind when the door is closed."

Ms. Johnson has seen all levels of refrigerator nastiness. "It could be things that have been left in there that look like a science project because it's covered with so much mold," she says. Broken eggs can be a pain to clean, too. The yolk hardens and can be tough to scrub off.

Ms. Johnson recommends that people explore the depths of their fridges once a week for food that needs to be tossed. She suggests cleaning one shelf at a time so that the task is less overwhelming. People should also be sure to clean what is often the dirtiest part of the fridge: underneath the bottom drawers where spilled liquid usually ends up. "It's going somewhere," she says. "It doesn't just evaporate."

A dirty fridge isn't just an aesthetic problem. Spills and food residue can carry health risks, too, says Penn State's Ms. Cutter. Consumers especially have to be careful with leaks from packages of raw meat, which can contaminate other food. If the meat contains E. coli, for example, the bacteria in the drippings could end up on food like fruits and vegetables, which are often eaten raw. Ms. Cutter also advises cleaning places that may harbour bacteria, such as the door handle and the drip tray located under the ice and water dispenser.

At least one manufacturer is rolling out bacteria-killing technology. Last year, Viking Range released a built-in model (priced from \$6,600 to \$8,800) that contains Sharp Electronics Corp.'s Plasma cluster Ion Air Purifier. The device, located at the top of the fridge, generates positive and negative ions that break down bacteria, mold and mildew, says Sue Bailey, the company's director of major appliance product management. In a test conducted by an outside firm hired by Viking Range, the Plasma cluster killed 99% of the bacteria in the fridge.

Even the most high-tech solutions can be thwarted by consumers who have a hard time throwing away food. Jennifer Smith, a digital marketing director

in Bronxville, N.Y., says her husband, who grew up on an organic farm, has tried to salvage everything from mouldy cheese to old salad dressing. "He doesn't like to throw things out," Ms. Smith says. "I think we should."

She says, "I have to go behind his back and look at some of the condiments and throw them out." Luckily, he doesn't notice.

A) What is the primary intention behind the refrigerator manufacturing various changes as described in the passage?

- a) Drive consumers to clean their refrigerators more often and reduce health risk
- b) Using consumer insight to enhance convenience and combat the problem of cleaning.
- c) Using the consumer insight to develop more advanced technology which would lead to higher revenues
- d) Educate customers on how to maximize storage efficiency and ensure food lasts longer

B) Which one these have not been highlighting as one of the way solving problem of messy refrigerators?

- a) Advanced technology
- b) More spacious shelves
- c) Increasing lighting
- d) Cleaning up more often

C) What can be inferred as the main reason for consumer not cleaning their refrigerators?

- a) Since the refrigerators do not have light, it is difficult to spot food that is getting spoilt
- b) The clutter in the fridge is less intrusive and hence tends not to be very important
- c) It is easy to simply shove more items in the refrigerator than bothering cleaning it up
- d) They lack the right education with regards to storage and cleaning of the refrigerator

6) Fasting is an act of homage to the majesty of appetite. So I think we should arrange to give up our pleasures regularly—our food, our friends, our lovers—in order to preserve their intensity, and the moment of coming back to them. For this is the moment that renews and refreshes both oneself and the thing one loves. Sailors and travellers enjoyed this once, and so did hunters, I suppose. Part of the weariness of modern life may be that we live too much on top of each other, and are entertained and fed too regularly.

Once we were separated by hunger both from our food and families, and then we learned to value both. The men went off hunting, and the dogs went with them; the women and children waved goodbye. The cave was empty of men for days on end; nobody ate, or knew what to do. The women crouched by the fire, the

wet smoke in their eyes; the children wailed; everybody was hungry. Then one night there were shouts and the barking of dogs from the hills, and the men came back loaded with meat.

This was the great reunion, and everybody gorged themselves silly, and appetite came into its own; the long-awaited meal became a feast to remember and an almost sacred celebration of life. Now we go off to the office and come home in the evenings to cheap chicken and frozen peas. Very nice, but too much of it, too easy and regular, served up without effort or wanting. We eat, we are lucky, our faces are shining with fat, but we don't know the pleasure of being hungry any more.

Too much of anything—too much music, entertainment, happy snacks, or time spent with one's friends—creates a kind of impotence of living by which one can no longer hear, or taste, or see, or love, or remember. Life is short and precious, and appetite is one of its guardians, and loss of appetite is a sort of death. So if we are to enjoy this short life we should respect the divinity of appetite, and keep it eager and not too much blunted.

A) What commonality has been highlighted between the sailors and hunters?

- a) Neither were fed nor entertained regularly
- b) They renew and refresh themselves regularly
- c) They were regularly separated from their loved ones and things they liked
- d) The roles of men and women were clearly divided for both professions

B) What are the benefits of fasting?

- a) It is an act against the drawbacks of appetite
- b) It brings joy in eating, and one learns to appreciate food
- c) It is the method to understand how civilization evolved
- d) It is a punishment for the greedy and unkind

C) What is the author's main argument in the passage?

- a) The olden times, when the roles of men and women were clearly divided, were far enjoyable than the present time.
- b) There is not enough effort required anymore to obtain food and hence the pleasure derived is not the same.
- c) People who don't have enough to eat enjoy life much more than those who have plentiful.
- d) We should deny ourselves pleasures once in a while in order to whet our desires and feel more alive.

D) 'The long-awaited meal became a feast to remember and an almost sacred celebration of life', what does this line imply?

- a) After so many days of being hungry, the cave men and women felt alive once again after eating the food.
- b) People respected and were thankful for getting food after days of being hungry and also of being united with their loved ones.
- c) Cave men and women ate and celebrated together with the entire community making the feast really enjoyable.
- d) Cave men and women enjoyed themselves in the feast and performed a ceremony to thank the gods for their safe return back home.

7) The impressive recent growth of certain sectors of the Indian economy is a necessary but insufficient condition for the elimination of extreme poverty.

In order to ensure that the poorest benefit from this growth, and also contribute to it, the expansion and improvement of the microfinance sector should be a national priority.

Researchers tell us that in Bangladesh, where 15 million families now benefit from small loans and other financial products such as micro-savings and micro-insurance, 40% of the overall reduction of rural poverty in recent years has been due to microfinance.

Two other studies suggest that the impact of microfinance on the poorest is greater than on the poor, and yet another that non-participating members of communities where microfinance operates experience socio-economic gains - suggesting strong spillover effects. Moreover, well-managed microfinance institutions (MFIs) have shown a capacity to wean themselves off of subsidies and become sustainable within a few years.

Microfinance is powerful, but it is clearly no panacea. Microfinance does not directly address some structural problems facing Indian society and the economy, and it is not yet as efficient as it will be when economies of scale are realised and a more supportive policy environment is created. Loan products are still too inflexible, and savings and insurance services that the poor also need are not widely available due to regulatory barriers

Still, microfinance is one of the few market-based, scaleable anti-poverty solutions that is in place in India today, and the argument to scale it up to meet the overwhelming need is compelling. According to Sa-Dhan, the overall outreach is 6.5 million families and the sector-wide loan portfolio is Rs 2,500 crore. However, this is meeting only 10% of the estimated demand. Importantly, new initiatives are expanding this success story to the some of the country's poorest regions, such as eastern and central Uttar Pradesh.

The local and national governments have an important role to play in ensuring the growth and improvement of microfinance. First and foremost, the market should be left to set interest rates, not the state. Ensuring transparency and full disclosure of rates including fees is something the government should

ensure, and something that new technologies as well as reporting and data standards are already enabling. Furthermore, government regulators should set clear criteria for allowing MFIs to mobilise savings for on-lending to the poor; this would allow for a large measure of financial independence amongst well-managed MFIs. Each Indian state could consider forming a multi-party working group to meet with microfinance leaders and have a dialogue with them about how the policy environment could be made more supportive and to clear up misperceptions.

There is an opportunity to make a real dent in hard-core poverty through microfinance. By unleashing the entrepreneurial talent of the poor, we will slowly but surely transform India in ways we can only begin to imagine today.

A) What is the author view about interest rate?

- a) The government should set them
- b) There should be transparency with regard to them
- c) The market forces should set them
- d) Both a and b
- e) Both b and c

B) Which of following is correct with regard to microfinance?

- a) The supply is more than demand
- b) The demand is more than supply
- c) The supply and demand are well balanced
- d) None of these can be inferred from the passage

C) Which of following will the author agree to?

- a) Indian economy growth will solve the problem of poverty.
- b) Indian economy growth is not enough to solve the problem of poverty
- c) Indian economy growth aggravates the problem of poverty
- d) None of these

D) Which of the following is not a challenge faced by microfinance in India?

- a) Does not help the poorest
- b) Efficient when economy of scale is achieved
- c) Non-conductive policy environment
- d) Structural problems of Indian society

8) My cell phone rings again. It is **futile** to ignore it anymore; Valerie is persistent. When Valerie wants something, she will continue to bedevil me until I **acquiesce**.

"Hello," I answer.

"State Fair, Bobbie?" she asks in her singsong voice. "When are we heading out? Only two more days left!"

I **abhor** the State Fair. The boisterous crowds, the insanely long lines and the impossibility of finding a clean restroom all combine to make this an event that I dread.

For Valerie, my best friend since the angst of middle school, the State Fair is a sign that divine powers really do exist.

“Really, Bobbie, where else can you pet a cow, ride a horse, fall ten stories, see the world’s smallest person and eat fried macaroni and cheese?” Valerie asks gleefully. “Hell?” I guess.

The fried food at the State Fair is a gastronomically nightmare on its own. I once tried a fried pickle at the fair and was sick to my stomach for hours. And a fried donut hamburger with bacon, cheese AND a greasy egg? How could that not be **deleterious**?

I have not seen Valerie for a good month; our schedules are both so hectic. My hatred of the State Fair becomes inconsequential compared to my desire to **hang** with Val.

Alas, I ignore my anti-fair bias for the **umpteenth** year.

“Pick me up at noon,” I say and hang up the phone

A) Logically speaking, which of the following might otherwise be included in Bobbie’s description of foods to be found at the state fair?

- I. fried candy bars II. Candy apples III. Ripe red tomatoes
a) I only b) I and II c) II and III d) I, II, and III

B) Which is the best synonym for **futile**?

- a) Arduous b) Enervating c) Preposterous d) Ineffective

C) Valerie regards the state fair with

- a) Ambivalence b) Condescension c) Jubilation d) Nonchalance

D) What does it mean to **acquiesce**?

- a) To give in b) To speak kindly c) To pay attention d) To answer the phone

E) Which is the best antonym for **deleterious**?

- a) Amicable b) Beneficial c) Fortuitous d) Pathetic

F) Why might the author have chosen to capitalize all the letters in the word “and” when writing about the burger she ate?

- a) To make sure the reader understood it was a list
b) To show that a greasy slice of cottage cheese was the last ingredient
c) To highlight her dislike of greasy slice of cottage cheese
d) To emphasize how many ingredients were in the burger

G) How does Maneesha seem to feel about the circus?

- a) Ambivalent b) Condescending c) Jubilant d) Nonchalant

H) What does the term gastronomical suggest?

- a) Enormous b) Health risk c) Culinary issue d) Resulting in gas

9) At the end of the 19th century, India’s maharajahs discovered a Parisian designer called Louis Vuitton and flooded his small factory with orders for custom-made Rolls-Royce interiors, leather picnic hampers and modish polo-club bags. But after independence, when India’s princes lost much of their wealth, the orders dried up. Then in 2002 LVMH, the world’s largest luxury-goods group, made a triumphant return to India, opening a boutique in Delhi and another in Mumbai in 2004. Its target was the new breed of maharajah produced by India’s liberalized economy: flush, flash and growing in number. Other purveyors of opulence followed, from Chanel to Bulgari. In recent months a multitude of swanky brands have announced plans to set up shop in India, including Dolce & Gabbana, Hermès, Jimmy Choo and Gucci. Though only a tiny fraction of the total population will spend on these brands but it is India’s future prospects that have excited the luxury behemoths.

India has fewer than 100,000 dollar millionaires among its one billion-plus population, according to American Express, a financial-services firm. It predicts that this number will grow by 12.8% a year for the next three years. The longer-term ascendance of India’s middle class, meanwhile has been charted by the MCKinsey Global Institute, which predicts that average incomes will have tripled by 2025, lifting nearly 300m Indians out of poverty and causing the middle class to grow more than tenfold to 583m.

Demand for all kinds of consumer products is about to surge, in short. And although restrictions on foreign investment prevent retail giants such as Wal-Mart and Tesco from entering India directly, different rules apply to companies that sell their own products under a single brand, as luxury-goods firms tend to. Since January 2006 they have been allowed to take up to 51% in Indian joint ventures. India is also an attractive market for luxury goods because, unlike China, it does not have a flourishing counterfeit industry. Credit is becoming more easily available.

Barriers to growth remain, however. High import duties make luxury goods expensive. Rich Indians tend to travel widely and may simply buy elsewhere. Finding suitable retail space is also proving a headache. So far most designer boutiques are situated in five star hotels.

But things are changing. Later this year Emporio, a new luxury-goods mall, will open in a prosperous neighbourhood in the south of Delhi. It is likely to be the first of many. Even so, India could remain a difficult market to crack. Last October the Luxury Marketing Council, an international organisation of 675 luxury-goods firms, opened its India chapter. Its boss, Devyani Raman, described

India's luxury-goods market as “a cupboard full of beautiful clothes with a new outfit arriving every day—it could start to look messy without the right care”. This, she said, included everything from teaching shop assistants appropriate manners to instilling in the Indian public a proper understanding of the concept of luxury.

A) According to the author, which of these is not a problem for the luxury good firms in the Indian Market?

- a) High import duty.
- b) Difficulty in finding retail space.
- c) Restrictions on firms to enter Indian markets.
- d) All of these.

B) What could be the meaning of the word & modish, as can be inferred from the context it is used in first line of the passage?

- a) Unattractive
- b) Stylish
- c) New
- d) Beautiful

C) What is a good estimate of the middle class population in India today as inferred from the passage?

- a) 583m
- b) 100m
- c) 58m
- d) 300m

D) Who are the ‘new breed of Maharajas’?

- a) Maharajas who recovered their wealth in 2004
- b) The children of older Maharajas
- c) The new class of rich people which emerged in India post liberalization
- d) None of these

E) What does Devyani Raman’s statement imply?

- a) Beautiful clothes are an important luxury item and should be taken care of
- b) The luxury goods market is being disorganized
- c) The supply of beautiful clothes is very high
- d) None of these

F) What is the author most likely to agree to as the reason for the inflow of luxury good groups in India?

- a) The fast growth in Indian economy leading to bright future prospects
- b) To serve ‘the new breed of Maharajas’
- c) To serve the tiny fraction of high income groups in India
- d) None of these

G) Why do different rules apply to Wal-Mart and luxury good firms?

- a) India is encouraging luxury goods while it doesn’t encourage Wal-Mart
- b) India is an attractive market for luxury goods
- c) There are different rules for retail firms and those that sell their own product
- d) India does not have a flourishing counterfeit industry

10) The Kingdom of Spain was created in 1492 with the unification of the Kingdom of Castile and the Kingdom of Aragon. For the next three centuries Spain was the most important colonial power in the world. It was the most powerful state in Europe and the foremost global power during the 16th century and the greater part of the 17th century. Spain established a vast empire in the Americas, stretching from California to Patagonia, and colonies in the western Pacific.

Spain's European wars, however, led to economic damage, and the latter part of the 17th century saw a gradual decline of power under an increasingly neglectful and inept Habsburg regime. The decline culminated in the War of the Spanish Succession, where Spain's decline from the position of a leading Western power, to that of a secondary one, was confirmed, although it remained the leading colonial power.

The eighteenth century saw a new dynasty, the Bourbons, which directed considerable effort towards the institutional renewal of the state, with some success, peaking in a successful involvement in the American War of Independence.

The end of the eighteenth and the start of the nineteenth centuries saw turmoil unleashed throughout Europe by the French Revolutionary and Napoleonic Wars, which finally led to a French occupation of much of the continent, including Spain. This triggered a successful but devastating war of independence that shattered the country and created an opening for what would ultimately be the successful independence of Spain's mainland American colonies.

Following a period of growing political instability in the early twentieth century, in 1936 Spain was plunged into a bloody civil war. The war ended in a nationalist dictatorship, led by Francisco Franco which controlled the Spanish government until 1975.

A) What was the result of Napoleonic wars?

- a) A small part of the continent was occupied by French people
- b) Spain was occupied by the French
- c) War of independence was unable to yield any positive result
- d) American colonies were destroyed after the war

B) What is the meaning of the term 'culminated'?

- a) Follow a particular path
- b) Guide or transform
- c) Reach the highest point
- d) Introduce on a grand scale

C) What occurred in the latter part of 17th century?

- a) War of succession confirmed the leading position of Spain
- b) Spain was no longer regarded as the ruling colonial power
- c) A vast empire was established in Europe
- d) Power steadily declined under Habsburg regime

11) The economic transformation of India is one of the greatest business stories of our times. As stifling government regulations have been lifted, entrepreneurship has flourished and the country has become a high-powered center for information technology and pharmaceuticals. Indian companies like Infosys and Wipro are powerful global players, while western firms like G.E. and I.B.M now have major research facility in India employing thousands. India's seemingly endless flow of young, motivated engineers, scientists, and managers offering developed-world skills at developing-world wages is held to be putting American jobs at risk, and the country is frequently heralded as the "next economic superpower".

But India has run into a surprising hitch on its way to superpower status : its inexhaustible supply of workers is becoming exhausted. Although India has one of the youngest workforces on the planet, the head of Infosys said recently that there was an "acute shortage of skilled manpower". and a study by Hewitt Associates projects that this year salaries for skillful workers increase 14 and a half percent, a sure sign that demand for skilled labour is outstripping supply. How is this possible in a country that every year produces two and a half million college graduates and four hundred thousand engineers? Start with the fact that just ten percent of Indians get any kind of post-secondary education, compared with some fifty percent who do in the US. Moreover, of that ten per cent, the vast majority go to one of India's seventeen thousand colleges, many of which are closer to community colleges than to four-year institutions. India does have more than 300 universities, but a recent survey by the London *Times Higher Education Supplement* put only two of them among the top hundred in the world. Many Indian graduates therefore enter the workforce with a low level of skills. A current study led by Vivek Wadhwa, of Duke University, has found that if you define "engineer" by U.S. standards, India produces just a hundred and seventy thousand engineers a year, not four hundred thousand. Infosys says that, of 1.3 million applicants for jobs last year, it found only two percent acceptable.

India has taken tentative steps to remedy its skills famine- the current government has made noises about doubling spending on education and a host of new colleges and universities have sprung up since the mid- nineties. But India's impressive economic performance has made the problem seem less urgent than it actually is, and allowed the government to defer difficult choices. (In a country where three hundred million people live on a dollar a day, producing college graduates can seem like a low priority.) Ultimately, the Indian government has to pull off a very tough trick, making serious changes at a time when things seem to be going very well. It needs, in other words, a clear sense of everything that can still go wrong. The paradox of the Indian economy today is that the more certain its glowing future seems to be, the less likely that future becomes.

A) Which of the following could you infer according to passage?

- a) Wages in developing countries are less compared to developed countries
- b) Wages in developing countries are more compared to developed countries
- c) Wages in developing countries are same compared to developed countries
- d) None of these

B) According to this passage why India did not have skilled labour?

- a) Total amount of young population is low
- b) Total number of colleges are insufficient
- c) Students do not want to study
- d) Maximum university and college do not match with global need

C) What does the American job in the last line in the first paragraph of the passage imply?

- a) Jobs provided by American companies b) Jobs held by American companies
- c) Jobs open to American companies d) Jobs provided by American government

D) What is an appropriate title to the passage?

- a) Growing Indian economy b) Higher education in India
- c) India's skill shortage d) Entrepreneurship in India

E) According to the passage, what is the paradox of the Indian economy today?

- a) The economic progress is impressive, but the poor (earning one dollar per day) are not benefited
- b) The economic progress is impressive disallowing the government to take tough decisions
- c) There is not enough skilled work force and the Government does not realize this.
- d) Government is not ready to invest in setting up new universities

F) Why are salaries for skilled workers rising?

- a) Companies are paying higher to lure skilled people to jobs
- b) American companies are ready to pay higher to skilled workers
- c) Entrepreneurship is growing in India
- d) There are not enough skilled workers, while the demand for them is high

G) In the third sentence of the third paragraph of the passage, the phrase "closer to community colleges" is used. What does it imply?

- a) Near to community colleges b) Like community colleges
- c) Close association with community colleges d) None of these

12) When it came to promoting its new video-game console, the Wii, in America, Nintendo recruited a handful of carefully chosen suburban mothers in the hope

that they would spread the word among their friends that the Wii was a gaming console the whole family could enjoy together. Nintendo thus became the latest company to use “word-of-mouth” marketing. Nestle, Sony and Philips have all launched similar campaigns in recent months to promote everything from bottled water to electric toothbrushes. As the power of traditional advertising declines, what was once an experimental marketing approach is becoming more popular.

After all no form of advertising carries as much weight as an endorsement from a friend. “Amway and Tupperware know you can blend the social and economic to business advantage” says Walter Carl, a marketing guru at Northeastern University. The difference now he says, is that the internet can magnify the effect of such endorsements.

The difficulty for marketers is creating the right kind of buzz and learning to control it. Negative views spread just as quickly as positive ones, so if a product has flaws, people will soon find out. And Peter Kim of Forrester, a consultancy, points out that when Microsoft sent laptops loaded with its new Windows Vista software to influential bloggers in an effort to get them to write about it, the resulting online discussion ignored Vista and focused instead on the morality of accepting gifts and the ethics of word-of-mouth marketing. Bad buzz, in short.

BzzAgent a controversial company based in Boston that is one of the leading exponents of word-of-mouth marketing, operates a network of volunteer “agents” who receive free samples of products in the post. They talk to their friends about them and send back their thoughts. In return, they receive rewards through a points program-an arrangement they are supposed to make clear. This allows a firm to create buzz around a product and to see what kind of word-of-mouth response it generates, which can be useful for subsequent product development and marketing. Last week BzzAgent launched its service in Britain. Dave Balter, BzzAgent’s founder, thinks word-of-mouth marketing will become a multibillion dollar industry. No doubt he tells that to everyone he meets.

A) What is the experiment approach being discussed in the first paragraph?

- a) Word of mouth marketing
- b) Selling of video console bottled water and electric tooth brushes
- c) Traditional advertising
- d) None

B) What is the effect of internet on word-of-mouth marketing?

- a) It is impeded by the internet
- b) It is encouraged by the internet
- c) Internet magnifies the moral issues of this marketing technique
- d) Internet has made it obsolete

C) What is the tone of the passage?

- a) Neutral
- b) Biased
- c) Celebratory
- d) Critical

D) What can we infer from Walter Carl’s statement?

- a) Amway and Tupperware are products where word of mouth marketing could be used
- b) Amway and Tupperware are consumers who appreciated word of mouth marketing
- c) Amway and Tupperware are companies who use word of mouth marketing
- d) None of these

13) The unique Iron Age Experimental Centre at Lajre, about 40km west of Copenhagen, serves as a museum, a classroom and a place to get away from it all. How did people live during the Iron Age? How did they support themselves? What did they eat and how did they cultivate the land? These and a myriad of other questions prodded the pioneers of the Lejre experiment.

Living in the open and working 10 hours a day,volunteers from all over Scandinavia led by 30 experts, built the first village in the antient encampment in a matter of months. The house walls were of clay, the roofs of hay - all based on original design. Then came the second stage-getting back to the basics of living. Families were invited to stay in the 'prehistoric village' for a week or two at a time and rough it Iron Age-style

Initially, this experiment proved none too easy for modern Danes accustomed to central heating, but it convinced the centre that there was something to the Lejre project. Little by little, the modern iron Agers learnt that their huts were, after all, habitable. The problems were numerous-smoke belching out from the rough-and-ready fireplaces into the rooms and so on. These problems, however, have led to some discoveries: domed smoke ovens made of clay, for example, give out more heat and consume less fuel than an open fire, and when correctly stoked, they are practically smokeless.

By contacting other museums, the Lejre team has been able to reconstruct ancient weaving looms and pottery kilns. Iron Age dyeing techniques, using local natural vegetation, have also been revived, as have ancient baking and cooking methods.

A) What can be the title of the passage?

- a) Modern techniques find their way into pre-historic villages
- b) Co-existence of ancient and modern times
- c) Glad to be living in the 21st Century
- d) Turning back time

B) What is the purpose of building the Iron Age experimental center?

- a) Prehistoric Village where people can stay for a week or two to get away from modern living
- b) Replicate the Iron Age to get a better understanding of the time and people of the era

- c) To discover the difference between a doomed smoke oven and an open fire to identify the more efficient of the two
d) Revive activities of ancient women such as weaving, pottery, dyeing, cooking and baking

C) What is the meaning of the sentence 'initially, this experiment proved none too easy for modern Danes accustomed to central heating, but it convinced the center that there was something to the Legree project'?

- a) Even though staying in the hunts wasn't easy for the modern people the centre saw merit in the simple living within huts compared to expensive apartments
b) Staying in the hunts was quite easy for the modern people and the centre also saw merits in the simple living within hunts compared to expensive apartments
c) The way of living of the Iron Age proved difficult for the people of the modern age who are used to living in luxury
d) The way of living of the Iron Age proved very easy for the people of the modern age since it was not inside the hunts, and they were anyway used to heated rooms

D) From the passage what can be inferred to be the center's initial outlook towards the Lejre project

- a) It initiated the project
b) It eagerly supported was very unique
c) It felt the project was very unique
d) It was apprehensive about it

14) Vacations are a chance to take a break from work, see the world and enjoy time with family. But do they make you happier?

Researchers from the Netherlands set out to measure the effect that vacations have on overall happiness and how long it lasts. They studied happiness levels among 1,530 Dutch adults, 974 of whom took a vacation during the 32-week study period.

The study, published in the journal Applied Research in Quality of Life, showed that the largest boost in happiness comes from the simple act of planning a vacation. In the study, the effect of vacation anticipation boosted happiness for eight weeks.

After the vacation, happiness quickly dropped back to baseline levels for most people. How much stress or relaxation a traveler experienced on the trip appeared to influence post-vacation happiness. There was no post-trip happiness benefit for travelers who said the vacation was "neutral" or "stressful."

Surprisingly, even those travelers who described the trip as "relaxing" showed no additional jump in happiness after the trip. "They were no happier than people who had not been on holiday," said the lead author, Jeroen Nawijn, tourism research lecturer at Breda University of Applied Sciences in the Netherlands.

The only vacationers who experienced an increase in happiness after the trip were those who reported feeling "very relaxed" on their vacation. Among those people, the vacation happiness effect lasted for just two weeks after the trip before returning to baseline levels.

"Vacations do make people happy," Mr. Nawijn said. "But we found people who are anticipating holiday trips show signs of increased happiness, and afterward there is hardly an effect."

One reason vacations don't boost happiness after the trip may have to do with the stress of returning to work. And for some travelers, the holiday itself was stressful.

"In comments from people, the thing they mentioned most referred to disagreements with a travel partner or being ill," Mr. Nawijn said.

The research controlled for differences among the vacationers and those who hadn't taken a trip, including income level, stress and education. However, Mr. Nawijn noted that questions remain about whether the time of year, type of trip and other factors may influence post-vacation happiness.

The study didn't find any relationship between the length of the vacation and overall happiness. Since most of the happiness boost comes from planning and anticipating a vacation, the study suggests that people may get more out of several small trips a year than one big vacation, Mr. Nawijn said.

"The practical lesson for an individual is that you derive most of your happiness from anticipating the holiday trip," he said. "What you can do is try to increase that by taking more trips per year. If you have a two week holiday you can split it up and have two one week holidays. You could try to increase the anticipation effect by talking about it more and maybe discussing it online."

Mr. Nawijn said that while he expected the study results to show a prevacation happiness boost, he was surprised that the study showed that relaxed holidays didn't affect post-trip happiness levels.

"People start working again," he said. "They have to catch up. Usually there is a big pile of work for them when they get back from the holiday."

A) In which of the following cases the post vacation happiness minimum?

- a) People who thoroughly enjoyed their vacation
b) There are pending issues to solve in home and workplace
c) Vacation lasting longer than eight weeks
d) Those who describe the vacation as neutral

B) What is the suitable title for the passage?

- a) Stress level higher during the vacation
b) Can the vacation can make the person happy
c) Beat the stress stay away from the vacation all together
d) Vacation being experienced with more stress at workplace

C) Why are numerous small trips recommended for people?

- a) Shorter duration of trips leads to increase in enjoyment
- b) Exploring new places often gives satisfaction
- c) There is lesser work pressure after short vacation
- d) Planning trips makes people happy

15) The great event of the New York cultural season of 1882 was the visit of the sixty-two-year-old English philosopher and social commentator Herbert Spencer. Nowhere did Spencer have a larger or more enthusiastic following than in the United States, where such works as "Social Statics" and "The Data of Ethics" were celebrated as powerful justifications for laissez-faire capitalism. Competition was preordained; its result was progress; and any institution that stood in the way of individual liberties was violating the natural order. "Survival of the fittest"-a phrase that Charles Darwin took from Spencer-made free competition a social as well as a natural law.

Spencer was, arguably, the single most influential systematic thinker of the nineteenth century, but his influence, compared with that of Darwin, Marx, or Mill, was short-lived. In 1937 the Harvard sociologist Talcott Parsons asked, "who now reads Spencer?" seventy years later, the question remains pertinent even if no one now reads Talcott Parsons, either. In his day Spencer was a greatest of philosophical hedgehogs: his popularity stemmed from the fact that he had one big easily grasped idea and a mass of more particular ideas that supposedly flowed from the big one. The big idea was evolution but while Darwin applied it to species change, speculating about society and culture only with reluctance. Spencer saw evolution working everywhere." This law of organic progress is the law of all progress" he wrote, "whether it be in the development of Earth, in the development of life upon its surface, in the development of society, of government, of manufacturers, of commerce, of Language, Literature, Science, (or) Art." Spencer has been tagged as a social Darwinist, but it would be more correct to think of Darwin as biological Spencerian. Spencer was very well known as evolutionist long before Darwin's "On the origin of species" was published, in 1859 and people who had limited interest in the finches of the Galapagos had a great interest in whether the state should provide for the poorer, whether it was right to colonize India.

In New York Spencer told his admirers that they had got him seriously wrong. He did not approve of the culture of American capitalism, and, while he admired its material achievements, he was concerned that, for Americans, work had become a pathological obsession. Americans were endangering their mental and physical health through overwork, and many were turning gray before their time-ten years earlier than the British., Spencer believed. America needed "a revised ideal of life" he said, and it was time to "preach the gospel of relaxation." He

went on," Life is not for learning, nor is life for working, but learning and working are for life." Having administered that slap to the face of national virtue, Spencer steamed off back to England.

A) According to the author, why was Spencer so popular in the 19th century?

- a) He supported capitalism
- b) He extended Darwin's theory of evolution to a lot of things
- c) He had one broad and simple idea and many specific ideas flowed from it
- d) He was a friend of parsons

B) Which people is the author referring to in the statement: "people who had limited interest in the finches of the Galapagos"?

- a) People who were not interested in the bird finch
- b) People who were not interested in finches in particular from Galapagos
- c) People who were not interested in animal species or natural evolution
- d) People who did not have interest in birds.

C) What is the author most likely to agree in the following ?

- a) Darwin's idea of evolution precede that of Spencer
- b) Both Darwin and Spencer got the idea of the evolution at the same time
- c) Spencer's idea of evolution precede that of Darwin's
- d) Darwin and Spencer worked on totally different models of evolution

D) What must have been the most-likely response/reaction of the New York audience to Spencer's talk in 1882?

- a) Vindication b) Surprise c) Happiness d) Depression

16) **Environmental Toxins: Frighteningly Commonplace**

Environmental toxins which can affect children are frighteningly commonplace. Besides lead, there are other heavy metals such as mercury, which is found frequently in fish that are spewed into the air from coal-fired power plants, says Maureen Swanson, MPA, director of the Healthy Children Project at the Learning Disabilities Association of America.

Mercury exposure can impair children's memory, attention, and language abilities and interfere with fine motor and visual spatial skills. A recent study of school districts in Texas showed significantly higher levels of autism in areas with elevated levels of mercury in the environment. "Researchers are finding harmful effects at lower and lower levels of exposure," says Swanson. "They're now telling us that they don't know if there's a level of mercury that's safe."

Chemicals in pesticides are also a major source of concern. One class of pesticides, called organophosphates, has been associated with various kinds of cancer and hormonal disruption. Approximately 40 different Organophosphate-

based pesticide products are currently on the market in the United States. One, called Chlorpyrifos, sold under the name Dursban, was used on school grounds and playing fields, and to get rid of household pests. Although Dursban is no longer sold in the United States, says Rogge, that doesn't mean it's not present in the environment. "At the time of the ban," she says, "stores put Dursban on sale, and people stocked up. So they may still be using it."

Another class of chemicals, organochlorines, have mostly been phased out in the United States. One of these chemicals, Lindane, was available as recently as 2003 as a prescription medicine to eliminate head lice and was associated with symptoms such as dizziness, headaches, and convulsions. Another organochlorine, dioxin, found in pesticides such as dichlorodiphenyltrichloroethane, has been banned from sale in the United States for some years. But dioxin, says Rogge, still enters the environment as a byproduct of combustion from industrial processes.

Other chemicals that have also been banned from use may still be causing problems as well. Polychlorinated biphenyls (PCBs), some of which are a form of dioxin, for example, have been banned in the United States for years but are still found in the environment. Researchers have found evidence that children exposed in the womb to low levels of PCBs grow up with poor reading comprehension, low IQs, and memory problems.

Then there's a whole category of chemicals that are known or suspected endocrine disruptors. These chemicals can interfere with the human hormonal system, particularly the thyroid gland, says Swanson. During pregnancy, the hormones released by the thyroid are vital for normal development of the fetus' brain.

Unfortunately, some of these chemicals make good flame retardants and have been widely used in everything from upholstery to televisions to children's clothing. Studies have found them in high levels in household dust, as well as in breast milk. Two categories of these flame retardants have been banned in Europe and are starting to be banned by different states in the United States. Other chemicals, called plasticizers, are just now coming onto the radar screen as possible sources of health problems. One of them, bisphenol A, is found in pacifiers, baby bottles, and dental sealant used to prevent cavities in children. It's also found in many adult consumer products, according to Elise Miller, MEd, executive director of the non-profit Institute for Children's Environmental Health and national coordinator of the Learning and Developmental Disabilities Initiative. "We all have bisphenol A in our bodies now," she says. Research on bisphenol A has shown it can affect both the reproductive and neurological system, and that it appears to accumulate at higher concentrations around the fetus-in the umbilical cord and amniotic fluid-than in the mother's blood.

A) Besides lead there are other heavy materials such as mercury are most frequently found in the fish that are swiped into the air from coal fired power plants. How this can be worded differently?

- a) Besides lead mercury is other heavy material which is found in fish cooked in coal fired power plants
- b) Besides lead fish containing the heavy material mercury ejected in the air from the power plants using coal
- c) Fish contain mercury which is released in the air as industrial waste and which is also a heavy material like lead
- d) Mercury released in the air as industrial waste which is also like a heavy material lead which is found in fish

B) All these are harmful effect of mercury in the children EXCEPT

- a) Affect driving skill
- b) Causes attention deficits ordered
- c) Lead to neurological problems
- d) Impacts ability to learn language

C) "Researcher are finding harmful effects at lower level of exposure" How can this line be interpreted?

- a) Lower level of exposure are harmful
- b) Harmful effects from exposure are becoming less intense
- c) Amount of clothing has an impact on harmful effect
- d) Even little exposure, can cause harm

D) What 'front' is being referred to?

- a) Efforts of Healthy Children Project at the Learning Disabilities Association of America
- b) Banning of flame retardants in Europe and various states of America
- c) More and more states are joining the 2 states in Europe and various states in America that have already banned harmful chemicals
- d) Proposed bill resulting in a blanket ban on all harmful chemicals

17) Rohit brushed quickly past an elderly woman waiting on the platform ahead of him to get onto the metro. He wanted to be sure to get a seat to read his Economic Times. As the train rolled out of the station, he lifted his head from the newspaper and stared at the man directly across from him.

A tsunami - of antipathy came over him. Rohit knew this man, knew him all too well.

Their eyes locked.

As the train reached full speed, the ruckus of speeding wheels against the winding rails and wildly gyrating subway car filled Rohit's ears. To this frenetic

d) No real interest in spiritual and religious aspects.

B) What can be inferred from the term 'fringe' used in the passage?

- a) Completely unrelated b) Not of relevance
- c) Marginal in relation to something d) Unavoidable in a situation

C) What is the aim of Urban Zen Foundation?

- a) It helps one succeed in career
- b) It helps find peace in the middle of chaotic lives
- c) The primary focus is on providing diagnosis and medication
- d) It brings together fashion and health care

D) Which of the statements is true about the field of integrative medicine?

- a) Only yoga devotees can understand the importance of this field
- b) Yoga and meditation are used along with proper medication
- c) It provides healing powers to patients
- d) It focuses on spiritual path of living

19) From the dawn of time, people have suspected powerful forces lurking deep in the oceans, from the Greeks' fearsome sea-god Neptune to John Wyndham's submarine aliens in his 1950s novel *The Kraken Wakes*. But science is once again going one better than science fiction. Researchers are discovering that hidden 'rivers' run through the oceans, and these powerful currents hold the destiny of our planet's climate.

The beneficial aspects of ocean currents have long been known. For countries on the east side of the Atlantic, winters are a balmy holiday compared with the same latitudes on the west: the frigid coasts of Newfoundland and Labrador. It's a reminder that "weather" is not just a matter of the Sun's heat affecting the Earth's atmosphere. The world's interconnected oceans can store up solar heat in one part of the globe in one season, and invisible rivers in the ocean can transport the warmth thousands of kilometres to another part of the globe and deliver it in another season.

In the case of the North Atlantic, heat is carried northward and eastward by the Gulf Stream. This current warms the coast evenly through the year, in winter as well as summer. Averaged over a year, the Gulf Stream provides Western Europe with a third as much warmth as the Sun does.

This ocean warmth is so important to Europe that climatologists are seriously concerned about the stability of the Gulf Stream. If it switched off, Europe would be plunged into a mini-Ice Age. And current studies suggest that the unseen river in the North Atlantic is dangerously fickle.

The focus of today's worries is the problem of global warming - the way that human activities are changing the climate, as the world gets warmer through the build-up of so-called greenhouse gases, such as carbon dioxide. Climatologists think that global warming may put the brakes on the Gulf Stream. While the rest of the world comes to swelter in greenhouse conditions, Europe would freeze! This concern is based on a new understanding of how the great ocean currents are all interconnected. The Gulf Stream is part of a giant pattern of moving water that stretches right around the globe.

A) Which of the following statements are correct about Gulf stream?

- a) It is a ocean which spreads warmth evenly across the coast
- b) Solar heat is carried in North-East direction
- c) It is a part of giant pattern of moving water around the world
- d) Both 1 and 3

B) What are the main concerns of climatologists?

- a) The entire planet will be warmer with increase in global warming
- b) Green house gases can change direction of ocean currents
- c) Interconnection of currents can be harmful for oceanic life
- d) Global warming can stop the flow of Gulf Stream

C) What is the possible meaning of 'fickle'?

- a) Constant flow in one direction b) Likely to change due to instability
- c) Modify under extreme conditions d) Fixed at one place

D) What is the role of ocean currents in maintaining the weather conditions?

- a) It helps in maintaining cold temperature in warmer regions
- b) It balances the effect of sun's heat
- c) It stores heat and warms distant places
- d) Unpredictable currents can create an imbalance in water temperature

20) Class and money has always strongly affected how people do in life in Britain, with well-heeled family breeding affluent children just as the offspring of the desperately poor tend to be poor. All that supposed to have ceased by the end of the Second World War, with the birth of welfare state designed to meet basic needs and promote social mobility. But despite devoting much thought and more money to improve the lot of the poor, governments have failed to boost those at the bottom of the pile as much as those on top of the pile have boosted themselves.

Although the study found that some of the widest gaps between social groups have diminished over time between men and women on pay, for example, and between various ethnic minorities), deep-seated differences between haves and

have-nots persist, blighting the life chances of the less fortunate. Looking at earnings, income, education, employment or wealth, a similar pattern emerges.

By the age three, a poor child is outperformed in verbal ability and behavior by a rich one. Much of this difference is explained by ethnicity: unsurprisingly, poor children who do not speak English at home know fewer words in what is their second or third language. A child's ethnicity becomes less important as he grows: by the age of 16, bright Chinese and Indian students are performing extremely well at school. But throughout his classroom career how well a child does is dominated by how highly educated his parents are and how much money they bring home.

Politicians of all stripes talk about equality of opportunity, arguing that it makes for a fairer and more mobile society, and a more prosperous one. The difficulty arises in putting these notions into practice, through severe tax increases for the middle-class and wealthy, or expanding government intervention.

A) Which of the following is highlighted in the passage?

- a) An insight into the economy of Britain and the failure of the Government
- b) The widening gap between the affluent and the poor.
- c) The problems of putting ideals into practice.
- d) The performance of children of various ethnic groups in school.

B) What is the pattern noticed while studying social groups?

- a) The gap will only continue to grow since implementing policies is difficult
- b) The ethnicity of a child becomes less important as he grows
- c) The gap is somewhat narrowing, but there is still a long way to go
- d) A poor person will always remains poor

C) In the context of the passage , what is the meaning of the term 'blighting'?

- a) Ruining b) Improving c) Illuminating d) Imbalancing

D) Which of these can be inferred from the passage as one of the key solutions to reduce the gap between various social groups?

- a) Encouraging ethnic social groups to converse in English even at home so as to develop their verbal ability
- b) Implementing higher tax rates for the middle class and wealthy so that the gap between the rich and poor can be reduced
- c) By not disclosing the child's ethnicity and background of parents at school so as to remove bias from coming in
- d) Making the affluent people responsible for the poorer people, since they have been better at generating wealth than the government

21) Research has found that more than 85 percent of college students feel increased stress and anxiety at exam time, and that number is likely even higher during their first time around. But there are many ways parents can help their students manage exam stress, including those that not only improve their ability to perform on the tests, but also help them stay healthy in the process.

One of the first things parents can do to help their students through their first round of exams is to make sure they don't wait until the last minute to prepare. As soon as the exam dates are determined, help them organize a schedule to stay on top of their work, and provide gentle reminders throughout the semester to make sure they don't procrastinate.

If you're too far away for face-to-face time, send study aids to help them get as relaxed and ready as possible. Help them avoid the typical exam-time habit of too much junk food and caffeine with a package filled with healthy snacks. A classical music CD will provide a calm study atmosphere, and a yoga DVD will help them stay relaxed and composed.

Finally, be sure to remember how important love and support are to your student. Offering support is as simple as acknowledging the stress they are feeling. Help your student keep a positive attitude, and remind him or her that the first round of exams is not likely to make or break their entire college career. It will all go a long way in helping your student become as relaxed and ready as possible.

A) What is the meaning of the term 'procrastinate'?

- a) Ignore consequences of an action b) Adapt to a situation
- c) Delay action d) Timely effort to complete something

B) How can a parent help if he or she is far away from the child?

- a) Talk regularly and provide guidance
- b) Persuade them to attend group study
- c) Give self-help books to instill a sense of purpose and motivation
- d) Send CD's and other useful things to help stay calm and focused

C) In what way can a parent offer unconditional support to a child?

- a) Let the child plan his exam study entirely on his own
- b) Spend quality time taking long walks and doing things of common interest
- c) Support and encourage while helping the child to be relaxed.
- d) Strategize and plan for a successful career ahead.

D) Which of the following can be used as the title?

- a) Coping with the pressure of exam stress alone
- b) Role of parents in reducing exam anxiety
- c) Students determination weakens under intense pressure
- d) Institutes reduce pressure by counselling

22) The stratosphere—specifically, the lower stratosphere—has, it seems, been drying out. Water vapour is a greenhouse gas, and the cooling effect on the Earth's climate due to this desiccation may account for a fair bit of the slowdown in the rise of global temperatures seen over the past ten years.

The stratosphere sits on top of the troposphere, the lowest, densest layer of the atmosphere.

The boundary between the two, the tropopause, is about 18km above your head, if you are in the tropics, and a few kilometres lower if you are at higher latitudes (or up a mountain). In the troposphere, the air at higher altitudes is in general cooler than the air below it, an unstable situation in which warm and often moist air below is endlessly buoying up into cooler air above. The resultant commotion creates clouds, storms and much of the rest of the world's weather. In the stratosphere, the air gets warmer at higher altitudes, which provides stability.

The stratosphere—which extends up to about 55km, where the mesosphere begins—is made even less weather-prone by the absence of water vapour, and thus of the clouds and precipitation to which it leads. This is because the top of the troposphere is normally very cold, causing ascending water vapour to freeze into ice crystals that drift and fall, rather than continuing up into the stratosphere.

A little water manages to get past this cold trap. But as Dr Solomon and her colleagues note, satellite measurements show that rather less has been doing so over the past ten years than was the case previously. Plugging the changes in water vapour into a climate model that looks at the way different substances absorb and emit infrared radiation, they conclude that between 2000 and 2009 a drop in stratospheric water vapour of less than one part per million slowed the rate of warming at the Earth's surface by about 25%.

Such a small change in stratospheric water vapour can have such a large effect precisely because the stratosphere is already dry. It is the relative change in the amount of a greenhouse gas, not its absolute level, which determines how much warming it can produce.

A) What is the order of layers in the atmosphere, starting from the lowermost and going to the topmost?

- a) Tropopause, Troposphere, Mesosphere, Stratosphere
- b) Troposphere, Tropopause, Stratosphere, Mesosphere
- c) Troposphere, Tropopause, Mesosphere, Stratosphere
- d) Troposphere, Stratosphere, Tropopause, Mesosphere

B) Why is the situation in the troposphere defined as unstable?

- a) Because, unlike the stratosphere, there is too much water vapour in the troposphere

- b) Because the troposphere is not directly linked to the stratosphere, but through the tropopause which creates much of their world's weather.
- c) Because of the interaction between warm and cool air which is unpredictable in nature and can lead to storms
- d) Because this layer of the atmosphere is very cloudy and can lead to weather related disruptions

C) What in the passage has been cited as the main reason affecting global temperature?

- a) Relative change in water vapour content in stratosphere
- b) Drop in stratospheric water vapour of less than one part per million
- c) The extreme dryness in the stratosphere
- d) Absorption and emission of infrared radiation by different substances

D) What accounts for the absence of water vapour in stratosphere?

- a) The layer of stratosphere is situated too far above for the water vapour to reach
- b) Rise in global temperature, lead to reduced water vapour that gets absorbed in the troposphere
- c) The greenhouse gas gets absorbed by the clouds in the troposphere and comes down as rain
- d) Before the vapour can rise up, it has to pass through below freezing temperature and turns into ice.

23) India lives in several centuries at the same time. Somehow we manage to progress and regress simultaneously. As a nation we age by pushing outward from the middle adding a few centuries on either end of the extraordinary CV. We greatness like the maturing head of a hammerhead shark with eyes looking in diametrically opposite directions.

I don't mean to put a simplistic value judgement on this peculiar form of "progress" by suggesting that Modern is good and Traditional is Bad or vice versa. What's hard to reconcile oneself to, both personally and politically, is the schizophrenic nature of it. That applies not just to the ancient/modern conundrum but to the utter illogic of what appears to be the current national enterprise. In the lane behind my house, every night I walk past road gangs of emaciated labourers digging a trench to lay fiber-optic cables to speed up our digital revolution. In the bitter winter cold, they work by the light of a few candles.

It's as though people of India have been rounded up and loaded onto two convoys of trucks (a huge big one and a tiny little one) that have set off resolutely in opposite directions. The tiny convoy is on its way to a glittering destination somewhere near the top of the world. The other convoy just melts into the

darkness and disappears. A cursory survey that tallies the caste, class and religion of who gets to be on which convoy would make a good lazy person's concise guide to the history of India. For some of us, life in India is like being suspended between two of the trucks, one leg in each convoy, and being neatly dismembered as they move apart, not bodily, but emotionally and intellectually.

Sixty years after independence, India is still struggling with the legacy of colonialism, still flinching from the "cultural insult". As citizens we are still caught up in the business of "disproving" the white world's definition of us. Intellectually and emotionally, we have just begun to grapple with communal and caste politics that threaten to tear our society apart. But meanwhile, something new looms on our horizon. On the face of it, it's just ordinary, day-to-day business. It lacks drama, the large-format, epic magnificence of war or genocide or famine. It's dull in comparison. It makes bad TV. It has to do with boring things like jobs, money, water supply electricity, irrigation. But it also has to do with a process of barbaric dispossession on a scale that has few parallels in history. You may have guessed by now that I'm talking about the modern version of globalization.

What is globalization? Who is it for? What is it going to do a country like India, in which social inequality has been institutionalized in the caste system for centuries? Is the corporatization and globalization of agriculture, water supply, electricity and essential commodities going to pull India out of the stagnant morass of poverty, illiteracy and religious bigotry? Is the dismantling and auctioning off of elaborate public sector infrastructure, developed with public money over the past sixty years, really the way forward? Is globalization going to close the gap between the privileged and the underprivileged, between the upper castes and the lower castes, between the educated and the illiterate? Or is it going to give those who already have a centuries-old head start a friendly helping hand? These are huge, contentious questions. The answers vary depending on whether they come from the villages and fields of rural India, from the slums and shantytowns of urban India, from the living rooms of the burgeoning middle class or from the boardrooms of the big business houses.

A) What do you infer from the sentence in context of the passage 'India lives in several centuries at the same time'?

- a) We are progressing in some areas and regressing in others
- b) People from different countries are living in India
- c) India has a diverse culture
- d) Some people are modern while others are traditional in approach

B) What does the phrase "cultural insult" imply?

- a) People from one culture do not respect people from the other cultures
- b) Disrespect of British towards Indian culture
- c) White people's definition for us
- d) Ill-treatment at hands of British

C) Why does the response towards 'Globalisation in India' differ in different parts of India?

- a) Due to different literacy levels
- b) Due to religious diversity in India
- c) It will not benefit all sections of the society
- d) It may not have all the answers to India's current problems.

D) What do you infer from the following lines- 'In the lane behind my house, every night I walk past road gangs of emaciated labourers digging a trench to lay fiber-optic cables to speed up our digital revolution. In the bitter winter cold, they work by the light of a few candles.'

- a) India has a balanced mixture of both traditional and modern people.
- b) Progress is unbalanced.
- c) Digital revolution is very important for our economic growth.
- d) There is shortage of electricity in India.

24) The most avid users of social-networking websites may be exhibitionist teenagers, but when it comes to more grown-up use by business people, such sites have a surprisingly long pedigree. LinkedIn, an online network for professionals that signed up its ten-millionth user this week, was launched in 2003, a few months before My Space, the biggest of the social sites. Consumer adoption of social networking has grabbed most attention since then. But interest in the business uses of the technology is rising.

Many companies are attracted by the marketing opportunities offered by community sites. But the results can be painful. On searching Pizza Hut on My pace, the profile of a pizza-delivery driver comes up, who helpfully lets friends in on the chain's latest promotional offers ("Dude, I just heard some scoop from the Hut" ran one recent post). Wal-Mart started up and rapidly closed down a much-derided teenage site called the Hub last year. Reuters hopes to do better with its forthcoming site for those in the financial-services industry.

Social networking has proved to be of greatest value to companies in recruitment. Unlike a simple jobs board, social networks enable members to pass suitable vacancies on to people they know, and to refer potential candidates back to the recruiter. So employers reach not only active jobseekers but also a much larger pool of passive candidates through referrals. Having lots of people in a network increases its value in a "super-linear" fashion, says Reid Hoffman, LinkedIn's founder. He says corporate use of his service is now spreading beyond recruiters: hedge funds use it to identify and contact experts, for example.

This technique is also gathering momentum in "knowledge management". IBM recently unveiled a social-software platform called Lotus Connections, that lets company employees post detailed profiles of themselves, team up on projects

and share bookmarks. One manufacturer testing the software is using it to put inexperienced members of its customer-services team in touch with the right engineers. It can also be used to identify in-house experts. Software firms will probably start bundling social features of this kind into all sorts of business software.

To work well in the business world, social networking has to clear some big hurdles. Incentives to participate in a network have to be symmetrical, for one thing. The interests of MySpace members and of jobseekers and employers may be aligned, but it is not clear why commission-hungry salespeople would want to share their best leads with colleagues. Limiting the size of the network can reduce its value for companies, yet confidentiality is another obvious concern for companies that invite outsiders into their online communities. Social networking sounds great in theory, but the business benefits are still unproven. But if who you know really does matter more than what you know, it has obvious potential.

A) What meaning of avid could you infer from the passage?

- a) Dormant b) Unprincipled c) Unwanted d) Enthusiastic

B) What are the hurdles that social networking has to overcome in order to benefit the business world?

- a) Issue of confidentiality b) Misalignment of interests
c) Misalignment of interests and confidentiality d) None of these

C) Why does the author call “Lotus Connections” a social software platform?

- a) Because it is used for knowledge management
b) It has a feature to allow employees to interact and cooperate with each other
c) Because IBM developed it
d) Because the service team can get in touch with the right engineers using it

D) What is the most probable context in which the author is talking about pizza hut?

- a) Social networking did not benefit it b) Social networking was a big success for it
c) Social networking created problems for it d) None of these

25) China’s massive subsidization of its steel industry is having consequences that are truly global. By expanding its steel industry by government fiat, rather than in response to the demands of the market, China has skewed the entire world market in steel and in the inputs used to make steel. In doing so, it has directly injured both foreign steel producers and steel consuming industries in other countries.

China’s explosive growth between 2000 and the present required massive amounts of steel and indeed, during much of this period China was the world’s leading steel importer. By building up its steel industry to artificial levels, though,

China deprived steel producers in other countries of valuable sales. This is significant, because steel is a highly cyclical industry.

Not surprisingly, the rapid expansion of steel making capacity in China led first to the replacement of imports and then to a boom in exports. In product line after product line, Chinese exports have flooded world markets, driving down prices. The world in many ways constitutes an integrated market for steel. Through a dramatic expansion in capacity fuelled largely by subsidies and government-directed lending, the Chinese steel industry is destabilizing that market. Foreign steel producers are not the only ones harmed by the subsidized expansion of the Chinese steel industry. Foreign steel consumers have also been injured. The expansion of the steel industry is only part of the Chinese government’s plan for the development of the Chinese economy. The Chinese government is also encouraging the development of manufacturing industries that use steel.

Manufacturers of products that are steel-intensive, such as automotive parts and appliances, are seeing increasing competition from Chinese producers who have access to subsidized domestic steel. Subsidized steel is going to manufacture components in China that ultimately end up in the United States and replace American steel. Indeed, American consumers report that they can import finished parts cheaper from China than they can buy the steel here. At the same time that U.S. steel producers are seeing increased imports caused, directly and indirectly, by increased Chinese production, we are also seeing many of our domestic customers move production to China, or go out of business altogether.

A) Which of the options most closely describes ‘by government fiat’?

- a) In response to government order b) Before Chinese government ordered
c) With the help of Chinese owned fiat company
d) In keeping with government intuition

B) How have US steel consumers gotten affected as a result of Chinese steel?

- a) Import from China has become very easy and hence there is no need to manufacture the finished product in the US
b) Subsidized Chinese steel which is not of very high quality is affecting quality of finished product.
c) Demand for steel is less than supply from China, leading smaller US steel consumers to shut down business.
d) Raw material in America costs more than the finished product in China and hence production is unfeasible

C) What is the main motive behind expansion of steel industry in China?

- a) Increased returns as a result of higher market share globally
b) Replacing imports and growth of Chinese economy
c) Driving out foreign producers and consumers from the world market of steel

d) Make a global impact in all industries, beginning with steel industry

D) What does “dramatic expansion” indicate?

- a) Artificial expansion b) Noticeable expansion
- c) Unstable expansion d) Unreal expansion

26) Alaska is also known as a good place for seeing the polar aurora, also known as “Northern Lights”. Most often you see greenish white ribbons stretching across the sky, roughly from East to West, usually with waves in them. And if you look closely at them, you will note that they contain many parallel rays, running across their width.

Two things about those rays are noteworthy. One, the bright ones fade while dim ones brighten instead, a bit like flames in a fireplace, and just as mesmerizing. Some auroras are deep red, and these may be just a shapeless glow, or they may have rays, too. And second, the direction of those rays is related to the magnetism of the Earth.

Anyone who has ever used a compass knows that the Earth is a giant magnet. The needle of the compass usually points towards one of two points, the magnetic poles of the Earth located near the geographic poles. Actually, the magnetic force points not just northward but also slants down into the Earth. The rays of aurora faithfully follow that slanting direction.

That was one clue that the aurora was related to Earth’s magnetism. The other clue was found by keeping tabs on how often aurora was seen in various locations. It turned out that the important factor was distance from the magnetic pole. That pole is separated from the geographic pole, marking the Earth’s rotation axis, and currently it is in the Arctic Ocean, just North of Canadian soil

A) What is the meaning of ‘mesmerizing’?

- a) Glorify the beauty b) Spellbind or Enthrall
- c) Unworthy of attention d) Appreciate the presence of a thing

B) How are the rays related to the magnetism of Earth?

- a) The Rays move along the needle pointing towards geographic poles
- b) The Rays are perpendicular to magnetic poles
- c) Parallel rays travel between geographic and magnetic poles
- d) Rays are in the direction of magnetic poles slanting into the Earth

C) What can be the suitable title for the passage?

- a) Northern Lights- a fading phenomenon
- b) Natural display of light- the wonder of Northern Lights
- c) Scientists at a loss for explaining auroras
- d) Aurora rays baffle scientists – no conclusion reached

D) What is the shape of “Northern Lights”?

- a) Ribbons stretching from west to east b) Curtain of rays with no distinct lines
- c) Parallel rays with waves in them d) Both 2 and 3

27) Most people can remember a phone number for up to thirty seconds. When this short amount of time elapses, however, the numbers are erased from the memory. How did the information get there in the first place? Information that makes its way to the short term memory (STM) does so via the sensory storage area. The brain has a filter which only allows stimuli that is of immediate interest to pass on to the STM, also known as the working memory.

There is much debate about the capacity and duration of the short term memory. The most accepted theory comes from George A. Miller, a cognitive psychologist who suggested that humans can remember approximately seven chunks of information. A chunk is defined as a meaningful unit of information, such as a word or name rather than just a letter or number. Modern theorists suggest that one can increase the capacity of the short term memory by chunking, or classifying similar information together. By organizing information, one can optimize the STM, and improve the chances of a memory being passed on to long term storage.

When making a conscious effort to memorize something, such as information for an exam, many people engage in "rote rehearsal". By repeating something over and over again, one is able to keep a memory alive. Unfortunately, this type of memory maintenance only succeeds if there are no interruptions. As soon as a person stops rehearsing the information, it has the tendency to disappear. When a pen and paper are not handy, people often attempt to remember a phone number by repeating it aloud. If the doorbell rings or the dog barks to come in before a person has the opportunity to make a phone call, he will likely forget the number instantly.* Therefore, rote rehearsal is not an efficient way to pass information from the short term to long term memory.* A better way is to practice "elaborate rehearsal". *This involves assigning semantic meaning to a piece of information so that it can be filed along with other pre-existing long term memories.*

Encoding information semantically also makes it more retrievable. Retrieving information can be done by recognition or recall. Humans can easily recall memories that are stored in the long term memory and used often; however, if a memory seems to be forgotten, it may eventually be retrieved by prompting. The more cues a person is given (such as pictures), the more likely a memory can be retrieved. This is why multiple choice tests are often used for subjects that require a lot of memorization.

Glossary:

Questions:

a) They revert from the long term memory.

c) They get chunked when they enter the brain.

2) The word elapses in paragraph 1 is closest in meaning to:

3) All of the following are mentioned as places in which memories are stored except the:

a) STM b) long term memory

c) Sensory storage area d) maintenance area

a) To give an example of a type of memory b) To provide a type of interruption

c) To prove that dogs have better memories than humans

d) To compare another sound that is loud like a doorbell

5) How do theorists believe a person can remember more information in a short time?

a) By organizing it b) By repeating it

c) By giving it a name d) By drawing it

A Streetcar Named Desire is a classic of the American theater. Tennessee Williams' landmark work was a tour de force in its original stage production in 1947 and continues to resonate with audiences and readers today despite—or perhaps because of—its simplistic though layered story. A faded Southern belle, Blanche DuBois, arrives at her sister's seedy New Orleans apartment where she is tortured by her brutish brother-in-law, Stanley Kowalski. Blanche puts on airs of class and happiness throughout the play, though internally she is miserable and haunted by her tragic and scandalous past. Stanley forces Blanche to face her dolorous reality with his vitriol and, finally, his act of sexual aggression, and in doing so, he causes her to lose her tenuous grip on sanity. Most have argued (correctly) that the play is about the ways the past haunts our present or (again correctly) that it is about the ways class and sexuality impact our lives. However, few have seen the play for what it is: an allegory for the theater itself. Before Williams wrote *Streetcar*, the theater had been dominated by melodrama. A brief interlude in the 1930s brought

But to make his point that melodrama was flawed, he added an equally unrealistic character. Blanche, unlike the other characters, speaks theatrically, acts larger than life on stage, and uses floral language and heightened mannerisms. Blanche is a character not to be trusted. She lies about everything, and the only thing that finally exposes her lies is reality itself: Stanley. He finally forces her off the stage and into the insane asylum by forcing himself on her sexually. And with that, realism forcibly removed melodrama from the stage.

It is not possible to imagine *A Streetcar Named Desire* without the influence of Marlon Brando, the actor who rose to fame playing Stanley Kowalski. On the page, the part is fairly simplistic. Stanley is a monster and a beast without any redeeming qualities. But Brando and the play's original director, Elia Kazan, imagined the character as having a soft underbelly, rooted in his own sorrow, insecurities, and soulful complexity. Brando's Stanley is a brute, yes, but he is a brute who hates the fact that he is so awful. He is also unable to control himself and his passions, and this lack of control is equally embarrassing to him, even as it is also threatening to Blanche and alluring to her sister Stella.

For instance, after he hits Stella, he comes back to her, famously begging for forgiveness by shouting “Stella” outside their apartment. But in Brando’s depiction on the stage and later on the screen, he is soaked from the rain and looks completely desperate, as though he needs Stella to live. He looks and seems totally helpless and weak, the exact opposite of the brute he appears later when he forces himself onto Blanche.

The play is excellent and memorable, even when read. But it is Brando's interpretation of the male lead role that makes the play indelible. Without Brando, the play would still have a deep meaning, but with Brando's interpretation, the play becomes even more profound.

1) Paragraph 1 of Passage 1 provides each of the following EXCEPT

a) a critical interpretation of A Streetcar Named Desire

b) an explanation of why modern audiences connect with *A Streetcar Named Desire*

c) a brief plot synopsis of *A Streetcar Named Desire*

d) Background information on the times that produced A Streetcar Named Desire

e) The author's main argument concerning A Streetcar Named Desire

2) It can be inferred from Passage 1 that A Streetcar Named Desire

- a) was Tennessee Williams' first play b) is better on stage than in print
- c) did not have socialist leanings d) was not melodramatic
- e) would not have been successful without Marlon Brando

3) According to Passage 1, the character of Blanche DuBois

- a) is intentionally overdramatic and theatrical
- b) has never been to the city of New Orleans before
- c) is recently married to Stanley Kowalski
- d) is brutally honest and frank during the play
- e) is firmly rooted in realism and sanity

4) Passage 2 argues that Marlon Brando's portrayal of Stanley Kowalski. (I) earned the actor great fame. (II) is more nuanced than the part that is written. (III) is what really made A Streetcar Named Desire a classic.

- a) I only b) II only
- c) I and II only d) II and III only
- e) I, II, and III

5) Both Passage 1 and Passage 2 argue that

- a) the New York theater scene was blown away by A Streetcar Named Desire
- b) Tennessee Williams wrote A Streetcar Named Desire to end melodrama
- c) A Streetcar Named Desire has more than one true meaning
- d) A Streetcar Named Desire only has power when performed on the stage
- e) the character of Stanley Kowalski is simply a brute monster

29) A few minutes ago, walking back from lunch, I started to cross the street when I heard the sound of a coin dropping. It wasn't much but, as I turned, my eyes caught the heads of several other people turning too. A woman had dropped what appeared to be a dime. The tinkling sound of a coin dropping on pavement is an attention-getter. It can be nothing more than a penny. Whatever the coin is, no one ignores the sound of it. It got me thinking about sounds again. We are besieged by so many sounds that attract the most attention. People in New York City seldom turn to look when a fire engine, a police car or an ambulance comes screaming along the street. When I'm in New York, I'm a New Yorker. I don't turn either. Like the natives. I hardly hear a siren there. At home in my little town in Connecticut, it's different. The distant wail of a police car, an emergency vehicle or a fire siren brings me to my feet if I'm seated and brings me to the window if I'm in bed. It's the quietest sounds that have most effect on us, not the loudest. In the

middle of the night, I can hear a dripping tap a hundred yards away through three closed doors. I've been hearing little creaking noises and sounds which my imagination turns into footsteps in the middle of the night for twenty-five years in our house. How come I never hear those sounds in the daytime? I'm quite clear in my mind what the good sounds are and what the bad sounds are. I've turned against whistling, for instance. I used to think of it as the mark of a happy worker but lately I've been associating the whistler with a nervous person making compulsive noises. The tapping, tapping, tapping of my typewriter as the keys hit the paper is a lovely sound to me. I often like the sound of what I write better than the looks of it.

1) The writer ...

- a) Sleeps next to the window. b) Has lived in Connecticut for a long time.
- c) Believes in ghosts. d) Is interested in fire engines.

2) How does the author relate to sounds at night?

- a) He imagines sounds that do not exist. b) He exaggerates quiet sounds.
- c) He thinks taps should be turned off. d) He believes it's rather quiet at night.

3) How does the writer feel about sounds in general?

- a) They make him feel at home b) He thinks they should be ignored
- c) He believes they are part of our lives d) He prefers silence to loud noises

4) People in New York It suggests?

- a) Don't care about emergencies b) Are used to sirens
- c) Are attracted by sounds d) Don't hear loud noises

5) The sound of a coin dropping makes people....

- a) Think of money b) Look at each other
- c) Pay attention to it d) Stop crossing the street

30) Management is a set of processes that can keep a complicated system of people and technology running smoothly. The most important aspects of management include planning, budgeting, organizing, staffing, controlling, and problem-solving. Leadership is a set of processes that creates organizations in the first place or adapts them to significantly changing circumstances. Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles. This distinction is absolutely crucial for our purposes here: Successful transformation is 70 to 90 per cent leadership and only 10 to 30 percent management. Yet for historical reasons, many organizations today don't have much leadership. And almost everyone thinks about the problem here as one of managing change. For most of this country, as

we created thousands and thousands of large organizations for the first time in human history, we didn't have enough good managers to keep all those bureaucracies functioning. So many companies and universities developed management programs and hundreds and thousands of people were encouraged to learn management on the job. And they did. But, people were taught little about leadership. To some degree, management was emphasized because it's easier to teach than leadership. But even more so, management was the main item on the twentieth-century agenda because that's what was needed. For every entrepreneur or business builder who was a leader, we needed hundreds of managers to run their ever-growing enterprises. Unfortunately for us today, this emphasis on management has often been institutionalized in corporate cultures that discourage employees from learning how to lead. Ironically, past success is usually the key ingredient in producing this outcome. The syndrome, as I have observed it on many occasions, goes like this: success creates some degree of marked dominance which in turn produces much growth. After a while keeping the ever larger organization under control becomes the primary challenge. So attention turns inward and managerial competencies are nurtured. With a strong emphasis on management but not leadership, bureaucracy and an inward focus takeover. But with continued success, the result mostly of market dominance, the problem often goes unaddressed and an unhealthy arrogance begins to evolve. All of these characteristics then make any transformation effort much more difficult. Arrogant managers can over-evaluate their current performance and competitive position, listen poorly and learn slowly. Inwardly focused employees can have difficulty seeing the very forces that present threats and opportunities. Bureaucratic cultures can smother those who want to respond to shifting conditions. And the lack of leadership leaves no force inside these organizations to break out of the morass.

1) Which of the following is similar in meaning of the word "smother" as used in the passage?

- a) Suppress b) Encourage c) Instigate d) Criticize

2) Which of the following characteristics help organizations in their transformation efforts?

- a) Emphasis on leadership but not management b) A strong and dogmatic culture
c) Bureaucratic and inward looking approach
d) Failing to acknowledge the value of customers and shareholders

3) Why did companies and universities develop programs to prepare managers in such a large number?

- a) Companies and universities wanted to generate funds through these programs

- b) The large number of organizations were created as they needed managers in good number
c) Organizations did not want to spend their scarce resources in training managers
d) Organizations wanted to create communication network through trained managers

4) What is the historical reason for many organizations not having leadership?

- a) A view that leaders are born, they are not made
b) Leaders lack managerial skills and organizations need managers
c) Leaders are weak in carrying out traditional functions of management
d) Leaders allow too much complacency in organizations

5) How has the author defined management?

- a) It is the process of adapting organizations to changing circumstances.
b) It is the system of aligning people with the direction it has taken.
c) It refers to creating a vision to help direct the change effectively.
d) Creating better performance through customer orientation.