SYMBIOSIS NATIONAL APTITUDE TEST (SNAP) 2005

Instructions:

This test is divided into the following sections

Sections	No. of Questions	Total
	Mark-1 each	
General English	25	25
Quantitative Ability	30	30
Data Interpretation and Data Sufficiency	40	40
Business Awareness	25	25
Logical Reasoning	40	40
Total	160	160

* For every wrong answer, you will score 25% negative marks. You will be given 120 minutes to complete the test.

SECTION I GENRAL ENGLISH

Directions (Qs. 1 to 10): Fill in the blanks with the most appropriate word.

1. _____ is to constitution as prologue is to

   1. Independence A. Eulogy
   2. Law   B. Write
   3. Preamble   C. Play
   4. Amendment   D. Epilogue

   (a) 3C   (b) 1D
   (c) 4A   (d) 4D

2. _____ is to horse as bray is to _____.

   1. Drive   A. Relay
   2. Hoof   B. Pony
   3. Neigh   C. Wagon
   4. Saddle   D. Donkey

   (a) 1D   (b) 1A
   (c) 3C   (d) 3D

3. _____ is to distance as kilogram is to _____.

   1. far   A. heavy
   2. meter   B. Ounce
   3. Europe   C. Weight
   4. travel   D. Noise

   (a) 2A   (b) 2B
   (c) 2C   (d) 1A

4. _____ is to never as all is to _____.

   1. always   A. none
   2. usually   B. whole
   3. seldom   C. every
   4. often   D. Total

   (a) 1A   (b) 4D
   (c) 2B   (d) 4A

5. _____ is to rain as dam is to _____.

   1. cloud   A. electricity
   2. fog   B. flood
   3. water   C. high
   4. umbrella   D. Spillway

   (a) 3B   (b) 1B
   (c) 4B   (d) 1A

6. _____ is to pacifist as religion is to _____.

   1. war   A. devout
   2. atlantis   B. sacred
   3. object   C. atheist
   4. conscience   D. Minister

   (a) 4C   (b) 4B
   (c) 1C   (d) 4A

7. _____ is to bird as shedding is to _____.

   1. calling   A. barn
   2. flying   B. dog
   3. migrating   C. hay
   4. moulting   D. Farm

   (a) 4A   (b) 4B
   (c) 2C   (d) 2A

8. _____ is to England as lira is to _____.

   1. London   A. Italy
   2. pound   B. mexico
   3. king   C. mandolin
   4. colony   D. Money

   (a) 1A   (b) 1B
   (c) 1D   (d) 2A

9. _____ is to Canada as Rangoon is to _____.

   1. Detroit   A. Indonesia
   2. Florida   B. Burma
   3. Toronto   C. East Pakistan
   4. Alberta   D. Ceylon

   (a) 2B   (b) 3B
   (c) 3D   (d) 3A

10. _____ is to all as part is to _____.

   1. each   A. whole
   2. right   B. Separate
   3. none   C. role
   4. full   D. Many

   (a) 1A   (b) 4B
   (c) 1D   (d) 4D

Directions (Qs. 11 to 15): Select two words which are most nearly the SAME in meaning, or OPPOSITE in meaning.

11. A. comical   B. pretentious
     C. tragedy   D. climatic

     (a) AC   (b) BC
     (c) AB   (d) DA

12. A. deliberate   B. increasing
     C. involuntary   D. incorrigible

     (a) DC   (b) BD
     (c) AC   (d) CD

13. A. sagacious   B. extravagant
     C. fastidious   D. meticulous

     (a) CD   (b) DB
     (c) BC   (d) AC

14. A. dilatory   B. querulous
     C. compatible   D. omnivorous

     (a) AC   (b) BD
     (c) DC   (d) CB

15. A. extravagance   B. prodigality
     C. edification   D. acrimony

     (a) DC   (b) AB
     (c) BC   (d) CA

Directions (Qs. 16 to 21): Choose the best answer among the listed alternatives.

16. One major obligation of the social psychologist is to provide his own discipline, the other social sciences, and interested laymen with conceptual tools that will increase the range and the reliability of their understanding of social phenomena. Beyond that, responsible government officials are today turning more frequently to the social scientist for insights into the nature and solution of the problems with which they are confronted.

     The above argument assumes that
     A. Social psychologists must have a strong background in other sciences as well as their own.
     B. The social scientist has an obligation to provide the means by which social phenomena may be understood by others.
     C. Social phenomena are little understood by those outside the field of social psychology.

     D. A good social psychologist is obligated principally by the need to solve inter-disciplinary problems.

     (a) B   (b) C
     (c) A   (d) D

17. Once a company has established an extensive sales network in a foreign market and therefore has achieved substantial sales, it seems that these markets should be treated in a very similar fashion to those in one's own country. It is therefore in those countries where only initial sales and representation have been developed where marketing methods will have to differ from domestic activities.

     The above statement assumes that:
     A. Sales network can be the same in both foreign and domestic markets.
     B. Extensive sales networks are preferable to less developed ones.
     C. Larger markets abroad are more adaptable to domestic marketing methods.
     D. A study of marketing should consider the adaptability of advertising campaigns in different countries.

     (a) A   (b) B
     (c) C   (d) D

18. Equality of opportunity has long been prominent as a goal in many countries. In Europe and America there has also been advocacy of more equality of income — the results after taxes of what a person gets for his efforts and the yield of his property. Many western politicians believe this concept of equality should be implemented in developing countries in order to speed economic development.

     Which of the following, if true, could weaken the argument above?
     A. In a poor society, total income is so low that if it were distributed equally, no one could save enough to provide resources for investment.
     B. The marginal dollars in the hands of people with large incomes provide less utility than those with lower income.
     C. High achievement in many societies is due to equality of incomes.
     D. Equality of opportunity is not necessarily synonymous with equality of income.

     (a) D   (b) B
     (c) A   (d) C

19. In 1985 there were 20 deaths from automobile accidents per I ,000 miles traveled. A total of 20,000 miles were traveled via automobiles in 1985. In the same year, 800 people died in airplane crashes and 400 people were killed in train disasters. A statistician concluded that it was more dangerous to travel by plane, train, and automobile, in that order.

Which of the following refutes the Statistician's conclusions?
A. There is no common denominator by which to compare the number of deaths resulting from each mode of travel.
B. One year is insufficient to reach such a conclusion.
C. More people travel by car than any other mode of transport, therefore, the probability of a car accident is greater.
D. The probability of being killed in a train disaster and as a result of a car crash is the same.

(a) A　　　　　　(b) B
(c) C　　　　　　(d) D

20. Product shipments of household appliances are expected to rise to $17 billion next year, an average annual increase of 8.0 percent over the past five years. The real growth rate, after allowing for probable price increases, is expected to be about 4.3 percent each year, resulting in shipments this year of $ 14 billion in 1987 dollars.

Each of the following, if true, could help to account for this trend EXCEPT:
A. Increased consumer spending for durable products
B. Consumer disposable income has increased.
C. The consumer price of electricity has decreased.
D. Individual tax advantages have decreased.

(a) C　　　　　　(b) A
(c) D　　　　　　(d) B

21. Each year's increase or decrease in the trade deficit (merchandise imports greater than exports) is calculated in relation to the previous year's. In 1976, imports of private vehicles were 10 percent higher than in 1975, while imports of vehicles including commercial vans was 15 percent higher than in 1975. That 15 percent increase was one and half times the increase recorded in 1975.

If the formation above is accurate, which of the following must be true?
A. In 1976, the increase, if any of commercial vehicle imports was smaller than the increase in imports of private vehicles.
B. In 1976, the increase, if any, of commercial vehicle imports was greater than the increase in imports of private vehicles.
C. In 1975, more commercial vehicles were imported than private vehicles.
D. The average number of private vehicles imported, in 1975 declined.

(a) A　　　　　　(b) C
(c) B　　　　　　(d) D

Directions (Qs. 22 to 25): Choose the correct alternative.

22. Somebody told you, _____?
(a) Isn't it　　　　(b) Wasn't it
(c) Didn't he　　　(d) Didn't they

23. _____fast.
(a) News travels　　(b) News travel
(c) A news travels　(d) The news travel

24. She _____ in the morning because she gets up late
(a) always has to hurry
(b) has always to hurry
(c) has to always hurry
(d) has to hurry always

25. There is _____.
(a) hair in the soup
(b) hair in soup
(c) a hair in soup
(d) a hair in the soup

SECTION II QUANTITATIVE ABILITY

26. There are 6 balls of different colours and 3 boxes of different sizes. Each box can hold all the 6 balls. The balls are put in the boxes so that no box remains empty. The number of ways in which this can be done is:
    (a) 534   (b) 543
    (c) 540   (d) 528

27. If $a^x = b^y = c^z$ and $b^2 = ac$, then y equals:

    (a) $\dfrac{xz}{x+z}$ (b) $\dfrac{xz}{2(x-z)}$

    (c) $\dfrac{xz}{2(z-x)}$ (d) $\dfrac{2xz}{(x+z)}$

28. If the total numbers of relations from Set A to Set B is 1024, and $n(A) > 1$, $n(B) > 1$, then
    (a) $n(A) = 2$, $n(B) = 5$ (b) $n(A) = 5$, $n(B) = 1$
    (c) $n(A) = 10$, $n(B) = 1$ (d) $n(A) = l$, $n(B) = 10$

29. On a railway there are ten (10) stations. The number of types of tickets required in order that it may be possible to book a passenger from every station to every other is

    (a) $\underline{10}/\underline{2}$ (b) $\underline{10}\,\underline{2}$

    (c) $\underline{10}/\underline{8}$ (d) $\underline{10}/\underline{8}\,\underline{2}$

30. The number of ways in which the letters of the word "ARGUMENT" can be arranged so that only consonants occurs at both the ends is:
    (a) 3!*5!   (b) 14400
    (c) 41000   (d) none of these

31. If U_r denotes the number of one-one functions from $(X_1, X_2, \dots X_r)$ to $(Y_1, Y_2, \dots Y_r)$ such that $f(X_I) \neq Y_I$ for $I = 1, 2, 3, \dots r$ then U_4 is:
    (a) 9   (b) 44
    (c) 265   (d) None of these

32. $\dfrac{a}{b} = \dfrac{4}{3}$, then $\dfrac{3a+2b}{3a-2b}$ would be equal to:

    (a) –1   (b) 3
    (c) 5   (d) 6

33. The number of ways in which the digits of the number 125453752 can be arranged such that no two 5's come together is:

    (a) $\underline{9}\,\underline{3}\,\underline{2}$ (b) $\underline{7}\,\underline{3}\,\underline{2}$

    (c) $\underline{6}\,\underline{2}$ (d) None of these

34. If $2^{x-1} + 2^{x+1} = 320$, then the value of x is
    (a) 4   (b) 5
    (c) 6   (d) 7

35. After a typist had written ten letters and had addressed the ten corresponding envelops, a careless mailing clerk inserted the letters in the envelopes at random, one letter per envelop. What is the probability that exactly nine letters were inserted in proper envelop?

    (a) $\dfrac{1}{2}$ (b) 1

    (c) 0   (d) $\dfrac{9}{10}$

36. In a 26 question test, five points were deducted for each wrong answer and eight points were credited for, each correct answer. If all the questions were answered how many were correct if the score was zero?
    (a) 13   (b) 6
    (c) 9   (d) 10

37. There are n players in an elimination type singles tournament. How many matches must be played (or defaulted to determine the winner).
    (a) $n + 1$ (b) $n - 1$
    (c) $n - 2$ (d) $n + 2$

38. If $-1 \leq x \leq 2$ and $1 \leq y \leq 3$, then least possible value of $(2y - 3x)$ is
    (a) 0   (b) –3
    (c) –4   (d) –5

39. When n is divided by 4, the remainder is 3. What is the remainder when 2n is divided by 4?
    (a) 1   (b) 2
    (c) 3   (d) 6

40. Ten turns of wire are helically wrapped around a cylindrical tube with outside circumference 4" and length 9". The ends of the wire coincide with the ends of the same cylindrical element. Find the length of the wire.
    (a) 27"   (b) 36"
    (c) 41"   (d) 43"

41. Multiply 5746320819 by 125
    (a) 748, 290, 103, 375
    (b) 728, 490, 301, 375
    (c) 718, 290, 102, 375
    (d) 798, 290, 102, 975

42. A company offered its 350 employees a bonus of Rs.10 to each male and Rs.8.15 to each female. All the females but certain percentage of males refused to accept. The total bonus paid was not dependent upon the number of new employed. What was the total amount paid to the women?
    (a) 2445
    (b) 1222.50
    (c) 1262.50
    (d) 2525

43. Which are two numbers whose difference and whose quotient are each equal to 5
    (a) 5/4 and 25/4
    (b) 15/2 and 30/2
    (c) 11 and 16
    (d) 7 and 12

44. A series of books was published at seven year interval. When the seventh book was issued, the sum of the publication years was 13,524. When was the first book published?
    (a) 1932
    (b) 1942
    (c) 1911
    (d) 1917

45. In a given period of days, it was observed that when it rained in afternoon, it had been clear in the morning, and when it rained in the morning, it was clear in the afternoon. It rained on 9 days and was clear on 6 afternoons and 7 mornings. How long was the period?
    (a) 21
    (b) 17
    (c) 13
    (d) 11

46. The traffic lights at three different road crossings change after every 48 sec, 72 sec and 108 sec.respectively. If they all change simultaneously at 8 : 20 : 00 hours, then they will again change simultaneously at:
    (a) 8 : 27 : 12 hrs
    (b) 8 : 27 : 24 hrs
    (c) 8 : 27 : 36 hrs
    (d) 8 : 27 : 48 hrs

47. If 1/4 of 20 is 6 then 1/5 of 10 is
    (a) 3
    (b) 4
    (c) 22/5
    (d) 21/2

48. Which pair from below will not satisfy the equation 187x – 104y = 41?
    (a) x = 3, y = 5
    (b) x = 107, y = 192
    (c) x = 211, y = 379
    (d) x = 314, y = 565

49. The simplest reduction to the lowest terms of: 116, 690, 151 / 427, 863, 887 is
    (a) 11/3
    (b) 7/11
    (c) 3/11
    (d) none of above

50. If $1.125 \times 10^k = .001125$, then the value of k is
    (a) –4
    (b) –3
    (c) –2
    (d) –l

51. 3 truck drivers went to roadside cafe. 1st purchased 4 sandwiches, 1 coffee, 10 biscuits and paid Rs 1.69 paise. 2nd purchased 3 sandwiches, 1 coffee, 7 biscuits and paid Rs. 1.26 paise. What did 3rd truck driver pay for a sandwich, a cup of coffee, and one biscuit?
    (a) 35 paise
    (b) 89 paise
    (c) 68 paise
    (d) 40 paise

52. 10 people start a club. If there had been five more in the group, the initial expenses to each would have been Rs. 100 less. What was initial cost per person?
    (a) 250
    (b) 300
    (c) 500
    (d) 400

53. A 27 quartz capacity car radiator is filled with 18% alcohol solution. How many quartz be drained and then be replaced by a 90% alcohol solution for resulting solution to contain 42% alcohol.
    (a) 9 quartz
    (b) 7 quartz
    (c) 11 quartz
    (d) 14 quartz

54. If 70% of adult males of a community have brown eyes, 75% have dark hair, 85% are over 5'8" tall and 90% weigh more than 140 pounds, what percent at least have all four characteristics?
    (a) 60%
    (b) 45%
    (c) 20%
    (d) 48%

55. Henry started a trip into the country between 8 A.M. and 9 A.M. when the hands of clock were together. He arrived at his destination between 2 P.M. and 3 P.M. when the hands of the clock were exactly 180° apart. How long did he travel.
    (a) 6 hours
    (b) 7 hours
    (c) 9 hours
    (d) 11 hours

SECTION III DATA INTERPRETATION & DATA SUFFICIENCY

Directions (Qs. 56 to 59): Refer to the following table. Given below are the win loss histories of four tennis players in three set matches. **No. of matches played**

	P	Q	R	S
Won 2–0	23	18	10	16
Won 2–1	13	16	13	14
Lost 0–2	8	13	16	13
Lost 1–2	6	8	20	17

56. If a win carries an award, of Rs.1500 and a loss, carries a Rs.1000 award, what is the largest difference in prize money earned by any two players?
    (a) 7000 (b) 14000
    (c) 5000 (d) 9000

57. As in the case above what is the lowest average prize money won per match by any player?
    (a) 1135 (b) 1300
    (c) 1195 (d) 1150

58. As in the case above what is the highest average prize money won per match by any player?
    (a) 1495 (b) 1360
    (c) 1460 (d) 1410

59. Who has lost the maximum percentage of matches played?
    (a) P (b) Q
    (c) R (d) S

Directions (Qs. 60 to 67): Follow the given Instructions:

Each item has a question followed by two statements
Mark (a), if the question can be answered with the help of statement A alone,
Mark (b), if the question can be answered with the help of statement B alone,
Mark (c), if the question can be answered with the help of both the statements but not with the help of either statement itself,
Mark (d), if the question can not be answered even with the help of both the statements.

60. The average of three quotations for a particular item is Rs.120. Is the highest quotation less than or equal to Rs.139?
    A. The lowest quotation is Rs.90
    B. One of the Quotation is Rs.125.

61. How many people, read both Economic Times and Financial Express?
    A. Out of 300 readers, 200 read financial express, 220 read Economic times and 50 read Indian Express.
    B. Out of total 300 readers, 200 read financial express, 220 read Economic times and 50 read neither.

62. A bus started from bus stop P, developed engine trouble and reached bus stop Q, 40 minutes late. What is the distance between bus stops P and Q?
    A. The engine trouble developed after traveling 40 kms from Bus stop P and the speed reduced to 1/4th of the original speed.
    B. The engine trouble developed after traveling 40 kms from Bus stop P in two hours and the speed reduced 1/4th of the original speed.

63. What is the value of prime number X?
    A. X + Y is a two-digit number greater than 50.
    B. Y is a two-digit number.

64. What is the time difference in Nairobi and Mumbai?
    A. The departure time at Nairobi is exactly 6 p.m. local time and the arrival time at Mumbai is next day 3 am local time.
    B. The flight time is 6 hours.

65. Sujata is the eldest daughter. What is the current age of her father?
    A. Current age of Sujata is 25 Years and current age of her sister Sangeeta is 20 years.
    B. Sangeeta's current age is one third of father's age five years before.

66. Alka has 2 sisters and 1 brother. How many sisters Sandhya have?
    A. Alka and Sandhya are sisters.
    B. Sandhya has one brother.

67. Madhav likes car X because its cost is Rs. 5 lac cheapest in C segment and Makarand likes car Y because it costs Rs.7 Lac highest in C segment. Which vehicle will be selected by Keshav?
    A. Keshav is looking for a car which is average representation of C segment.
    B. Keshav's budget is around Rs. 5.5 lac.

Directions (Qs. 68 to 73): Questions are based on the following graph of buyers.

Buyers by age
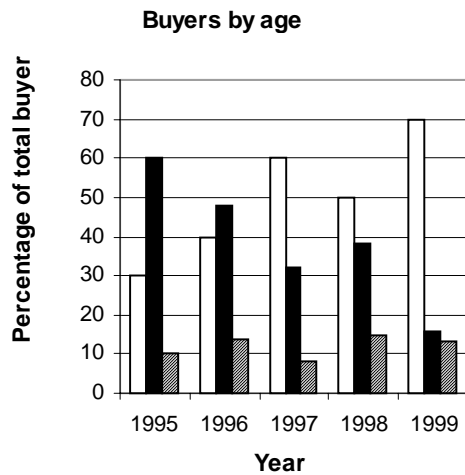
68. By how many percentage has the number of buyers in the age 20-40 years age group has declined from year 1995 to 1999?
    (a) 26.6   (b) 73.4
    (c) 44   (d) 20

69. If the total number of people surveyed is 2000 in each of the five years given, the number of people who buy in the age group 10-20 years has changed from year 1995 to 1999?
    (a) 800   (b) 600
    (c) 1200   (d) 1400

70. Which of the following age groups shows a declining trend in the purchase in the given five years?
    (a) 10-20 Years
    (b) 20-40 Years
    (c) 40 Years & above
    (d) no particular trend in any group

71. By how many percent has the number of buyers in the age 10-20 years age group has increased from year 1997 to 1999?
    (a) 13.6   (b) 15
    (c) 16.7   (d) 10

72. Which of the age group, showed no particular trend?
    (a) 10-20 Years   (b) 20-40 Years
    (c) 40 Years & above   (d) no particular age group

73. The regain strategy should focus on which age group?
    (a) 10-20 Years   (b) 20-40 Years
    (c) 40 Years & above   (d) no particular age group

Directions (Qs. 74 to 81): Questions are based on the data given in the following table.

There are Eight major locations in a zoo at Mysore. A survey was conducted to find out the movement of the people within the zoo. Following results were obtained.

		To							
		A	B	C	D	E	F	G	H
From	A		48	46	66	24	4	68	64
	B	20		64	152	64	90	108	86
	C	28	108		88	86	46	130	130
	D	54	92	66		42	82	20	4
	E	70	48	50	110		26	46	22
	F	24	74	92	68	112		120	60
	G	28	32	134	152	6	86		26
	H	50	70	90	108	68	110	86	

74. The least number of people go to which location?
    (a) G   (b) D   (c) B   (d) A

75. What is the total number of people visiting the zoo?
    (a) 3868   (b) 5000   (c) 4000   (d) Cannot be determined

76. What percentage of total visitor come to E from D?
    (a) 10   (b) 20   (c) 40   (d) 30

77. What is the difference between the number of people going from B to F and G and from D to F and G?
(a) 48   (b) 96
(c) 72   (d) 84

78. The least number of people leave from which place?
(a) H   (b) G
(c) A   (d) E

79. The number of people leaving F for C is _____ the number of people, leaving C for F.
(a) greater than
(b) less than
(c) equal to
(d) can not say with certainty

80. The number of people going to A from B and C is equal to the number of people going to _____ from _____ and _____.
(a) E, A & C   (b) E, D & C
(c) F, A & C   (d) H, E & G

81. The highest number of people leave from which place?
(a) C   (b) D
(c) H   (d) F

Directions (Qs. 82 to 87): Questions are based on the following graph

Spending by advertisers and viewers
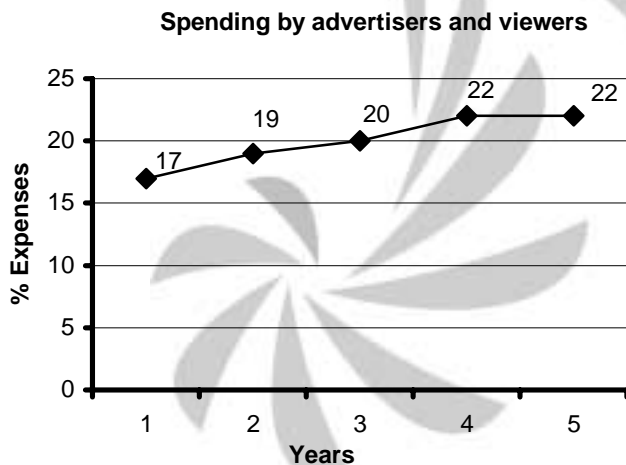
Total for all five years Rs.100 crores

82. If in year 3 out of money spent by the advertisers and viewers 12% had been spent on contingent expenses, what was the amount spent on contingent expenses (in Rs. Crore)?
(a) 2.4   (b) 2.1
(c) 25   (d) 2.6

83. The expenses of which year added to one fourth the expenses of another year equal the expenses of each of two other years?
(a) 4   (b) 3
(c) 2   (d) 1

84. In how many years from Year 2 has the expenditure risen by the around 15%?
(a) 1   (b) 3
(c) 2   (d) Insufficient data

85. The difference in the expenditure between which two years equals the difference between the expenditure in year 2 to year 1?
(a) year 5 and year 3   (b) year 4 and year 3
(c) both 1 and 2   (d) neither 1 and 2

86. If in Year 6 the expenses increase at the same rate as they did from Year 3 to Year 5. What will be the expenditure in Year 6 (in Rs. Crore)?
(a) 28.2   (b) 24.2
(c) 25.2   (d) 23.2

87. If in year 4 out of the money spent by the advertisers and viewers, 10% spent on disaster recovery expenses, what was the amount spent on disaster recovery expenses?
(a) 2.2   (b) 2.6
(c) 2.3   (d) 2.4

Directions (Qs. 88 to 95): Questions are based on the following table.

The XYZ manufacturing company produces a product which has a 6 month demand cycle. The table given below shows Month's Demand in Units and Working days/month

Month	Demand in Units	Working days/month
January	300	22
February	500	19
March	400	21
April	100	21
May	200	22
June	300	20

If company's policy is to retain safety stock of 20% of monthly demand and each months safety stock becomes the opening stock for the next month, and opening stock for January is 50 units. Each unit requires 10 labour-hours and company works 8 hours/day.

88. What is the opening stock for June month?
(a) 20   (b) 40
(c) 60   (d) 100

89. What is production requirement for March?
    (a) 220　　　　　　　(b) 310
    (c) 380　　　　　　　(d) 320

90. In which month production requirement is highest?
    (a) February　　　　(b) March
    (c) January　　　　　(d) June

91. In which month Opening stock is lowest?
    (a) February　　　　(b) March
    (c) January　　　　　(d) May

92. If there are currently 20 workers are employed, and how many workers need to be laid off in January to accommodate demand?
    (a) 6　　　　　　　　(b) 2
    (c) 3　　　　　　　　(d) 5

93. If there are currently 20 workers are employed, and number of workers need to be laid off in January (in previous question) to accommodate demand. How many workers need to be hired in February month?
    (a) 18　　　　　　　(b) 16
    (c) 14　　　　　　　(d) 22

94. If constant workforce of 20 is retained, how many hours workers sit idle in January month?
    (a) 300 hrs.　　　　(b) 420 hrs.
    (c) 240 hrs.　　　　(d) 200 hrs.

95. If constant workforce of 20 is retained, how many hours workers do overtime in February month?
    (a) 2000 hrs.　　　(b) 3000 hrs.
    (c) 2360 hrs.　　　(d) 3360 hrs.

SECTION IV BUSINESS AWARENESS

96. The first animal tamed by man of middle stone age was
    (a) Dog　　　　　　(b) Bullock
    (c) Horse　　　　　(d) Camel

97. The planning commission started functioning on
    (a) 1948　　　　　(b) 1949
    (c) 1950　　　　　(d) 1951

98. The age of earth is believed to be
    (a) 10 million years　　(b) 100 million years
    (c) 1000 million years　(d) 4000 million years

99. Indian constitution was prepared in
    (a) 2 years 11 months
    (b) 2 years 18 days
    (c) 2 years 18 months
    (d) 2 years 11 months 18 days

100. In the event of breakdown of constitution machinery of any state, under which one of the following articles can president rule by imposed
    (a) 352　　　　　　(b) 356
    (c) 360　　　　　　(d) 370

101. FERA has been replaced by
    (a) Competitive Bill　(b) Finance Bill
    (c) FEMA　　　　　(d) No replacement

102. The measurement of poverty line is based on criteria of
    (a) Dwelling houses
    (b) Caloric consumption
    (c) The nature of employment
    (d) The level of education

103. Largest flower in the world is
    (a) Cuscula　　　　(b) Nelumbo
    (c) Rafflesia　　　　(d) Deosera

104. In case of myopia the correct statement is/are
    1. behind the retina
    2. infront of the retina
    3. can be corrected by concave lens
    4. can be corrected by convex lens.
    (a) 1 & 4　　　　　(b) 2 & 4
    (c) 2 & 3　　　　　(d) 1, 2 & 4

105. The four most common elements in living organisms in order are
    (a) Carbon, hydrogen, oxygen, nitrogen
    (b) Hydrogen, oxygen, carbon, nitrogen
    (c) Hydrogen, carbon, oxygen, nitrogen
    (d) Carbon, oxygen, hydrogen, nitrogen

106. The polymer of isoprene is called
    (a) natural rubber　(b) polyethylene
    (c) neoprene　　　(d) monoprene

107. The lightest metal is
    (a) K　　　　　　　(b) Li
    (c) Ca　　　　　　(d) Mg

108. Cinnabar is ore of
    (a) Hg　　　　　　(b) Cu
    (c) Pb　　　　　　(d) Zn

109. A current of 4 amp from 250V source flow through an electric iron for 2 hours The energy consumed will be
    (a) I Kwh　　　　　(b) 4 Kwh
    (c) 1.5 Kwh　　　　(d) 2 Kwh

110. A coin is dropped at refractive index of 4/3. The real depth of coin is 28cm. The coin would be apparently appear to be at the depth of
    (a) 80 cms　　　　(b) 25 cms
    (c) 20 cms　　　　(d) 21 cms

111. An aircraft takes off at the speed of 100 km/hr at an angle of 30° runaway. What is the velocity of the aircraft along the runway,
    (a) 86.6 km/hr
    (b) 76 km/hr
    (c) 70 km/hr
    (d) 50km/hr

112. The gas primarily responsible for the yellowing of the Taj is
    (a) Nitric Oxide
    (b) Carbon Dioxide
    (c) Ozone
    (d) Sulphur Dioxide

113. What annual payment will discharge a debt of Rs.5082 due in 2 yrs at 10% per annum compounded annually
    (a) 2000
    (b) 2250
    (c) 2575
    (d) 2928.20

114. The base radius of a cylinder is $1\frac{2}{3}$ times its height.

    The cost of painting is CSA at 2 paise/cm^2 is Rs.92.40. The volume of liquid is
    (a) 80850 cm^3
    (b) 80580 cm^3
    (c) 80508 cm^3
    (d) none

115. When a metallic wire is connected to a battery
    (a) Current is taken to be flowing from negative terminal to positive terminal
    (b) Electrons flow from negative terminal to positive terminal.
    (c) Electrons flow from positive terminal to negative terminal.
    (d) Current is taken to be flowing from negative to negative and positive to positive terminal.

116. In man, the absence of a Y chromosome in a fertilized egg causes it to develop into
    (a) Male
    (b) Female
    (c) Inter sex
    (d) Dead chromosome

117. Synecology is the study of
    (a) Individuals
    (b) Relation between plant & animal community.
    (c) Study of environment
    (d) None

118. "No part of the enemy's body may be used as t souvenir" was said by
    (a) General Kamikaze
    (b) American Pacific fleet 1942
    (c) Winston Churchill
    (d) Stalin

119. Who wrote the book "Selling the dream"
    (a) Steve Jobs
    (b) Guy Kawasaki
    (c) Shiv Khera
    (d) Philip Goldberg

120. The Bombay dabawala have achieved international reputation because of
    (a) timely daba delivery
    (b) organized team work
    (c) six sigma based operation
    (d) excellence service for last 50 years and beyond.

SECTION V LOGICAL REASONING

121. In a beauty contest the order of contestant was to be reported.
    1. The editor was asked "Is the order A-B-C-D-E". The Editor said "none are in their true position" and "not a single one follow' her immediate predecessor".
    2. The editor was then asked "Is it D-A-E-C-B?" The editor replied "You have two in position and you have two following correctly their immediate predecessors".
    3. The editor was asked for the third time "Is this the order" The editor said "you are right".

    Which is this order?
    (a) BECDA
    (b) EDACB
    (c) CAEDB
    (d) ADBEC

122. On the blackboard, the mathematics professor wrote a polynomial f(x) with integer coefficients and said "Today is my son's birthday. When his age A is substituted for x, than f(A) = A. You will note also that f(O) = P and that P is prime number greater than A". How old is professor's son.
    (a) 4
    (b) I
    (c) 3
    (d) 2

123. Select the sequence to be inserted into boxes,

    CABAY [   ] ECDY [   ] XGE [   ] WU
    (a) ZWVF
    (b) ZVWF
    (c) ZVFW
    (d) ZWFV

124. Fill in the gaps: SL__Bs_bc_L__dSL_e
    (a) AIScD
    (b) LAScD
    (c) ALScd
    (d) aISCD

125. Fill in the blanks: 1, 4, 27,16, ___, 36, 343
(a) 87   (b) 120
(c) 25   (d) 125

126. Which is odd one:
(a) ADBEC   (b) FIGJH
(c) KNLOM   (d) PRTSQ

127. Which is the odd one:
(a) ZZXAY   (b) BBLAM
(c) KKUAV   (d) LLSMM

128. Fill in the Circle

(a) 269   (b) 260
(c) 324   (d) 429

129. Fill missing number

52	43	34	25
42	33	?	15
45	?	27	18
?	45	36	27

(a) 64, 25, 61   (b) 18, 26, 37
(c) 24, 36, 54   (d) 21, 46, 24

130. Fill the missing number

4C	2B	3A
28A	?	45B
7C	5A	15B

(a) 10A   (b) 10C
(c) 13C   (d) 7C

131. If number 4 is placed on the bottom which number will be on top?

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

132. If you start your journey on 22nd June 2003, what will be the day of the week after 7 days of your departure,
(a) Saturday   (b) Monday
(c) Friday   (d) Sunday

133. Fill in the Gap
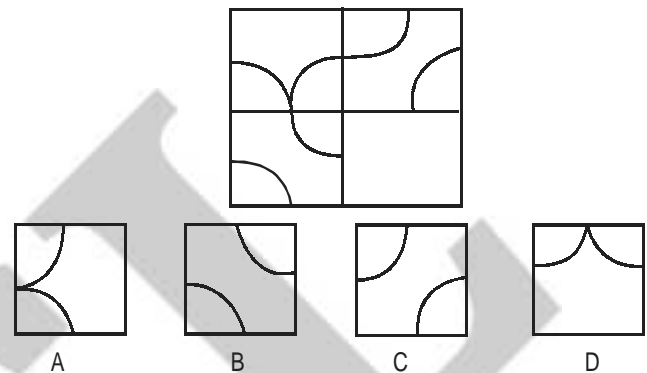
(a) B   (b) C
(c) A   (d) D

Directions (Qs. 134 to 138): Solve the questions if the symbols are as given below.

$* = +$ $+ = /$ $- = *$
$/ = -$ $\rightarrow$ = square $\leftarrow$ cube

134. 65*89754 – 9856 + 785/8647
(a) 1118316.629   (b) 1129316.629
(c) 1119376.629   (d) 1128376.629

135. 89765/897 – 6789 + 89 $\rightarrow$
(a) 455839620.7   (b) 45483532.6
(c) 455439719.7   (d) 455440719.7

136. 1234/90*8978 – 234 $\leftarrow$
(a) 92887128772529   (b) 92874321872529
(c) 98284321772529   (d) 92874581932529

137. 980 – 320 + 56/220 $\rightarrow$
(a) 28944400   (b) 28934500
(c) 28876700   (d) 27868458

138. 8765*789654 – 456*4356 + 660/34532
(a) 340056463.6   (b) 360056552.6
(c) 360056463.6   (d) 360090996

Directions (Qs. 139 and 140) : Rectangle, square, circle, and triangle represents the regions of wheat, gram, maize, rice cultivation. Based on the below diagram answer the question.
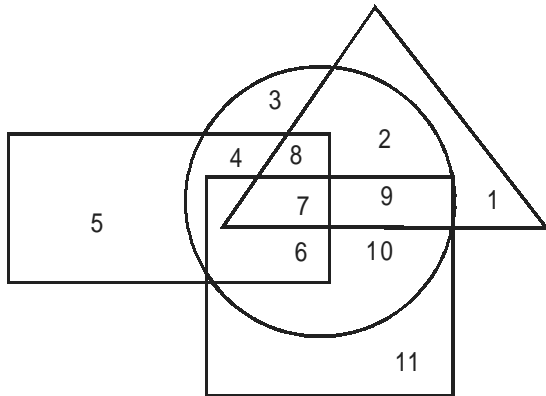
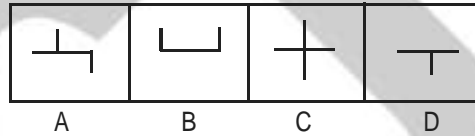139. Which is area for only wheat and maze?
(a) 8 (b) 6
(c) 5 (d) 4

140. Which is for maize only
(a) 10 (b) 2
(c) 3 (d) 4

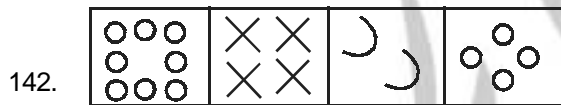**Directions (Qs. 141 to 146):** The following six sub questions have two section problem figures and answer figures. Problem figures have four designs in series. Answer figures have the fifth one which should it be,

141.

(a) C (b) A
(c) D (d) B

142.

(a) C (b) A
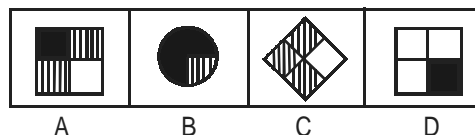(c) B (d) D

143.

(a) A (b) B
(c) C (d) D

144.

(a) C (b) B
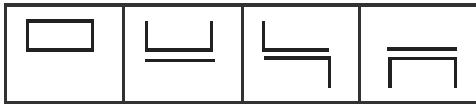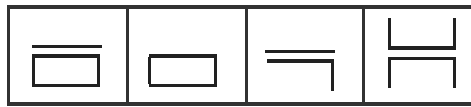(c) A (d) D

145.
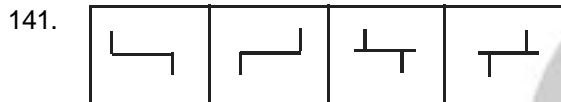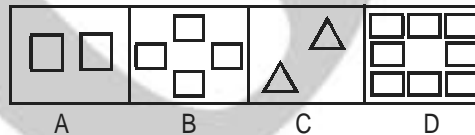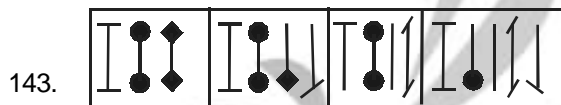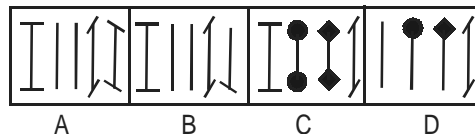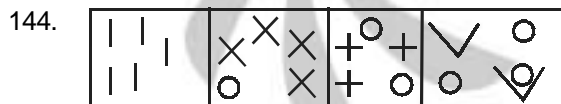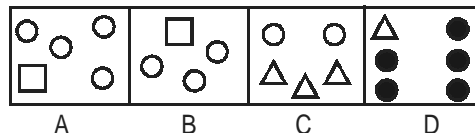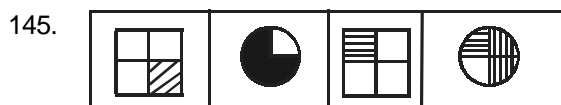
(a) A (b) B
(c) C (d) D

146.

(a) C (b) D (c) A (d) B

147. **Statement:** Some wise man lies. Whoever lies should be imitated.

Condition:
X) Some wise man deserves to be imitated.
Y) Some fools should not be imitated.
(a) X is valid (b) Y is valid
(c) X & Y are valid (d) X & Y are invalid

148. If MACHINE is coded as 19-7-9-14-15-20-11, how will you code DANGER?
(a) 13-7-20-10-11-25 (b) 11-7-20-16-11-24
(c) 10-7-20-13-11-24 (d) 13-7-20-9-11-25

149. In a certain code, 'FAVOUR' is written as 'EBUPTS'. How is 'DAGGER' written in
(a) EBHHFS (b) CBFHDS
(c) CBFFDS (d) EBFHDS

150. If South East becomes North. North East becomes West & so on, what will West become?
(a) N.E (b) N.W
(c) S.E (d) South

151. A & B are standing at the same point. They decide to move exactly in the opposite direction to each other. A goes 5 km East. Then goes 7 km North, then goes 5 km West, & finally goes 7 km North. What is the shortest distance between A & B?
(a) 48 km (b) 38 km
(c) 28 km (d) 118 km

152. X, Y & Z together can do a piece A work in 8 days, while X and Z together can do it in 12 days. Y alone will do the same work in how many days?
(a) 16 days (b) 20 days
(c) 24 days (d) 28 days

153. If using each letter meaningful word beginning with B can be formed from 'HACEB' then the fourth letter of that word is your answer. If no such word can be formed then your answer is (d) i.e. none of these.
(a) A (b) C
(c) E (d) None of these

154. How many meaningful English words can be formed by using any two letters of the word 'NOT'?
(a) One (b) Two
(c) Three (d) More than three

Directions (Q. 155): The conversation given below are followed by one question each, to which there are four possible answers. Choose the best answer.

155. Host: So here you are at last.
Guest: Hope I am not too late

What does the guest want to convey?
(a) He wanted to reach late
(b) He knows it doesn't matter even if he is late
(c) He hopes he is on time
(d) He knows the host doesn't like his coming late

156. Choose the part of the words having similar relationship to each other as the two words

TADPOLE : FROG:
(a) frog: fish (b) cat: feline
(c) Caterpillar: butterfly (d) flower: tulip

157. What is the synonym of 'wary'?
(a) apprehensive (b) attentive
(c) alert (d) cautious

158. A tank in which fish or water plants are kept is known:
(a) aviary (b) aquarium
(c) nursery (d) apiary

159. This is defect which a boy had even at the time of his birth
(a) genetic (b) genial
(c) congenital (d) biological

160. Walter Hunt is remembered for the invention of:
(a) Telephone (b) Mobile phone
(c) Safety pin (d) Aeroplane