

CAT FULL LENGTH TEST 1

Directions for questions 1 to 4 : Each questions has a set of four statements. Each consists of 3 segments. Choose the best alternative where the third segment in the statement can be logically deduced from the preceding two segments.

- A. Internet is for nerds. Shyam is a nerd. Internet is for Shyam.
- B. Intelligence is for wise men. Some people are wise. Intelligence is for people.
- C. Capital punishment is for killers. Ravan is a killer. Capital punishment is for Ravan.
- D. Liquor is for drinking. Juice is for drinking. Some liquor is juice.

1] A only 2] D only 3] A&C 4A&B

2. A. No R is P ; All Y is R; No Y is P.
 B. No R is P ;All Y is R; All Y is P
 C. Some R is not P; Some Y is R ; Some Y is not P.
 D. Some R is not P; All Y is R ; All Y is not P

1]C only 2] A&B 3] A only 4] D only

3. A. Some oranges are sour. This fruit is an orange. This fruit is sour.
 B. Sheela is a nurse. All nurses are healthy women. Radha is a healthy woman.
 C. Army officers are tall. Airforce officers are tall. Military officers are tall.
 D. No animal likes fire. Elephants are animals. Elephants do not like fire.

1] B only 2] D only 3] C only 4] A & D

4. A. Some babies are boys; Some boys are fathers; Some babies are fathers.
 B. Some films are books; Some books are good; Some films are good.
 C. Some fruits are sweet; Some mangoes are sweet; Some fruits are mangoes.
 D. Some mothers have babies; Some babies are boys; Some mothers have boys.

1] B only 2] A&C 3] D only 4]None.

Directions for questions 5 to 9: In each of the following questions a phrase is underlined. There are four different ways of phrasing the underlined part. Choose the best alternative.

5. I think Rahul had something vital to say, however he was unable to explain his viewpoint to a skeptical audience.

- 1] he did not change the minds of a conversant public.
 2] the people were willing to accept his views.
 3] he failed to convince a suspicious congregation
 4] he could not convince the doubting audience.

6. In the twentieth century mental elite assumed that economic and cultural modernization was leading to the decay of religion as a determinant in human existence.

- 1] total decay of religion as a determinant
 2] withering away of religion as a significant element
 3] humanization of religion

4] debasement of religion

7. British Aerospace had been focusing on building European links.

- 1] stressing on building European links.
- 2] focusing on forging European links.
- 3] pursuing ways of building European connectivity.
- 4] concentrating on creating European links.

8. Impromptu recognition from supervisors and managers to employees is the most effective and inexpensive method available for sustaining personal interest and individual effort for continued quality progress.

- 1] Immediate appreciation from supervisors and managers in management
- 2] Unobstructed showing of praises from supervisors and managers
- 3] Impromptu recognition from supervisors and managers
- 4] Free recognition from immediate superiors.

9. Bureaucrats may also be well advised to deal with Service Headquarters as representatives of the government and not behave as their bosses.

- 1] may also be well advised.
- 2] should know their limits when they have
- 3] may have to remember.
- 4] may need to learn how.

Directions for questions 10 to 19: Each of the questions has part/parts left blank. There are 4 different ways of completing the sentence. Choose the best alternative.

10. To pursue their decision to resist what they saw as anti- labor acts, the employees' union launched an agitation to _____

- 1] affirm their responsibility to the country
- 2] prove their strength
- 3] bring down the central government
- 4] exhibit their virility

11. The best general characterization of the European philosophical tradition as it has developed upto now, with all its variety, is that it consists of a _____ Plato.

- 1] series of footnotes to
- 2] set of prologues to
- 3] series of chapters on
- 4] string of commentaries on

12. The ideas that these companies used seem so clear with _____ that their rivals will now _____ themselves for not thinking of them first.

- 1] technology, hit
- 2] new ideas, disparage
- 3] the passage of time, curse
- 4] hindsight, kick

13. In our country, the challenges are to raise _____ incomes to reduce poverty, and to _____ ailing enterprises.

- 1] farm, liberalize

- 2] middle-class, privatize
- 3] workers', suppress
- 4] rural, restructure

14. Overall, the recent policy changes by the government only amount to a _____ in the sugar industry.

- 1] superficial attempt at liberalization
- 2] lack of solution
- 3] large change
- 4] small regulating authority

15. The world is moving into a period of ' civilisational clash' in which the primary identification of people will not be _____ as during the Cold War, but _____

- 1] religious, technological
- 2] cultural, ethnic
- 3] political, economic
- 4] ideological, cultural

16. The internet represents that awkward _____ in all communication systems; while it _____ to bring us together, it keeps us apart.

- 1] paradox, tries
- 2] irony, intends
- 3] paradox,needs
- 4] irony,wishes

17. These stories are just a few of the _____, sometimes extraordinary ones in this volume, in which people face unbelievable odds_and _____!

- 1] abhorrent,fly
- 2] creative, die
- 3] inspiring, lose
- 4] inspiring,win

18. The dream of flying had _____ inventors since the ancient Greeks and Chinese, though most of those who attempted to create wings for themselves were considered _____

- 1] revived,strange
- 2] troubled, insomniacs
- 3] attracted, oddballs
- 4] repulsed, demi-gods

19. Unable to contain their _____ and amazement at the end of the performance, the audience burst into _____, and showed no signs of stopping.

- 1] excitement, cheers
- 2] frustration, song
- 3] envy, flames
- 4] delight, tears.

Directions for questions 20 to 30 : In each of the following sentences, four words or phrases are underlined. You should choose the one word or phrase which would be not appropriate in standard written English. Mark(5) if you think that the sentence has no error.

20. Thirty liters of fuel do not seem to be sufficient for the distance to be covered.

1]Thirty liters 2] do 3]seem 4]for 5]No Error

21. The hardest part of the job is the bending once a minute and then lifting the weight.

1]hardest 2] job 3]is the bending 4]lifting the 5]No Error

22. The minute they came to know that their chief was issued a charge sheet, the entire group of workers went on a boycott.

1]minute 2]came to know 3]issued a charge 4]went on a boycott 5]No Error

23. Since I had forgotten all my mathematical concepts I had to start from the scratch.

1]I had 2]all my 3]I had 4]the scratch 5]No Error

24. Modi has recently been selected the representative to the SriLanka.

1]been 2] selected 3]the 4]the SriLanka 5]No Error

25. Having laid the magazine on the desk, she went out the door.

1]laid 2]on 3]went out 4]the 5]No Error

26. She nearly blushed until she was pink.

1]nearly 2]until 3]was 4]pink 5]No Error

27. Our writing, like our speech, is the sign of our ability to communicate.

1]like 2]speech 3]is 4]sign 5]No Error

28. When you have completed the last topic of the book, please return it to the bookroom.

1]have 2]completed 3]the 4]it 5]No Error

29. His report, including thorough notes on the background investigation, were well received.

1]including 2]thorough notes 3]the background 4]were 5]No Error

30. This is one of the four primary libraries that are supported by our organization.

1]This is 2]one of the 3]libraries 4]that are 5]No Error

Directions for questions 31 to39 : In each of the following sentences, four words or phrases are underlined. You should choose the one word or phrase which would be not appropriate in standard written English. Mark(5) if you think that the sentence has no error.

31. The real indicator of success for many people are earning more and more wealth.

real are more more No Error

32. He is invested by full rights to act on behalf of the firm.

invested by full rights on behalf No Error

33. The leader is liable for losses.

is liable for losses No Error

34. The committee felt that there was no necessity of a new firm to handle project financing.

no necessity of to handle project financing No Error

35.The painter was completely unconscious about the fact that not one of his creations had been sold for over two years.

was completely about the fact had been sold No Error

36. The superior wanted to know whether there was a precedent to that action.
wanted whether precedent to No Errors
37. Which tables is booked for the ministers' staff?
which tables is ministers' No Error
38. All my equipment, including the ruler, tripod, and the camera, were lost on the tour.
equipment including and the camera were No Error
39. The committee have ordered their coffee and are going to have it in the board room.
have their are have it No Error

Directions for questions 40 to 44: each question below consists of a pair of capitalised words, followed by four pairs of words. Choose the pair which best expresses the relationship DISSIMILAR to that expressed in the capitalised pair.

40. GRIP : FIRM

39. 1]. Manners : good
2]. Wit : ready
3]. Aroma : tantalising
4]. Brain : heady

41. VIGOUR : HEALTHY

39. 1]. Hazard : dangerous
2]. Threat : alarming
3]. Challenge : defiant
4]. Hinder : impediment

42. CUFF: PUNISHMENT

- 1]. Penance : atonement
2]. Adulatory : flattery
3]. Prostration : respect
4]. Frown : disapproval

43. PULP : FRUIT

- 1]. Jam : quince
2]. Ore : iron
3]. Vodka : potato
4]. pudding : rice

44. EAR : LOBE

- 1]. Foot : leg
2]. Hand : finger
3]. Arm : hand
4]. leg : foot

Directions for questions 45 to 49: Each question below contains six statements. Choose the set of three statements which are logically related.

45. A]. No actress eats heartily.
B]. All actresses like food.
C]. Some actresses are weight conscious.
D]. All men eat heartily.

- E]. No man is an actor.
- F]. All men are handsome.

1]. ABC 2] CDB 3] ADE 4] FED.

46. A] All MBAs without work experience would like to attend training programmes.
B]. All managers would like to attend training programmes.
C]. Some managers are entitled to attend training programmes.
D]. Some who qualify as managers are also MBAs.
E]. All MBAs are entitled to attend training programmes.
F]. Some managers are not MBAs.

1]. ACD 2] EDC 3] DFB 4]. CAD

47. A] All businessmen are rich.
B] All businessmen are investors.
C]. All businessmen are professionals.
D]. All businessmen need money.
E]. All professionals need money.
F]. All professionals need power.

A]. BCF B] DFC C]. ECD 4]. ABD

48. A] Some students think about their career.
B]. All CA aspirants are students.
C]. All CA aspirants are hardworking.
D] All CA aspirants think about their career.
E] Some people who think about their career are students.
F] Some students are CA aspirants.

A]. AEF B]. ADF C] BCE 4] DBA

49. A] Some top companies are conscious about costs.
B]. Some high-growth companies are profitable.
C]. Some high growth companies are not conscious about costs.
D]. All high growth companies are profitable.
E]. Some high growth companies are not profitable.
F]. All profitable companies are not conscious about costs.

1]. ADE B]. ACE C]. ACF 4]. ABE.

Directions for questions 50 to 51 : Each question below contains a sentence broken into four segments marked a, b, c, d. Arrange the segments so as to form a logical sequence.

- 50 A]. that both hunts in the forest.
B]. the opossum is a roving feeder.
C]. from native hunts
D]. and steals food.

1]. Badc 2] cbda 3] bacd 4] abcd.

51. A] When a young Virginia farmer named Peter Lobo
B]. the great breakthrough in wheat farming

C]. invented the harvesting machine.

D]. came in the 1930s

1]. Acbd 2] dabc 3] bdac 4] dbac

Directions for 52 to 54: In each question below there is an incomplete sentence, followed by four answer choices marked 1, 2, 3, and 4. Choose the answer that best completes the sentence and mark it appropriately.

52. We consulted a specialist _____

- 1] so that cancer may be ruled out
- 2] so that we wanted to rule out cancer.
- 3] so that cancer could be ruled out
- 4] so that we can rule out cancer

53. Could you tell us _____?

- 1]. who was given the letter to
- 2]. to whom was given the letter to
- 3]. you have the letter to whom
- 4]. to whom you gave the letter.

54.No one denies that _____ knowledge.

- 1]. he is ambitious and aspires.
- 2]. he was ambitious and aspired for
- 3]. he is ambitious and aspires for
- 4]. he aspires after

Directions for questions 55 to 58

Each of the questions consists of two capitalized words, which have a certain relationship to each other, followed by 4 pairs of words. Choose the pair that is not related to each other in the same way as the capitalized pair.

55. MANDATORY : COMPLY

- 1] Command : obey
- 2] Forbidden : abstain
- 3] Tacit : approve
- 4] Lawful : abide

56. GENEROSITY : DONOR

- 1] Discrimination : connoisseur
- 2] Credulity : dupe
- 3] Eloquence : orator
- 4] Truculence : snob

57. GALLEY : SHIP

- 1] Mall : market
- 2] Kitchen : bedroom

- 3] Banquet : feast
- 4] Restaurant : hotel

58. LETHARGIC : STIMULATION

- 1] Skeptical : convince
- 2] Bored : interest
- 3] Unwilling : coax
- 4] Erudite : teach

59. INVECTIVE : PRAISE

- 1] Indiscriminate : fastidious
- 2] Brook : tolerate
- 3] Exaggerate : minimize
- 4] Untoward : favorable

Directions for question 60

Each of the sentences given below has a blank space. Select the appropriate word that would make the sentence meaningful.

60. In the developed countries, R&D efforts are _____ by their absence.

- 1] apparent 2] conspicuous 3] clear 4] minimized

Directions for question 61 to 110. Choose the correct alternative.

61. If an article cost 50% of its selling price there was a profit of Rs60. What was the selling price?

- 1] 125 2] 120 3] 140 4] 200

62. A can do a piece of work in 10 days which can be done by B in 12 days. How long would it take to do the work together?

- 1] 4 $\frac{7}{9}$ 2] 5 $\frac{3}{9}$ 3] 5 $\frac{5}{11}$ 4] 5 $\frac{1}{2}$

63. The denominator of a fraction is greater than its numerator by 5 but if 7 were added to the denominator the value of the fraction would then become $\frac{1}{4}^{\text{th}}$. What is the fraction?

- 1] $\frac{4}{9}$ 2] $\frac{2}{3}$ 3] $\frac{5}{11}$ 4] $\frac{4}{7}$

64. The sum of all 2 digit numbers which can be formed from 4 & 5 ?

- 1] 45 2] 99 3] 100 4] 101

65. Find the number whose double is greater than its half by 30.

- 1] 20 2] 30 3] 25 4] 23

66. A divided Rs. 200 amongst 15 children giving some Rs. 20 and remaing Rs.10.How many children receive Rs. 20?

- 1] 7 2] 12 3] 10 4] 5

67. If 3 apples are worth 2 bananas, how many bananas are 15 apples worth?

1] 15 2] 8 3] 10 4] 12

68. A buys an item for Rs. 600 of which 12% is excise and 4% is sales tax . How much would A pay exclusive of taxes and excise?

1] 519.82 2] 521.33 3] 517.24 4] 518.00

69. X has Rs. 6 with him. If $\frac{2}{3}$ of what X has is $\frac{1}{4}$ of what Y has. How much does Y have?

1] 8 2] 16 3] 12 4] 14

70. The sum of a number and its reciprocal is $\frac{1}{2}$. The sum of their squares is,

1] $\frac{9}{4}$ 2] $\frac{4}{5}$ 3] $\frac{5}{3}$ 4] $\frac{7}{4}$

71. X,Y,and Z take 20, 30 and 60 days respectively to complete a job independently. They set out to complete a job together . However Y leaves after 4 days and Z leaves after another 6 days . How many more days will it take for X alone to complete the job now?

1] 4 2] 3 3] 5 4] 6

72. A rectangular block of dimensions $5 \times 6 \times 7$ cm. Is dropped into a cylindrical vesssed of radius 6 cm. And height 10 cm.. If the level of fluid in the cylinder rises by 4 cm. , what portion of the block is immersed in the fluid?

1] $\frac{22}{7} \times \frac{15}{18}$ 2] $\frac{22}{7} \times \frac{24}{35}$ 3] $\frac{22}{7} \times \frac{22}{34}$ 4] $\frac{22}{7} \times \frac{12}{15}$

73. The difference between a number and its square is 870. What is the number?

1] 42 2] 29 3] 30 4] 32

74. In an election , 60% of the voters exercised the franchise. Of these, 40% were women. The number of males exercising their franchise was 53040. How many eligible voters were there in all?

1] 125000 2] 150000 3] 230000 4] 153000

75. If the side of a square is increased by 3 cm., the area increases by 33 cm. The side of the square is

1] 5.5 2] 6 3] 2 4] 4

76. A sum of RS. 88000 is to be divided among A, B, and C such that for every rupee, A gets, B gets 75 paise and for every rupee, B gets , C gets 90 paise . How much is C's share?

1] 28345 2] 28563 3] 24495 4] 30500

77. A family uses a mixture of a blend of 2 coffees costing Rs. 30 and Rs. 60 respectively.If the family uses only the expensive variety, it will have to spend Rs.450 more. The annual consumption of coffee of the family is 20Kgs. In what ratio are the two blends being used?

1] 3:1 2] 2:3 3] 4:5 4] 2:1

78. A buys a washing machine costing Rs.6000 on instalment basis. He pays Rs. 3000 cash at the time of delivery and subsequently 2 monthly instalments of Rs. 1575 each. The rate of interest charged p.a. is

1] 39% 2] 32% 3] 28% 4] 30%

79. If $4 - [2.8 - \{3.5 - (1 - X)\}] = 5$, Then value of X is

1] 2.3 2] 1.5 3] 1.3 4] 2.5

80. A salesman earns a commission of 3% on the value of sale that he makes. If by selling a radio at 60 % of the marked prices, he earns a commission of Rs. 12, then the marked price of the radio is?

- 1] 667 2] 700 3] 655 4] 680

81. P, Q, and R enter into a Partnership and their shares are in proportion of 3:2:1.

P withdraws half his capital at the end of 4 months and after 8 months more the profit of Rs. 1800 is divided. What is P's share?

- 1] 570 2] 660 3] 720 4] 700

82. A sum of Rs. 8.25 is made up of 100 coins which are either 10 paise or 5 paise. How many are there of 10 paise?

- 1] 65 2] 35 3] 40 4] 55

83. A trader has 100 Kg of wheat, part of which he sells at 5% profit and the rest at 20% profit. He gains 15% on the whole. Find how much is sold at 5% profit?

- 1] 60 2] 50 3] 66.6 4] 33.3

84. If $x^2y^2z = (x^2+y^2)^z$, then value of $4^3 \cdot 3^2$ is

- 1] 650 2] 675 3] 550 4] 625

85. If the side of a square is increased by 8cm, the area increases by 80cm^2 . What is the side of the square?

- 1] 1.3 2] 1.5 3] 1 4] 2

86. Ashish travels a distance of 100 km in the following manner, at 20 kmph for the 1st 50 kms, at 25 kmph for the next 50 kms. He returns at a constant speed of 25kmph. What was his average speed for the journey?

- 1] 22.50 2] 23.52 3] 24.60 4] 22.35

87. A purchases a car at a discount of 20% from a wholesaler and sells it at a profit of 20% for Rs.1800. How much discount did he get from the wholesaler?

- 1] 60 2] 85 3] 70 4] 75

88. A radio can be brought for Rs.2000 cash or for Rs.2200 on 5 months credit. Find the interest rate p.a. Consider simple interest.

- 1] 24 2] 22 3] 32 4] 25

89. If 20kg of rice cost Rs.200 less than 80 kgs of wheat. If a kg mixture of rice and wheat is in the proportion 2:3 and cost Rs.15, Find per kg cost of rice in Rs.

- 1] 15 2] 20 3] 10 4] None of these.

90. X is 25% more efficient than Y and his hourly wages are 25% more. If X is paid Rs.75, how much will Y receive for the same work?

- 1] 65 2] 90 3] 75 4] 110

91. Ashish spends 10% of his pocket money on himself and gives his sister Rs.5. If he still has 80% of the original sum, what was the amount he had as pocket money?

1] 36 2] 50 3] 45 4] 48

92. A owes B a sum of Rs.5000 to be paid 6 months from today. If simple interest @12% p.a. is calculated, what sum shall A have to pay B, 4 months from now in full discharge of the debt?

1] 4726 2] 4824 3] 4900 4] 4906

93. The difference of 2 positive numbers is 81 and quotient obtained on dividing the one by the other is 9. Find the first number.

1] 75 2] 90 3] 10 4] 81

94. Anand goes to a shop to buy the walkman costing Rs.2250. The rate of sales tax is 6% he wants the dealer to reduce the price so that he has to pay Rs.2000 inclusive of tax. Find the reduction needed in the percent of the walkman.

1] 15 2] 16 3] 17 4] 18

95. P,Q, R enter a partnership where they invest Rs. 20000, Rs. 30000, Rs. 40000 resp. P withdraws Rs. 10000 after 2 months, Q withdraws Rs. 15000 after 4 months and R withdraws Rs. 25000 after 8 months. What will be R's share in the profit of Rs. 12474?

1] 3564 2] 3267 3] 5643 4] 5500

96. A company declares a dividend of 15% on Rs.150 shares. A man buys such shares and gets 10% on his investment. Find at what price he bought the shares?

1] 255 2] 356 3] 225 4] 240

97. If x sells for Rs.20 each, 250 Rs.10 share in a company which pays a dividend of 10% and then invests the proceeds of this sale in the purchase of Rs.5 shares in another company at Rs.4 each, find what difference is made in his income if the company pays a dividend of 4%?

1] 50 2] 66 3] 105 4] None of these.

98. $\frac{1}{4}$ of one number + $\frac{2}{3}$ of another = $\frac{3}{8}$ of their sum. Find the ratio of their numbers.

1] 4:3 2] 2:5 3] 3:7 4] 2:1

99. At how many distinct points do the diagonals of a square intersect if no 2 diagonals pass through the same point?

1] 4 2] 1 3] 2 4] 3

100. X buys an apple from Y for Rs.5 and sells it to Z for Rs.10. He later buys the apple back from Z for Rs.12 and sells it to Y for Rs.15. What is his profit over the venture?

1] 8 2] 6 3] 12 4] 10

101. I have a rectangular piece of cloth 16 meters long & 1 $\frac{1}{4}$ metre broad. I want to cut as many large square pieces of the same size as possible. How many such pieces can I cut out of it ?

1]320 2]240 3]360 4]325

102. The sum of two natural numbers is 85 and their L . C .M is 102. Find the numbers

1]51 & 34 2] 25&63 3] 40&25

103. A man XY of height 1.75 cm stands at a distance of 4 metres from a pillar AB. If the pillar I is at the height of 5.25 m from the ground, what is the length of the man's shadow on the ground ?
- 1] 1m 2]2m 3]5m 4]6m
104. triangles x & y have the same area. If the bases are in the ratio 2 : 3, what is the ratio of their heights ?
- 1]3:2 2]2:3 3]3:4 4]5:6
105. A ground of 4.9 m width is prepared on the inside of a circular area of diameter 10 m. Find the cost of levelling the garden at Rs. 10 per sqm.
- 1]789.25 2]653.43 3]775.54 4]650.33
106. Three circles touch each other externally. If $xy = 15$, $yz = 10$, $xz = 21$ Find the radius of each circle.
- 1]13 ,8 ,2 2]14 , 5 ,9 3]10 ,13 ,12 4]5 ,6 ,3
107. If the diameter of a circle is increased by 100 %, find the % increase in the area.
- 1]200 2]300 3]100 4]250
108. A spherical ball of 8 cm diameter is melted into a cone with base 20 cm in diameter. Find its height.
- 1]2.56cm 2]3 cm 3]2 cm 4]3.75 cm
109. Water flows out at the rate of 10m per minute, from a cylindrical pipe of diameter 5 mm. Find the time taken to fill a conical tank whose diameter at the surface is 40 cm and depth 24cm.
- 1]53 1/2 min 2]51 1/5 min 3]57 1/5 min 4]60min
110. Find the S.I. for Rs.2500 for 73 days at 6 % p.a.
- 1]Rs.30 2]Rs.50 3]Rs.40 4]Rs.20

Directions for questions 120 to 150

Each question is followed by 2 statements
Mark (1) if statement I alone is sufficient but statement II alone is not sufficient
Mark (2) if statement II alone is sufficient but statement I alone is not sufficient
Mark (3) if both statements I & II together are sufficient but neither statements alone is sufficient
Mark (4) if each statement alone is sufficient
Mark (5) if statement I &II together are not sufficient.

120. Is the sum of 2 real numbers x &y even
- a. x & y are positive.
b. x & y are negative.
- 1 2 3 4 5
121. What will be Raghu's age 5 year's from now
- a. Raghu is 30 years younger than his dad

b. Raghu's dad was 50 years old 5 years ago

1 2 3 4 5

122. How many boys passed CAT Entrance this year?

a. Last year 500 hundred boys passed

b. This year there was a 15% decrease, over last years in the number of failures

1 2 3 4 5

123. In a class of 50 students how many girls scored over 80% in chemistry test

a. Exactly 15 boys scored over 80% of the test

b. 1/2 of the class scored over 80%

1 2 3 4 5

124. What was the cost price of an article which was sold for Rs. 156

a. the % profit made was numerically equal to the cost price

b. the profit made on the article was 65% of the selling price.

1 2 3 4 5

125. Was Ashish early, on time, or late for work

a. he thought his watch was 15 minutes fast

b. actually his watch was 10 minutes slow.

1 2 3 4 5

126. In 1980, what was Vithal's monthly average income

a. he earned Rs. 15000 from Jan to July 1980

b. he earned average income of 1500 from July to Dec. 1980

1 2 3 4 5

127. In what time was the Job to be completed by the typist

a. if she had typed 2 pages more than what is required per day she would have completed the task 2 days ahead of time

b. total no. of pages she types per day is 10.

1 2 3 4 5

128. What is total investment of Mahaveer on 99 eggs in Rs.

a. out of 99 eggs 45 are broken and he sold the remaining at Rs. 6 per dozen

b. he gained 5% on this investment

1 2 3 4 5

129. How many rupee coins does Ashwini have in her pocket

a. she has 24 rupees in coins in her pocket

b. 5 of her coins are of 50 paise.

1 2 3 4 5

130. What is the volume of a cubical box in cubic cm

a. 1 face of the box has area of 49 cm

b. The longest diagonal of the box is 20 cm.

1 2 3 4 5

131. Is $X=Z$, X,Y,Z are real numbers.

a. $X-Y=Y-Z$

b. $X-2Z = Z-2Y$

1 2 3 4 5

132. Is $Y>Z$, X,Y,Z are real numbers

a. $X^2+Y^2+Z^2=0$

b. $X>Y-Z$

1 2 3 4 5

133. What is the value of X ? X is a real number

a. $X^2-X-12=0$

b. $X^2+X-20=0$

1 2 3 4 5

134. How long would it take A to complete the work

a. A & B complete the work in 10 days

b. A takes 5 days more than B to complete the work.

1 2 3 4 5

135. How many square tiles are required for the wall of the bathroom of a house

a. The length of the bathroom is twice its width

b. Area of each tile is $\frac{1}{25}$ th of the area of the wall of the bathroom.

1 2 3 4 5

136. Is the product of 2 real numbers A & B greater than 15

a. $5 < A < 7$

b. $2B > 6$

1 2 3 4 5

137. Is triangle PQR an isosceles triangle

a. Exactly two of the angles angle P & angle Q have the same measure

b. angle Q & angle R are not equal.

1 2 3 4 5

138. Is the area of the outer circle 4 times the area of the inner circle.

a. the circumference of the outer circle is 2 times that of the inner circle

b. the 2 circle are concentric.

1 2 3 4 5

139. what is value of angle P in a triangle PQS, where

a. angle Q = 70°

b. angle X is complementary to angle S at $=130^{\circ}$

1 2 3 4 5

140. What is the area of the triangle abc

a. the perimeter of the triangle is 20 cms.

b. the triangle is right angled at 'a'

1 2 3 4 5

141. In the rectangle P,Q,R&S what is the length

a. area of the rectangle is 50 cm^2

b. QS = 20 cm

1 2 3 4 5

142. What is the distance between 2 bus stops

a. One bus covers the distance 25m. faster than the other

b. The speed of the first bus is 8 kmph faster than the 2nd

1 2 3 4 5

143. Is $a^2 - 9/a - 3 = 6$

- a. $a-3 = 0$
- b. $a+3 = 0$

1 2 3 4 5

144. What are the 2 positive numbers

- a. their geometric mean is equal to their arithmetic mean
- b. their geometric mean is greater than their arithmetic mean by 2.

1 2 3 4 5

145. When will the American population exceed Indian population?

- a. Population of India grows @20% per decade and America @15% per decade.
- b. In 1980 Indian population was 35 crores more than the American population.

1 2 3 4 5

146. Given $P+Q = A+B$ is $P>Q$. $PQAB$ are real nos.

- a. $P>A$
- b. $Q<B$

1 2 3 4 5

147. Is $(x+y)^2 = x^2+y^2$, x,y are real nos.

- a. $x>0$
- b. $y<0$

1 2 3 4 5

148. Is 50 the average of $x,y,&z$, x,y,z are real nos.

- a. $x+y = 24$
- b. $z-y = x-z$

1 2 3 4 5

149. What is the average running speed of A and B

- a. A runs 4 miles an hour.
- b. B completes 80 miles.

1 2 3 4 5

150. A man has gone bankrupt. How much will the creditors receive

- a. With total debts of Rs.43000 he will pay 23 paise in a rupee.
- b. His total loss is Rs.12376.

1 2 3 4 5

Directions for questions 151 to 160 : Read carefully the passages given below and answer the questions that follow.**Passage-1**

The most complex script is Japanese. It consists of a long series of tricky picture characters, ideograms, which symbolize ideas and objects derived from Japanese life and culture. In ancient times the writing was practised as

an skill from, studied and guarded by selected scholars. It is beautiful, hard to learn, and represents the discipline of scholarship and the delightful dedication of Japanese writers to this day. Japanese children learn to write their languages all the time they are in school, but very few of them are able to complete the task before they leave. Yet some literacy scholars are persuaded that no one system is more difficult to learn to read and write than any other. Whether or not this is the case, to learn to write always involves practice with a tool which has to be brought under control so that the writer can concentrate on putting together the message rather than on the creation of the sign.

151. State which of the following statements is true.

- 1] A long series of picture-characters go to make the Japanese script
- 2] Even the semi-literate peasant and artisan can quickly learn the Japanese script
- 3] In ancient times ordinary people were encouraged to learn the Japanese script.
- 4] The picture characters are like Braille which the blind can also read.

152. To grasp the evolution of the Japanese picture-character script, we have to study

- 1] The teachings of Lao Tze.
- 2] Japanese life and culture.
- 3] folk tales of Japan.
- 4] ancient Japanese education system.

153. Very few students complete learning the Japanese script before leaving school for following reasons except that

- 1] it demands disciplined scholarship and aesthetic devotion.
- 2] it contains hundreds of intricate picture-characters.
- 3] it is complicated and hard to learn.
- 4] teachers proficient in Japanese script are a few.

154. If there is a message in the passage, it is

- 1] the Script should be simple to enable a language to develop at all levels of literacy, so ideas can spread rapidly for progress.
- 2] a complicated script can retard the spread of ideas and the civilising process of a people.
- 3] alphabets and language should be rooted in the life and culture of a people.
- 4] democratising a script ensures the growth of a language and the spread of progress at all levels.

155. What is the challenge posed by the system of picture-signs?

- 1] The characters in the script lend themselves to different meaning at different times.
- 2] Many of the characters become obsolete quickly.
- 3] The writer has to concentrate on the formation of the signs as well as putting his message together.
- 4] All of the above.

Passage-2

I do not appreciate of forbiddance by law. According to me, it is a worthless attempt at a self-arrogated virtue. Wine is as old as gods and it has come down to us through ages and scriptures as the supreme soothe for the human agony. It is our legacy of an age when gods were mortal and men were divine, and though wine has been accursed as an hateful evil since its first sip by man, he has not stopped drinking at its bubbling fountain of vice and forgetfulness. A nation that needs legislation to maintain the virtue of its people is really unfortunate. Saints have preached great sermons on the immoral of drinking but this Christian scriptures of the saints has always remained a bad sermon in the world of sinners. It is good for the saints to preach but stupid for the state to enforce that preaching, for what is enforced by law ceases to be moral. A virtue is a virtue only when it is acquired through self-realisation, not when is is pushed on the lives of the people. Every new law creates a new group of law-breakers and one more sin is added to the sum-total of human crimes. As Goldsmith says that virtue which requires, to be ever guarded is scarcely worth, the sentinel.

156. When the writer speaks of 'self-arrogated virtue', who has arrogated virtue in his view?

- 1] The law-court
- 2] The society
- 3] The state
- 4] The police

157. No virtue remains a virtue unless

- 1] it is acquired through self-realisation
- 2] the sentinel is discarded.
- 3] the state thrusts it on peoples'lives.
- 4] [1] and [2]

158. The possible flaw in the author's logic is that it

- 1] assumes that is the government, not the society, who want prohibition.
- 2] does not state and refute arguments in favour of prohibition.
- 3] does not support argument with statistics.
- 4] neglects the state's role in pre-empting crimes for social peace.

159. It is stupid, according to the writer, to enforce the saints' preaching, because

- 1] the state shouldn't set itself up as the guardian of morals.
- 2] no legislation can maintain for long morality based on sermons.
- 3] the saint's gospel and the state's law enforcement are different issues.
- 4] neither legislation for nor sermons have succeeded in preventing drinking.

160. State which of the following statements is false.

- 1] Every part of legislation adds one more offender.
- 2] The moment law tries to enforce virtue , it no longer remains virtue.
- 3] Goldsmith says a virtue is one which cannot remain a virtue unless someone guards it constantly.
- 4] The sinners have always ignored sermons.

Directions for questions 161 to 185

Each question is based on a passage. Select the best answer choice given

Passage1

A Company manufactures chairs. In 1994 its installed capacity was 3 lacs. Now it doubled in 1998 and remained the same in 1999. Through 1995-1997 it was 2/3 the capacity of 1998. Capacity utilization is inversely proportional to capacity. In all years except 1994 capacity utilization was below 100% though production increased steadily over the years. In 1994 it was 110%, 1995-85%, 1996-90%, 1997-91% and 1998-76%. In 1999 it was the same as 1996 levels.

The selling price was Rs4 per unit in 1994 increased at 10% per annum till 1996. In 1997 it was Rs5 per unit and thereafter it rose 20% per annum. Unit sales are 90% of production in 1994 and 1995 and 95% in 1997,1998,1999.

1996 was a boom year in which the company sold all that it produced in that year plus the inventory of the last 2 years (assume opening inventory to be zero in 1994). The company has been facing heavy competition and market share by value has been declining from 25% in 1994-95, it was 60% of that in 1998-99. 1996 & 1997 shares were equal to the average share of these 6 years. The company spends 4.33% of its sales revenue every year on advertising.

161.What was the production in 1997?

- 1] 350,000 2] 360,000 3] 364,000 4] 365,000

162. What was the total sales revenue in 1996?

- 1] 1,900,360 2] 2,066,680 3] 1,890,560 4] 2,135,500

163. What was the advertising expenditure in 1998?

- 1] 112,545 2] 120,000 3] 135,000 4] 123,345

164. What were the unit sales in 1996?

- 1] 427,000 2] 450,000 3] 360,000 4] 365,000

165. What was the total market in 1997?

- 1] 84.39lac 2] 86.45lac 3] 79.69lac 4] cannot be determined

Passage2

IN organizing a newspaper 4 editors are required ;the managing editor, the news editor, the sports editor and the entertainment editor. The managing editor can work only on Wednesday mornings, Thursday afternoons and Friday the whole day. The news editor can work only on Monday afternoons, Tuesday and Thursday the whole day. The sports editor can work only on Monday afternoons, Tuesday mornings and Wednesday the whole day. The entertainment editor can work all day Monday and Wednesday only.

166. If the managing editor cannot edit until each of the others has completed atleast a full day of work, when is the earliest the managing editor can work?

- 1]Wednesday afternoon 2]Friday morning 3]Monday morning 4]Thursday afternoon

167.One of the editors must work completely alone for the whole day in order to prevent confusion and disorder. If no other editor can afford to lose his available time, then the only possible editor privileged with working alone is

- 1]The news editor on Tuesday 2]The managing editor on Friday
3]The sports editor on Monday 4]The entertainment editor on Thursday

Passage3

4 people Arti, Banti, Chetan and Dolly have together got Rs100 with them. Arti and Banti together have got as much money as Chetan & Dolly put together. Arti has got more money than Banti. Chetan has half as much money as Dolly has. Arti has Rs5 more than Dolly.

168. Who has got the most money?

- 1] Arti 2] Dolly 3] Chetan 4] Cannot be determined

169. How much does Banti have?

- 1] 12.03 2] 11.6 3] 13.3 4] None of these

170. Who has got the second biggest sum?

- 1] Arti 2] Chetan 3] Dolly 4] Banti

171. What is the ratio of the amount with Chetan and Dolly?

- 1] 2:1 2] 1:2 3] 1:3 4] 1:4

172. Who has got the least amount of money?

- 1] Banti 2] Arti 3] Chetan 4]Dolly

Passage4

The following is the list of instructions to be followed

- Step1: $x=0$ $A=2$ $B=3$
- Step2: If $X<5$ then do Steps3-6 otherwise Step7
- Step3: $Y=A+B$ replace A by B replace B by Y
- Step4: Type Y
- Step5: Increase X by 2
- Step6: Goto Step2
- Step7: Exit

173. When $X=4$ what value of Y is typed?

- 1] 12 2] 8 3] 13 4] 5

174. Suppose Step5 is replace by 'Increase X by 5' then what would be the last value of Y typed?

- 1] 5 2] 4 3] 6 4] 9

175. After the set of instructions is over at Step 7 what is the value of X

- 1] 5 2] 4 3] 3 4] 7

Passage 5

Five offices in Mumbai are run by five couples
Husbands: Bala, Girish, Jai, Jayesh, Pratap
Wife: Beena, Chand, Maya, Preeti, Sangeeta
Surname: Bakshi, Joshi, Natwar, Parikh, Sahni
Office: Air India, Jet, Ashiana, Indian Court, American Court

- No husband shares a first name initial with his wife; Only one husband who is not Pratap has an identical initial for his first name and surname, but none of the wives does
- The Air India is run by Jai and his wife
- Girish and Maya are one of the couples
- Chand's husband is Mr. Natwar
- Mrs. Joshi is the owner of Jet and Preeti is the owner of American Court; neither of them is married to Jayesh
- The office run by the Sahni has the word 'Court' as part of its name
- The Ashiana is not run by Mr.Parikh whose wife is not Sangeeta

176. Jai's wife is

- 1] Preeti 2]Chand 3] Maya 4] Beena

177. The Sahni's run the restaurant

- 1] Ashiana 2] Air India 3] Jet 4] Indian Court

178. Which of the men has the surname Natwar

1] Bala 2] Pratap 3] Jai 4] Jayesh

179. Which of the following women is Mrs. Joshi

1] Preeti 2] Chandni 3] Sangeeta 4] Beena

180. Bala's surname is

1] Parikh 2] Joshi 3] Bakshi 4] Sahni

Passage 6

Five brothers have among them a pair of twins who are neither the oldest nor the youngest. E is older than C but younger than B. D is younger than 3 brothers

181. The youngest is

1] A 2] B 3] C 4] D

182. One of the twin pair is

1] B 2] C 3] D 4] E

183. The eldest is

1] A 2] B 3] C 4] E

184. The one who has as many elder brothers as younger brothers is

1] A 2] B 3] E 4] none of these

185. Who is the fourth brother

1] A 2] B 3] D 4] E

SOLUTIONS:

1] A & C **Hence, [3]**

2] A only **Hence [3]**

3] D only **Hence [2]**

4] D only **Hence [3]**

5] He could not convince the doubting audience. **Hence [4]**

6] Withering away of religion as a significant element. **Hence [2]**

7] Concentrating on creating European links. **Hence [4]**

8] Spontaneous recognition from supervisors and managers. **Hence [3]**

9] May also be well advised. **Hence [1]**

10] Demonstrate their strength. **Hence [2]**

11] String of commentaries on . **Hence [4]**

- 12] The passage of time, curse. **Hence [3]**
- 13] Rural, restructure **Hence [4]**
- 14] Superficial attempt at liberalisation. **Hence [1]**
- 15] Ideological, cultural. **Hence [4]**
- 16] Irony, intends **Hence [2]**
- 17] Inspiring, win **Hence [4]**
- 18] Fascinated, oddballs. **Hence [3]**
- 19] Excitement, applause. **Hence [1]**
- 20] 2, does not
- 21] 5
- 22] 4, drop 'a'
- 23] 4, drop 'the'
- 24] 3, drop 'the'
- 25] 5
- 26] 1, was nearly pink
- 27] 5
- 28] 4, the book
- 39] 4, was
- 30] 5
31. 2, is
32. 2, with
33. 5
34. 2, for
35. 2, of
36. 4, for
37. 3, are
38. 4, was
39. 5
40. [4]
41. [4]

42. [2]

43. [2]

44. [1]

45. [3]

46. [2]

47. [3]

48. [4]

49. [2]

50. [1]

51. [3]

52. [3]

53. [4]

54. [4]

55. [3]

56. [4]

57. [2]

58. [4]

59. [2]

60. [2]

61. Let the selling price be S .

$$\text{Cost price} = C = 0.5S$$

$$\text{Profit} = 0.5S$$

$$0.5S = 60$$

$$S = 120$$

62. In one day A can do $\frac{1}{10}$ work

In one day B can do $\frac{1}{12}$ work

$$\text{In one day } A+B = \frac{1}{10} + \frac{1}{12}$$

$$= \frac{22}{120} = \frac{11}{60}$$

$$= \frac{60}{11} = 5 \frac{5}{11}$$

63. Let the fraction be $\frac{a}{b}$

$$b = a+5 \text{ --I}$$

$$\text{Also, } \frac{a}{b+7} = \frac{1}{4}$$

$$4a = b+7 \text{ --II}$$

Solving I+II,

$$-a+b = 5$$

$$4a-b = 7$$

$$3a = 12$$

$$a = 4, \text{ therefore } b = 9$$

64. 45, 54

$$\text{sum} = 45 + 54 = 99$$

65. Let the number be x

$$2x - 1/2x = 30$$

$$3/2x = 30$$

$$3x = 60$$

$$x = 20$$

$$66. 20x + 10y = 200 \text{ --I}$$

$$x + y = 15 \text{ --II}$$

$$20x + 10y = 200$$

$$\underline{(-) 10x + 10y = 150}$$

$$10x = 50$$

$$x = 5$$

67. Apples Bananas

3

2

15

$$15 * \frac{2}{3} = 10 \text{ Bananas}$$

68. cost exclusive of excise and tax = x

$$\text{excise} = 0.12$$

$$\text{Tax} = 0.04$$

$$X + 0.16x = 600$$

$$X = 600 / 1.16$$

$$= 517.24$$

69. x has Rs. 6.

$$2/3 \text{ of } x = 2/3 * 6 = \text{Rs. } 4$$

$$\text{Rs. } 4 = \frac{1}{4} y$$

$$Y = 4 * 4 = 16$$

70. $x + 1/x = \frac{1}{2}$

$$(x + 1/x)^2 = x^2 + 2x(1/x) + 1/x^2$$

$$= x^2 + 2 + 1/x^2$$

$$= x^2 + 1/x^2 + 2$$

$$= \frac{1}{4} + 2$$

$$= 1 + 8/4$$

$$= 9/4$$

71. x will complete 1/20 in one day.

Y will complete 1/30 in one day.

Z will complete 1/60 in one day.

$$4 \text{ days} = (1/20 + 1/30 + 1/60) * 4$$

$$= (3 + 2 + 1/60) * 4$$

$$= 6/60 * 4$$

$$= 4/10$$

$$= 2/5^{\text{th}} \text{ complete}$$

$$\begin{aligned}
 6 \text{ days} &= (1/20 + 1/60) * 6 \\
 &= (3+1/60) * 6 \\
 &= 4/60 * 6 \\
 &= 4/10 = 2/5 \\
 \text{total work complete} &= 2/5 + 2/5 = 4/5 \\
 \text{work remaining} &= 1/5 \\
 1/5 / 1/20 &= 1/5 * 20/1 \\
 &= 4 \text{ days}
 \end{aligned}$$

72. volume increase in cylinder = (volume of block * portion of it which is immersed)

$$\begin{aligned}
 22/7 * 62 * 4 &= 5 * 6 * 7 (p) \\
 p &= \frac{22/7 * 36 * 4}{5 * 6 * 7}
 \end{aligned}$$

$$p = 22/7 * 24/35$$

73. Let the number be x.

$$\begin{aligned}
 x^2 - x &= 870 \\
 x^2 - 30x + 29x - 870 &= 0 \\
 (x-30)(x+29) &= 0 \\
 x &= 30
 \end{aligned}$$

74. Let the no. of eligible voters = x

$$\begin{aligned}
 \text{Then, } (0.6)(.6x) &= 53040 \\
 0.36x &= 53040 \\
 x &= 54000/0.36 \\
 x &= 150000
 \end{aligned}$$

75. Let side of the square be x.

$$\begin{aligned}
 (x+3)^2 &= x^2 + 33 \\
 x^2 + 6x + 9 &= x^2 + 33 \\
 6x &= 24 \\
 x &= 4
 \end{aligned}$$

76. A:B is 10:7.5

$$\begin{aligned}
 B:C &\text{ is } 10:9 \\
 A:B:C &\text{ is } 100:75:90 \\
 C \text{ gets } &90 * 88000 / 265 = 29887
 \end{aligned}$$

77. Expensive brand cost = 20*60=1200

$$\begin{aligned}
 \text{Expense now} &= 1200 - 450 = 750 \\
 \text{Average cost of the mixture} &= 750/20 \\
 \text{Rs. } 30 &\text{ Rs. } 60 \\
 \text{Rs. } 750/20 & \\
 450/20 & 150/20 \\
 3:1 &
 \end{aligned}$$

78. Instalments paid = 1575+1575 = 3150

$$\begin{aligned}
 \text{Interest} &= 3150 - 3000 = 150 \\
 \text{For 2 months interest} &= \text{Rs. } 150 \\
 \text{Rate of interest} &2.5\% \text{ p.m.} \\
 \text{Rate of interest p.a.} &= 12 * 2.5 = 30\%
 \end{aligned}$$

79. $4 - 2.8 + 3.5 - 1 + x = 5$

$$x = 5 - 4 + 2.8 - 3.5 + 1$$

$$= 1.3$$

80. Let the marked price be 100.

Selling price = 60

Commission = $\frac{3}{100} \times 60 = 1.8$

Commission(%) Commission(Rs).

1.8	12
100	?

$$100 \times \frac{12}{1.8} = 666.67$$

81. 3:2:1

$$1.5 \times 12 + 1.5 \times 4 + 2 \times 12 + 1 \times 12$$

$$18 + 6 + 24 + 12$$

$$24 + 24 + 12$$

$$2 + 2 + 1$$

$$1800 / 5 \times 2$$

$$360 \times 2$$

$$\text{Rs. } 720.$$

82. By alligation rule:

10	5
----	---

$$825 / 100$$

13	7
----	---

$$\text{No. of 5 paise} = \frac{100}{20} \times 13$$

$$= 65 \text{ coins}$$

$$\text{No. of 10 paise} = \frac{100}{20} \times 7$$

$$= 35 \text{ coins}$$

83. By alligation rule:
& [2]

163. Production in 1998 = 456000 units

Sales = 433200 units

Sales revenue = $433200 \times 6 = 2599200$

Therefore advt. expense = $2599200 \times 4.33\%$

$$= 112,545$$

Hence [1]

164. Inventory for 1994

Production in '94 = 330,000

Sales = 297,000 therefore inventory = 33,000

Inventory for 1995

Production in 1995=340,000

Sales in 1995=306,000 therefore inventory=34000

Sales for 1996=360000

Total sales=360000+34000+33000=427000 units

Hence [1]

165. Market share=80/4=20%

Sales revenue=345,800*5=1729000

Therefore market =1,729,000/0.20=86.45lac

Hence [2]

166. Answer is [2]

167. Answer is [1]

The following table can easily explain questions 168 to 172

Names	Arti	Banti	Chetan	Dolly
Amount	Rs38.4	Rs11.6	Rs16.6	Rs33.4

168.[1] 169.[2] 170.[3] 171.[3] 172.[1]

173. While X=0, Y=5, A=3, B=5

While X=2, Y=8, A=5, B=8

While X=4, Y=13, A=8, B=13

Hence [3]

174. While X=0, Y=5, A=3, B=5

If X is increased by 5 further values of Y will not be calculated.

Hence [1]

175. The last value of X is 4

Hence [2]

The following table explains the questions171 to 180

Husband	Wife	Surname	Office
Jai	Beena	Parikh	Air India
Girish	Maya	Sahni	Indian Court
Jayesh	Chand	Natwar	Ashiana
Bala	Preeti	Bakshi	American Court
Pratap	Sangeeta	Joshi	Jet

176. [4] 177. [4] 178. [4] 179. [3] 180. [3]

The following table explains the questions 181 to 185

1	2	3	4	5
B	E	A	D	C

181. [3] 182. [4] 183. [2] 184. [1] 185. [3]