## CAT FULL LENGTH TEST 6

No of questions: 185
Directions for questions 1 to 4: Each question below consists of a pair of capitalized words, followed by 4 pairs of words. Select the pair, which best expresses the relationship similar to that expressed in the capitalized pair.

1. KNIFE : LACERATION
$\bigcirc$ medicine : germs $\bigcirc$ calcium : bones $\bigcirc$ bacteria : illness $\bigcirc$ Fire : explosion
2. STANZA : CHAPTER
$\bigcirc$ poetry: prose $\bigcirc$ art: fiction $\bigcirc$ clause : sentence $\bigcirc$ novelty : narration
3. SCULPTOR: CLAY

○ doctor: patient $\bigcirc$ mechanic : car $\bigcirc$ chemist : discovery $\bigcirc$ artist : paint
4. TACIT : SILENT
$\bigcirc$ object : oblate $\bigcirc$ isometric: monometric $\bigcirc$ vacillate : waver $\bigcirc$ vulpine : supine
5. CATERPILLAR : BUTTERFLY
$\bigcirc$ star: moon $\bigcirc$ river: sea $\bigcirc$ tadpole : frog $\bigcirc$ bee : flower
6. ELONGATE : ABBREVIATE
$\bigcirc$ change : return $\bigcirc$ pull : strike $\bigcirc$ duplicate : alter $\bigcirc$ stretch : shrink
7. NECKLACE : BEAD
$\bigcirc$ bouquet: flower $\bigcirc$ door: handle $\bigcirc$ room: window $\bigcirc$ cutlery : forks
8. ALLEVIATE : AGGRAVATE
$\bigcirc$ joke : worry $\bigcirc$ pain: disease $\bigcirc$ plastic : rigid $\bigcirc$ medicine : doctor
9. PLAY : PLAYWRIGHT
$\bigcirc$ bus : conductor $\bigcirc$ baby : mother $\bigcirc$ symphony : composer $\bigcirc$ student : teacher
10.PLIABLE : BEND
$\bigcirc$ irreducible : reduce $\bigcirc$ cemetery : death $\bigcirc$ hydro : water $\bigcirc$ fragile : crack
Directions for questions 11 to 14: Given below are a set of letters with numbers followed by four choices of letters to make a word. Choose the correct order of letters as indicated by numbers to make a word.
11. W HALTE

123456
154236 126345 163452 163425
12. P Y LOTUR

1234567
$\bigcirc 1463527 \bigcirc 1463725 \bigcirc 1463572 \bigcirc 1465372$
13. D O B M I R

123456
14. S M ULCE

123456
$\bigcirc 651324 \bigcirc 123546 \bigcirc 231546 \bigcirc 231654$
Directions for questions 15 to 20: In the each of the following sentences, four words or phrases have been underlined. You should choose the one word or phrase which would not be appropriate in standard written English. If the sentence has no error, mark(5)
15. A variety of pleasing objects of art are displayed in her study.
○
O 2 ○ 3

- 4

16. The sum and the substance of the matter were that your summary is unfounded.1
3
4
17. She is one of those few people who know everything in this matter.
$\bigcirc 1$
○ ○ 3
○ 4
18. This is one of those films which has caused the recent controversy.3

4
19. Having failed once, it is unfortunate to note that no further attempt was made.
○ 1
○ 2
○ 3
4
20. The mill was locked-out since $15 \underline{\text { th }}$ June, 1999.
$\bigcirc 1$
1
○ 2
3
○ 4

Directions for questions 21 to 25: Select the word nearly similar in meaning to the capitalized word.
21. INFRA
○ abovebelowrightleft
22. DOWDY

- corpulentrakishelegantunstylish

23. LISSOME

- dainty ○ supplethin O lazy

24. ERGO

○ if thereforeearlybefore
25. IMMURE

- ripen O shut in $\bigcirc$ exempt Obetray

Directions for questions 26 to 31: Select the word nearly opposite in meaning to the capitalized word.
26. SIMULATED
falserealhardheavy
27. PROLIX
○rieftallbitter stringent
28. SUPERNAL

- earthlyghostly official ○ bold

29. PERTINACIOUS
$\bigcirc$ gentle $\bigcirc$ crude $\bigcirc$ rough $\bigcirc$ slight
30. MORIBUND
$\bigcirc$ growing $\bigcirc$ declining $\bigcirc$ swaying $\bigcirc$ dying
Directions for questions 31 to 38: Each question below contains six statements followed by four sets of combinations of three. Choose the set in which statements are logically related.
31. A. Suhas is a teacher.
B. Sheetal is Suhas' wife.
C. Some wives are intelligent.
D. No teacher is intelligent.
E. Sheetal is not intelligent.
$F$. Suhas is not intelligent.

- BCE
ABE CDEADF

32. A. Hard work and intelligence lead to success.
B. Success is the obsession of our time.
C. Obsession can be many, success being one.
D. Hardwork is essential for success.
$E$. Intelligence is essential for success.
F. No unsuccessful person lacks hard work and intelligence.
○ BCFCDA
○
ADE
○ DEF
33. A. Ram and Gopal are both cowboys.
B. Cowboys are known to dislike one another.
C. Ram and Gopal do not dislike each other.
D. All those who dislike one another are cowboys.
E. Ram and Gopal dislike each other.
F. Ram and Gopal cannot both be cowboys.
$\bigcirc \mathrm{ACF}$ ○ BCD ○ CDF ○ ABE
34. A. All P who say yes mean no.
B. All $P$ never say no.
C. All $P$ never tell the truth.
D. All P who say no mean no
E. All P always mean no.
F. All $P$ never say yes.

- ADF

ADE
ABD
ACE

35. A. No decent person is corrupt.
B. All corrupt people are decent.
C. No corrupt person is decent.
D. All politicians are decent.
E. All politicians are corrupt.
F. Corruption is everywhere.

EBD ○ EDA ○ ABC ACD
36. A. All those good at Maths are good at Stats.
B. Many of those who are good at Stats are bad at Maths.
C. Shyam is good at Maths.
D. Shyam is good at Stats.
E. Sunder is good at Stats.
F. Sunder is bad at Stats.
○ ACD
O EBF
ABD
ECA
37. A. Many tennis players are not good hockey players.
B. All hockey players are good tennis players.
C. Boris is a good hockey player.
D. Pele is a good tennis player.
E. Pele is a good hockey player.
F. Boris is a good tennis player.
$\bigcirc$ ADE $\bigcirc$ BCF $\bigcirc$ ACE $\bigcirc$ ACF
38. A. No clerk is a thinker.
B. Some clerks are not smart.
C. Some clerks are smart.
D. No clerk is smart.
E. Some thinkers are clerks.
F. No clerk is smart
BDE ADF

- CDF
ACD

Directions for questions 39 to 44: From among the given alternatives choose the one that best completes the meaning of the sentence.
39. The rabbit $\qquad$ a few shreds from the lettuce leaf but was clearly not hungry. - gobbled gnawed nibbled
40. In most of the pre-election speeches a lot of importance was given to the country's $\qquad$ situation.

- economicindustriouscommercial economical

41. His P.A. was amazingly efficient, as near $\qquad$ as a human being can be.meticulous
incorrigible
42. She was a kindly old woman with a lively intelligence and her many $\qquad$ remarks were enjoyed by the company.

- laughable $\square$ facetiouswitty
- malicious

43. She goes to College by bicycle as the local bus service is far from $\qquad$ .
reliable $\bigcirc$ assured $\bigcirc$ certain $\bigcirc$ dependent
44. It is not possible to $\qquad$ the full value of her contribution to female education.
$\bigcirc$ underrate appreciate $\square$ assess esteem

## Directions for questions 45 to 50: Each of the following sentences/groups contain two expressions of which only one is correct. Choose the correct one.

48. 

Sign the document.
Sign on the document.
49. Congratulate him for his success.

Congratulate him on his success.
50. Your ignorance does not admit of any excuse.

Your ignorance does not admit any excuse.

## Directions for questions 51-100: choose the correct alternative

51. A man 2.8 meters tall casts a shadow 2.4 metres long and at the same time a building to him casts a shadow 10.8 meters long. What is the height of the building?
○ 12.6 m
14.5 m

- 

16 m
20 m
52. If 40 men can build a wall 224 metres long in 12 days what length of wall can be built by 50 men in 6 days
○ 140 m
120 m160 m
200 m
53. If 34 men can dig a ditch 52 m long in 36 days working 16 hours a day, how many more men should be engaged to dig a similar ditch 78 m long in 12 days, each man now working 18 hours a day.

- 102
200
35
78

54. Two balls have their radii in the ratio $2: 6$ what is the ratio of their volumes ?

- 1:27
2:30
$1: 3$
$2: 1$

55. The parameters of $x$ and $y$ of an object are such that $x=18 / 286 y^{2}$ Two such similar objects of different sizes have their parameter $y$ in the ratio $4: 6$ what is the ratio of the parameters $x$
9:4
8:3
2:3
$3: 1$
56. X earns $25 \%$ more than $y$ by how much percent is $y$ 's income less than that of $x$

- 20\%
- 30\%
- $25 \%$
5\%

57. In an exam, $40 \%$ are the passing marks. If a student gets 20 marks and fails by 10 marks, what are the maximum marks.
$\bigcirc 75 \bigcirc 100 \bigcirc 150 \bigcirc 25$
58. In an election one of the 2 candidates gets $42 \%$ of the total votes and still loses by 368 votes. What is the total no. of votes
$\bigcirc 2300 \bigcirc 2500 \bigcirc 1200 \bigcirc 1400$
59. Rice is now being sold at Rs. 30 kg . Last month its rate was Rs. 26 Kg . By how much \% should a family reduce its consumption so as to keep the expenditure fixed
13.33 \%
$15 \%$
20\%
12\%
60. A batsman increases his average by 4 runs when he makes 126 runs in his $12^{\text {th }}$ innings. What is his average after 12 innings.
82
85
75
80
61. If $a$ and $b$ are integer and $O a b=9$ which of the following cannot be the value of $a+b$

- 82
30
25
18

62. Tap A can fill a tank in 4 hours Because of a leak it took 5 hours to fill the tank. In how much time, the leak can drain all the water of the tank.

- 20
25
22
23

63. In what proportion should water be added to a liquid costing Rs. 20 per liter so as to make a profit of $20 \%$ by selling the mixture at Rs. 15.
○ $3: 5$
○
1: 2
2:3
3:5
64. If I sell a dog for Rs. 650 and a cat for Rs. 300. I gain $20 \%$ on the original cost of both but if I sell the dog for Rs. 675 and the cat for its original price I lose $20 \%$. The original cost of the cat is

- 280
275
300
325

65. Manoj buys 100 articles on which he has to pay Rs. 20 as carriage. The articles were marked for sale at Rs.10. He sells 80 of them at this price and the remaining after allowing a discount of $10 \%$ on the marked price. At the end he finds that he has made a profit of $30 \%$ on his outlay. Find the amount he pays for each article
○ 8.22
5.65

7.33 6
66. At a party, first the ratio of boys to girls was 5 to 4 . If 20 boys left the ratio became $1: 1$, how many people were there originally at the party.
$220 \bigcirc 200 \bigcirc 180 \bigcirc 150$
67. There are 4 picture nails and 6 different pictures. In how many different ways can pictures be hung on all nails.

- 100
360
450
500

68. Ashok marks his goods such that he can reduce $10 \%$ for cash and yet make $20 \%$ profit what is the marked price of an article which costs Rs. 120
○ 160
180
200
150
69. In a game of cricket P's runs are to Q's runs \& Q's runs are to R's runs as $4: 5$. The score 300 runs altogether. How many runs are scored by Q's
○ 130
100
150
120
70. In an examination 10\% candidates fail in English, 15\% in History and 5\% in both. If 2000 candidates pass in both the subjects, Find the total number of candidates appearing in the examination.

$$
\bigcirc 2500 \bigcirc 3000 \bigcirc 4000 \bigcirc 3500
$$

71. An employee reduces the number of employees in the ratio of $7: 5$ and increase the wages in the ratio $10: 11$. Find the difference in the amount of the wage bill, if the earlier bill was Rs. 960

- 206
208
- 210
- 212

72. The average speed of a bus including stoppages was $25 \mathrm{kms} / \mathrm{hr}$ and excluding stoppages was 30 $\mathrm{kms} / \mathrm{hr}$. How many minutes did the bus stop per hour.
○ 33
10
32
31
73. Two pipes $x$ and $y$ can fill a cistern is 15 and 20 minutes respectively both pipes being opened, when should the first pipe be turned off so that the cistern may be just filled in 10 minutes8.3 minutes
9 minutes
8 minutes
7.5 minutes
74. Supposing a clock pendulum takes 8 seconds to strike 8 how long will the same clock take to strike 11
$\bigcirc 12 \mathrm{sec} . \bigcirc 11 \mathrm{sec} . \bigcirc 11.42 \mathrm{sec} \bigcirc 10 \mathrm{sec}$.
75. A rainy day occurs once in every 15 days. Half of the rainy days produce rainbows what $\%$ of all the days have not rainbows.

- $15 \%$
$50 \%$
95\%
96.6\%

76. A bag contains 5 blue marbles, 5 green marbles and 3 red marbles. The marbles are removed one by one in a dark room. What \% of marble must be removed to insure that at least two of each color have been taken out.

- 95\%
90\%
92.3\%
86.6\%

77. By selling 100 Bhajiyas the seller gains the selling price of 20 Bhajiyas. The gain of the seller is

- $25 \%$
30\%
$35 \%$
- $40 \%$

78. At what rate \% S.I on Rs. 2000 produce the same interest in 5 years as Rs. 3000 for 4 years at 5\% p.a
-7\%6.75\%
6.5\%
6\%
79. Complete the given series -2 , $-16,-54,-128$
-250
-300
-260
-150
80. A professor was to demonstrate an experiment to 10 student. If she can show the experiment to only 4 student at a time in how many ways can she make the group for the experiment

- 210
○ 220
320
240

81. 26 swans and 18 parrots were bought for Rs.2583.70. If the average price of a swan is Rs.148, what is the average price of a pigeon ?
○ Rs.70.24
○Rs.85.53
Rs. 80
Rs. 75
82. The average weight of a group of 20 men is increased by 3 kg when one of the men of weight 136 kg is replaced by a new man what is the weight of the new man ?
$\bigcirc 196 \mathrm{~kg} \bigcirc 200 \mathrm{~kg} \bigcirc 85 \mathrm{~kg} \bigcirc 155 \mathrm{~kg}$.
83. 60 cows were purchased for Rs. 2400 . The average cost of 24 cows out of them is Rs. 500 find the average cost of the remaining cows.

- Rs. 333.33
Rs.533.33
Rs. 650
Rs. 700

84. The average daily temperature from $9^{\text {th }}$ January to $16^{\text {th }}$ January (both days inclusive) was $38.6^{\circ}$ and that from the $10^{\text {th }}$ to $17^{\text {th }}$ (both days inclusive) was $39.2^{\circ}$. The temperature on the $9^{\text {th }}$ was $34.6^{\circ}$. What was the temperature on $17^{\text {th }}$ Jan ?
$39.4^{\circ}$
-60
$35^{\circ}$
$36.3^{\circ}$
85. The average salary per head of the entire staff of an office including the officers \& clerk is Rs.180. The average salary of the officers is Rs. 1200 and that of clerks is RS.168. If the no. of officers is 24 , find no. of clerks in the office.
$\bigcirc 2040 \bigcirc 1020 \bigcirc 1120 \bigcirc 25$
86. Visitors to a show were charged Rs. 30 each on the $1^{\text {st }}$ day Rs. 15 on the second, Rs. 5 on the $3^{\text {rd }}$ and the total attendance on 3 days were in the ratio $4: 10: 26$ respectively. Find the average charges per person for the whole show.
○ Rs. 10
Rs. 20Rs. 15
Rs. 30
87. A mixture of 140 litres of wine and water contains $20 \%$ of the water. How much water must be added to make water $74 \%$ of the resulting mixture?

- 291
358
561
- 356

88. A man rows with the stream at the rate of $28 \mathrm{~km} / \mathrm{h}$ and against the stream at $18 \mathrm{~km} / \mathrm{h}$. What is the speed of the boat in still water and the speed of the stream
$\bigcirc 23 \mathrm{~km} / \mathrm{h} \& 5 \mathrm{~km} / \mathrm{h} \bigcirc 26 \mathrm{~km} / \mathrm{h} \& 2 \mathrm{~km} / \mathrm{h} \bigcirc 6 \mathrm{~km} / \mathrm{h} \& 12 \mathrm{~km} / \mathrm{h} \bigcirc$ None of these
89. A man can row at $9 \mathrm{~km} / \mathrm{h}$ in still water. It takes him twice as long to row up as to row down the river. What is the rate of the stream$3 \mathrm{~km} / \mathrm{h}$
6 km/h
$5 \mathrm{~km} / \mathrm{h}$
$4 \mathrm{~km} / \mathrm{h}$
90. A man rows at the rate of $10 \mathrm{~km} / \mathrm{h}$ in still water. If the river runs at the rate of $3 \mathrm{~km} / \mathrm{h}$, it takes him 1 hour to row to a place and lack. What is the distance
4.55 km
5365 km
2.30 km10 km
91. In a Km.race, p beats T by 70 meters or 14 seconds. What is P's time over the course$3 \mathrm{~min} \& 6 \mathrm{sec}$.
$4 \mathrm{~min} \& 5 \mathrm{sec}$.
2 min 1 min
92. A sells a book at a profit of $40 \%$ had he bought it at $40 \%$ less and sold it for Rs. 10 less, he would have gained $50 \%$ what is the C.P of the book.
Rs. 20
Rs. 50
Rs. 30
Rs. 25
93. The value of a machine depreciates @ $20 \%$ after every year. What was its purchase price if at the end of the 3 years its value is Rs. 17496.
$\bigcirc$
Rs. $1,36,687.50$
Rs.1,50,000
○ Rs.1,23,453.50
O None of these.
94. A purchases Rs. 50 shares in a company which pays $9 \%$ dividend. The money invested by the person is that much as gives $10 \%$ on investment. At what price did he buy the shares ?
Rs. 45
Rs. 50
Rs. 20
Rs. 35
95. A can do a piece of work in 24 days and $b$ alone can do it in 30days. What time will they take to complete the job if they work together.

- 40/3 days
- 20/7 days
26/3 days
- 45 days

96. Ashok Began business with Rs.7500. After 6 month Bharat joined him with a certain capital. At the end of the tear the profit were divided in the ratio of Rs. $2: 3$. How much did $B$ invest.

- Rs. 22500
○
Rs. 20000
Rs. 6000
Rs. 6500

97. 100 gallons of a mixture of alcohol and spirit contain $25 \%$ spirit. How much spirit must be added to it to make the spirit $30 \%$ of the new mixture ?

- 4.5 gallons
5.6 gallons
7.1 gallons
8.3 gallons

98. Complete the series $58,29,64,32,94$, $\qquad$
$47 \bigcirc 48$
60 50
99. $X$ can do piece of work in 8 days $y$ in 10days and $Z$ in 12 days. $Y \& Z$ do it for 4 days and then $Z$ is replaced by $x$ fine when the works will be finished ?
4.2 days
6 days
2.8 more days
3 days
100. If $x=5$ and $y=25$, find $y$ when $x=30$, where $y$ varies directly as $x$
150
200
○ 250
350

## Directions for questions 101 to 130

## 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.
101. What is the area of the rectangle.
I. Its length is 5 ft .
II.Its width is 3 ft .
1
○ 2
○ 34 5
102. What is the numerical value of $x^{2}$
I. $x+y=5$
II. $x=2$

○ 1 $\qquad$ ○ 3 3 $\square$ 4 5
103. What is the perimeter of the rectangle.
I. Its area is 20
II. Its length is 51 $\bigcirc 2$ 3 ○ 4
104. What is the shortest distance from $x$ to $z$.
I. The shortest distance from $x$ to $y$ is 5
II. The shortest distance from $y$ to $z$ is 3 .
1
$\bigcirc 2$
○ 3
$\bigcirc 4$
○ 5
105. $x, y$, and $Z$ lie in a straight line ( $y$ comes between $x$ and $z$ ). what is the length of $x z$.
I. $x y=2$
II. $y z=5$.
1
2O 4
106. What is the numerical value of a
I. $A^{2}=9$
II. $a^{3}=27$
$\bigcirc$
1 ○ 2

○ 3
$\bigcirc 4$
○ 5
107. $a=4 b$, what is the numerical value of $b$
I. $b=a / 4$
II. $a+b=25$
○ 13 $\square$ 4 5
108. $A$ is the elder brother of $B . B$ is 25 years old. What is the age of $A$.
I. The difference between the ages of $A \& B$ is 10 .
II. A is older than B.
○ 1
○ 2
○ 34
109. PQRS is a square. What is the length of $P Q$.
I. $L P=90^{\circ}$
II. The area of $\mathrm{PQRS}=4.9$
1
○ 2
○ 3

- 4

110. $X / Y=2 / 3$ What is the numerical value of $y$
I. $x=10$
II. $3 x / 4 y=2 / 5$.
○ 1
○ 2

- 3
○ 4
$\bigcirc 5$

111. $a$ and $b$ are $(+)$ ve integers. $(a+b)^{2}=36$. What is the value of $b$
I. $a=5$
II. $a+b=6$

○ 3
○ 4
112. Is P positive
I. $p+q=0$
II. $q$ is negative.
$\square$
1 2 3 ○ 4 5
113. What is the numerical value of $a+b$
I. a $=2$
II. $b+c=5$
13
4
114. What is the value of $x+3 y$
I. $6 x+8 y=1010 x-$
II. $2 y=18$
○ 1
○
○ 3
○ 4
○ 5
115. $x+y$ is odd. Is $x$ even
I. $y$ is even
II. $x+y$ is not greater than 10 .
1 $\square$
2 $\square$
3 $\square$ 5
116. $p, q, r$ and $s$ are consecutive integers. Is $s$ even
I. $p, q, r$, is odd
II. pqrs is even
1 2 - 3$4 \bigcirc 5$
117. $a$ and $b$ are odd numbers. Is $a b$ divisible by $c$
I. $a>b$
II. B c is an even no.
$\bigcirc 1$
○ 2
3 ○ 4 ○
118. Is b odd
I. $a+b$ is odd
II. $a$ is not odd.
1 $\square$ 2 3 $\bigcirc$ 4 5
119. All Capitals in a country are ports. Is Bombay a capital
I. Bombay has 4 towns
II. Bombay is a port.
124 5
120.Laloo is the tallest boy in the class. Who is the tallest student in the class
I. Dimple is the tallest girl in the class.
II. Laloo is shorter than 2 girls in the class.
○ 1
$\bigcirc 2$
○ 3
○ 4 $\square$
121. Is K to the north of L
I. M and N are to the north of L
II. $Q$ and $L$ are to the south of $K$
1
2 34 5
122. 100 people were invited for the function. How many attended.
I. Not more than 40 failed to respond to the invitation.
II. Not less than 60 attended.
○ 1 $\square$ ○ 3 $\square$○ 5
123. What is the value of the positive integer a
I. The least common multiple of a and 24 is 48.
II. The greatest common divisor of a and 24 is 4 .
○ 1
○ 2
○ 3
4
○ 5
124. $a$ and $b$ are $2(+)$ ve consecutive odd integers in increasing order. What is the value of $a$ I. $(a-b) 2=16$
II. $(a+b) 2<36$
$\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$
125. What is the price of apples ?
I. I can buy 5 apples \& 6 oranges for Rs 20.
II. Rs 15 can buy 2 apples $\& 5$ oranges with $10 \%$ discount.
○ 1
$\bigcirc 2$
○ 3
○ 4
$\bigcirc 5$
126. What would be the ratio of mother's age and daughter's age 3 years from now.
I. The ratio of mother's age and daughter's age now is $3: 1$ and would be $4: 2$ ten years later
II. The sum of their ages is 75 \& the ratio of their ages was $5: 2$, y years back.
$\bigcirc 1$
$\bigcirc 2$
○ 3
4
$\bigcirc 5$
127. What is the sales of Wheat $A$. The total sales of wheat $A \& B$ is 6000 .
I. when sales of wheat $A$ is increased, that of wheat $B$ decreases.
II. The sales of wheat $A$ is twice that of $B$.
$\bigcirc 1$
$1 \bigcirc 2$
○ 3
○ 4
5
128. What is the selling price of the radio.
I. The ratio of S.P. to cost is 0.75
II. The radio is sold at a loss of $f 10 \%$ of cost.
○ 1
$\bigcirc 2$
○ 3
○ 4
$\bigcirc$
129. What is the value of $x$
I. $2 x+3 y=20$
II. $6 x+2 y=15$
$\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$
130. The total capacity of production for type 1 T.V. \& type 2 T.V. is 10,500 units. Using a total of 60 ton of raw material for production of $100^{\text {th }}$ types of T.V. \& operating at full capacity, what is the production of type 1 if,
I. rate of consumption of materials for type 1 is $5 \mathrm{~kg} / \mathrm{T} . \mathrm{V}$.
II. rate of consumption of materials for type 2 is $10 \mathrm{~kg} / \mathrm{T} . \mathrm{V}$.
○ 1
2
○ 3
$\bigcirc$ 4 5

Directions for question 131 to 155: Refer to the data given to answer the given questions
The following is the financial result of a company in (Rs.Lacs)

| Particulars | Current Quarter | Corresponding <br> Previous Quarter | Previous Year |
| :--- | :--- | :--- | :--- |
| Sales | 4772 | 5157 | 22171 |
| Other Income | 24 | 24 | 135 |
| Expenditure | 4686 | 4520 | 18985 |
| Interest | 172 | 192 | 810 |
| Gross Profit | -62 | 469 | 2511 |
| Depreciation | 112 | 103 | 417 |
|  |  |  |  |


| Profit before tax | -174 | 366 | 1937 |
| :--- | :--- | :--- | :--- |
| Tax | 0 | 148 | 562 |
| Net Profit | -174 | 218 | 1377 |

131. The company has made

- a loss in the current year
- a loss in the current quarter
a loss in the previous year
- a loss in the previous quarter.

132. The total income of the company is
4796
4744
4772
4848
(Hint : Total Income is sum of sales \& other income)
133. The company has shown as regards to Sales

On income of $6.42 \%$ over previous quarter.
A decline of $8.06 \%$ over previous quarter.

- A decline of $7.46 \%$ over previous quarter.
- a decline of 6.42 \% over previous quarter

134. It sales are going to follow last years trend then the projected sales for current year would be $\bigcirc 22171 \bigcirc 19846 \bigcirc 19826 \bigcirc 20515$
135. If the Company is getting a one time order of 5000 lacs and otherwise sales follow last years trend then the sales projected is
25515
27171
24848
24851
136. Interest as an expenditure over previous year quarter has gone

- up by $10.4 \%$ over previous year

O down by 10.4 \% over previous year
data given is insufficient

- None of the above.

137. Depreciation as a percentage of sales in the two-quarter has

- remained unchanged
- decrease in the current quarter
- increase in the current quarter
- none of the above.

138. If companies are taxed at $40 \%$ then in order to pay tax same as the previous quarter it must have to make a profit before tax of

290 in the remaining quarters.

- 300 in the remaining quarters.
- 370 in the remaining quarters.

544 in the remaining quarters.
139. The expenditure has in Comparison to the Previous Quarter.
O increased
decreased
remained same
none of the above
140. Expenditure has in the current quarter

- decrease by $3.67 \%$ over previous quarter
increase by $3.67 \%$ over previous quarter
- remained unchanged over previous quarter
$\bigcirc$ none of the above.

141. The percentage of Total expenditure to sales in the two quarters has

- remained unchanged
gone down by $10.5 \%$
gone down by $10.5 \%$
- None of the above.

142. If the company has the same performance in the next quarter but no loans then

There is a profit of 62 lacs.
There is a loss of 62 lacs
There is a gross profit of 172 lacs
There is a gross profit of 110 lacs.
143. If the company is taxed at $40 \%$ men in case there is no loan it would pay
tax of 44 lacs.
Tax of 40 lacs.
Tax of 148 lacs.
144. If the depreciation is halved in the next quarter and there is no loan it would pay

- tax of 44 lacs
O tax of 21.6 lacs
- no tax tax of 54 lacs.

145. Last year the company paid tax at the rate of
46 \%
40\%
28.91\%
50\%

Given below is a statistical record of usage of 4 soaps in terms of number of persons over 5 years in a locality.

| Products | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | 500 | 400 | 600 | 400 | 350 |
| B | 400 | 450 | 300 | 370 | 420 |
| C | 540 | 600 | 700 | 320 | 400 |
| D | 100 | 150 | 200 | 250 | 270 |

146. The only product which is showing an increasing trend is

- A
A ○ B $\bigcirc$
C

147. The biggest fall in usage came in

- case of c in 1997
- in case of B in 1996

O in case of A in 1998
© in case of D in 1994
148. The biggest jump in usage came in

A in 96 alone
A \& D in $96+95$ respectively.

- $D$ in 95 alone
- None of the above

149. The product showing a declining trend in the last 3 years of the survey is
○ D $\square$
B A C
150. The Population of the locality was the highest in
151. The Product which increased by the same numbers in absolute terms in the first four years is

- A
B
D
C

152. For Product D in 1995 \& 1996
a.The rate of increase was same
b.The number of users increased by the same no.

Which of the following is true
A alone $\bigcirc$ B alone $\bigcirc$ A and B together $\bigcirc$ None of the above.
153. In 1998 the highest sales was of soap in the locality

- A
B can't be determined.
- C

154. In all the five years the highest number of users of soap used
O A in 1994

- D in 1998B in 1997
C in 1996

155. In all the five years the lowest number of users used
C in 1996

- B in 1997
D in 1994
A in 1996.

Directions for questions 156 to 161: Choose the correct set of three sentences which make a logical sequence.
156. (a) Meena is a nice girl.
(b) Teena is a nice girl too.
(c) All nice girls like a pilot.
(d) Meena likes Teena.
(e) Meena likes pilots.
(f) Teena likes Meena.
○ abd
dba
○ ace
○ abf
157. (a) Whale lay eggs.
(b) Mammals have hair.
(c) Whale are fish.
(d) Kangaroos are mammals.
(e) All fish lay eggs.
(f) Kangaroos have hair.
○ ace
dfbaef
cea
158. (a) Some men are singers.
(b) Some men are not singers.
(c) Sangita may be a singer.
(d) Some women are singers.
(e) Some women are not singers.
(f) Sangita is a woman.abd $\bigcirc$ dfc $\bigcirc$ def - ecf
159. (a) Sheela likes to look adult.
(b) Sheela is a girl.
(c) Girls play a lot.
(d) Sheela likes gardening.
(e) Sheela likes to wear Saree.
(f) All adults wear Saree.
aef ○ afe ○ bcd $\bigcirc$ fea
160. (a) Sachin is a cricketer.
(b) All cricketers play ball.
(c) All cricketers bat.
(d) Sachin plays ball.
(e) cricketers are fond of chocolates.
(f) Chocolates affect the teeth.
$\bigcirc$ abc $\bigcirc$ aef $\bigcirc$ efd $\bigcirc$ bad
161. (a) There is no life after death.
(b) Life after death has not been proved.
(c) There is life after death.
(d) There is no life.
(e) There may be life after death.
(f) Life after death has not been disproved.bfe 〇 cba ○ def ○ bfa
162. (a) All gold is metal.
(b) Some Gold is metal.
(c) All metal is not Gold.
(d) Some gold is not metal.
(e) Silver is also metal.
(f) All metal is Silver.
○ abc
○ aec
ade
○ abd

Directions for questions 163 to 166: In the following questions, two statements are followed by two inferences. Write
(a), if only inference 1 follows.
(b), if only inference 2 follows.
(c), if both of them follow.
(d), if neither of them follows.
163. All cables are tables. All tables are sturdy. So

1. Some sturdy things are cables.
2. Some cables are sturdy.

- a
b
c
d
164.All coins are rupees. Some rupees are paper currency. So

1. All coins are paper currency.
2. Some coins are paper currency.

- a
b
c
d
165.Leopard is an animal. Leopard are fast runners. So

1. All animals are fast runners.
2. Some fast runners are animals.
○ a
○b $\square$ c $\square$
3. If you are an officer you can attest this paper. You are an officer. So
4. You can attest this paper.
5. You cannot attest this paper.a b c d

Directions for questions 167 to 170: On the basis of more than two statements two inference are drawn. You are to mark
(a), if only conclusion 1 follows.
(b), if only conclusion $\mathbf{2}$ follows.
(c), if both the conclusions follow.
(d), if neither of the conclusion follows.
167.All hands are feet. All feet are shoes. All shoes are socks. All socks are sockets. Therefore 1. All hands are sockets.
2. All sockets are hands.
$\bigcirc \mathrm{a} \bigcirc \mathrm{b} \bigcirc \mathrm{c} \bigcirc \mathrm{d}$
168.All lovers are dogs. Some dogs are hogs. Some hogs are logs. All logs are wood. Therefore

1. All lovers are wood.
2. Some woods are lovers.
$\bigcirc a \bigcirc b \bigcirc c \bigcirc d$
169.Some tigers are foxes. All foxes are ants. All ants are insects. No insect is a human being. Therefore
3. Some tigers are not human beings.
4. No human being is a tiger.
ab
c
d
5. All rivers are waterfalls. All waterfalls are seas. All seas are navigable. Therefore
6. All rivers are navigable.
7. All navigable places are rivers.
$\bigcirc a \bigcirc b \bigcirc c \circ d$
Directions for questions 171to 175: Given below is a capitalized pair of words which bear a certain relationship to each other. From the alternatives, choose the pair that does not bear the same relationship as the capitalized pair.
8. BANANA : FRUIT
$\bigcirc$ milk: water $\bigcirc$ wood : tree $\bigcirc$ letter: alphabet $\bigcirc$ iron: gold
9. SWEATER: GLOVES
$\bigcirc$ ladder: stool $\bigcirc$ far: distance $\bigcirc$ jump: hop $\bigcirc$ mawkish: awkward
10. FOOD : MAN
trigger: gun $\bigcirc$ fuel : truck $\bigcirc$ fuse : explosion $\bigcirc$ light: match
11. ORIGINAL: ERSATZ
$\bigcirc$ euphoria : humour $\bigcirc$ cogitation : levity $\bigcirc$ detract : extract $\bigcirc$ oracular : prophetic
12. BED : SLEEP
$\bigcirc$ scientist : chemical $\bigcirc$ man : food $\bigcirc$ calculator: arithmetic $\bigcirc$ scooter: vehicle

## Read the passage given below and answer the questions

Passage -1
In its more extreme forms persecution mania is a recognized form of insanity. Some people imagine that others wish to kill them, or imprison them, or to do them some other grave injury. Often the wish to protect themselves against imaginary persecutors leads them into acts of violence which make it necessary to restrain their liberty. This, like many other forms of insanity, is only an exaggeration of a tendency not at all uncommon among people who count as normal. I do not propose to discuss the extreme forms, which are a matter for a psychiatrist. It is the milder forms that I wish to consider, because they are a very frequent cause of unhappiness, and because, not having gone so far as toe produce definite insanity, they are still capable of being dealt with by the patient himself, provided
he can be induced to diagnose the trouble rightly and to see that its origin lies within himself and not in the supposed hostility or unkindness of others.

We are all familiar with the type of person, man or woman, who according to his own account, is perpetually the victim of ingratitude, unkindness, and treachery. People of this kind are often extraordinarily plausible, and secure warm sympathy from those who have not known them long, There is, as a rule, nothing inherently improbable about each separate story that they relate. The kind of ill-treatment of which they complain does undoubtedly sometimes occur. What in the end rouses the hearer's suspicions is the multiplicity of villains whom it has been the sufferer's ill-fortune to meet with.

In accordance with the doctrine of probability, different people living in a given society are likely in the course of their lives to meet with about the same amount of bad treatment. Of one person in a given set receives, according to his own account, universal ill-treatment, the likelihood is that the cause lies in himself, and that the either imagines injuries from which in fact he has not suffered, or unconsciously behaves in such a way as to arouse uncontrollable irritation. Experienced people therefore becomes suspicious of those who by their own account are invariable ill-treated by the world; they tend, by their lack of sympathy, to confirm these unfortunate people in the view that everyone is against them. The trouble, in fact is a difficult one to deal with, since it is inflamed alike by sympathy and by lack of sympathy. The person inclined to persecution mania, when he finds a hard-luck story believed, will embellish it until he reaches the frontier of credibility; when, on the other had, he finds it disbelieved, he has merely another example of the peculiar hard-heartedness, and this understanding, and this understanding must be conveyed to the patient if its is to serve its purpose.

## 176. Persecution mania is

a form of temporary insanity.
an exaggerated form of insanity.

- in its more extreme forms, an incurable form of insanity
- none of the above.

177. The liberty of a person suffering from extreme persecution mania has to restrained because $\bigcirc$ his ills are imaginary $\bigcirc$ he might turn violent $\bigcirc$ he is insane $\bigcirc$ none of these.
178. The author would seem to suggest that
persecution is present in most normal people.
like persecution, many other forms of insanity quite uncommon in many normal people.

- [1] \& [2]
- in a milder form, many forms of insanity are common among normal people.

179. The author feels that the milder variety of persecution mania can be dealt with by the patient himself because

O his affliction has not so far produced definite insanity.

- he can induce himself to diagnose his trouble rightly.
- he can realize that the origin of his disease lies in himself.
- [2] \& [3].

180. All the following facts, about people suffering from mild persecution mania are true, except that
they are apparently reasonable.
there is nothing improbable about the stories they tell.
O the kind of ill-treatments they complain of do sometimes occur.
O they get warm sympathy from those who have known them for long.

After singing for their supper, bees sleep soundly. When they hover around, sucking fluid from hibiscus flowers during the day, their wings beat about 60 times a second.

An expenditure led by Dr.John Joseph from the University of Aarhus in Denmark went to Brazil to see how bees manage their energy supplies. It concentrated on the grounds of the Biological Museum in Santa Teresa, 500 kilometers north of Rio de Janeiro.

The park boasts of 3,200 wild bees from 15 species, including the tiny Lophornis Magnifica, whose name refers to its green, red, and white plumange rather than its size. Its body would fir onto this paragraph with room to spare.

They found that a hovering ten-gram bees used about half a liter of oxygen every hour. In terms of oxygen per gram, that is about ten times the amount an energetic person might use up in the same time. To pump all this oxygen around its body a bees' heartbeat has to be high - about 1,440 beats per minute, compared to around 110 for an exercising human. The oxygen is used to burn up food, making the energy that keeps the bird warm and powers its wings. Eating lets it hover, and hovering lets it eat.

During the day such an energetic metabolism keeps a bees' body temperature at about $40^{\circ} \mathrm{c}$. But the bees cannot store enough food in their tiny bodies to keep their temperature that high all night. So, at night L. Magnifica slows its metabolism enough to cut its body temperature by $20-30^{\circ} \mathrm{c}$. It may breathe around 50-100 times less oxygen than during the day, which means that it uses by 50100 times less food. It works well, but it does mean that waking up is hard to do.

Dr. Joseph found that the bees uses almost as much oxygen shivering itself awake in the morning as it does when hovering. It takes the bees about $15-20$ minutes to raise its temperature back up to is day-time level - all the time using up energy. With only small food reserves, the bees - especially small ones like L. Magnifica - sometimes get only one chance to wake up. If they nod off again, they sleep the sleep of the dead.
181. Which of the following statement is false?

There are only 15 species of the bees in the world.
O Of the bees found on the grounds of the Biological Museum in Santa Teresa, Lophornis magnifica is one of the tiniest.

The bees survive on fluid from flowers.

- The name Lophornis magnifica does not refer to the size of the bee.

182. The bees needs to maintain a high rate of heart beat
to send the abnormally high amount of oxygen round its body.

- to digest food.
to generate energy.
to keep itself warm.

183. Which of the following statements is false?

The less the weight of a bees, the greater are its chances of dying in its torpor.

- A normal human being needs less than a half a litre of oxygen per hour.
- The task of the expedition led by Dr-Joseph was to examine how bees managed their energy supplies.

184. Which of the following statements is true ?

The bees eats while it hovers.

- In order to keep its night temperature low the bees eats little at night.
- Eating gives the bees energy to hover and hovering makes it hungry.
- The larger the body of a bees, the faster it hovers.

185. Which of the following measures, even if successfully adopted, is unlikely to bring down the death rate among bees?

A device to shorten the time span the bees take to raise their body temperature while waking up.

A device to make them store more energy in their bodies before and during their sleep
Making them take more nutritious food than fluid from the flowers.
A device to make them breathe at night at the same rate as during the day.

| $1 .[2]$ | $2 .[1]$ | $3 .[4]$ | $4 .[3]$ | $5 .[3]$ | $6 .[4]$ | $7 .[1]$ | $8 .[4]$ | $9 .[3]$ | $10 .[4]$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 .[3]$ | $12 .[3]$ | $13 .[2]$ | $14 .[3]$ | $15 .[3]$ | $16 .[3]$ | $17 .[5]$ | $18 .[2]$ | $19 .[1]$ | $20 .[1]$ |
| $21 .[2]$ | $22 .[4]$ | $23 .[2]$ | $24 .[2]$ | $25 .[2]$ | $26 .[2]$ | $27 .[1]$ | $28 .[1]$ | $29 .[1]$ | $30 .[1]$ |
| $31 .[4]$ | $32 .[4]$ | $33 .[4]$ | $34 .[2]$ | $35 .[1]$ | $36 .[1]$ | $37 .[2]$ | $38 .[2]$ | $39 .[4]$ | $40 .[1]$ |
| $41 .[2]$ | $42 .[3]$ | $43 .[1]$ | $44 .[3]$ | $45 .[1]$ | $46 .[2]$ | $47 .[1]$ | $48 .[1]$ | $49 .[2]$ | $50 .[1]$ |

51. Let the ht. Of the bldg be $h$ metres
2.8/2.4 = h/10.8
$\backslash \mathrm{h}=2.8 \times 10.8 / 2.4=\underline{12.6}$ meters Hence (1)
52. $M_{1} T_{1} / W_{1}=M_{2} T_{2} / W_{2}$
$40 \times 12 / 224=50 \times 6 / X \backslash X=140$
$\backslash$ length of wall built $=\underline{140}$ metres Hence (1)
53. $\mathrm{M} 1=34, \mathrm{R}_{1}=16_{1} \mathrm{~T}_{1}=36_{1} \mathrm{~W}_{1}=52_{1} \mathrm{M}_{2}=2_{1} \mathrm{R}_{2}=18_{1}$
$\mathrm{T}_{2}=12{ }_{1} \mathrm{~W}_{2}=78$
$(34 \times 16 \times 35) / 52=\left(M_{2} \times 18 \times 12\right) / 78$
$19584 / 52=216 \mathrm{M}_{2} / 78$
$1123 \mathrm{M}_{2}=1527552$
$M_{2}=136$
$\backslash$ No. of extra men to be employed
= 136 - 34 = $\underline{102}$
Hence (1)
54. $\mathrm{V} 1: \mathrm{V} 2=\left(\mathrm{R}_{3}\right)^{3}:\left(\mathrm{R}_{2}\right)^{3}$
$=2^{3}: 6^{3}$
= $8: 216$
= $1: 27$
Hence (1)
55. $X_{1}: X_{2}=1 / Y_{1}{ }^{2}: 1 / Y_{2}{ }^{2}$
= $1 / 16: 1 / 36$
$\backslash X_{1}: X_{2}=36: 16=9: 4$
Hence (1)
56. Let y's income be Rs. 100.

Then X's income $=$ Rs. 125
X Y
125100
$100 \quad ?=100 \times 100 / 125=80$
$\backslash Y$ 's Income is $20 \%$ less than $x$.
Hence (1)
57. Total passing marks $=20+10=30$
$40 \%$ of maximum marks $=30$
$\backslash$ Maximum Marks $=30 \times 100 / 40=75$
58. In an election, one of the 2 candidates gets $42 \%$ of the total voted and still loses

Let the total no. of votes be 100
Votes secured by defeated candidate $=42$
Votes secured by winning candidate $=58$
Diff $=16$
$=368 \times 100 / 16=\underline{2300}$
Hence (1)
59. Let earlier consumption be 1 kg
\ earlier expend = Rs. 26
Now Rs. 30 gives 1 Kg
\Rs. 26 gives $26 / 30 \mathrm{Kg}$.
\Reduction in consumption =1-26/30=4/30 Kg.
$\backslash$ Reduction $\%=4 / 30 \times 100=13 / 3 \%$
Hence (1)
60. Average score after 11 innings $=126-(4 \times 12)$
= 126 - 48 = 78
$\backslash$ Average Score after 12 innings $=78+4=\underline{82}$
61. $a b=81$

Factor of 81 are 81,1 or 27,3 , or 9,9 , Their Sum is equal to $82,30,18$ But there are no factors whose sum is 25 .
Hence (3).
62. Without Leakage $1 / 4$ tank can be filled in 1 hours with leakage $1 / 5$ tank can be filled in 1 hour.
$\backslash$ leakage per hour $=1 / 4-/ 5$
$=1 / 20$ Time taken to drain
all the water is 20 Hours
Hence [1].
63. Let $a \& b$ be the amount of liquid and water in the mixture
(1.2) (20) $a=15(a+b)$
$24 a=15 a+15 b$
$9 \mathrm{a}=15 \mathrm{~b}$
$3 \mathrm{a}=5 \mathrm{~b}$
$\backslash$ the ratio $=3: 5$
Hence [4]
64. Let $d$ and $c$ be the original cost of the dog and the cat
$650+300=102(d+c)$
$675+c=0.8(d+c)$
$950=1.2 \mathrm{~d}+1.2 \mathrm{c}$
$0.2 c-0.8=-675$
$12 \mathrm{~d}+12 \mathrm{c}=9500$
$48 d-12 c=40500$
$60 \mathrm{~d}=31000$
$\backslash d=516.67$
$\mathrm{c}=$ Rs. 275 hence [2].
65. Let the costprice of each article be $x$
$(100+20) \times 1.30=10 \times 80+20 \times 9$
$130 x+26=800+180$
$x=$ Rs. 7.33
Hence [3].
66. Let the number of boys and girls be band $g$ initally
$B / g=5 / 4$ and $b-20 / g=1$
B/ b-20 $=5 / 4$
$4 b=5 b-100$
$b=100$
and number of girls $=100-20=80$
Therefore total number of people at the party $=180$ Hence [3].
67. Required number of arrangement $=6 p_{4}=6^{1} / 2^{1}$
= 360
Hence [2].
68. $x-10 x / 100=144$
$9 x=1440$
$x=160$
Hence [1].
69. Let $P, Q \& R$ be the respective scores
$P / Q=Q / R=4 / 5$
$P=4 Q / 5$ AND $R=5 Q / 4$
$P+Q+R=Q(4 / 5+1+5 / 4)=305$
$=Q(3005)=305$
Q = 300
Hence [2].
70. \% of candidates who failed in atleast one subject = 15 + $10-5=20 \%$
\% passed in both $=80 \%$
80\% = 2000
Therefore total number of candidates $=2500$
Hence [1].
71. Ratio of employes $=7 / 5$

Ratio of wages $=10 / 11$
Let amount of later bill be $x$
$7 \times 10 / 5 \times 11=960 / x$
70/ $55=960 / x$
x = Rs. 754.3
$\backslash$ diff = Rs. 206
Hence [1].
72. In one hour the bus will travel 30 km without stopping and 25 km with stoppages. It stops for the time in which it will travel a distance of 5 km with speed $30 \mathrm{~km} / \mathrm{hr}$.
\time of stoppage $=5 \times 60 / 30$
= 10 minutes
Hence [2].
73. Let pipe $x$ be turned of in ' $t$ ' minutes
$(1 / 15) t+10(1 / 20)=1$
$\mathrm{t} / 15+1 / 2=1$
$2 t+15 / 30=1$
$2 t+15=30$
$2 \mathrm{t}=15$
$\mathrm{t}=7.5$ minutes
Hence [4]
74. To strike 8 the pendulum has to perform seven oscillations for which it takes 8 seconds to strike 11 the clock will have to perform 10 oscillations for that it will take $10 \times 8 / 7$ $=11.42 \mathrm{sec}$.

Hence [3].
75. Only one day out of 30 days produces the rainbow
\out of 30 days 29 days can not produce rainbows
$\backslash$ their \% is $100 \times 29 / 30$
$=96.6 \%$ Hence [4].
76. We consider the worst case since we must have atleast two marbles of each colour first 11 marbles may be blue, green and 1 red once we draw the $12^{\text {th }}$ marble there has to be at least two month of each colour
$\backslash$ Required $\%=12 \times 10 / 13$
= 92.3\%
Hence [3].
77. his profit $\%$ is $20 / 80 \times 100$
= 25\%
Hence [1].
78. Let the rate of interest be $r$
$2000 \times r \times 5 / 100=3000 \times 4 \times 5 / 100$
$2000 r=12000$
$\backslash r=6 \%$ Hence [4].
79. The series is $-1^{3} \times 2,-2^{3} \times 2,-3^{3} \times 2,-4^{3} \times 2,-5^{3} \times 2$
80. required no. of groups $=10_{c 4}$
$=210$
Hence [1].
81. Average price of swan $=$ Rs. 148
\Total price of 26 swan $=$ Rs $26 \times 148=$ Rs. 3848 .
Total price of 26 swans $\& 18$ parrot $=$ Rs. 2583.70
$\backslash$ Price of 18 parrot $=1264.30$
$\backslash$ Average price of 1 parrot $=1264.30 / 18=$ Rs. 70.24
Hence (1)
82. Total increase in weight $=20 \times 3=60 \mathrm{~kg}$.
\Weight of the new man $=136+60=\underline{196} \mathrm{~kg}$
Hence (1)
83. Cost of 24 cows $=24 \times 500=12000$
\Cost of remaining 36 cows $=12000$
$\backslash$ Average cost $=12000 / 36=\underline{333.33}$
Hence (1)
84. Sum of the temperatures from $9^{\text {th }}$ to $16^{\text {th }}=38.6 \times 8=308.8$

Sum of the temperature from $10^{\text {th }}$ to $16^{\text {th }}=274.2$
Sum of the temperature from $10^{\text {th }}$ to $17^{\text {th }}=39.2 \times 8=313.6$
Temperature on $17^{\text {th }}$ Jan $=313.6-274.2=39.4$
Hence (1).
85. Salary of officers $=1200 \times 24=28800$

Let no. of clerks be $x$
Salary of clerks $=168 \mathrm{x}$
Total salary $=28800+168 x$
Average $=(28800+168 x) /(x+24)=180$
$28800+168 x=180 x+4320$
$12 x=24480$
\x = 2040
Hence (1).
86. Let the person attending on the $1^{\text {st }}, 2^{\text {nd }}, \& 3^{\text {rd }}$ day

Be $4 x, 10 x \& 28 x$ respectively.
Total collection $=120 x+150 x+130 x=400 x$
Average charge $=400 x / 40 x=$ Rs. 10
Hence (1)
87. The mixture contains $20 \times 140 / 100=28$ litres of water

It contain (140-28) = 112 litres of wine.
Let $x$ litres of water be added.
$(28+x) / 140+x=74 / 100$
$2800+100 x=10360+74 x$
$26 x=7560$
$\backslash x=\underline{291}$
Hence (1)
88. Speed of boat in still water $=1 / 2(28+18)=23 \mathrm{kmph}$

Speed of the stream $=1 / 2(28-18)=5 \mathrm{kmph}$
Hence (1).
89. Let the man's rate upstream be $x$ kmph
\Man's rate downstream be $2 x \mathrm{kmph}$
$1 / 2(2 x+x)=9$
$x+x / 2=9$
$3 x=18$
$\backslash \mathrm{x}=6 \mathrm{kmph}$
\Man's rate downstrem = 12 kmph
Rate of current $=1 / 2(12-6)=\underline{3 \mathrm{Kmph}}$
Hence (1)
90. Man's rate downstream = 13 kmph

Man's rate upstream $=7 \mathrm{kmph}$
Let the distance be xkm .
Total time taken to row x km \& lack
$=x / 13+x / 7=1$
$20 x / 91=1$
$\backslash \mathrm{x}=91 / 20=4.55 \mathrm{~km}$
Hence (1)
91. T runs 70 meteres in 14 seconds
$\backslash$ T's time over the course $=14 / 70 \times 1000$ seconds
$=200$ seconds
$\backslash$ P's time over the course $=(200-14)$ seconds
= 186 seconds
$=3$ minutes, 6 seconds.
Hence (1)
92. Let C.P be Rs. 100 ; Grain $=40 \%$
\ S.P = Rs. 140
New C.P $=40 \%$ less $=$ Rs. 60
If gain is $50 \%$ then S.P = RS. $150 \times 60 / 100=$ Rs. 90
Diff in S.P = Rs. $140-90=$ Rs. 50
Diff in S.P C.P
$=100 \times 10 / 50=$ Rs. 20
Hence (1).
93. Let purchase price be Rs. P
$P(1-20 / 100) 3=17496$
$P \times 80 / 100 \times 80 / 100 \times 80 / 100=17496$
$P=$ Rs. 1,36,687.50
Hence (1).
94. F.V. of 1 shares = Rs. 50.
$\backslash$ Dividend on 1 share $=$ Rs. $50 \times 9 / 100=$ Rs. $9 / 2$
Rs. 10 is an income on an invt. Of Rs. 100
Rs. $9 / 2$ is an income on an invt. Of Rs. $100 \times 9 / 2 / 10=$ Rs. 45
$\backslash$ Price if 1 share = Rs. 45 Hence (1).
95. A . In 1 days $\mathrm{A}+\mathrm{B}=1 / 24+1 / 30=546 / 720=3 / 40$ work
\Both can complete the work in 40/3 days.
Hence (1).
96. Let Bharat investement be Rs. $X$

2/ $(7500 \times 12)=3 / 6 x$
$12 x=3 \times 7500 \times 12$
$x=7500 \times 3=22500$ Rs.
Hence [1].
97. Amount of spirit in 100 gallons $=25$ gallons

If $x$ gallon of spirit is added to make it
$30 \%$ of the new micture
$(100+x) 30 / 100=25+x$
$(100+x) 30=100(25+x)$
$3000+30 x=2500+100 x$
$x=7.1$ litres
Hence [3].
98. The series is Number, Number/2 and so on
99. $x, y, z$ 's work per day is $1 / 8,1 / 10,1 / 12$
in 2 days $y+z=2(1 / 10+1 / 12)$
$=2(6+5) / 60$
$=11 / 30$
Remaining work $=19 / 30$
Y z's work per day $=11 / 60$
X, y's work per day $=9 / 40$.
Work to be done by $x \& y=19 / 30$
No. of days to finish the work $=19 / 30 \times 40 / 9$
$=2.8$ days
Hence [3].
100. $x=k y$
$K=x / y=1 / 5$
When $x=30,1 / 5=30 / y$
$\backslash Y=150$
Hence [1]
101. Area can be found using both statements

Hence [ 3 ]
102. Statement (I) above gives the value of $x^{2}$.

Hence [ 1 ]
103. Perimeter $=2(I+b)$

From statement (2) $I=5$
From statement (1) $20=5 b$
b $=4$
Hence combining both statements we can get perimeter.
Hence [ 3 ]
104. Since we do not know the positions of $x, y, \& z$, we cannot find the answer. Hence (4)
105. Using both statements, $x z=x y+y z$

Hence [ 3 ]
106. From statement (1) $a=+3$ or -3
from statement (2) a =cube root of $27=+3$
Hence [2]
107. Statement (1) is just a repetition to the question

But from statement (2) $4 b+b=25$
$5 b=25, b=5$
Hence [2]
108. From statement (1) we get the age of $A$ statement (2) is repetitive.
Hence [1]
109. From statement (2), if the length of each side is a, then

A $2=49$
Hence I (P Q) = 7 Units
Hence [ 2 ]
110. Statement (1) alone is sufficient to answer the question.

Hence [1]
111. From statement (1) $A+b=6$ ( since given that $a \& b$ are $+v e$ )

Thus value of $b$ can be obtained
Hence [1]
112. Both statements are required

Hence [ 3 ]
113. Both the statements are not sufficient since we don't find the value of $a+b$.

Hence [4]
114. Using both the statements we get 2 simultaneous equations which when solved give the values for $x+y$. Hence [ 3 ]
115. Statement (2) is irrelevant.

From statement (1) if we assume that $x+y$ be $7 \& y$ be 4
$X=3$ Hence we conclude that $x$ is not even.
Hence [ 1 ]
116. From statement ( 1 ) we get that $p$ is odd, $q$ is odd $\& r$ is odd.

From statement (2) pqrs is even.
So combining both statements, $s$ has to even.
Hence[3]
117. Given that ab is odd.

From statement (2) c is an even no.
An odd. No. is not divisible by an even no.
Hence [ 2 ]
118. Both statements are not sufficient .

Hence [ 4 ]
119. From statement (2) we cannot say whether all ports are capitals

Statement (1) is irrelevant
Hence [ 4 ]
120. From statements ( 1 ) \& (2) IF Laloo is shorter than 2 girls, then a girl has to be the tallest. We Know that Dimple is the tallest girl
Hence [ 3]
121. From statement (2), we find that $K$ is to the north of $L$

Hence [ 2 ]
122. From both statements, we do not get the exact number of people .

Hence [ 4 ]
123. Both statements are required

Hence [ 3 ]
124. From both statements we cannot find the answer.

Hence [ 4 ]
125. Both statements are irrelevant

Hence [4]
126. From statement ( 2 ) we can get the ratio.

Hence. [2]
127. From statement (2) we get
$X+2 x=6000$
$x=2000$
Hence [ 2 ]
128. From both statements we don't get the value of c.p. or profit or s.p.

Hence [ 4 ]
129. Using both the simultaneous equations, we get the value of $x$.

Hence [ 3 ]
130. Since we know only the capacity from both statements, we can find the production. Hence [ 3 ]
$\begin{array}{lllllll}\text { 131. b } & \text { 132. a } & \text { 133. c } & \text { 134. d } & \text { 135. a } & \text { 136. b } & 137 . \mathrm{c} \\ \text { 138. d } & \text { 139. a } & 140 . \mathrm{b}\end{array}$
141. c 142. d (No loans means no interest to be paid)
143. a (No tax depreciation is still 112 lacs) 144. b 145. c
146.d 147. a 148. b 149. c 150. a The Population of the locality was highest in 1996. 151. c 152. b 153. b (These are not actual sales but no. of people using it. For eg. Soap can be used by 4 people) 154. d 155. c
156. (c) 157. (d) 158. (b) 159.(b) 160.(d) 161.(a) 162.(b) 163. (a)
164 (d) 165. (b) 166.(a) 167.(a) 168.(d) 169.(a) 170.(a) 171. (c) 172.(a) 173.(b) 174. (b) 175.(c)
176. [4] 177.[2] 178.[4] 179.[1] 180.[4] 181.[4] 182.[1] 183.[2] 184.[3] 185. [4]

