# MOCK TEST 4

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**No. of questions:185**

**Directions for questions 11 to 14: Each questions below consists of a pair of capitalized words followed by four pairs of words. Select the pair which best expresses the relationship similar to that expressed in the capitalized word.**

11. PERFUME : FRAGRANT

dessert :dry  Chocolate: sweet  ice-cream : icy  cheese : colorful

12.Blood : body

ink: pen  water : river  syrup: juice  satellite : communications

13. BASIC : THIRD

direct : organize  secondary :basic  first : foremost  primary : tertiary

14. PUNY : MAMMOTH

huge : untidy  beautiful : large  compact : clumsy  mite : leviathan

**Directions for questions 15 to 20: Each of the sentences below has one blank space. Choose the alternative which when inserted in the sentence, best fits in with the meaning of the sentence as a whole.**

15. If you want to lose weight, you should avoid eating _____ foods such as bread and potatoes.

fatty  starchy  greasy  sugary

16. If you want this chickoo tree, to bear good fruit next year, you will have_____ it.

to pare  to nip  to whittle  to trim

17. She lost her temper and _____ her teeth in rage.

ground  chomped  rasped  rattled

18. If you don't want your bicycle to be stolen, you should put _____ on it.

a handcuff  a fetter  a latch  a padlock

19. I have it on very good _____ that Mr.kantilal will be joining in October.

reference  authority  information  inference

20. After searching for an hour, the girl found her ring in the _____ by the lilac bushes.

underground  underworld  undergrowth  underneath

**Directions for question 21 to 23: From among the given alternatives, choose the option that does not belong to the group.**

21. explain tell recount recant

22. pluck spirit spic spunk

23. tame insipid dull domestic

**Directions for questions 24 to 28: Given below are four words, three of which are similar in meaning. Select the word which is not similar in meaning to the other three words in the group.**

24. undertaking activity trip enterprise

25. attach staple basis essence

26. contempt derision aversion ridicule

27. earlier archaic antiquated obsolete

28. assembly cluster collate clique

**Directions for questions 29 to 34: Read the following information and answer the questions that follow.**

Disha is younger than Farida and older than Geeta. Anju is younger than Isha and older than Charlie. Isha is younger than Geeta and older than Jugal. Jugal is younger than Charli and older than Emraan. Farida is younger than Beena and older than Heena. Heena is older than Disha.

29. Who is the youngest?

Anju Charlie Jugal Emraan

30. Who precedes Charlie, Jugal and Emraan in age?

Isha Geeta Anju Disha

31. Who is the oldest?

Anju Charlie Beena Geeta

32. Who is next in age to Beena, Farida,Disha,Heena and Geeta?

Isha Charlie Emraan Anju

33. Who is the second oldest?

Charlie Farida Heena Jugal

34. Who is the second youngest?

Heena Jugal Anju Isha

**Directions for questions 35 to 40: Each question consists of a capitalized word followed by four words or phrases. Choose the word/phrase which is farthest in meaning to the capitalized word.**

35. CLAM

mollusc vise quiet close-mouthed

36. CLAIM

demand gist state assert

37. STRAIGHT

difficulties undeviating unbroken upright

38. LOP

swim join drown cut

39. SWITCH

rod tip of a tail shift click

40 .SORRY

moody contrite worthless grievous

**Directions for questions 41 to 50: The sentences below are divided into four parts. Select the part which has an error.**

41. A few invitees made short speeches appropriate for the function

42. The audience was perceptively thinner after the break on the first show.

43. We prefer going by bus to travel by auto.

44. Preoccupied by financial difficulties as she was, she neglected her business.

45. The lawyers are now in the possession of the documents.

46. The reason for the delay is because we have had difficulty in obtaining stock.

47. He assured us that they would do his best to find out the cause for the delay.

48. The child was left in charge of an elderly lady.

49. More than one artists has contributed to the completion of this project.

50. I shall certainly go and meet him in case I pass through Mumbai.

**Directions for questions 51 to 60 : From the following sentences, choose one underlined word or phrase which would not be appropriate in written English. If the sentence has no error, mark(5).**

51. The chief <u>with</u> <u>all his followers</u> <u>has</u> <u>been</u> arrested.

1 2 3 4 5

52. <u>Many</u> a <u>clever pupils</u> <u>have</u> lost interest in <u>studies</u> for the lack of facilities.

1 2 3 4 5

53.<u>When I</u> <u>met</u> her, <u>she had</u> no house to <u>live</u>.

1 2 3 4 5

54.<u>He should learn</u> <u>to avoid</u> <u>these kind</u> <u>of</u> mistakes.

1 2 3 4 5

55. She is enough smart to go through your articles.

1 2 3 4 5

56. What is the time by her watch?

1 2 3 4 5

57. In a second, the naughty monkey climbed up the tree.

1 2 3 4 5

58. Also present at the meeting was Mr.Sharma, Mr.Patil and Mrs.Dasan.

1 2 3 4 5

59. She isn't as beautiful now as she was 8 years before.

1 2 3 4 5

60. The news of her resignation was not broadcasted on the radio.

1 2 3 4 5

**Directions for questions 61 to 65: In each of the following sentences one word or phrase is missing. Choose the best among the four alternatives.**

61. The old women could not remember where she _____ her money.

deposited depositing had deposited will deposit

62. The _____ topics of the chapter are lengthy and boring.

first four four first first two

63. She promised that she _____ the instrument by the second week of the September

will repair should have repaired would have repaired would repair

64. She says she knows stitching, but I don't think she _____.

knew can had known does

65. They haven't left already;_____

they have? haven't they have they? did they?.

**Directions for questions 66 to 70 : Fill in the blanks with appropriate prepositions**

66. She was not pleased _____ him.

with by on at

67. She is very different _____ her mother.

than from at on

68. Many employees complain _____ their low salaries.

of about to with

69. His work consists _____ dealing with people.

in of with on

70.Can you translate this letter _____ Marathi.

in into of upon

**Directions for questions 71 to 95**

**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.**

71. What is the value of b ? 'a' and 'b' are real numbers.
I. 2a + 3b = 9
II b=27-6a/9

1 2 3 4 5

72. What is the fourth consecutive even number in a given series of even real numbers ?
I. The sum of the first two numbers is 28.

II. The sum of last two numbers is 38

1 2 3 4 5

73. Which of the integers a, b, c, d, are even numbers ?
I. p, q, r, s, t are consecutive integers
II. r is an odd integer.

1 2 3 4 5

74. In the 5 term series 4, A, B, C, 16 ; what is the value of C, all numbers being real ?
I. The third term is twice the first term.
II. The fourth term twice the second term.

1 2 3 4 5

75. A, B, C, are negative integers and t is a number. Is X positive ?
I. X = A - B
II. XC = A

1 2 3 4 5

76. What is the area of parallelogram PQRS ?
I. QR = RN
II. PMRN is a rectangle of area 28.

1 2 3 4 5

77. If b > 1, is P > Q ? P , Q being positive numbers.
I. P = (b - 1 ) ( $b^2$ + b + 1 ) and Q = ( b + 1 ) ( $b^2$ - b + 1)
II. P = a. Q

1 2 3 4 5

78. a, b, c, d, and e are in arithmetic progression. Is d positive ?
I. e > 0
II.a, b are negative.

1 2 3 4 5

79. Is Q - 5 even ? P is a real number.
I. Q - 20 is an integer.
II.Q - 10 is an odd integer.

1 2 3 4 5

80. Is A less than B ? A and B real numbers.
I. $A^2$=36
II.B = 16

1 2 3 4 5

81. The value of an estate in January 1905 started gradually declining in such a way that at the end of each year it was worth only $5/6^{th}$ of its value at the beginning of the year. What was its worth in end December 1910 ?

I. It was worth Rs. 12000 in beginning January 1905.
II. It was worth Rs. 10000 in end December 1906.

1 2 3 4 5

82. What is the perimeter of rhombus ABCD ?
I Area of ABCD is 140 $m^2$
II. Diagonal BD is 48 metres.

1 2 3 4 5

83. What is the sum of 12 terms in a given series of real numbers ?
I . The $n^{th}$ term is n (5n +2 )
II. $11^{th}$ term of series is 1160022.

1 2 3 4 5

84. In a general election, 3 candidates A, B, and C were representing a membership of parliament How many votes did each receive ?
I. A received 1006 votes more than B and 1213 more votes than C
II. Total votes cast were 15414.

1 2 3 4 5

85. If n is an integer, is n/2 an even integer ?

I. X is a multiple of 2.
II. X is a multiple of 4.

1 2 3 4 5

86.Is PQRS a rectangle
a. l (PQ) = l (QR) + 3
b. Perimeter ( II PQRS) = 4 * l (PQ)

1 2 3 4 5

87. What is the distance between P Q of which both lie on a straight line

a. The distance between P R is 6 cm.
b. The distance between Q R is 2 cm.

1 2 3 4 5

88. Is Roger over 30 years of age

a. The average age of 20 employees in his office is 36.
b. Roger is among the oldest 3 employees in his office in which the retirement age is 58.

1 2 3 4 5

89. What % of the total population are women voters ?

a. 50 % of all women are voters.
b. 36 % of the total population are women.

1 2 3 4 5

90. Is Q an integer

a. P + Q is an integer
b. Q = P

1 2 3 4 5

91. What is the value of 4x + y

a. 3 x + y = 15
b. x is 2 times y

1 2 3 4 5

92. What is the length of PQ in triangle PQR

a. PR is 6 is perpendicular to RQ
b. QR is 10.

1 2 3 4 5

93. Is Q = R

a. $q^2 = r^2$
b. $q^3 = r^3$

1 2 3 4 5

94. A rectangular paper is rolled into a tube. What is the volume of this tube

a. The length & width of this paper are 20 cm 14 cm respectively.
b. The height of the tube is 20 cm.

1 2 3 4 5

95. Is Y divisible by 60?
a. Y is divisible by 30
b. 4Y is not divisible by 20

1 2 3 4 5

**Directions for questions 96 to 99: Each question below has a main statement followed by two arguments. Strong argument must be both important and directly related to the main statement. Weak argument may not be directly related or may be related to trivial aspects of the main statement and may be of minor importance.**

**Mark[1], if only A is a strong argument.**
**Mark[2], if only B is a strong argument.**
**Mark[3], if, both are strong arguments.**
**Mark[4], if both are weak arguments.**

96. When defects go unspotted until the end of a process it is too late to fix them.
A. Yes : By the end of the process, the defects have been incorporated.
B. No : There are processes that are not irreversible – the defects may be eliminated at the end.

1 2 3 4

97. It is perfectly absurd: 39 people don their new sneakers, pack their flight bags and poison themselves in the solemn belief that a passing UFO will whisk them of f to wonderland.
A. Yes : It is indeed ludicrous as no UFO theory has ever been verified by documentation.
B. No : The solemnity of the situation is borne but by the tragic deaths of the participants.

1 2 3 4

98. Moralists are so rigid – they always ignore the reality of a situation and insist on applying dated morals to it.
A. Yes : They fail to understand that human emotions, and therefore the situations they engender, are too complex to be judged by a fixed moral code.
B. No : There are certain values and principles that guide human behavior – without them, society would become impossible to live in.

1 2 3 4

99. To remain competitive, an organization must ensure that it always focuses on product quality.
A. Yes : In the absence of a good product, all other efforts of an organization to become successful would be useless.
B. No : Product quality is not the most important thing in an Organization's success.

1 2 3 4

**Directions for questions 100 to 102 : Each question has a main statement followed by two conclusions.**
**Mark[1], if only conclusion I follows.**
**Mark[2], if only conclusion II follows.**
**Mark[3], if both conclusions follow.**
**Mark[4], if neither conclusion follow.**

100. In a country that likes to sneer at Anglo-Saxon capitalism, the upheaval in French Banking is shocking.
I. The upheaval in French Banking is about Anglo-Saxon Capitalism.
II The upheaval in French Banking is related to a situation where contempt for Anglo-Saxon capitalism and its implications, is missing.

1 2 3 4

101. Although advertising once put a gloss on everything, the darker side of life is what now peoples' attention.
I. Today advertising has moved to emphasizing the darker side of life.
II Earlier, people were more interested in the glossy side of life.

1 2 3 4

102. Men are torn between joy in parenting and social conditioning that makes the task grueling.
I. Social conditioning does not teach men that parenting is enjoyable.
II Joy in parenting is independent of social conditioning.

1 2 3 4

**Directions for questions 103 to 107: Each questions is based on a passage or set of conditions. In answering some of the questions, it is best to draw a rough diagram. For each question, select the best answer choice given.**

In a study of five brands of painkillers A, B, C, D and E , the brands were tested and ranked against each on the basis of effectiveness per dose. The following results were obtained.

I] A was more effective than B.
II] The effectiveness of C was less than that of D.
III] E was the least effective brand tested.
IV] B and C were equally effective.
V] The effectiveness of D was greater than that of B.

103. If the above statements are true, which of the following must also be true?

- A and D were equally effective.
- A was the most effective.
- D was the most effective.
- C was less effective than A.

104. All of the information in the results given above can be derived from which of the following groups of statements?

Statement I,II,III Statement I,III,IV Statement II,III,IV Statement I,II, III, IV

105. If the sixth brand J, is tested and found to be more effective than D, then which of the following must be true if the findings of the study are correct?

- J is most effective of all six brands tested.
- At least four of the six brands tested are less effective than J.
- J is more effective than A.
- J is less effective than A.
- No more than four of the six brands tested are more effective than E.

106. If C is more expensive per dose than A, and E is less expensive per dose than C, which of the following must be true, according to the study, for a consumer, who whishes to buy a pain reliever with the greatest effectiveness for the amount spent per dose?

- A should be purchased instead of C.
- A should be purchase instead of E.
- E should be purchased instead of C.
- B should be purchased instead of C if B is the same price as D.

107. If B contains the same amount of an ingredient Y, as D does, and more of that ingredient than E does, which of the following is consistent with the results of the study?

- C does not contain Y, and brands of pain reliever in which Y is absent do not have any measurable effectiveness.
- The absence of Y in C would account for C's being more effective than E, B and D.
- E does not contain Y and brands of pain reliever in which Y is about do not have any measurable effectiveness.
- The presence of Y is partly responsible for the effectiveness of E, B and D in relieving pain.

**Directions for questions 108 to 111: Each question is followed by two statements marked I and II providing certain information.**
**Mark(1) if statement I alone is needed to answer the question.**
**Mark(2) if statement II alone is needed to answer the question.**
**Mark(3) if both statements I and II are needed to answer the question.**
**Mark(4) if statements I and II are not sufficient to answer the question.**

108. Why do thieves, pursued by police dogs, take to water as soon as possible?
I. Dogs are able to swim in water.
II. Dogs lose their ability to follow a scent, when in water.

1 2 3 4

109. Did Robert live to see the nineteenth century?
I. Robert was born in 1702.
II. When Robert died, he was the only centenarian of his times.

1 2 3 4

110. Why was the person released after the trial?
I. The judges found no incriminating evidence against the person.
II. A person is innocent unless proved guilty.

1 2 3 4

111. Is man's visual system closest to that of tree climbing animals?
I. The eyes of most tree creatures face forward in the head so that their owners can look at a point with both eyes at once.
II. The eyes of tree climbing animals are equipped with aiming and focussing mechanisms for bringing the images of the two eyes together so that the picture is three dimensional

and in sharp outline.

1 2 3 4

**Directions for questions 112 to 115: Arrange sentences A,B,C,and D so as to form a logical sequence between 1 and 6.**

112. 1] Cosmetics have a long and composite history.
A. Shining colors have also been used in the west in modern times.
B. The eye make-up of ancient Indians contained hydrosilicate of copper – a protection against the sun's glare.
C. Their facial jewels were also decorative and applied with great care.
D. The tribes of New Zealand covered their entire face in bright green, white, and Blue stripes.
6] But the most recent trend has been to produce an artificially 'natural' look.

ADBC ABDC BCDA BDAC

113. 1] As the infant begins to grow, it begins to add hostile signs to its repertoire.
A. Before long, temper tantrums put in an appearance.
B. These begin simply as rejection movements – a turning away of the head.
C. Finally, direct threats make an appearance; and the small child reaches the stage of powerful self-assertion.
D. This creates a new relationship between the infant and the genitor.
6] Now, an element of training creeps in.

BADC CABD CBDA BACD

114. 1] Before 1940, there were more men than women in U.S.
A. Since 1940, the sex ratio has shifted, not only with immigration changes, and cut in maternal mortality, but also because American women now outlast men by a bigger margin than ever.
B. This was mainly because immigration was weighted towards men, and because of the high mortality rate of women in childbirth.
C. Their wives survive to inherit the earth.
D. After 40, anxiety diseases hit men harder.
6] As one irritable comment has it, the U.S. is becoming a society ruled by aging females.

BADC CABD ABDC ABCD

115. 1] At 10 weeks, babies usually use both hands with equal vigor.
A. The pendulum does not cease to swing then.
B. When the infant reaches the age of 1.5 years, the right hand takes over again, but between 2 and 2.5 years, bilateral activity begins again.
C. By 14 weeks, they mostly favor the left hand while making contact.
D. At 28 weeks, they are again bilateral.
6] Stability begins, at last, around the age of 3 years, and grows in strength until, finally, at the age of 7 years, the child is fixed in its permanent condition, with one hand strongly dominant over the other.

CDAB BACD CABD BDAC

**Directions for questions 116 to 120: Each question or group of questions is based on a passage or set of conditions. For each question, select the best answer choice**

**given.**
In a certain word game, an acceptable sequence of 5 words is one that meets all of the following rules.
I] The 5 words in a sequence must be written down side by side on a single line.
II] Each word must have at least 5 letters, and of the letters in a word, no more than two can be vowels.
III] Words cannot begin with any of the following letters : i, p and x.
IV] The five words must be in alphabetical order from left to right with the added requirement that the initial letters of the 5 words must come immediately after each other in the alphabet.

116. Which of the following is an acceptable sequence of words for the game?

- Aster, bread, dog, establish, farmer
- Jester, kettle, label, mental, mental, nerves
- Nearer, opens, plate, quite, rowed
- Plastic, quay, rooster, trailer, zephyr

117. If the middle word in a sequence is 'fish', then the initial letter of the first word and the initial letter of the last word of that sequence, respectively, must be

a,e  b,g  c,a  d,h

118. The last word in a sequence cannot begin with

w  o  s  u

119. The first word in a sequence cannot begin with

a  d  j  u

120. Each of the following can be the last word in a sequence except?

entry  Horror  Market  Other

121. The distance between the points (3, -4) and (3, 3) is

7 Units  5 Units  6 Units  8 Units

122. The coordinates of a point which divide the join of A (5, 5) and (8, 5) in the ratio 2 : 1 are

(5, 6)  (7, 5)  (8,4)  (9, 6)

123. XYZ is an equilateral triangle with vertices X (6, -2), Y (2, - 1) and Z (4, -2). If ZA is one of its medians find the length of the median.

sqrt6 Units  sqrt5 Units  sqrt13 Units  sqrt10 Units

124. The ratio in which the line segment joining P (3. –4) and Q(6, 7) is divided by x axis is

5 : 2  3 : 4  2 : 3  4 : 7

125. P ( - 4, b ) and Q ( 2, b + 2 ) are 2 points and the coordinates of the middle point of PQ are ( - 2, 2) . The value of b is

1 3 -2 -1

126. The slope of the line Joining A (-4. 6) and B (5, 3) is

2/5 -1/3 2/3 1/3

127. The points of intersection of the circle x2 +y2 = 34 and line y = 5

(2, 4 ) ( -2, 4) (3, 6) (-3, 6) (3, 5) (3, -5) (2, 3) (-2, 3)

128. Complete the series 25, 125, 36, 216, 49, _____

200 290 335 343

129.The value of a machine depreciates at the rate @ 15% per annum. If the price of a new machine is Rs. 60,000 its value after 2 years will be

Rs. 43350 Rs.45000 Rs. 52570 Rs. 51750

130. 80% of p = 40% of Q and Q = X % P . Then the value of x is

360 200 300 250

131.The population of a town increase by 10% every year. If it is 16093 row, its population 2 year ago was

13300 14200 14750 15265

132. If A:B is 2:3 and B:C is 3:4 then A:C is equal to

2:3 6:7 5:6 1:2

133. If the numerator of a fraction is increased by 15 % and the denominator is increased by 10% , then the value of the fraction is 15/26, The original fraction is

130/223 158/229 133/462 165/299

134. X varies directly as Y varies and Z varies inversely as Y varies . At a time Y = 10, X = 20 , Z
= 5 , If y is changed to 20 then the values of Z is :

2.5 5 10 3

135. If a Box containing 10 mirrors is dropped which of the following can not be the ratio of broken mirrors to unbroken mirrors.

1 : 1 2 : 3 3 : 2 3 : 4

136. 5 (P 's Capital ) = 10 (Q's Capital ) = 15 ( R's Capital ) then the ratio of their capital is :

6 : 3 : 2 2 : 7 : 9 8 : 5 : 3 2 : 3 : 1

137. The difference between a discount of 50 % on Rs. 500 and two successive discounts of 45 % and 5% on the same amount is

Rs 15 Rs 11.25 Rs 10 None of These

138. A man rows upstream 10 Km. And downstream 20 Km taking 4 hrs each time. The velocity of the current is

2 Km/h 2.5 Km/h 1.25 Km/h 1. 5 Km/h

139.A boat goes 50 Km upstream in 10 hours and a distance of 40 Km. Down stream is 9 hours. The speed of the boat in standing water is

4.9 Km/h 5.2 Km/h 4.5 Km/h 4.72 Km/h

140. A man can swim 4 Km/h in still water . If the velocity of the stream be 3 km/h the time taken by him to swim to a place 14 Km upstream and back is:

16 Hours 12 Hours 14 Hours 10 Hours

141. D xyz is rotated about x y as axis. Find the volume of the solid generated if xy = 6 cm and yz = 10 cm. D x y z is a right angled D

200 P 300 P 250 P 60 P

142. I shopped in 4 shops 1 after another. In the end I had no money. In each shop I Spent Rs 2 more than 20% of what I had when I entered each shop. How much did I have in the beginning .

87.81 82.35 80.30 85.65

143. A rides 5 km at 1 km/h, 4 km at 2 km/h and 12 km at 6 km/h. What is his Average speed .

2.33 kmphr. 4.33 kmphr. 3.33 kmphr. 1.33 amp hr.

144. Within a square ground with one side 20 m , there is a square path that is 4 m in breadth. What is the area of the park without the path.

144 $m^2$ 400 $m^2$ 16 $m^2$ Not determined.

145. If $( p - q)^2 = ( x - y )^2$, then x =

p – q + y y – p + q Both ( a) and (b) None of these

146. Rs. 13400 are invested at SI for 7 years partly at 6 % interest and partly at 4 % interest. If both sums yield equal interest , find the sum invested at 6 %.

Rs. 5360 Rs. 3000 Rs. 4000 Rs. 2800

147. B reaches 10 ,minutes early travelling at 6 km per hour, whereas A reaches 10 minutes late travelling at 5 km per hour. Find the distance.

10 Km 12 Km 17 Km 20 Km

148. Fi nd the next term in the series 123, 129, 141, 147, _____

171 162 159 148

149. A 2 digit number is divisible by 6 and not by 12. When the digits are interchanged the number
is also divisible by 12. The absolute value of the difference between the numbers is

18 12 24 36

150. A Farmer notices that the area of his farm in sq. mts is equal to 2 times the square of the number of tractors he owns. If one tractor is stolen he has to sell 62 sq. mts of the farm. So as to maintain the relationship. Find the number of tractors remaining.

14 15 16 17

151. How many numbers greater than a million can be formed using digits 0,6 ,6, 7 , 0, 0 , 6,
and 7 ?

410 420 360 800

152. At exactly midnight, a thief tries to steal a car from a garage. 2 full minutes are gone before the guard arrives at the scene and starts running after the burglar. At 12 : 05 :00, the burglar panics and slips. By the time he gets up, 10 seconds are gone and the guard has caught up with him . Had he not fallen, the thief would have reached a safe hideout which was at a distance of 3560 m from the museum at 12 : 05 : 56 hours. What was the running speed of the security guard ?

15.07 m / sec 0.6 km / min 12 m / sec 15 m / sec

153. X and Y enter into a partnership by investing certain capital in the ratio of 1 : 3. However, after 4 months, X alone starts managing the business and Y pays him Rs. 10,000 per month. How much profit should they make so that at the end of the year, when the profit is divided, the net incomes of both are the same for the year ?

Rs. 40,000 Rs.320,000 Rs 400, 000 Rs . 200, 000

154. Complete the series 1, 3, 4, 13, 53, ____

690 670 65 35

155. There are 5 people - A, B, C, D, E, standing in a queue. How many ways are available to form the queue such that D is not ahead of E ?

60 120 125 80

156. 5 men can do a certain task working 10 hours a day in 1 day that requires 4 Women 2 days working 8 hours a day and 5 boys 4 days working 5 hours a day. If a contractor hires 20 men, 9 Women, and 10 boys to complete together 1000 such tasks, starting on 1st March, 2000, when will the entire work get over ?

2 nd July 29 th June 30 th June 4 th August

157. X's Salary is 150% of Y's salary. Z's salary is 75 % of Y's salary. The total of all three salaries is Rs. 325,000. How Much is Y's Salary ?

Rs. 100,000 Rs. 25, 0000 Rs. 24, 000 Rs. 28, 000

158. If Santa can walk a certain distance in 200 days when he rests 18 hours each day; how long will it take to walk twice the distance twice as fast and the rest half as long each day ?

80 days 40 days 100 days 50 days

159. An automobile has two punctured tyres. The first puncture by itself would make the tyre flat in 10 minutes. The second puncture by itself would make the tyre flat in 5 minutes. How long would it take for both punctures together to make the remaining tyre flat ?

2 1/3 minutes 4 minutes 5 minutes 15 minutes

160. a * b = a - b, if both 'a ' and ' b ' are positive.
= 1 otherwise
a @ b = ab, if ' ab ' is positive.
= 0 otherwise
based on the data given above solve the question given below

[ 4 * ( - 5 ) ] @ [ ( - 2 ) * 2 ] /[ (- 4 ) @ (- 5 )] * [ 2 @ 2 ]

1/16 1/4 1/8 0

161. The square root of (11 + 2 sqrt(30) ) is

sqrt5 + sqrt6 sqrt 5 +sqrt3 sqrt 10 + sqrt3 sqrt 6 + 1

162. An army chief wishing to draw his 17164 men in the form of a solid square found that he had 3 men more. The number of men is the last row was.

152 131 134 140

163. What is the ratio whose terms differ by 50 and the measure of which is 3 / 5

80 95 60 75

164. A bag contains Rs 300 in the form of 1 rupee, 50 paise and 25 paise coins in the ration 3 : 2 : 4 The number of 25 paise coins in the bag are

240 300 360 180

165. Rs. 11250 are divided among Jay , Ajay & Vijay so that Jay may receive one fourth as much as Ajay and Vijay together receive and Ajay one half of what Jay & Vijay together receive . What is Jay’s share.

Rs 6500 Rs 5250 Rs 2250 Rs 3750

166. X, Y, Z, enter into a partnership. X invests some money at the beginning y, invests 4 times

The amount after 8 months and Z invests 3 times the amount after 10 months. If the annual profit be Rs. 8500 then Z's share is

1525 1875 2000 1500

167. By selling 75 toys a shopkeeper gains the selling price of 25 toys. Find his gain percent.

20% 25% 50% 75%

168. P & Q enter into a partnership P invests Rs 8000 for 6 months and Q remains in the Business for 3 months. Out of the total profit Q claims ½ of the profit. What was Q's contribution

Rs 5750 Rs 15525 Rs 8000 Rs 16000

169. Successive discounts of 25% and 15% are equivalent to a single discount of

42.75% 40% 36.25% 35%

170.If 4 cars are sold at the cost price of 6 cars the profit % will be

50% 33 1/3% 16.67% 32%

**Read carefully the passages given below and answer the questions that follow.**

The hotel functions as a cultural centre and we were taken to a horse race in an alpine Khampa village. With us was a Swiss Tibetan who took us to visit a handsome house of mud, stone and colorful lintels. We entered a courtyard full of full of slush and yak manure and climbed the wooden stairs to the cavernous rooms upstairs. Mao's visage on the obligatory calendar smiled down on us through the smoke as we sat sipping yak butter tea around a huge stove, but pictures of Dalai Lama are also seen placed discreetly behind other objects. The Sumetseleng is now being rebuilt and can have upto 800 monks. Many of them have returned from India. Out of nostalgia perhaps they encouraged the jade shop outside to play loud Hindi music.

Questions;

171. This is probably a piece from a

Crime nove l History book Travelogue Romance

172. Which of the following is false

- The author is alone before meeting the Swiss Tibetan
- The author has tea at a house
- The author went for a race
- None of the above.

173. By "Mao's visage" , the author is referring to ,

A person named Mao  Mao's picture  Mao's age  None of the above

174. The house which the author visits has

- Pictures of Mao and Dalai Lama
- A picture of Mao only
- A picture of Dalai Lama only
- Pictures of neither

175. The Sumetseleng monastery can has monks

- who have returned from India
- Who play loud Hindi music.
- Have a jade shop
- None of the above

**Directions for questions 176 to 181: Each of the following questions consists of 2 capitalized words which have a certain relationship to each other, followed by four numbered pairs of words. Choose the numbered pair which are related to each other in the same way as the words of the capitalized pair.**

176. Business : profits

Employer : production  Officer : work  Labour : wages  Teacher : tution

177. Star : constellation

farmer : cooperative  worker : labourer  soldier : army  member : library

178. Asleep : awake

somniloquist : orator  discussion : debate  mumble : speak  dreamer : leader

179. Starved : famished

water : drought  salt : stone  desiccated : anhydrous  umbrage : scold

180. Famous : notorious

tall : stout  worm : elephant  effete : strong  emaciated : lean

181. Thesaurus : synonyms

recipe : eatables  volume : books  encyclopaedia : words  anthology : poems

**Directions for questions 182 to 185: Select the word nearly similar in meaning to the capitalized word.**

182. GAFFE

passion  enthusiasm  total ignorance  bloomer

183. ASKEW

dim and dull  turned to one side  difficult  ugly

184. FILLIP

complete  stimulus  large dose  neglect

185. RAFFISH

made of fish  vulgar  ludicrous  urbane

## CAT FULL LENGTH TEST 4 : EXPLANATORY ANSWERS

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**Refer to the following table**

| | 1997 | 1998 | 1999 | 2000 | Sales in 2000 / sales in1997 | Total |
|---|---|---|---|---|---|---|
| Key Board | 250 | 400 | 500 | 600 | 2.4 | 1750 |
| Mouse | 300 | 250 | 350 | 150 | 0.5 | 1050 |
| CPU | 200 | 200 | 250 | 250 | 1.25 | 900 |
| Printer | 400 | 300 | 150 | 300 | 0.75 | 1150 |
| | | | | | | |
| Total | 1150 | 1150 | 1250 | 1300 | 4.9 | 4850 |

1. It is difficult to find the CAGR. Hence we find which market has the maximum growth
Hence[1]

2. Business contributed by Key Board = 1750/4850*100 = 36%
Hence[4]

3. The growth in 1999 is 24% which is the highest
Hence[1]

4. Business contributed by printer and CPU=(1150+900)/4850*100= 42.27%
Hence[3]

5. the % contributed by Key Board in 1998= 400/1150*100=34.78
Hence[1]

6. 1. Is true

2. is not true in case of college B
3. can not be a interence based on data given
   Hence[1]

7. Total strength of A is
70 in commerce + 90 in Science + 30 in Arts = 190 Students
Total strength of B is
50 in Commerce + 50 in Science + 30 in Arts = 130 Students
Overall strength greater by 60 Students.
Hence[1]

8. No. of Students in Science in B = 50
No. of Students / Teacher for 2 teachers = 25
No. of students in Science in A = 90
No. of students / teacher in A for 3 teachers = 30
% of no. of students / teacher in A is greater by 30 – 25 / 25 = 5 / 25
= 20%
Hence[4]

9. No. of students in B = 130
No. of Arts Students = 30
Proportion = 30 / 130
No. of Students in A = 190
No of Arts student = 30
Proportion = 30 / 190
30 / 190 < 30 / 130.
Hence[2]

10. The proportion of commerce Students in A = 70 / 190
Proportion of Commerce Students in B = 50 / 130.
Ratio of Commerce Students in A to that in B = 70 / 190 * 130 / 50
= 91 / 95
Hence[3]

11. [2] 12. [1] 13. [4] 14. [4] 15. [2] 16. [4] 17. [1] 18. [4] 19. [2] 20. [3]

21. [4] 22. [3] 23. [4] 24. [4] 25. [1] 26. [3] 27. [1] 28. [3] 29. [4]

30. [3] 31. [3] 32. [1] 33. [2] 34. [2] 35. [3] 36. [2] 37. [1] 38. [2]

39. [4] 40. [1] 41. [4] 42. [2] 43. [3] 44. [1] 45. [3] 46. [2] 47. [4] 48. [3]

49. [2] 50. [3]51. [5] 52. [4] 53. [4] 54. [3] 55. [1] 56. [5] 57. [4] 58. [3]

59. [4] 60. [3] 61. [3] 62. [4] 63. [3] 64. [1] 65. [3] 66.[1] 67. [2] 68. [1]

69. [1] 70. [2]

71. From statement I we have 2a + 3b = a
From statement II we have ab = 27 - 6a => 2a + 3b = a
Since both the equations are same we cannot find out the value of b
Hence [ 5 ]

72. Let series be => a, a + 2, a + 4, a + 6 , a + 8
From statement I we have a + a+2 = 28
2a + 2 = 28
2a = 26
a = 13
from statement II => we do not know if the fifth number is the last number in the series .
Therefore statement 1 alone is sufficient.
Hence [ 1 ]

73. From statement I we have :- p,q,r, s,t, are consecutive integers.
From statement II we have : r is an odd integer
Together P (odd) , q, r, (odd), s, t, (odd) q and s are even numbers
Therefore answer = [ 3 ]

74. From statement I we have the value of B which is the third number.
But from either statement we do not know if the series is in A.P, G.P, or H.P,
Hence [ 5 ]

75. From statement I -à X = A – B hence we do not know if X is > O
from statement II ---à XC = A
As we know that C and A are negative
\ ( + ve ) ( - ve) = ( - ve )
Therefore statement II alone is sufficient
Hence [ 2 ]

76. From both the statements it is not possible to determine the value of the area of a parallegogram
Hence [ 5 ]

77. From statement I ---- P = $b^3$ - 1
Q = $n^3$ + 1
As b > 1, Q > P because ($b^3$ + 1) is greater than $b^3$ – 1
From statement II à p = bq
p > q
Hence [ 4 ]

78. From statement I we know that e > 0
from statement II à a & b are -ve

but we do not knw if c is greater than zero
d will definetely be greater than zero.
Therefore [ 5 ]

79. From statement I : Q – 20 is an integer bet we cannot say if Q is even or odd
From statement II Q - 10 is an odd integer as odd - even = odd
Q is an odd integer
And Q – 5 is even
Hence [ 2 ]

80. From statement I we have $a^2 = 36 \setminus A = 6$
from statement II we have B = ab
Therefore from both the answers we have if A > B
Hence [ 3 ]

81. From statement I à value at the end of the year = 5 / 6 value at the beginning of the year
From statement II à we have the value at the end of 1906
Hence [ 4 ]

82. By combining both the statement we can get the solutions
Hence [ 3 ]

83. From statement I à we know the nature of the sequence , Hence by substituting n = 1, 2, 3.
_____ 11 in the formula the answer can be obtained
From statement II à We know the $11^{th}$ term but we do not know the first ten.
Hence [ 1 ]

84. By combining both the statements we can determine A & B
Hence [ B ]

85. From statement I à n may or may not be an even integer.
From statement II à n is definitly an even integer.
Hence [2]

86. From statement II the figure could be a square or a rhombus.
Hence both the statements are required.
**Hence[3]**

87. From statement (1) PR = 6
From statement (2) QR = 2
But we do not know where the point R lies.
**Hence[5]**

88. Age of remaining employees = 504.**Hence[3]**

89. Both statements are required.**Hence[3]**

90. If 2Q is an integer then Q need not be an integer. Both are not sufficient.**Hence[2]**

91. Both the statements are required.**Hence[3]**

92. Using both the statements we can apply Pythagoras theorem and find l (PQ).**Hence[3]**

93. Statement (2) alone is sufficient.**Hence[2]**

94. Statement I alone is not sufficient since we do not know whether it is rolled along the length or width. But combining both the statements we get volume.
**Hence[3]**

95. Statement 2 is sufficient ot find out if Y is divisible by 60.**Hence[2]**

96. [2] 97. [1] 98. [1] 99. [4] 100. [2]

101. [4] 102. [3] 103. [4] 104. [4] 105. [2]

106. [1] 107.[4] 108. [2] 109. [3] 110. [1]

111. [4] 112. [3] 113. [4] 114. [1] 115. [1]

116. [2] 117. [4] 118. [3] 119. [4] 120. [3]

121] Required distance = sqrt $(3-3)^2 + (3 - (-4)^2)$
= sqrt $(7)^2$
= 7 Units.
Hence[1]

122] The required point is
[ 2 * 8 + 1 * 5 / 2 + 1 , 2 * 5 + 1 * (- 3 ) / (2 + 1) ]
= 21 / 3, 15 / 3
= ( 7 , 5)
Hence[2]

123. A is the midpoint of yz,
The coordinates of A are [ 2+4 / 2 , - 2 + 4 / 2 , -2 + 2 / 2 ]
= ( 3 , 0)
XA = sqrt $(6 - 3)^2 + ( - 2 - 0 )^2$
=sqrt $3^2 + 2^2$
= sqrt 9 + 4 = sqrt 13 Units
Hence[3]

124. Let the ratio be K : 1
TK + 1 * ( - 4 ) / K + 1 = 0
TK = 4
K = 4 / 7
The ratio is 4/7 : 1
= 4 : 7
Hence [4]

125. b + b + 2 / 2 = 2
2b + 2 = 4

2b = 2
b = 1
Hence[1]

126. Slope = y 2 - y1 / x2 - x1
= 3 - 6 / 5 + 4 = -3 / 9 = -1/3
Hence[2]

127. Putting y = 5 in $x^2 + y^2 = 34$
$= x^2 + 25 = 34$
x 2 = a \ x = ± 3
points are ( 3 , 5 ) and ( 3, -5)
Hence[3]

128. The series is $5^2$, $5^3$, $6^2$ and so on

129. Value of Machinery after 2 years = $60000 ( 1 – 15 / 100)^2$
$60000 ( 115 / 100)^2$
= Rs 43350
Hence[1]

130. 8 0 / 100 P = 40 / 100 Q = 40 / 100 * X/100
8 / 10 = 4 x / 1000
X = 8000 / 40 = 200
Hence[2]

131. Population 2 years ago = $16093 / (1 + 10 / 100 )^2$
= 16093 * 10000 / 12100
= 13300
Hence[1]

132. A:C = 2/3 * 3/4
=1:2
Hence[4]

133. Let the fraction be x/y
New fraction = 115% of x / 110% of y = 23x / 22y = 15 / 26
x / y = ( 15/26 * 22 / 23 ) = 330 / 598 = 165 / 299
Hence[4]

134. When y = 10, X = 20, Z = 5
x = k, and $z = k_2 / y$ 5 = $k_2 / 10$
K 2 = 50
X = 2y and Z = 50 / y
When y = 20
Z = 50 / 20 = 2.5
Hence[1]

135. For a perfect division into whole numbers the sum of the terms of the ratio must divide 10 Therefore the ratio cannot be 3 : 4
Hence[4]

136. SP = 10 , Q = 15 , R = x
P = x / 5, Q = x / 10 and R = x / 15
P : Q : R = x /5 : x / 10 : x / 15
= 6 : 3 : 2
Hence[1]

137. S.P at 50% discount = Rs 250
S.P. after 2 successive discounts of 5 % and 5% = 95% of ( 55% of 500) =
[ 95 / 100 * 55 / 100 * 500 ]
= Rs. 261.25
differences = Rs 11.25
Hence[2]

138. Rate unstream = 10 / 4 = 2.5 kmph
Rate downstream = 20 / 4 = 5 kmph
velocity of current = 1 / 2 ( 5 - 2.5 ) kmph
= 1.25 kmph
Hence[2]

139. Rate upstream = 50 / 10 = 5 kmph
Rate downstream = 40 / 9 = 4.44 kmph
Rate in still water = 1 / 2 ( 5 * 4.44)
= 4.72 kmph
Hence[4]

140. Rate upstream = 1
rate downstream = 7
Total time take = [ 14 / 1 + 14 / 7]
= 14 + 2 = 16 hours
Hence[1]

141. A cone is generated with radius 10 cm & vertical height = 6 cm
Volume = 1 P / 3 * 100 * 6 = 200 P
Hence [ 1 ]

142. Let him have Rs. X when he intered the Amount spent = 2 + x / 5
x – 2 – x / 5 = 0
5x - 10 – x = 0
4x = 10 , x = 2.5
When I entered the $3^{rd}$ shop, I had 2.5 ( 2.5 + 2 ) = 11.25
When I entered the $2^{nd}$ shop I had 11.25 + 2 ( 2.5) = 33.125
When I entered the $1^{st}$ shop I had 33.125 + 2 (2.5) = 87.8125
Hence [1]

143. Total time = 5 / 1 + 4 / 2 + 12 / 6
= 9 hours
Total distance = 21 km
Average speed = 21 / 9 = 2.33 every hr.
Hence[1]

144. It cannot be determined as it depends on the position of the path. Hence[4]

145. ( p - q ) 2 = ( x – y ) 2
p - q = ± x – y
p – q = x - y or y – x
x = p - q + y or q - p + y
Hence [3]

146. Let the sum interested at 6% be x
X * 7 * 6 / 100 = 100
= ( 13400 – x ) * 7 * 4 / 100
42 x / 10 = 93800 – 7x / 25
42 x = 93800 * 4 - 28 x
70 x = 93800 * 4 / 70 = Rs 5360
Hence[1]

147. Let 'd ' be the distance and t' be the normal time
D / 6 = t – 10 / 60
D / 5 = t + 10 / 60
D / 6 - d / 5 = - 10 / 60 - 10 / 60
5d – 6d / 30 = -20 / 60
-2d = -20
d = 10 km
Hence [ 1 ]

148. Each number in the series in the precious numbers added to the sum of its digits.
the last no. = 1 + 4 + 7 + 147
= 159
Hence [ 3 ]

149. Both the digits must be even and odd multiples of 6 will not be divisibleby 12
The number is 42
And its reverse is 24
The difference = 18
Hence [ 1 ]

150. Let there be x tractors
Area of farm = 2x 2
When one tractor is stolen x – 1 will
Remain $2x^2 - 2(x - 1)^2 = 62$
Solving
$2x^2 - 2 (x^2 - 2x + 1) = 62$
$2x^2 - 2x^2 + 4x - 2 = 62$
4x = 60
x = 15
No. of tractors = 15 - 1 = 14
Hence [ 1 ]

151. All seven digits with have to be used to make a number greater than a million.
Since there are 3 6's and 2 7's the number of distinct persutations = 7! / 2! 3!
But all persutations starting with zero should let be counted
7! / 2! 3! - 5! / 2! 3!
= 410
Hence [1]

152. Let the speed of the burglar and the guard be 'x' min /sec and 'y' min / sec
The guard covered the distance in 3min 10 sec for which the thief took 5 minutes
Therefore 300 x = 190 Y
30x = 19y
Also given that
356 * x = 3560 m
x = 10 m / sec
and y = 300 * 10 / 190 = 15.07 m / sec
Hence [ 1 ]

153. Let profit be Rs p
Then x gets 0.25 p. and y gets 0.75 p. in the ratio of their investement.
Y pay Rs. 10, 000 per month for 8 months
= 10000 * 8 = Rs 80, 000
= 0.25 p + 80000 = 0.75 p - 80000
0. 5 p = 160000
P = 320, 000
Hence [2]

154. The series is 3*1+1, 4*3+1 and so on

155. For any positions of A B & C there are 2 ways of completing the queue either D willl be ahead or behind E since of the total combinations of forming a queue half will have D ahead of E.
Total No. of ways = 5! = 120
But in this case = 60
Hence[ 1 ]

156. One task = 5 men 10 hrs 1 day = 50 - man hours
same task = 4 women 8 hrs 2 days = 64 - women hours
same tassk = 5 boys 5 hrs 4 days = 100 - boy hours
each day total labour available = 20 men = (200 man hours) + 9 women (72 women hours ) + 10 boys = 50 boy hours
200 * 100 / 50 + 72 * 100 / 64 + 50
= 400 + 150 + 50
= 600 boy hours

boy hours  task  days

100  1  1
600  1000  ?
= 1000 * 100 / 600 = 167 days
from 1st march 167 days = 14 th August.
Hence [ 4 ]

157. Let y's salary be x
x's salary = 150 x
z's salary = 75 x / 100
x + 75 x / 100 + 150x / 100 = 325 x / 100
325x / 100 = 3, 25, 000
x = 325000 * 100 / 325 = 1, 00, 000.
[ Hence ]

158. Distance Time Speed Days
x 24 - 18 = 6 hrs y 200
2x 24 - 9 = 15 hrs 2y ?
Days = 200 * 2x / x * 6 / 15 * y / 2y = 80 days.
Hence [ 1 ]

159. In 1 minute, tyre flat = 1 / 10 -------- Puncture (I)
In 1 minute, tyre flat = 1 / 5 -------- puncture (II)
Together 1 / 10 + 1 / 5 = 3 / 10 in one minute
Remaining = 7 / 10
= 7 / 10 * 10 / 3 = 7 / 3
= 2 1/ 3 minutes
Hence[1]

160. ( 1 ) ( 1 ) / 20 – 4 = 1 / 16
Hence [1]

161. Two numbers whose sum is 11 and product of their squares is 30 are sqrt 5 & sqrt 6
sqrt 11 + 2 sqrt 30
= sqrt ( sqrt 5 + sqrt 6 ) $^2$
= ( sqrt5 + sqrt 6 )
Hence [ 1 ]

162. 17164 - 3 = 17161
sqrt 17161 = 131
No. of men in the last row was 131
Hence [ 2 ]

163. Let the term be x : x + 50
X / x + 50 = 3 / 5
5x = 3x + 150 = 2x = 150
x = 75
Hence [4]

164. The ratio of coins = 3/1 : 2/2 : 4/4
= 3 : 1 : 1
The amount of 25 paise coins is Rs. 60
No of coins = 60 / 0.25
= 240 coins
Hence [1]

165. J + A + V = 11250
J = ¼ ( A + V )
4 J = A + V
5 J = 11250
J = 11250 / 5 = 2250
Hence [ 3 ]

166. Let x invest Rs a for 12 months Y invest Rs 4a for 4 months Z invest Rs 3a for 2 months
The ratio is 12a : 16a : 6a

Z’s share = Rs 8500 * 3 / 17 = Rs 1500
Hence [ 4 ]

167. S. P of 75 toys = C P of 75 toys
Let CP of each toy = Rs 1
CP of 50 toys = Rs 50
SP of 50 toys = Rs 75
= 25 * 100 / 50
= 50%
Hence [ 3 ]

168.Let Q’s contribution = Rs x
8000 * 6 : 3x
16000 : x
ratio of profit ½ : ½
= 1 : 1
16000 / x = 1 / 1
= Rs 16000
Hence [ 4 ]

169. Let the marked price be Rs. 100
Final SP after 2 discounts = 15%, 75% of Rs 100
= Rs. 63.75
Single discount = 100 - 63.75 = 36.25 %
Hence [ 3 ]

170. Let C.P. of 1 car=x
C.P. of 4 cars=4x
% profit=2x/4x*100
=50%
Hence[1]

171. c  172. a  173. b  174. a  175. a
176. [3]  177. [3]  178. [1]  179. [3]  180. [3]  181. [4]  182. [4]  183. [2]
184. [2]
185. [2]