

Part I : General Intelligence

Directions : In the following Nine questions, find out the odd word / letters / number / number pair from the given alternatives.

1. Find out the odd number pair.

- A. (24, 96)
- B. (54, 216)
- C. (61, 244)
- D. (27, 135)

2. Find out the odd letters.

- A. STUA
- B. RQPA
- C. HGFA
- D. MLKA

3. Find out the odd word.

- A. RIN
- B. HAMAM
- C. CINTHOL
- D. PEARS

4. Find out the odd letters

- A. RFD
- B. PET
- C. TIW
- D. CAP

5. Find out the odd pair.

- A. Crayon-Chart
- B. Brush-Paint
- C. Pen-link
- D. Pencil-Lead

6. Find out the odd word.

- A. Crane
- B. Kingfisher
- C. Humming bird
- D. Sparrow

7. Find out the odd letters.

- A. IMQU
- B. WZCF
- C. ADGJ
- D. LORU

8. Find out the odd number pair.

- A. 34-43
- B. 57-75
- C. 12-21
- D. 15-41

9. Find out the odd number.

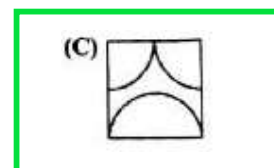
- A. 742956
- B. 876321
- C. 564327
- D. 368127

10. Identify the answer figure from which pieces given in the question figure have been cut.

Question Figures



Answer figures



11. CEIM : DGLQ :: FGIO : ____?

- A. GMSI
- B. GMIS
- C. GLIS
- D. GILS

12. Governor : State :: President : ____?

- A. Organisation
B. Country
C. Constituency
D. District

13. Heart : Cardiologist : : Brain : ____?

- A. Ophthalmologist
B. Neurologist
C. Gynaecologist
D. Nephrologist

14. GFEH : RQPS : : LKJM : ____?

- A. VUWX
B. ONMP
C. LKNM
D. IHJG

15. 17 : 102 : : 23 : ____?

- A. 112
B. 216
C. 138
D. 413

16. 235 : 587 : : 435 : ____?

- A. 789**
B. 989
C. 988
D. 788

17. Car : Garage : : ____? : Hangar

- A. Bus
B. Aeroplane
C. Truck
D. Train

18. HUK : GFED : : NOPQ : ____?

- A. FDEC
B. MLKJ
C. BCDE
D. EFGH

19. 4 : 36 : : ____? : 49

- A. 6
B. 5

- C. 7
D. 8

20. If PNIJ : 2468, then QOKL : ____?

- A. 1367
B. 1376
C. 3591
D. 1276

Directions : In the following Two questions, which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

21. _ zy _ zxy _ yxzx _ zyx _ xy

- A. yzxyx
B. yxzyz
C. xzyzy
D. zxyzy

22. b _ ac _ cc _ ab _ ac

- A. bbaac
B. cbaba
C. abbbc
D. aabba

23. Select the set of symbols which can be fitted correctly in the equation.

5 ____ 3 ____ 8 ____ 4 ____ 2 = 21

- A. x, +, -, /**
B. +, x, -, /
C. +, x, +, /
D. -, x, +, /

24. A watch reads 4:30. If the minute hand points East in which direction will the hour hand point?

- A. North-East**
B. North-East
C. South-West
D. South

Directions : In the following Four questions, select the missing number from the given responses.

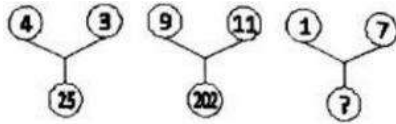
25. 3 21 7
4 ? 3
2 16 8

- A. 1
B. 10
C. 5
D. 12

26. 8 13 10
7 12 9
10 15 ?

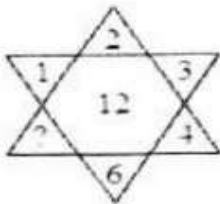
- A. 12
B. 5
C. 8
D. 19

27.



- A. 75
B. 50
C. 100
D. 25

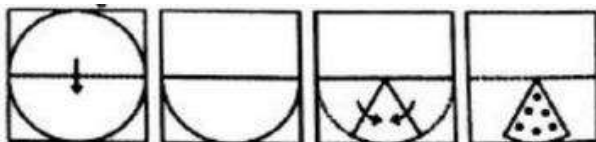
28.



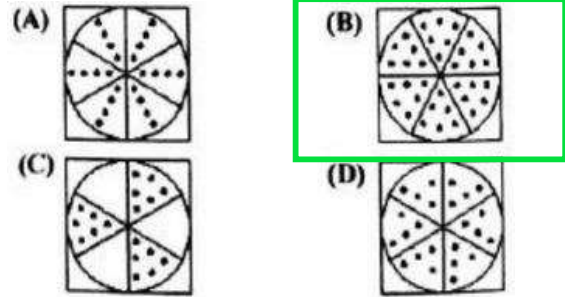
- A. 1
B. 12
C. 8
D. 6

29. A piece of paper is folded and punched as shown below in the question figures, From the given answer figures, indicate how it will appear when opened.

Question figures:



Answer Figure:



30. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., M can be represented by 01, 10 etc., and A can be represented by 56, 65 etc. Similarly, you have to identify the set for the word ROD.

Matrix - I आव्यूह - I						Matrix - II आव्यूह - II					
	0	1	2	3	4		5	6	7	8	9
0	I	M	W	S	Q	5	O	A	D	R	N
1	M	W	S	Q	I	6	A	D	R	N	O
2	W	S	Q	I	M	7	D	R	N	O	A
3	S	Q	I	M	W	8	R	N	O	A	D
4	Q	I	M	W	S	9	N	O	A	D	R

A. 67, 96, 57

B. 56, 66, 86

C. 58, 66, 78

D. 58, 69, 65

31. Find out the incorrect term in the series.

2, 5, 10, 3, 6, 18, 4, 7, 30

A. 6

B. 7

C. 30

D. 10

Directions:

In the following Three questions. arrange the following words as per order in the dictionary.

32. 1. Plate 2. Plane
3. Plaster 4. Plasma
5. Plastic

A. 2, 1, 5, 3, 4

B. 2, 4, 3, 5, 1

C. 1, 2, 3, 4, 5

D. 2, 5, 3, 4, 1

33. 1. Smoulder 2. Smother
3. Smuggle 4. Smudge

A. 1, 2, 3, 4

B. 4, 3, 2, 1

C. 2, 1, 4, 3

D. 1, 4, 3, 2

34. 1. Intervention 2. Intertwine
3. Interview 4. Intervene

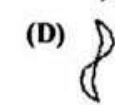
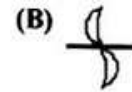
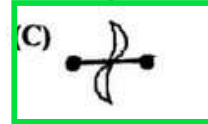
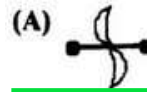
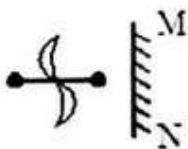
A. 2, 3, 4, 1

B. 2, 4, 1, 3

C. 3, 4, 1, 2

D. 4, 3, 2, 1

35. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



Directions:

In the following Three questions, a series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

36. 1, 15, 13, 25, 41, 61, ?

A. 85

B. 81

C. 91

D. 77

37. 1, 16, 81, 256, 625, ?

A. 1296

B. 4163

C. 1225

D. 2225

38. EZ FY XG ?

A. WH

B. GW

C. WG

D. HW

Directions:

In the following Two questions, unscramble the letters to form a meaningful word. Then find out the correct numerical position of the letters

39. H N R C A B
1 2 3 4 5 6

A. 6 3 5 2 4 1

B. 6 5 3 4 1 2

C. 4 1 5 6 2 3

D. 3 5 6 4 1 2

40. N I T I F E I N
2 4 5 4 3 6 4 2

- A. 3 2 5 3 5 2 4 6
- B. 3 2 4 3 5 2 4 6
- C. 2 4 3 2 4 2 5 6
- D. 4 2 3 4 2 4 5 6**

41. Raghu jogged 2 km southwards, then he turned right and walked 5 km. He again turned right and walked and jogged 8 km. In which direction was he seen moving last?

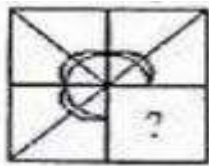
- A. East
- B. South
- C. North**
- D. West

42. Five students are standing one behind the other in the playground facing the instructor. Mohini is behind Anjana, but in front of Gayathri. Meena is in front of Shena, but behind Gayathri. What is the position of Meena?

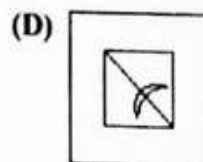
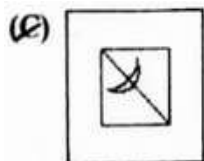
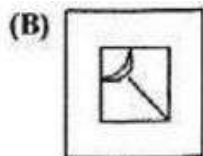
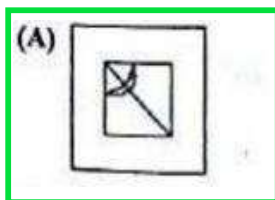
- A. Second from last**
- B. Extreme first
- C. Second from first
- D. Extreme last

43. Which answer figure will complete the pattern in the question figure?

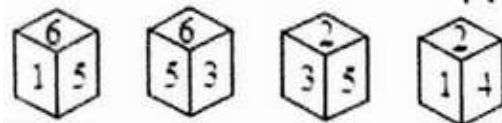
Question figure:



Answer figure:



44. Four positions of a dice are given below:



Find the number on the face opposite to the face showing 4.

- A. 5**
- B. 3
- C. 6
- D. 1

45. In the question, two statements are given followed by two conclusions I and II. You have to consider the two statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements.

Statements I : Creative persons are learned people.

II : Some doctors are creative persons.

Conclusions I : Some creative persons are learned people.

II : Some learned people are doctors.

- A. I
- B. II
- C. I & II**
- D. Neither I nor II

46. In 5 years Rs. 5,000 amounts to Rs. 9,000. In what time at the same rate will Rs. 600 amounts to Rs. 900?

- A. 6 years

B. 3 years

C. 5 years

D. 2 years

47. If a means +, b means \times , c means \div , d means -, then $20a10b45c5d12 = ?$

A. 98

B. 74

C. 68

D. 88

48. If in a certain code ONE is coded as 231, FIVE is coded as 9641. then how will be NINE coded?

A. 3631

B. 3613

C. 3316

D. 3361

49. In the question, two statements are given. You have to answer considering the statements to be true, even if they seem to be at variance from commonly known facts.

Statements I : Plants grow from seeds.

II : Seeds are produced by flowers.

A. lowers and seeds are produced by plants.

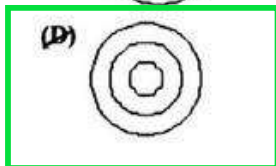
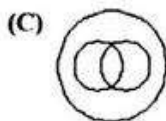
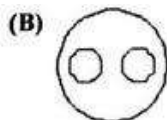
B. Plants grow from flowers.

C. Seeds are produced by plants.

D. Flowers are produced by plants.

50. Identify the diagram that best represents the relationship among classes given below:

Library. Books. Racks



Part-II: English Language

Directions:- In the following Two Questions a sentence has been given in Direct/Indirect Speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect/Direct Speech and mark your answer in the Answer Sheet.

51. The maid confessed to the police that it was she who had taken the diamond ring.

- A. The police were told, "I have taken the diamond ring."
- B. The maid said, "I have stolen the diamond ring."
- C. The maid said, "It is I who took the diamond ring."
- D. The maid told the police, "It is I who have taken the diamond ring."**

52. My father said to me, "Go now".

- A. My father ordered me to go then.**
- B. My father ordered me to go now.
- C. My father ordered me to go later.
- D. My father ordered to go now.

Directions:- In the following Ten Questions given below in the following passage, some of the words have been left out. Read the passage carefully and choose the correct answer to each question out of the four alternatives and fill in the blanks by blackening the appropriate circle [•] in the Answer Sheet.

Did the Earth always (i) as it does today? No, (ii) its origin about 4.8 billion years ago, our planet has (iii) a lot of changes. The initial ball of fire (iv) down and the surface slowly (v) solid. Today we (vi) that the Earth's crust is divided (vii) several plates, (viii) move continuously. Entire continents (ix) been displaced and mountains, islands (x) new seas have been formed or have disappeared.

53. (v)

- A. turn
- B. turned**
- C. has turned
- D. turning

54. (iv)

- A. cooled**
- B. cooling
- C. cools
- D. cool

55. (ix)

- A. has
- B. had
- C. are
- D. have**

56. (iii)

- A. undergo
- B. undergoes
- C. underwent
- D. undergone**

57. (x)

- A. but
- B. and**
- C. or
- D. so

58. (i)

- A. looking
- B. looks
- C. looked**
- D. look

59. (vi)

- A. have known
- B. had known
- C. know**
- D. knew

60. (viii)

- A. which**
- B. who

- C. whom
- D. whose

61. (vii)

- A. to
- B. on
- C. in
- D. into**

62. (ii)

- A. from
- B. before
- C. after
- D. since**

Directions:- In the following Four Questions, out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer Sheet.

63. Luxuriant

- A. Class
- B. Lush**
- C. Lovely
- D. Luxurious

64. Languid

- A. Lively
- B. Luxurious
- C. Spirited
- D. Lethargic**

65. Despair

- A. Hopeless**
- B. Distress
- C. Disrupt
- D. Discourage

66. Malady

- A. Melody
- B. Parody
- C. Disease**
- D. Lady

Directions:- In the following Four

Questions, sentences are given with blanks to be filled in with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four and indicate it by blackening the appropriate circle (•) in the Answer Sheet.

67. The doctor _____ the woman that her son would recover.

- A. assured**
- B. assumed
- C. insured
- D. ensured

68. I have no _____ riches.

- A. desirous of
- B. desire to
- C. desire for**
- D. desire of

69. He is only an _____ director in the organization but he does his work sincerely.

- A. honorary**
- B. honorific
- C. honour
- D. honourable

70. A warm reception was _____ him.

- A. accorded to**
- B. allied to
- C. allotted to
- D. given for

Directions:- In the following Four Questions, a sentence/a part of the sentence is underlined. Below are given alternatives to the underlined part which may improve the sentence. Choose the correct alternative. In case no improvement is needed blacken the circle (•) corresponding to "No improvement" in the Answer Sheet .

71. He summarily dismissed what his son told him in a fit of rage.

- A. No improvement
B. In a fit of rage he summarily dismissed
what his son told him.
C. What his son told in a fit of rage he summarily dismissed.
D. He summarily dismissed in a fit of rage what his son told him.

72. There were times in his life when he struggled for one square meal a day.

- A. No improvement**
B. he keeps struggling for meals.
C. he struggled one day for food.
D. he struggled with one square meal a day.

73. Each and everyone of you are guilty of some crime or the other.

- A. Everyone are guilty
B. Each and everyone of you is guilty
C. No improvement
D. Each and each of you are guilty

74. Let you and I go together.

- A. No improvement
B. me
C. mine
D. my

Directions:- In the following Four Questions out of the four alternatives. choose the one which can be substituted . For the given word/sentences and indicate it by blackening the appropriate circle (•) . in the answer Sheet.

75. A place where arms and weapons are stored.

- A. tannery
B. kiln
C. arsenal
D. granary
76. One who sells articles at public sales.

- A. juggler
B. teller
C. milliner
D. auctioneer

77. A partner in crime

- A. assistant
B. helper
C. accomplice
D. alibi

78. A general act of forgiveness or pardon.

- A. gratification
B. amnesty
C. emancipation
D. benediction

Directions:- In the following Four Questions, choose the word opposite in meaning to the given word and mark it in the Answer Sheet.

79. Cautious

- A. Careless**
B. Thoughtful
C. Watchful
D. Alert

80. Mammoth

- A. Stupendous
B. Minute
C. Monumental
D. Prodigious

81. Dubious

- A. Easy
B. Assured
C. Double
D. Demise

82. Abhor

- A. Love**
B. Hate
C. Miss
D. Mad

Directions:- In the following Four Questions, the 1st and the last part of a sentence are numbered 1 and 6. The rest

of the sentence is split into four parts and named P, Q, R and S. These four parts are not given in their proper order. Read the sentence and find out which of the four combinations is correct. Then find the correct answer and indicate it in the Answer Sheet.

83. I. A social network is
P. provides a clear way of analyzing
Q. a set of actors and the
R. a social structure made up of
S. dyadic ties between these actors
6. the structure of whole social entities.

- A. QSPR
- B. SPRQ
- C. PQRS
- D. RQSP**

84. I. Some people seem to imagine
P. and that when you have filled it with anything
Q. and it becomes as empty
R. that the human mind is like a bottle
S. you pour it out again
6. as it was before

- A. RPSQ**
- B. PRSQ
- C. RSPQ
- D. PQRS

85. I. England's Cath Webb
P. with her resolution
Q. to make a sponge cake every day for a year
R. hit the headlines in January
S. and give it to a friend, family member or stranger.
6. just to make them smile.

- A. SPRQ
- B. SRPQ
- C. RPQS**
- D. RQSP

86. I. The pilgrimage to Mecca
P. giving alms
Q. recognizing Allah as the only God
R. is one of the five religious duties of

each Muslim
S. along with praying five times a day
6. and fasting four weeks once a year.

- A. SPQR
- B. SQRP
- C. RQPS
- D. RSQP**

Direction: In the following Four questions, four word are given in each question, out of which only one word is correctly spelt. Find the correctly spelt word and mark your answer in the Answer sheet.

87. Find the correctly spelt word:

- A. Bouganvella
- B. Bougainvilla
- C. Bougainvillea**
- D. Bougenvillea

88. Find the correctly spelt word:

- A. Courtious
- B. Courtoeus
- C. Courteous**
- D. Courteus

89. Find the correctly spelt word:

- A. Occurrence**
- B. Occurance
- C. Ocurrance
- D. Occurance

90. Find the correctly spelt word:

- A. Diminutive**
- B. Diminuitive
- C. Dimitnutiv
- D. Dimenutive

In the following Four questions, four alternatives are given for the Idiom\Phrase underlined. Choose the alternative which best expresses the meaning of the Idiom\Phrase and mark it in the Answer Sheet.

91. To eat humble pie.

- A. to pretend to be
- B. to act apologetically**
- C. to have a low estimate of oneself
- D. to strave

92. A Wild Goose Chase

- A. a desperate effort
- B. a useless effort**
- C. a good effort
- D. a baseless effort

93. Men like Vidyasagar and Bhagat Singh are the salt of the earth.

- A. famous men
- B. ideal men**
- C. hardworking men
- D. makers of the earth

94. There was a definite element of fabrication in the story, but he believed the account hook, line and sinker.

- A. A little bit
- B. hardly
- C. not wholly
- D. completely**

Direction: In the following Four questions, some parts of the sentences have errors and some are correct. Find out which part of sentence has an error and blacken the circle corresponding to the appropriate correct option. If a sentence is free from error, blacken the circle corresponding to "No Error" in the Answer sheet.

95. I jumped with the opportunity of going to Kashmir.

- A. of going to Kashmir
- B. with the opportunity**
- C. No error
- D. I jumped

96. Tutankhamun's death mask is still untarnished after thirty four centuries.

- A. No error

- B. after thirty four centuries
- C. Tutankhamun's death mask
- D. is still untarnished**

97. Forty minutes later James return to his family bearing an important piece of news.

- A. bearing an important piece of news.
- B. Forty minutes later
- C. No error
- D. James return to his family**

98. The flower and the vine are growing well.

- A. No error**
- B. The flower
- C. and the vine
- D. are growing well.

Direction: In the following Two questions, a sentence has been given in Active/Passive voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/Active voice and mark your answer in the Answer Sheet.

99. He may have left a message for me.

- A. He might have left a message for me.
- B. A message may have been left for me.
- C. A message may have been left for me by him.**
- D. A message might be left for me by him.

100. Was the question answered?

- A. Did the question get answered?
- B. Were they answering the question?
- C. Was the answer to the question given?
- D. Did they answer the question?**

Part III – Quantitative Aptitude

101. In a 2 kg mixture of copper and aluminium, 30% is copper. How much aluminium powder should be added to the mixture so that the proportion of copper becomes 20% ?

- A. 1000 gms
- B. 800 gms
- C. 1200 gms
- D. 900 gms

Directions

Read it carefully and answer five questions.

Total cost of production of a firm is Rs. 250 lakh.

Following pie-chart shows the percentage of costs of production in different purposes.

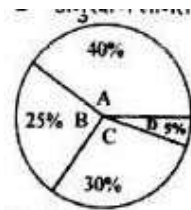
Letters A, B, C, D represent the following:

A = Cost of raw materials

B = Cost of packing materials

C = Cost of labour

D = Maintenance Cost



102. If the production increases to five times of the present cost, then the percentage increase of the cost is

- A. 50%
- B. 400%
- C. 300%
- D. 500%

103. Cost of packing materials and raw materials together amounts to

- A. Rs. 162.5 lakh
- B. Rs. 175 lakh
- C. Rs. 137.5 lakh
- D. Rs. 87.5 lakh

104. If the cost of production doubles in a period of 3 years, then the corresponding maintenance cost in rupees will be

- A. Rs. 75 lakh
- B. Rs. 12.5 lakh
- C. Rs. 25 lakh
- D. Rs. 125 lakh

105. If the total maintenance cost increases from Rs. 12.5 lakh to Rs. 50 lakh, then the percentage increase of the maintenance cost is

- A. 25%
- B. 75%
- C. 400%
- D. 300%

106. If the packing cost increases by 2%, then the new packing will be

- A. Rs. 62.5 lakh
- B. Rs. 5 lakh
- C. Rs. 1.25 lakh
- D. Rs. 63.75 lakh

107. Arvind deposited a sum of money with a bank on 1st January 2012 at 8% simple interest per annum. He received an amount of Rs. 3,144 on 7th August 2012. The money he deposited with the bank was

- A. Rs. 3,080
- B. Rs. 3,000
- C. Rs. 2,500
- D. Rs. 3,100

108. ABCD is a cyclic quadrilateral, AB is the diameter of the circle. If $\angle ACD = 50^\circ$, the measure of $\angle BAD$ is

- A. 130°
- B. 40°
- C. 50°
- D. 140°

109. A man rows 12 km in 5 hours against the stream, the speed of current being 4 kmph. What time will be taken by him to row 15 km with the stream?

(A) 1 hour $24\frac{7}{13}$ min.

(B) 1 hour $27\frac{7}{13}$ min.

(C) 1 hour $26\frac{7}{13}$ min.

(D) 1 hour $25\frac{7}{13}$ min.

110. $(x^3 + x^6)(x^3 - y^6)$ is equal to

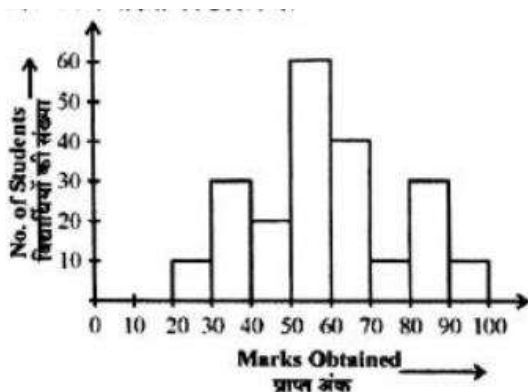
A. $x^6 + y^{12}$

B. $x^9 - y^{36}$

C. $x^9 + y^{36}$

D. $x^6 - y^{12}$

Directions: Study the following histogram and answer the Four questions.



111. The total no. of students on whom this survey was made is

A. 200

B. 210

C. 190

D. 220

112. The percentage of students securing marks less than 50 is

(A) $47\frac{13}{21}\%$

(B) $28\frac{5}{7}\%$

(C) $23\frac{13}{21}\%$

(D) $28\frac{1}{2}\%$

113. The no. of students securing marks in the range 90 – 100 is

A. 10

B. 30

C. 20

D. 40

114. The range of marks obtained by maximum no. of students is

A. 30 - 40

B. 60 - 70

C. 80 - 90

D. 50 - 60

115. A man spends his three months income in four months time. If his monthly income is Rs, 1,000 then his annual savings is

A. Rs. 9,000

B. Rs. 6,000

C. Rs. 4,000

D. Rs. 3,000

116. Divide 27 into two parts so that 5 times the first and 11 times the second together equal to 195. Then the ratio of the first and second parts is

A. 17:10

B. 3:2

C. 2:7

117. The value of $(\cos 0^\circ + \sin 45^\circ + \sin 30^\circ)$
 $(\sin 90^\circ - \cos 45^\circ + \cos 60^\circ)$ is

D. 5:4

A. 5/4

B. 3/2

C. 3/4

D. 7/4

118. Simplify

$$\frac{\sqrt[3]{0.0625} + \sqrt[3]{0.008} + \sqrt{0.09} - 1}{\sqrt[3]{625} \sqrt[5]{32}}$$

- A. $\frac{1}{5}$
- B. 2.4
- C. 1.25
- D. 0**

119. One-fifth of half of a number is 20. Then 20% of that number is

- A. 60
- B. 20
- C. 80
- D. 40**

120. The weight of a container completely filled with water is 2.25 kg. The container weight 0.77 kg when its 0.2 part is filled with water. The weight (in kg) of the container when 0.4 part of it is filled with water is

- A. 0.40
- B. 1.88
- C. 0.74
- D. 1.14**

121. The sum of $\frac{1}{x+y}$ and $\frac{1}{x-y}$ is

(A) $\frac{2x}{y^2 - x^2}$ (B) $\frac{2y}{x^2 - y^2}$

(C) $\frac{2x}{x^2 - y^2}$ (D) $\frac{-2y}{x^2 - y^2}$

122. The LCM of two numbers is 12 times their HCF. The sum of the HCF and LCM is 403. If one of the number is 93, then the other is

- A. 120
- B. 124**
- C. 112
- D. 116

123. The average marks of 14 students was 71. It was later found that marks of one of the students has been wrongly entered as 42 instead of 56 and of another as 74 instead of 32. What is the correct average?

- A. 69**
- B. 68
- C. 71
- D. 67

124. A can do half of piece of work in 1 day, whereas B can do full. B can do half the work as C in 1 day. The ration of their efficiencies of work is

- A. 2:4:1
- B. 2:1:4
- C. 4:2:1
- D. 1:2:4**

125. If $x = 5$, then the value of the expression $x^2 - 2 + \frac{1}{x^2}$ is

- A. $\frac{24}{25}$
- B. $\frac{576}{25}$**
- C. $\frac{24}{5}$
- D. $\frac{625}{24}$

126. If $a + \frac{1}{a} = -1$, then the value of $(1 - a + a^2)(1 + a - a^2)$ is

- A. -4
- B. 4**
- C. 1
- D. 0

127. Base of a prism of height 10 cm is square. Total surface area of the prism is 192 sq. cm. The volume of prism is

- A. 640 cm^3
- B. 120 cm^3
- C. 90 cm^3
- D. 160 cm^3**

128. 15 men can finish a work in 20 days, however it takes 24 women to finish it in 20 days. If 10 men and 8 women undertake to complete the work, then they will take

- A. 10 days
- B. 20 days**
- C. 15 days
- D. 30 days

129. A low land, 48 m long and 31.5 m broad is raised to 6.5 dm. For this, earth is removed from a cuboidal hole, 27 m long and 18.2 m broad, dug by the side of the land. The depth of the hole will be

- A. 2.2 m
- B. 3 m
- C. 2 m**
- D. 2.5 m

130. A man rows to a place 60km distant and back in 13 hours 30 minutes. He finds that he can row 5 km with the stream in the same time as he can row 4 km against the stream. Find the rate of the stream.

- A. 10 km/hr
- B. 1 km/hr**
- C. 8 km/hr
- D. $\frac{1}{2}$ km/hr

131. BE, CF are the two medians of ΔABC and G is their point of intersection. EF cuts AG at O. Ration of AO:OG is equal to

- A. 3:1**
- B. 1:3
- C. 1:2
- D. 2:3

132. AB is a diameter of a circle having centre at O. P is a point on the circumference of the circle. If $\angle POA = 120^\circ$, then measure of $\angle PBO$ is

- A. 75°
- B. 68°
- C. 70°
- D. 60°**

133. If $2\sin^2\theta - 3\sin\theta - 1 = 0$, θ being positive acute angle, then the values of θ are

- A. $45^\circ, 50^\circ$
- B. $60^\circ, 45^\circ$
- C. $60^\circ, 55^\circ$

D. $30^\circ, 90^\circ$

134. A discount series of 10%, 20% and 40% is equal to a single discount of

- A. 50%
- B. 60.28%
- C. 60%
- D. 56.8%**

135. A vendor purchased 40 dozens bananas for Rs. 250. Out of these 30 bananas were rotten and could not be sold. At what rate per dozen should he sell the remaining bananas to make a profit of 20% ?

- A. Rs. 6
- B. Rs. 12
- C. Rs. 10
- D. Rs. 8**

136. The length of two parallel chords of a circle of radius 5 cm and 6 cm and 8 cm in the same side of the centre. The distance between them is

- A. 1.5 cm
- B. 2 cm
- C. 1 cm**
- D. 3 cm

137. The time required for a sum of money to amount to four times itself at 15% simple interest p.a. will be

- A. 20 years**
- B. 30 years
- C. 15 years
- D. 10 years

138. Average age of seven persons in a group is 30 years, the average age of five persons of this group is 31 years. What is the average age of the other two persons in the group?

- A. 15 years
- B. 26 years
- C. 55 years
- D. None of these**

139. The value of $\sec^2 A (1 - \sin^2 A) - 2 \tan^2 A$ is

- A. 1
B. 2
C. $1/2$
D. 0

140. After deduction a commission of 5%, T.V. set costs Rs. 9,595. Its marked price is

- A. Rs. 12,000
B. Rs. 10,000
C. Rs. 10,100
D. Rs. 10,074.75

141. If $5 \tan A = 4$, then the value of $\frac{5 \sin A - 3 \cos A}{\sin A + 2 \cos A}$ is

- A. $5/14$
B. $9/14$
C. $5/6$
D. $7/9$

142. If $x = 2$, $y = 1$ and $z = -3$, then $x^3 + y^3 + z^3 - 3xyz$ is equal to

- A. 0
B. 2
C. 6
D. 8

143. Which one of the following is true ?

- (A) $0 > \frac{7}{17} > \frac{3}{7} > \frac{3}{5}$
(B) $0.5 < \frac{2}{3} < \frac{3}{4} < \left(\frac{16}{25}\right)^{0.5}$
(C) $\frac{7}{24} > \frac{1}{3} > \frac{3}{8} > \frac{5}{12}$
(D) $\frac{1}{2} > \frac{2}{3} > \frac{3}{4} > \frac{4}{5}$

144. A bag contains coins of Rs 1,50 paise and 25 paise in the ratio 2:3:5. If the total value of these coins is Rs. 228, then the number of 50 paise coins in that bag was

- A. 96
B. 124
C. 112
D. 144

145. Ram, Rahim and Robert started a

partnership business investing Rs. 30,000, Rs. 50,000 and Rs. 40,000 respectively. If they made an annual profit of Rs. 18,504 then the share of Rahim is

- A. Rs. 7,510
B. Rs. 7,010
C. Rs. 7,170
D. Rs. 7,710

146. The radii of a sphere and a right circular cylinder are 3 cm each. If their volumes are equal, then curved surface area of the cylinder is

(Assume $\pi = 22/7$)

- (A) $75 \frac{3}{7} \text{ cm}^2$
(B) $65 \frac{3}{7} \text{ cm}^2$
(C) $74 \frac{3}{7} \text{ cm}^2$
(D) $72 \frac{3}{7} \text{ cm}^2$

147. If the angles of a triangle are in the ratio 2:3:5, then the measure of the least angle of the triangle is

- A. 20°
B. 36°
C. 90°
D. 18°

148. If $x = a \sec \theta + b \tan \theta$ and $y = a \tan \theta + b \sec \theta$ ($a \neq b$), then the value of $\frac{x^2 - y^2}{a^2 - b^2}$ is

- A. 1
B. $1/2$
C. 0
D. 2

149. ABC is a triangle in which $\angle A = 90^\circ$. Let P be any point on side AC. If $BC = 10$ cm, $AC = 8$ cm and $BP = 9$ cm, then $AP =$

- (A) $3\sqrt{3}$ cm
(B) $2\sqrt{5}$ cm
(C) $2\sqrt{3}$ cm
(D) $3\sqrt{5}$ cm

150. A right prism has triangle base. If v

be the number of vertices, e be the number of edges and f be the number of faces of the prism. The value of $(v + e - f) / 2$ is

- A. 10
- B. 2
- C. 4
- D. 5**

151. Who was the first Deputy Prime Minister of India?

- A. Sardar Vallabhbhai Patel**
- B. Gulzarilal Nanda
- C. Jawaharlal Nehru
- D. Maulana Abul Kalam Azad

152. Mass number is the sum of

- A. Only protons
- B. Protons and neutrons**
- C. Electrons and neutrons
- D. Electrons and protons

153. Who was the first Delhi Sultan to break the power of the Turkish nobles known as the Chahalgani or the Forty?

- A. Qutb-ud-din Aibak
- B. Balban**
- C. Iltutmish
- D. Raziya

154. Television was invented by

- A. Louis Braille
- B. Lawrence
- C. R.A. Millikan
- D. J.L. Baird**

155. Which of the following regulates the working of share market in India?

- A. FERA
- B. SEBI**
- C. MRTP Act
- D. BIFR

156. Vitamin which provides immunity

- A. K
- B. A
- C. C**
- D. E

157. Which is the final Appellate Court of Justice?

- A. Civil Court
- B. High Court
- C. District Court
- D. Supreme Court**

158. Centre for Ecological Sciences is situated at

- A. New Delhi
- B. Bengaluru**
- C. Allahabad
- D. Karnal

159. There are only two metals that are non-silver in colour, they are

- A. Palladium & Platinum
- B. Copper & Gold**
- C. Nickel & Zinc
- D. Sodium & Magnesium

160. Which country earned the title "The Queen of Seas"?

- A. Britain**
- B. Germany
- C. France
- D. Italy

161. Breath analysers used by police to test drunken drivers works on the chemical basis of

- A. Complexation reactions
- B. Acid-base reactions
- C. Precipitation reactions
- D. Redox reactions**

162. The resistance of an ideal voltmeter is

- A. high
- B. zero**
- C. low

D. infinite

163. ICMP is used for

- A. Forwarding
- B. Addressing
- C. Multicasting
- D. Error reporting

164. Who is the founder of Homeopathy?

- A. Domagk
- B. Hahnemann
- C. wakesman
- D. Linnec

165. Respiration is controlled by _____ part of brain.

- A. Hypothalamus
- B. Medulla Oblongata
- C. Olfactory Lobes
- D. Cerebellum

166. The World Environment Day is celebrated on

- A. June 16
- B. April 7
- C. August 6
- D. June 5

167. Penicillin was discovered by

- A. Ian Fleming
- B. Louis Pasteur
- C. Edward Jenner
- D. Alexander Fleming

168. The most stable measure of central tendency is

- A. Mode
- B. Mean
- C. Median
- D. Range

169. The last dynasty of the Delhi Sultanate was the

- A. Lodi dynasty
- B. Khilji dynasty

- C. Slave dynasty
- D. Syed dynasty

170. India's 1st Hi-Speed Rural Broadband Network has been commissioned in a district of

- A. Karnataka
- B. Kerala
- C. Telangana
- D. Andhra Pradesh

171. Who was the first to use the term "Micro" and "Macro" in Economics in 1933?

- A. I. Fischer
- B. Gurly
- C. Ragnar Frisch
- D. James Tobin

172. In marine whales, the limbs are modified as

- A. Flappers
- B. Grippers
- C. Flippers
- D. Slippers

173. When did India become a fully Sovereign Democratic Republic?

- A. 26th November, 1930
- B. 26th November, 1951
- C. 26th November, 1949
- D. 26th January, 1949

174. The first National Park of India is

- A. Hazaribagh National Park
- B. Simlipal National Park
- C. Corbett National Park
- D. Dachigam Wild Life Sanctuary

175. Of the following Rapeseed belongs to

- A. Linseed
- B. Coffee
- C. Mustard
- D. Pepper

176. The Earth is nearest to the Sun on

- A. 23 September
- B. 3 January**
- C. 21 March
- D. 4 July

177. Which of the following is observed as Sports Day every year?

- A. 22 April
- B. 2 October
- C. 29 August**
- D. 26 July

178. Amjad Ali Khan is associated with which of the following musical instruments?

- A. Sitar
- B. Veena
- C. Violin
- D. Sarod**

179. Which of the following is the best indicator of SO₂ pollution?

- A. Algae
- B. Bryophyte
- C. Lichen**
- D. Pteridophyte

180. Aggregate Monetary Resources is

- A. M3**
- B. M2
- C. M4
- D. M1

181. According to which article, State Legislative Council can be created or abolished?

- A. Article 167
- B. Article 170
- C. Article 168
- D. Article 169**

182. The two components of an eco-system are

- A. Weeds and micro-organisms

B. Biotic and abiotic

- C. Plants and light
- D. Plants and animals

183. The system in which the few govern many is known as

- A. Monarchy
- B. Oligarchy**
- C. Autocracy
- D. Plutocracy

184. The lowest temperature is recorded by

- A. Maximum reading thermometer
- B. Minimum reading thermometer
- C. Alcohol thermometer**
- D. Mercurial thermometer

185. When is Human Rights Day celebrated?

- A. 9th Dec.
- B. 10th Dec.**
- C. 10th Oct.
- D. 12th Dec.

186. Mercury thermometer was invented by

- A. Fahrenheit**
- B. Newton
- C. Priestley
- D. Galileo

187. The Great Bath was found at

- A. Mohenjodaro**
- B. Lothal
- C. Chanhudaro
- D. Harappa

188. A sufficiently large scale map indicating the detailed surface features of an area including relief is called

- A. Topographical map
- B. Relief map**
- C. Wall map
- D. Chorographical map

189. Reserve Bank of India was nationalised in

- A. 1948
- B. 1949**
- C. 1945
- D. 1947

190. Which of the following works on the basis of conservation of linear momentum?

- A. Helicopter
- B. Rocket**
- C. Aeroplane
- D. Jet

191. The hard enamel layer of teeth is

- A. Calcium hydroxide
- B. Calcium hydroxy apatite**
- C. Calcium phosphate
- D. Calcium oxide

192. Which scientist wrote a book called "A Brief History of time"?

- A. Stephen Hawking**
- B. Pasteur
- C. J.L. Baird
- D. Edward Jenner

193. A plane glass slab is kept over coloured letters, the letter which appears least raised is

- A. Blue
- B. Violet
- C. Red**
- D. Green

194. A defect of vision in which the points in one plane of an object appear in focus while those in another plane are out of focus is called

- A. Myopia
- B. Astigmatism
- C. Distortion**
- D. Hypermetropia

195. Which of the following species is locally extinct in India?

- A. The Gyps vulture**
- B. Forest Owlet
- C. White Bellied Heron
- D. Siberian Crane

196. An electronic path, that sends signals from one part of computer to another is

- A. Modem
- B. Bus**
- C. Logic Gate
- D. Serial Port

197. Which gas is responsible for depletion of ozone layer around earth which protect us from harmful ultra-violet rays?

- A. Chlorofluoro carbons**
- B. Nitrogen oxide
- C. Nitrogen
- D. Oxygen

198. Where is Brabourne Stadium located?

- A. Cuttack
- B. Mumbai**
- C. Kolkata
- D. Jamshedpur

199. What is Hawala?

- A. Illegal trading of shares
- B. Tax evasion
- C. Illegal transactions of foreign exchange**
- D. Full details of a subject

200. To whom did Allauddin Khilji entrust the mission to conquer South?

- A. Malik Kafur**
- B. Ulugh Khan
- C. Shaji Malik