

Part – I : General Intelligence

Question Nos. 1 to 9

Directions : Select the related word I letters I
C) FBD D) NJL number from the given
alternatives.

1. 12593 : 35291
29684 : 46982
72936 : ?

- A. 62973
- B. 62793
- C. 69237
- D. 92637

2. Fan : Wings :: Wheel : ?

- A. Air
- B. Cars
- C. Spokes
- D. Round

3. RORRIM : MIRROR TNESERP : ?

- A. TNERESP
- B. STNERPE
- C. PRESENT
- D. CRESENT

4. Mathematics : Logic :: Science : ?

- A. Experiments
- B. Scientists
- C. Laboratory
- D. Facts

5. 6 : 18 :: 4 : ?

- A. 15
- B. 8
- C. 6
- D. 2

6. Window : Pane :: Book : ?

- A. Glass
- B. Page
- C. Cover
- D. Novel

7. BUT : TUB :: NET : ?

- A. TEN
- B. PET
- C. LET
- D. TWO

8. 4845 : 45² :: 5964 : ?

- A. 94²
- B. 54²
- C. 96²
- D. 59²

9. EAC : KGI :: HDF : ?

- A. PLN
- B. KIJ
- C. FBD
- D. NJL

Question Nos. 10 to 18

Directions : Find the odd
words/letters/number from the given
alternatives.

10.

- A. 65
- B. 28
- C. 215
- D. 126

11.

- A. NODE
- B. LMVW
- C. HIXY
- D. RQCB

12.

- A. RTV
- B. XYZ
- C. MOQ
- D. BDF

13.

- A. Power : Machine
- B. Oil : Lamp

- C. Oxygen : Life
D. Water : Tap

14.

- A. 2610
B. 41220
C. 51530
D. 3915

15.

- A. Nitrogen
B. Chlorophyll
C. Glucose
D. Photosynthesis

16.

- A. IMNR
B. GKIN
C. CGFJ
D. EIHL

17.

- A. 163
B. 166
C. 131
D. 137

18.

- A. Maharashtra
B. Karnataka
C. Gujarat
D. Arunachal Pradesh

Question Nos. 19 to 23

Direction : A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

19. T, R, P, N, ?

- A. L
B. V
C. M
D. E

20. 16, 30, ?, 79, 114

- A. 49
B. 63
C. 51
D. 45

21. 1, 48, 4, 24, 7, ?, 10, 2

- A. 18
B. 12
C. 2
D. 8

22. 4, ?, 19, 39, 79, 159

- A. 9
B. 10
C. 8
D. 12

23. Z, X, V,, T, R, ?, N

- A. O
B. Q
C. S
D. P

24. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

_bc c_a abc_ba ab_

- A. abac
B. acac
C. abcc
D. acbc

25. Question Nos. 25 to 27

Directions : Select the missing number from the given responses.

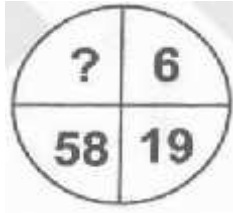
25.

5	4	9
6	3	?
7	2	4
65	20	45

A. 3

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

26.



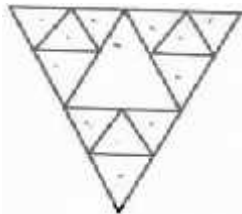
- A. 417
- B. 147
- C. 171
- D. 175**

27.

43	48	41
42	44	?
47	?	?

- A. 46, 40, 45**
- B. 49, 45, 46
- C. 40, 48, 46
- D. 45, 49, 46

28. The number of triangles in the following diagram is:



- A. None
- B. 14
- C. 17**
- D. 13

Question Nos. 29 to 30

Directions: From the given alternative words, select the word which cannot be formed using the letters of the given word.

29. EMANCIPATE

- A. MANIAC
- B. PATENT**
- C. PAINT
- D. MENACE

30. POLYTHEISM

- A. HOTELS
- B. PISTOL
- C. THESIS**
- D. SMITH

Question Nos. 31 to 33

Directions: Arrange the following words as per order in the dictionary.

31. (1) Complicate, (2) Complicity, (3) Complication, (4) Compliant

- A. 4,1,3,2**
- B. 2,1,3,4
- C. 4,2,3,1
- D. 4,2,1,3

32. (1) Extortioner, (2) Extemporize, (3) Extinction, (4) Extermination, (5) Extinguisher

- A. 4,5,2,1,3
- B. 1,2,3,4,5
- C. 2,4,3,5,1**
- D. 2,4,5,3,1

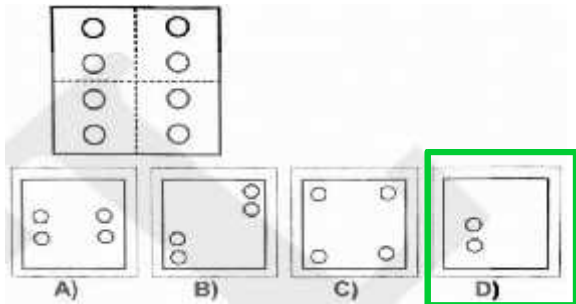
33. (1) Launderette, (2) Laughter, (3) Laundry, (4) Launch

- A. 1,3,2,4
- B. 4,2,1,3
- C. 4,1,2,3
- D. 2,4,1,3**

34. In a certain code 0, 1, 2,.....9 is coded as a,b,c,.....j then find $baf \div bf \times d$

- A. d
- B. be
- C. cb**
- D. df

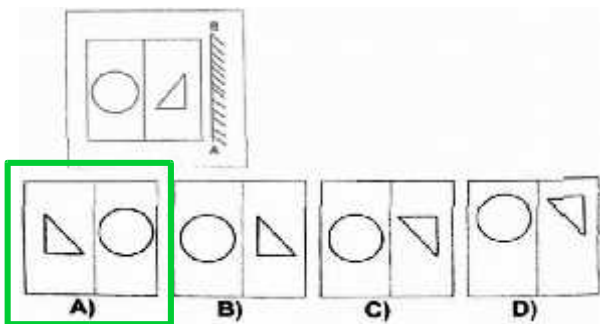
35. If a paper is folded in a particular manner and punch is made when, unfolded this paper appears as given below in the question figure. Find out the manner in which the paper is folded and the punch is made from the answer figures given.



36. If 'MOTHER' is coded as 'TOMREH', what should be the code for the word 'NEPHEW' ?

- A. ENHPWE
- B. WEHPEN
- C. HPENWE
- D. PENWEH**

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



38. If x stands for \div , \div stands for +, + stands for -, and - stands for x, then what is the value of $(30+20) - 5(7\div 3) \times 25 = ?$

- A. 25
- B. 10
- C. 100
- D. 20**

39. After walking 200 mtrs, I turned right and covered a distance of 100 mtrs, then turned

left and covered a distance of 300 mtrs. In the end I am facing towards North. From which direction did I start my journey?

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

40. In the question one statement is given. You have to answer considering the statement to be true, even if it seem to be at variance from commonly known facts.

Statement : Students go to school in uniforms.

- A. Students look smart in uniforms.
- B. Uniforms create a sense of belongingness.**
- C. Uniforms are easily available.
- D. Uniforms are compulsory.

41. Raheja started from a point. He walked 3km to the North, then turned East and walked 4km, then turned West walked 2km and then turned West walked 3km and stopped. In which direction is Raheja from his starting point?

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

42. In the question one statement is given, followed by two conclusion/assumption, I and II . You have to consider the statement to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusion/assumptions, if any, follows from the given statements.

Statement : An advertisement in the paper says "Consume pure organic honey of Company A".

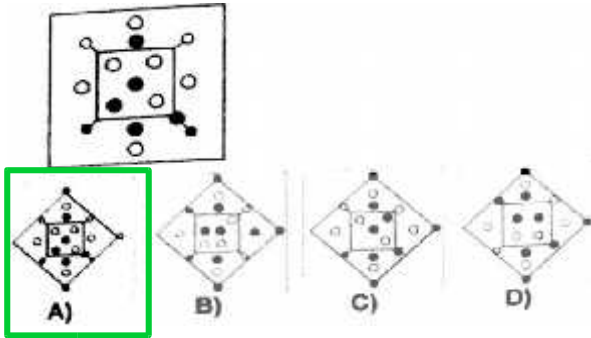
Conclusion:

- I) Artificial honey can be prepared.
- II) People don't mind paying more for pure organically prepared honey.

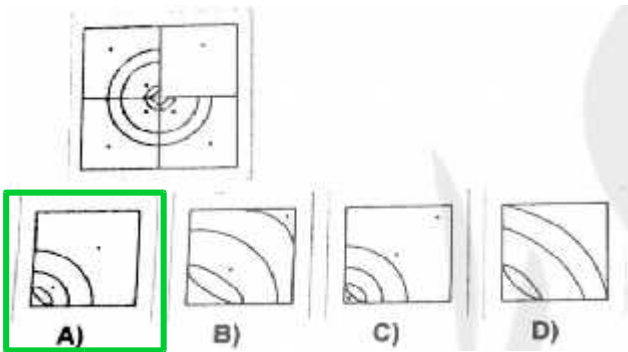
A. Assumption II is implicit.

- B. Neither I nor II is implicit.
- C. Both I and II are implicit.
- D. Assumption I is implicit.

43. from the given answer figures. select the one in which the question figure is hidden/embedded.



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



45. In a certain language. PRAYER is coded as MOXVBO th how SALUTE will be coded in the same language?

- A. PIXRQB
- B. PIXQRB
- C. PXIQRB
- D. PXIRQB

46. Adam who is 20 years old is 4 times as old as Mary. What will be Mary's age when Adam is twice as old as her?

- A. 35 years
- B. 17 years
- C. 30 years
- D. 15 years

47. A word is represented by only one set of

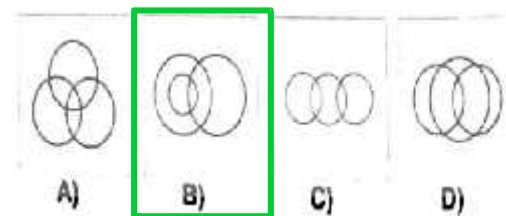
numbers as given in any one of the alternatives.

The sets as given 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. "B" can be represented by 00.23 etc., and "P" can be represented by 56.65 etc. Similarly, you have to identify the set for the word 'DEBRIS'

MATRIX - I (आवृत्त - I)					MATRIX - II (आवृत्त - II)					
	0	1	2	3	4	5	6	7	8	9
0	B	U	I	L	D	S	P	A	R	E
1	U	I	L	D	B	P	A	R	E	S
2	I	L	D	B	U	A	R	E	S	P
3	L	D	B	U	I	R	E	S	P	A
4	D	B	U	I	L	E	S	P	A	R

- A. 40,95,14,58,34,69
- B. 40,95, 14,59,30,69
- C. 22,95,59,30,14,69
- D. 22,59,42,59,34,69

48. Which of the following diagrams best represents cousins, nieces and females?



49. If + means ÷, ÷ means -, - means x, x means +, then $12 - 8 \times 6 - 4 \div 3 = ?$

- A. +92
- B. +118
- C. -112

D. -33

50. Jais and his father has an age difference of 35 years now. After 5 years, the sum of their age is 125. What will be the age of Jais and his father after 12 years from now?

A. 40 & 75

B. 45 & 70

C. 51 & 85

D. 52 & 87

Part-II : English Language

Question Nos. 51 to 60

Direction: 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 alternative and fill in the blanks.

Squirrels are I animals in the world. They have the II for rainy days. Autumn can be very entertaining for them. That is the time III the great harvest collection for their winter store. You can IV here and there, collection nuts of all sorts. Walnuts, beechnuts, chestnuts, dried berries.

They are not fussy. Relentlessly, they run from their storage point, usually a tree hollow, to the vast amount of wild nuts to be found in the forest.

These beautiful animals are house-proud. They take great pains to ensure that V and warm enough to tide them over the harsh winter. You VI busily collecting soft pieces of bark, wood and leaves to line their nests. After all their VII, and when the first, cold hard frost arrives, they VIII inside their nests for the duration/rest of the cold spell. There, IX till it is warm enough to bring out their stored food. Ah but then again, they are the most forgetful little animals, and it is not unusual to see squirrels X their hoards.

51.

- A. (I) this most resourceful
- B. (I) the most resourceful**
- C. (I) the most resource
- D. (I) the more resourceful

52.

- A. (II) knack of saving down
- B. (II) knack of saved up
- C. (II) knack of saving up**
- D. (II) knack of saving on

53.

- A. (III) when their begin
- B. (III) when they begin**

- C. (III) what they begin
- D. (III) when them begin

54.

- A. (IV) see them scampering**
- B. (IV) seeing hem scampered
- C. (IV) seen them scampering
- D. (IV) see their scampering

55.

- A. (V) they nest is secure
- B. (V) there nest is secure
- C. (V) their nest is securing
- D. (V) their nest is secure**

56.

- A. (VI) will see them**
- B. (VI) will saw them
- C. (VI) will seen them
- D. (VI) is saw them

57.

- A. (VII) scavenging is doing
- B. (VII) scavenging is done**
- C. (VII) scavenged was done
- D. (VII) scavenged is done

58.

- A. (VIII) will sealing themselves
- B. (VIII) will seal themselves**
- C. (VIII) will be seal themselves
- D. (VIII) are seal themselves

59.

- A. (IX) they will hibernating
- B. (IX) they are hibernated
- C. (IX) them are hibernate
- D. (IX) they will hibernate**

60.

- A. (X) searched desperately for
- B. (X) searching desperates for
- C. (X) search desperate at
- D. (X) searching desperately for**

Question Nos. 61 to 64

Direction: Four alternatives are given for the Idiom / Phrase underlined. Choose the alternatives which best expresses the meaning of the Idiom / Phrase and mark it in the Answer Sheet.

61. Take the bull by the horns is

- A. to face a difficulty courageously
- B. to be helpful
- C. to be sensitive
- D. to win the battle

62. to be in a quandary

- A. to be on the alert
- B. to be in an unenviable position
- C. to be in a commanding position
- D. to be in a confusing situation

63. Sail in the same boat.

- A. suspect something uncanny.
- B. suspect something wrong.
- C. be in a different situation.
- D. be in the same situation.

64. A false friend never hesitates to shed crocodile tears.

- A. to show false happiness
- B. to feel disappointed
- C. to pretend to be sympathetic.
- D. to move from one place to another

Question Nos. 65 to 68

Direction: 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.

65. His words were _____ for the session.

- A. suitable
- B. appropriately
- C. suit
- D. appropriate

66. I have no _____ office work.

- A. experience in
- B. experience to
- C. experience on
- D. experience of

67. Solar panels are used to _____ Satellites.

- A. powerful
- B. powerless
- C. power
- D. powers

68. Ten dollars _____ too much to pay.

- A. is
- B. could
- C. are
- D. were

Question Nos. 69 to 72

Direction: Out of the four alternatives, choose the one which can be substituted for the given words / sentences and indicate it by blackening the appropriate circle in the Answer Sheet.

69. A person who worships only one God.

- A. Monotheist
- B. Philogymist
- C. Theist
- D. Polythesit

70. A person who helps another to commit a crime.

- A. Accomplice
- B. Assistant
- C. Supporter
- D. Colleague

71. a legal agreement that allows someone to use a building or land for a period of time, usually in return for rent.

- A. Deal
- B. Lease

- C. Bond
- D. Assurance

72. The act of killing one's own brother or sister.

- A. Patricide
- B. Suicide
- C. Fratricide
- D. Homicide

Question Nos. 73 to 76

Directions: Out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer sheet.

73. Crusade

- A. critical
- B. campaign
- C. flatten
- D. angry

74. Result

- A. data
- B. cause
- C. decision
- D. outcome

75. Invincible

- A. unassailable
- B. yielding
- C. vulnerable
- D. fallible

76. lousy

- A. aura
- B. awful
- C. awry
- D. awesome

Question Nos. 77 to 80

Direction : Choose the word opposite in meaning to the given word and mark it in the Answer Sheet.

77. Detest

- A. withhold
- B. assist
- C. injure
- D. adore

78. Traitor

- A. officer
- B. patriot
- C. member
- D. migrant

79. Ascend

- A. rise
- B. descend
- C. climb
- D. soar

80. Repel

- A. attract
- B. annoy
- C. drag
- D. coax

Question Nos. 81 to 82

Direction: A sentence has been given in Direct / Indirect. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect / Direct and mark your answer in the Answer Sheet.

81. Kumar says, "It doesn't rain in January".

- A. Kumar says that it didn't rain in January.
- B. Kumar says that it doesn't rain in January.
- C. Kumar said that it doesn't rain in January.
- D. Kumar said that it didn't rain in January.

82. The men said, "We are going to fly kites."

- A. The men said that we are going to fly kites.
- B. The men said that we were going to fly kites.
- C. The men said that they are going to fly kites.
- D. The men said that they were going to fly kites.

Question Nos. 83 to 86

Directions : 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" option in the Answer Sheet.

83. The promise was broken by him.

- A. was broken
- B. The promise
- C. No Error
- D. by him

84. Rakesh found the newspaper very dull.

- A. very dull
- B. No Error
- C. Rakesh founds
- D. the newspaper

85. The door should be keep closed.

- A. keep closed
- B. The door
- C. No Error
- D. should be

86. She made the child to study hard.

- A. the child
- B. No Error
- C. to study hard
- D. She made

Question Nos. 87 to 90

Directions: The 1st and the last part of sentences are numbered 1 and 6. The rest of the sentence is split into four parts and named P,Q,R & 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 by blackening the appropriate circle in the Answer Sheet.

87.

- 1. Earth is the home
- P. to our future
- Q. we all share
- R. generations as their
- S. and would pass on
- 6. legacy.

- A. QPRS
- B. SPQR
- C. QSPR
- D. PRQS

88.

- 1. A man
- P. with yellow, red, green
- Q. stood holding
- R. balloons
- S. a pole
- 6. flying from it

- A. QSPR
- B. PRQS
- C. QRSP
- D. PRSQ

89.

- 1. Margaret Nobel
- P. become a disciple
- Q. of Swami Vivekanada
- R. a remarkable Irish lady,
- S. and dedicated her life
- 6. to the service of the Indian people.

- A. SRQP
- B. RPQS
- C. SQPR
- D. PQRS

90.

- 1. It was a Friday morning and
- P. the lieutenant scanned the horizon
- Q. just as the desert haze
- R. with his binoculars
- S. was clearing
- 6. and focused on many enemy tanks.

- A. QSPR
- B. RPSQ
- C. SPQR
- D. PRSQ

Question Nos. 91 to 92

Directions: A sentences 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.

91. Close the door.

- A. Let the door be closed.
- B. Let the door is being closed.
- C. Let the door is closed
- D. Let the door closed.

92. I was obliged to leave.

- A. Circumstances will oblige me to leave.
- B. Circumstance was obliged me to leave
- C. Circumstances have obliged me to leave.
- D. Circumstances obliged me to leave.

Question Nos. 93 to 96

Directions: Four words are given in each question, out of which only one word is correctly spelt. Find the correctly spelt. Find the correctly spelt word and mark your answer in the Answer Sheet.

93.

- A. Obedient
- B. Obeydient
- C. Obedient
- D. Obidient

94.

- A. Pattriotism
- B. Patrotism
- C. Patritism
- D. Patriotism

95.

- A. Difuse
- B. Diffuse
- C. Diffusse
- D. Difuse

96.

- A. Jewellery
- B. Jewillery
- C. Jewelery
- D. Jevelry

Question Nos. 97 to 100

97. Be quick otherwise you would miss the train.

- A. otherwise you could have
- B. otherwise you will
- C. otherwise you will have
- D. No Improvement

98. Ours is a joined family.

- A. joint
- B. No Improvement
- C. jointed
- D. join

99. A greedy man always hankers after money.

- A. No Improvement
- B. runs after
- C. wanted
- D. greeds after

100. It is not difficult to forgive someone who says sorry.

- A. No Improvement
- B. is apologising
- C. is asking sorry
- D. apologises

Part III Quantitative Aptitude

101. If $\cos A + \sin A = \sqrt{2} \cos A$ then $\cos A - \sin A$ is equal to; (where $0^\circ < A < 90^\circ$)

- A. $\sqrt{2} \sin A$
- B. $2\sqrt{\sin A}$
- C. $\sqrt{2} \sin A$
- D. $2 \sin A$

102. If $x(x+y+z)=20$, $y((x+y+z))=30$, & $z((x+y+z))=50$, then the value of $2(x+y+z)$ is:

- A. 15
- B. 18
- C. -10
- D. 20

103. Ram babu donated 3% of his income to a charity and deposited 12% of the rest in bank. If now he has Rs. 12804, then his income was:

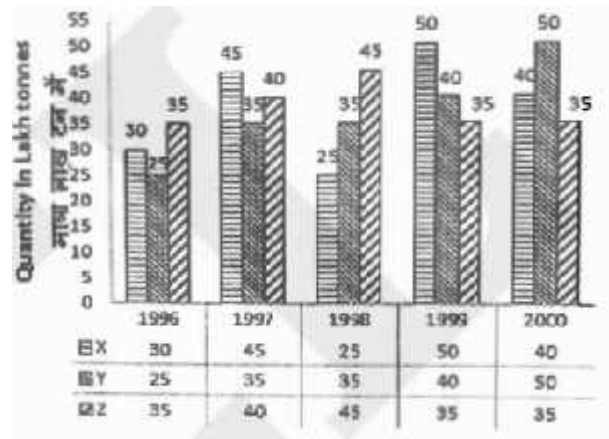
- A. 14550
- B. 15000
- C. 17460
- D. 7500

104. If 12 men working 8 hours a day complete the work in 10 days, how long would 16 men working $7\frac{1}{2}$ hours a day take to complete the same work?

- A. 8
- B. 6
- C. 7
- D. 10

Question Nos. 105 to 109

Directions : The bar graph provided below gives the data of the production of paper (in lakh tonnes) by three different companies X, Y, Z over the years. Study the bar chart and answer the following questions.



105. The ratio of the average production of company X in the period 1998-2000 to the average production of company Y in the same period is:

- A. 27:29
- B. 23:25
- C. 24:27
- D. 25:26

106. The percentage increase in the production of company Y from 1996 to 1999 is:

- A. 40%
- B. 60%
- C. 50%
- D. 55%

107. The average production for five years is maximum for company?

- A. X
- B. X and Z
- C. Y
- D. Z

108. The percentage of production of company Z to the production of company Y is maximum in:

- A. 1996
- B. 1998
- C. 2000
- D. 1999

109. The difference between the production of company Z in 1998 and company Y in 1996 is:

- A. 10,00,000 tonnes
- B. 15,00,000 tonnes
- C. 25,00,000 tonnes
- D. 20,00,000 tonnes**

110. 150 workers were engaged to finish a piece of work in a certain number of days. Four workers dropped on the second day, four more workers dropped on third day and so on. It takes 8 more days to finish the work now. Find the number of days in which the work was completed.

- A. 24
- B. 28
- C. 30
- D. 25**

111. If $5416x6$ is a perfect square, then the digit at 'x' is:

- A. 9**
- B. 4
- C. 5
- D. 6

112. A boy aged 12 years is left with Rs. 100,000 which is under a trust. The trustees invest the money at 6% per annum and pay the minor boy a sum of Rs. 2500, for his pocket money at the end of each year. The expenses of trust come out to be Rs. 500 per annum. Find the amount that will be handed over to the minor boy after he attains the age of 18 years.

- A. Rs. 150000
- B. Rs. 118000**
- C. Rs. 120000
- D. Rs. 125000

113. Let $AX \perp BC$ of an equilateral triangle ABC. Then the sum of the perpendicular distances of the sides of $\triangle ABC$ from any point inside the triangle is:

- A. Greater than AX
- B. Equal to AX**
- C. Equal to BC
- D. Less than AX

114. The average of all the odd integers between 2 and 22 is:

- A. 12**
- B. 13
- C. 11
- D. 14

115. AB is a diameter of a circle having centre at O. PQ is a chord which does not intersect AB. Join AP and BQ. If $\angle BAP = \angle ABQ$, then ABQP is a:

- A. cyclic rhombus
- B. cyclic square
- C. cyclic rectangle
- D. cyclic trapezium**

116. The least number that should be subtracted from the number 32146 to make it a perfect square is:

- A. 205
- B. 405
- C. 305
- D. 105**

117. The value of the expression.

$$\sin^2 1^\circ + \sin^2 11^\circ + \sin^2 21^\circ + \sin^2 31^\circ + \sin^2 41^\circ + \sin^2 45^\circ + \sin^2 49^\circ + \sin^2 59^\circ + \sin^2 69^\circ + \sin^2 79^\circ + \sin^2 89^\circ$$

- A. $4\frac{1}{2}$
- B. $5\frac{1}{2}$**
- C. 0
- D. 5

118. The sides of a triangle are in the ratio of 7:9:12. The difference between the lengths of largest and smallest sides is 15 cm. The length of the largest side would be:

- A. 60 cm
- B. 12 cm
- C. 36 cm**
- D. 24 cm

119. The average of 8 numbers is 21. If each of the numbers is multiplied by 8, the average of the new set of numbers is:

- A. 8
- B. 29
- C. 168**
- D. 21

120. The liquids, X and Y are mixed in the ratio of 3:2 and the mixture is sold at Rs. 11 per litre at a profit of 10%. If the liquid X costs Rs. 2 more per litre than Y, the cost of X per litre is (in Rs.):

- A. 10.80**
- B. 11.75
- C. 11
- D. 9.50

121. The value of $\frac{1}{1+\sqrt{2}+\sqrt{3}} + \frac{1}{1-\sqrt{2}+\sqrt{3}}$ is:

- A. $\sqrt{2}$
- B. $4(\sqrt{3} + \sqrt{2})$
- C. 1**
- D. $\sqrt{3}$

122. If $x = a(\sin\theta + \cos\theta)$ and $y = b(\sin\theta - \cos\theta)$, then the value of $\frac{x^2}{a^2} + \frac{y^2}{b^2}$ is:

- A. 1
- B. 4
- C. 3
- D. 2**

123. The marked price of a CD is Rs. 250. It is sold for Rs. 225. The rate of discount is:

- A. 10%**
- B. $11 \frac{1}{9}\%$
- C. 25%
- D. 2.5%

124. If $x+y=4$, $x^2+y^2=14$ and $x>y$. Then the correct value of x and y is:

- A. 3, 1
- B. $2+\sqrt{3}$, $2\sqrt{2}$
- C. $2+\sqrt{3}$, $2\sqrt{3}$**
- D. $2\sqrt{2}$, $\sqrt{3}$

125. Find out the wrong number in the sequence:
40960, 10240, 2560, 640, 200, 40, 10

- A. 640

- B. 40
- C. 200**
- D. 2560

126. If $x - x \frac{\tan^2 30^\circ}{1 + \tan^2 30^\circ} = \sin^2 30^\circ + 4 \cot^2 45^\circ - \sec^2 60^\circ$
Then value of x is:

- A) $\frac{1}{\sqrt{3}}$
- B) $\frac{1}{2}$
- C) $\frac{1}{4}$
- D) $\frac{1}{2}$**

127. The ratio of two numbers is 3 : 4 and their HCF is 15. Then the sum of the two numbers is:

- A. 110
- B. 105**
- C. 115
- D. 120

128. If the Cost Price of 25 chairs is equal to the Selling Price of 30 chairs, then the loss % is:

- A. 20%
- B. 25%
- C. 5%
- D. $16 \frac{2}{3}\%$

129. A motor boat covers a certain distance downstream in a river in 3 hours. It covers the same distance upstream in 3 hours and half. If the speed of the water is 1.5 km/h, then the speed of the boat in still water is:

- A. 19.5 km/h**
- B. 19 km/h
- C. 17.5 km/h
- D. 17 km/h

130. In ΔABC , the internal bisectors of $\angle B$ and $\angle C$ meet at point O. If $\angle A = 80^\circ$ then $\angle BOC$ is of:

- A. 140°
- B. 130°**
- C. 120°
- D. 100°

131. If $a^2+b^2+c^2=2(a-b-c)-3$, then the value of $a+b+c$ is:

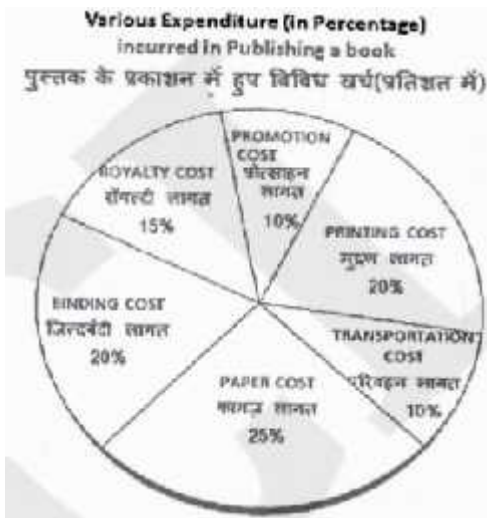
- A. -1
- B. 1
- C. 2
- D. -2

132. The centroid of an equilateral triangle ABC is G and $AB=10$ cm. The length of AG (in cm) is:

- A) $\frac{\sqrt{3}}{3}$
- B) $3\frac{1}{3}$
- C) $\frac{10}{\sqrt{3}}$
- D) $\frac{10\sqrt{3}}{3}$

Question Nos. 133 to 136

Direction : The following pie-chart shows the percentage distribution of the expenditure incurred in publishing a book. Read the pie-chart and answer the questions.



133. The central angle of the sector corresponding to the expenditure incurred on Royalty is:

- A. 15°
- B. 54°
- C. 24°
- D. 48°

134. Royalty on the book is less the printing cost by:

- A. $33\frac{1}{3}\%$
- B. 25%
- C. 5%
- D. 20%

135. If 5500 copies are published and the transportation cost on them amount to Rs. 82500, then the selling price of the book so that the publisher can earn a profit of 25% is:

- A. Rs. 175
- B. Rs. 187.50
- C. Rs. 191.50
- D. Rs. 180

136. If for a certain quantity of books, the publisher has to pay Rs. 30600 as printing cost, then the amount of royalty cost to be paid for these books is:

- A. Rs. 19450
- B. Rs. 22950
- C. Rs. 21200
- D. Rs. 26150

137. Mohan purchased a bag with 20 percent discount on the labelled price. He sold it with percent profit on the price he bought. The percentage of profit on the labelled price is:

- A. 18%
- B. 24%
- C. 12%
- D. 20%

138. The straight line $y = 3x$ must pass through the point:

- A. (0,1)
- B. (1,2)
- C. (0,0)
- D. (2,0)

139. If $\cos\theta + \sin\theta = m$ and $\sec\theta + \operatorname{cosec}\theta = n$ then the value of $n(m^2-1)$ is equal to:

- A. $4mn$
- B. $2m$
- C. $2n$
- D. mn

140. The average age of mother and her six children is 12 years, which is reduced by 5 years if the age of the mother is excluded. The age of mother (in-yrs) is:

- A. 42
- B. 48
- C. 40
- D. 50

141. The diameter of a 120 cm long roller is 84 cm. It takes 500 complete revolutions of the roller to level a ground. The cost of levelling the ground at Rs. 1.50 pr sq.m. is:

- A. Rs. 6000
- B. Rs. 3762
- C. Rs. 5750
- D. Rs. 2376

142. Mr. Dutta desired to deposited his retirement benefit of Rs. 3 lacs partly to a post office and partly to a bank at 10% and 6% interests respectively. If his monthly interest income was Rs. 2000, then the difference of his deposits in the post office and in the bank was:

- A. Nil
- B. Rs. 50,000
- C. Rs. 1,00,000
- D. Rs. 40,000

143. A shopkeeper fixes the price of an article at 30% higher then its actual cost. If he sells it at 10% discount on marked price then, the profit is:

- A. 20%
- B. 18%
- C. 17%
- D. 19%

144. In what proportions must water be added with milk to gain 20% by selling the mixture at cost price?

- A. 1:1
- B. 4:1
- C. 5:1
- D. 1:5

145. A mixture contains milk and water in the

ration 5:1. On adding 5 litres of water, the ration of milk and water becomes 5:2. the quantity of milk in the mixture is:

- A. 32.5 litres
- B. 16 litres
- C. 25 litres
- D. 22.75 litres

146. A train in 250m long. If the train takes 50 seconds to cross a tree by the railway line, then the speed of the train in km/hr is:

- A. 5
- B. 10
- C. 18
- D. 9

147. Volume of a right circular cylinder of height 21 cm and base radius 5 cm is:

- A. 1175 cm^3
- B. 1050 cm^3
- C. 1255 cm^3
- D. 1650 cm^3

148. The three successive angles of cyclic quadrilateral are in the ration 1:3:4, find the measure of the forth angle ?

- A. 36°
- B. 108°
- C. 30°
- D. 72

149. A right triangle with sides 9 cm, 12 cm and 15 cm is rotated about the side of 9 cm to form a cone. The volume of the cone so formed is:

- A. $327 \pi \text{ cm}^3$
- B. $334 \pi \text{ cm}^3$
- C. $330 \pi \text{ cm}^3$
- D. $324 \pi \text{ cm}^3$

150. If the radius of a sphere is increased by 2 cm, then its surface area increases by 352 cm^2 . The radius of the sphere initially was: (use $\pi = 22/7$)

- A. 5 cm
- B. 4 cm

C. 3 cm

D. 6 cm

Part IV: General Awareness

151. Arundhati Roy is the author of the book:

A. The Algebra of Infinite

B. The Rising Sun

C. Truth, love and a little

D. Half a life

152. The first Nobel Prize in Economics was awarded to:

A. Stiglitz

B. Jan Tinbergen and Ragnar Frisch

C. Amartya Sen

D. Paul A. Samuelson

153. The gas liberated in the Bhopal gas tragedy was:

A. Pheynl isocyanate

B. Methyl isocyanate

C. Acetylene

D. Ethylene

154. Which of the following is responsible for fostering the development of dance, drama and music in India?

A. National School of Drama

B. Sahitya Akademi

C. Lalit Kala Akademi

D. Sangeet Natak Akademi

155. Which of the following pairs of physical quantities have the same dimensions?

A. Work and Energy

B. Momentum and Power

C. Work and Power

D. Force and Power

156. Deen Dayal Antyodaya Yojana launched on September 25, 2014 is related to:

A. Poverty alleviation among SC/ST

B. Women empowerment

C. Skill development in rural and urban areas

D. Food security to old age rural people

157. The highest title in Judo is:

A. Black Belt

B. 10th Dan

C. 12th Dan

D. Yellow Belt

158. Chile saltpeter is the common name of:

A. Sodium nitrate

B. Potassium nitrite

C. Potassium nitrate

D. Sodium nitrite

159. VAT is imposed:

A. On first stage of production

B. Directly on Consumer

C. On final stage of production

D. On all stages between production and sale

160. Approximate number of skeletal muscles:

A. 700

B. 500

C. 200

D. 206

161. Arboriculture is the study of:

A. Science of plant life

B. Art of garden cultivation

C. Art of growing crops

D. Cultivation of trees and vegetables

162. Who is called as the "Prince of Moneyers"?

A. Babar

B. Mohammad-Bin-Thuglaq

C. Akbar

D. Ibrahim Lodhi

163. A cycle tyre bursts suddenly. This represents an:

A. Isothermal process

B. Isobaric process

C. Isochoric process

D. Adiabatic process

164. Organic food is supposed to be better for human consumption because:

A. It is grown without the use of chemicals & synthetic pesticides.

- B. It is too expensive to buy.
- C. It depends on chemicals & fertilizers.
- D. It is grown in glass house & air tight environment.

165. Network of a series of vertical and horizontal lines constructed perpendicular to each other is known as:

- A. Latitudes
- B. Geographic coordinates
- C. Grid system**
- D. Longitude

166. Who translated 'Mahabharata' into Persian?

- A. Badauni**
- B. Babar
- C. Ibn-Batuta
- D. Abut Fazal

167. Unit of resistance is:

- A. volt x ampere
- B. volt² x ampere
- C. ampere / volt
- D. volt / ampere**

168. Araneology is the study of:

- A. Study of aphids
- B. Rearing of bees
- C. Study of mites
- D. Study of spiders**

169. The Nobel Peace Prize for 2014 has been awarded to:

- A. Kailash Satyarthi and Tawakkul Karman
- B. Barack Obama
- C. Kailash Satyarthi and Malala Yousafzai**
- D. Kailash Satyarthi

170. Commercially valued cork is obtained from:

- A. Quercus sp.**
- B. Cycas
- C. Ficus
- D. Cedrus Deodara

171. The Ozone layer protects us from:

- A. Visible rays
- B. Cosmic rays
- C. Infrared ray
- D. Ultra-Violet rays**

172. Blue Revolution is related to:

- A. Fisheries**
- B. Space research
- C. Poultry
- D. Drinking water

173. The term Ecosystem was proposed by:

- A. Thienemann
- B. Vemadsky
- C. A.G. Tansley**
- D. S.A. Forbes

174. Which of the Kushana ruler patronised Buddhism?

- A. Kautilya
- B. Kanishka**
- C. Vikramaditya
- D. Ashoka

175. Who is popularly known as the Grand Old Man of India?

- A. Madan Mohan Malaviya
- B. Mahadeva Govinda
- C. Surendranath Banerjee
- D. Dadabhai Naoroji**

176. Which of the following states having longest coastline in India?

- A. Andhra Pradesh
- B. Tamil Nadu
- C. Maharashtra
- D. Gujarat**

177. The strongest oxidizing agent among the

following is:

- A. Chlorine
- B. Fluorine**
- C. Iodine
- D. Oxygen

178. Origin of Life by 'Natural Selection' is a book written by:

- A. Charles Dickens
- B. Lamarck
- C. Charles Darwin**
- D. Hugo de Veris

179. Which of the following states is known as the traditional region for Tank Irrigation?

- A. Gujrat
- B. Tamil Nadu**
- C. Assam
- D. Orrisa

180. What do you understand by the term 'Dark Fermentation'?

- A. It is a method to dispose nuclear wastes
- B. It is a method to reduce COD in the atmosphere.
- C. It is a method to produce Hydrogen as a fuel from**
- D. It is a method to produce methane from organic

181. The term "United Nations" was coined by:

- A. Stalin
- B. Churchill
- C. Len
- D. Roosevelt**

182. Which of the following species are critically endangered?

- A. White bellied heron
- B. Gangetic Dolphin
- C. The gyys Vulture
- D. Forest owlet**

183. In our country the Van Mahotsava day is celebrated on:

- A. 1st Dec
- B. 10th Aug
- C. 5th Oct
- D. 1st July**

184. Who built 'Adhai Din Ka Jhopra' or 'A hut of two and a half days' at Ajmer?

- A. Alauddin Khalji
- B. Muhammad- bin- Tughlaq
- C. Qutbuddin Aibak**
- D. Balban

185. Which Brigadier was associated with Jallianwala Bagh tragedy?

- A. Arthur Wellesly
- B. General Harris
- C. Colonel Wellesly
- D. General Dyer**

186. The "Recall Provision" to remove the elected office bearers from the local Self Government institution has been executed in:

- A. Haryana
- B. Bihar
- C. Madhya Pradesh**
- D. Kerala

187. Scurvey is caused by:

- A. Vitamin 'A'
- B. Vitamin 'D'
- C. Vitamin 'B'
- D. Vitamin 'C'**

188. IMF stands for:

- A. International Monetary Function
- B. International Monetary Fund**
- C. Indian Manufacturing Firm
- D. Interest Minimum Function

189. The oath of office is administered to the Governor by the:

- A. Chief Justice of High Court**
- B. Speaker of Legislative
- C. President
- D. Chief Justice of India

190. Venturimeter is used to measure:

- A. surface tension
- B. liquid pressure
- C. rate of flow of liquids
- D. liquid density

191. Breaking physical memory into fixed-sized blocks called as:

- A. Packets
- B. Frames
- C. Page
- D. Segments

192. Which of the following was the early capital of the Rashtrakutas?

- A. Ellora
- B. Sopara
- C. Vatapi
- D. Ajanta

193. What is the superannuation period of Chief Justice of Supreme Court?

- A. 65 years
- B. 66 years
- C. 60 years
- D. 62 years

194. Which law states that with constant taste and preferences, the proportion of income spend on food stuff diminishes as income increases?

- A. Engel's Law
- B. Say's Law
- C. Griffin's Law
- D. Gresham's Law

195. Which type of switching is used in Internet?

- A. Packet
- B. Telephone
- C. Telex
- D. Circuit

196. Gas engine was invented by:

- A. Diesel
- B. Daimler
- C. Davy
- D. Charles

197. BOD stands for

- A. Biotic oxidation demand
- B. Biochemical oxygen
- C. Biological oxygen demand
- D. Biological oxidation

198. The main component of liquid bleach is:

- A. Sodium hypochlorite
- B. Hydrochloric acid
- C. Sodium hypochlorate
- D. Sodium Chloride

199. International Women's Day is observed on:

- A. 3rd March
- B. 15th October
- C. 8th March
- D. 27th January

200. Planimeter is used to measure:

- A. Road Distance
- B. Directions
- C. Height of a region
- D. Areas