## Part-1: General Intelligence

1. Arrange the following words as per their order in Dictionary
2. Cinnabar, 2. Cinder, 3. Cinema, 4.

Cinnamon, 5 Cinchoina
A. $2,3,5,4,1$
B. $5,2,3,1,4$
C. $5,2,1,4,3$
D. $4,1,5,2,3$

## Question Nos. 2 to 6

A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.
2. $3,5,9,15,23,33,45,59$,?
A. 75
B. 81
C. 60
D. 72
3. OTE, PUF, QVG, RWH, ?
A. SXJ
B. SXI
C. TXI
D. SYJ
4. $7,18,40,73,117, ?$
A. 150
B. 161
C. 172
D. 183
5. AFKPU, BGLQV, CHMRW, ??
A. KLMNQ
B. VQLGB
C. DINSX
D. UVWXY
6. $16,61,25,52,36,45$ ?
B. 36
C. 94
D. 46
7. If $246=8,624=0$ and $327=6$ then $423=$ ?
A. 10
B. 8
C. 1
D. 9
8. In a certain code MISCHIEF is written as NKVGMOLN, then how is RELIEVED written in that code?
A. SEQIJVLD
B. SGOMJVED
C. SFMJFWFE
D. SGOMJBLL
9. From the given answer figures, select the one in which the question figure is hidden/embedded.

10. Sitara walk 45 metres in North-West from her uncle's house. There she met her friend and they walked 45 metres in SouthWest direction. Then they walk 45 metres in South0East direction and turned to uncle's house. Now in which direction they are going?
A. North-East
B. North-West
C. South-East
D. South-West
A. 72
11. In certain code PEN is coded as 123 , PENCIL as 123456, CABLE as 48962, then 6283123456 means what?
A. LANPENCIL
B. LAENPENCIL
C. LEANPNCLI
D. LEANPENCIL

Question Nos. 12 to 20
Direction: Find the odd word / number / letters / number pair from the given alternatives.
12.
A. 7689
B. 6578
C. 4367
D. 3245
13.
A. BSNL
B. RIM
C. NOKIA
D. MTS
14.
A. $54: 17$
B. $81: 9$
C. $42: 2$
D. $24: 6$
15.
A. 15:120
B. 13:117
C. $16: 128$
D. 12:96
16.
A. KNXY
B. CNPT
C. DKRW
D. FBJL
17.
A. Gear
B. Engine
C. Fuel
D. Horn
18.
A. Helicopter
B. Rocket
C. Aero plane
D. Sub-marine
19.
A. LPuB
B. UXeN
C. DkUZ
D. FoMY
20.
A. IK
B. PN
C. BD
D. SU

## Question Nos. 21 to 29

Direction: Select the related word / letters / number from the given alternatives.
$21.49: 343$ :: 64:?
A. 486
B. 634
C. 514
D. 512
22. School : Teacher :: Bank :?
A. Cashier
B. Peon
C. Manager
D. Banker
23. QPOR : XWVY : LKJM : ?
A. CBAD
B. SRTU
C. DEGF
D. FHGI
24. Patient : Fowler Bed :: ?
A. Neclace : Adornment
B. Certificate : Merit
C. Baby : Cradle
D. Trophy : Achievement
25. Exercise : Gym :: Eating : ?
A. Fitness
B. Food
C. Dieting
D. Restaurant
26. 7 : 42 :: 8 :?
A. 50
B. 57
C. 49
D. 48
27. VVXY : RRTU :: FFHI : ?
A. CCDF
B. XXYB
C. UUVZ
D. SSUV
28. 7 : 77 :: ?
A. 11:143
B. $8: 64$
C. 3:81
D. 6:24
29. JKPO : LMNM :: ? PQJI
A. NOKL
B. KOLN
C. NOLK
D.LKNO

Question Nos. 30 to 31

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

## 30. METAPHYSICS

A. HEATS
B. PESTS
C. SEEMS
D. TEAMS
31. RAILWAYSTATION
A. STAIR
B. OSTITIS
C. STORY
D. NOTARY
32. 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 matrix given below. The columns and rows of Matrix 1 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., 'A' can be represented by 03, 12 etc., and ' N ' can be represented by 56,65 etc.
Similarly, you have to identify the set for the word 'DRAW'.


| $\begin{aligned} & \text { MATRIX - II } \\ & \text { आव्यूह -II } \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 6 | 7 | 8 | 9 |
| 5 | W | N | R | M | L |
| 6. | N | R | M | L | W |
| 7 | R | M | L | W | N |
| 8 | M | L | W | N | R |
| 9 | L | W | N | R | M |

A. $23,57,30,68$
B. $32,75,44,76$
C. $14,89,12,78$
D. $41,66,23,55$
33. If two days back it was $9^{\text {th }}$ November 2014 and it was a Sunday, then tomorrow will be?
A. $13^{\text {th }}$ November 2014, Wednesday
B. 2
B. $12^{\text {th }}$ November 2014, Wednesday
C. 3
C. $12^{\text {th }}$ November 2014, Tuesday
D. 5
D. $12^{\text {th }}$ November 2014, Thursday

## Question Nos. 34 to 37

Direction: A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.
34.

A. 22
B. 14
C. 320
D. 32
35.

A. 35
A. $2,4,3,1$
B. $1,2,3,4$
C. $1,3,2,4$
D. $2,1,4,3$
40. Which answer figure will complete the pattern in the question figure?

41. If the given interchanges are made in signs and numbers, which one of the following equation is true?
(Signs: $\div$ and + , Number : 6 and 5)
A) $18+6 \div 5=9.6$
B) $5 \div 6+80=5.8$
c) $90+5 \div 6=8.6$
D) $26 \div 5+6=6.4$
42. Q walked 20 m towards West, took a left turn and walked 20 m . He then took a right turn and walked 20 m and again took a right turn and walked 20 m . How far is $Q$ now form the starting point?
A. 50 m
B. 120 m
C. 40 m
D. 80 m
43. Identify the answer figure form which the pieces given in the question figure have been cut.


## Question Nos. 44 to 45

Direction: One/Two statements is/are given each followed by tow assumption, I and II. You have to consider the statement to be true even if they seem to be at variance form commonly known facts. You have to decide which of the given assumptions, if any, follows form the given statements.
44. Statement: "There is very heavy traffic on the road between 5-7 p.m. We need to have a flyover in this area." A planning engineer said in a meeting.

Assumption:
I-Heavy traffic should be regulated.
II-Previous planning engineer did not do much about heavy traffic.
A. Only Assumption II is implicit.
B. Both I and II are implicit.
C. Only Assumption I is implicit
D. Neither I and II are implicit.
45. Statement: The impact of economic sanction on economy, that is already so weak could be devastating.

Assumption:
I-Economics sanctions impact only a weak economy.
II-The impact of economic sanctions varies form economy to economy.
A. Neither I nor II are implicit.
B. Both I and II are implicit
C. Only II is implicit
D. Only I is implicit
46. 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.

50. Prema has a son named Anand. Rajiv is Prema's brother. Neha has a daughter named Rashmi. Neha is Rajiv's sister. What is Anand's relationship to Rashmi.
A. Cousin
B. Brother-in-law
C. Nephew
D. Uncle
47. Find water image of:

48. On arranging Atomic age, Metallic Age, Stone Age, Alloy Age is a meaningful order (starting from the earliest) which would appear in the $3^{\text {rd }}$ position?
A. Atomic Age
B. Metallic Age
C. Alloy Age
D. Stone Age
49. Which one of the following diagrams best depicts the relationship among:

Plant, Animal, Deer


## Part - II : English Language

## Question Nos. 51 to 52

Direction: A sentence has been given in Direct/Indirect. Out of the four alternatives suggested, select the one which best express the same sentence in Indirect/Direct and mark your answer in the Answer Sheet.
51. The teacher said, "The Earth moves round the sun."
A. The teacher asked that the Earth moves round the sun.
B. The teacher said that the Earth moves round the sun.
C. The teacher told that the Earth has moved round the sun.
D. The teacher told that the Earth moved round the sun.
52. Ashok said to me, "Your parents are waiting for you".

## A. Ashok told me that may parents were waiting for me.

B. Ashok told me that is parents are waiting for him.
C. Ashok told me that his parents were waiting for him.
D. Ashok told to me that my parents were waiting for me.

## Question No. 53 to 56

Directions: Sentences 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.
53. All of us are devoted $\qquad$ one another.

## A. at

B. of
C. to
D. for
54. $\qquad$ is the way to the zoo?
A. what
B. which
C. where
D. when
55. This area suffers from $\qquad$ .
A. droaghts
B. drafts
C. draughts
D. drought
56. He agreed $\qquad$ my business proposal.
A. on
B. to
C. at
D. for

## Question Nos. 57 to 58

Directions : A sentence has been given in Active/Passive voice. Out of the four alternatives suggested, select the one which best express the same sentence in Passive/Active voice and mark your answer in the Answer Sheet.
57. Has he completed the assignments?
A. Has the assignments being completed by him?
B. Have the assignments completed by him?
C. Has the assignments been completed by him?
D. Have the assignments been completed by him?
58. People say that he is a spy.
A. It is said that he is a spy.
B. A spy that he is said the people.
C. It has been said by the people that he is a spy.
D. He is spy was said by people.

## Question Nos 59 to 62

Directions: 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.
59. A person who steals the writing of others.
A. nepotism
B. popular
C. plagiarist
D. Plagiarism
60. One who compiles a dictionary.
A. lexicography
B. Iexicon
C. lexicographer
D. lexical
61. Someone not fit to be chosen.
A. uneligible
B. non-eligible
C. ineligible
D. imeligible
62. Animals living in water.
A. mammals
B. gregarious
C. aquatic
D. amphibian

## Question Nos. 63 to 66

Directions : The $1^{\text {st }}$ 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 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.

## 63. 1. Right from

P have been used as a measure of time
$Q$ prehistoric times
R and have formed the basis of
$S$ the phases of the moon
6. the earliest calendar.
A. PRSQ
B. QSPR
C. SRQP
D. QRSP
64. 1. In recent years
$P$ primarily because purchasing
$Q$ has grown more intense
R price competition in most industries
$S$ managers now exert much influence
6. over suppliers
A. RQPS
B. SPRQ
C. SRPQ
D. RSPQ
65. 1. Without water

P and consequently
Q the oxygen content in the atmosphere
$R$ which carry out photosynthesis and release oxygen
S there would be no animals or plants
6. would go down.
A. PRQS
B. SPRQ
C. SPQR
D. SRPQ
66. 1. The internet is

P a world wide network
Q that should not be
R regulated or censored
$S$ by any one country
6 . howsoever strong the temptation

## A. PQRS

B. PRSQ
C. PSQR
D. PRQS

## Question Nos 67 to 70

Directions: Choose the word opposite in meaning to the given word and mark it in the Answer Sheet.
67. Flawless
A. Sick
B. Seconds
C. Deficient
D. Defective
68. Obscure
A. Enigma
B. Distinguish
C. Distinct
D. Vague
69. Enduing
A. Transient
B. Unwavering
C. Abiding
D. Transitory
70. Grieve
A. Rejoice
B. Agony
C. Sadness
D. Moam

Question Nos 71 to 80
Directions: 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.

## Passage

If you _I to be free from all physical aches and pains, and enjoy perfect
physical harmony, then put your mind in order and II your thoughts. Think joyful thoughts; think loving thoughts' Let the III of goodwill IV though your veins, and you will need no other medicine. $\vee$ your jealousies, your suspicious, and you will put away your indigestion, your sickness, your VI and VII , If you will VIII clinging to these IX and demoralizing habits of minds, then do not complain when your body is $X$ sickness.
71.
A. (I) will
B. (I) can
C. (I) would
D. (I) want
72.
A. (II) regulate
B. (II) harmonize
C. (II) co-ordinate
D. (II) regularize
73.
A. (III) sweetness
B. (III) potion
C. (III) elixir
D. (III) generosity
74.
A. (IV) run
B. (IV) race
C. (IV) gather
D. (IV) course
75.
A. (V) cast away
B. (V) ignore
C. (V) throw off
D. (V) discard
76.
A. (VI) confidence
A. Income
B. (VI) happiness
B. Regain
C. (VI) nervousness
C. Return
D. (VI) worries
D. Disaster

## 77.

A. (VII) joy
B. (VII) painting
C. (VII) mercy
D. (VII) despair
78.
A. (VIII) care to
B. (VIII) persisting
C. (VIII) continue to
D. (VIII) indulge in
79.
A. (IX) good
B. (IX) unhealthy
C. (IX) worse
D. (IX) unruly
80.
A. (X) laid up with
B. $(X)$ laid low with
C. (X) lying with
D. $(X)$ affected to
83. Accuracy
A. Precision
B. Cleverness
C. Agreement
D. Attachment
84. Consort
A. Convoy
B. Guide
C. Protect
D. Partner

## Question Nos. 85 to 88

Directions: Four alternative 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.
85. My brother puts by a little money every month.
A. saves
B. gives away
C. loses
D. spends carefully
86. Ramah was on cloud nine when she heard that she had won the lottery.
A. shocked
B. frustrated
C. confused
D. very happy
87. To call in a day
A. the day was marvellous
B. give the day a name
C. decide to finish working
D. put off work for another day
88. I was in two minds whether to buy a new television or a nre computer.
A. to be firm
B. to be undecided
C. to take two decisions
D. to lose one's mind

## Question Nos. 89 to 92

Directions : Four words are given in each question, out of which only one word is correctly spelt. Find the correctly spelt word and mark our answer in the Answer Sheet.
89.
A. Revarberation
B. Riverberation
C. Revirberation
D. Reverberation
90.
A. Advertice
B. Advertise
C. Advertise
D. Adverties
91.
A. Remarkabel
B. Remarkebel
C. Remarkeble
D. Remarkable
92.
A. Preference
B. Prefference
C. Preferennce
D. Preferrence

## Question Nos. 93 to 96

Directions: A sentence / a part of the sentence is underlined. Below are given alternative to the underline part which may
improve the sentence. Choose the correct alternative. In case no improvement is needed choose "No Improvement".
93. How many country are there in Europe?
A. countries are there in
B. countries are there in
C. No improvement
D. country are there on
94. We stayed in Mumbai in five days.
A. at
B. with
C. for
D. No improvement
95. The Sutlej has changed its path.
A. journey
B. No improvement
C. line
D. course
96. The medicine must be take by you.
A. No improvement
B. takes
C. taken
D. taking

## Question Nos. 97 to 100

Directions: Some parts of the sentences have errors and some are correct. Find out which part of a 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.
97. Electronic mail or E-mail are a method of exchanging digital messages.
A. Electronic mail or E-mail
B. No error
C. digital messages
D. are a method of exchanging
98. My wife, having finish her work rushed to meet me at the event.
A. at the event
B. No error
C. My wife, having finish her work
D. rushed to meet me
99. You must abide on the terms of this government.
A. this government
B. the terms of
C. No error
D. You must abide on
100. I will have both the blue or the black pen.
A. I will have
B. or the black pen
C. both the blue
D. No error

## Part - III : Quantitative Aptitude

101. If $a^{2}+b^{2}+c^{2}-a b-b c-c a=0$ then $a$ : $b$ : c is:
A. $2: 1: 1$
B. 1:1:2
C. $1: 2: 1$
D. $1: 1: 1$
102. The area of a circle whose radius is the diagonal of a square whose area is 4 is:
A. $8 \Pi$
B. $6 \Pi$
C. $4 \Pi$
D. $16 \Pi$
103. Out of 10 teachers of a school, one teacher retires and in place of him a new teacher 25 yrs. Old joins. As a result of it average age of the teachers by 3 yrs . Age of the retired teacher (in yrs.) is:
A. 58
B. 60
C. 55
D. 56
104. A hemi-spherical bowl has 3.5 cm radius. It is to be painted inside as well as outside. The cost of painting it at the rate of Rs. 5 per 10 sq.cm will be:

## A. Rs. 77

B. Rs. 100
C. Rs. 50
D. Rs. 175
105. Six numbers are arranged in decreasing order. The average of the first five numbers is 30 and the average of the last five numbers is 25 . The differences of the first and the last numbers is:
A. 5
B. 20
C. 25
D. 30
106. The radius of base and curved surface area of a right cylinder is 'r' units and 4 Пrh square units respectively. The height of the cylinder is:
A. h units
B. $\mathrm{h} / 2$ units
C. $2 h$ units
D. 4h units
107) If $\frac{x+1}{x}=\underline{a}$ and $\underline{1-y}=\underline{b}$, then the value of $x-1 \quad b \quad 1+y \quad a$
$x-y$ is:
$1+x y$
यदि $\frac{x+1}{x-1}=\frac{a}{b}$ और $\frac{1-y}{1+y}=\frac{b}{a}$, तो
$x-y$ का मान क्या होगा?
$1+x y$
A) $\frac{a^{2}-b^{2}}{2 a b}$
B) $\frac{a^{2}+b^{2}}{2 a b}$
C) $\frac{2 a b}{a^{2}-b^{2}}$
D) $\frac{a^{2}-b^{2}}{a b}$
108. The amount on Rs. 25000 in 2 years at annually compound interest, if the rates for the successive years be $4 \%$ and $5 \%$ per annum respectively is:
A. Rs. 27300
B. Rs. 28500
C. Rs. 26800
D. Rs. 30000
109. If $a^{2}+a+1=0$, then the value of $a^{5}+$ $a^{4}+1$ is:
A. $a^{2}$
B. 0
C. 1
D. $a+1$
110. A rectangular carpet has an area of $120 \mathrm{~m}^{2}$ and a perimeter of 46 metre. The length of its diagonal is:

## D. 1:5

A. 13 metre
B. 23 metre
C. 17 metre
D. 21 metre
111. An article is sold at a profit of $25 \%$. If the selling price is doubled, the profit will be:
A. $50 \%$
B. $200 \%$
C. $150 \%$
D. $100 \%$
112.

ABCD is a cyclic trapezium whose sides AD and BC are parallel to each other; if $\angle \mathrm{ABC}=75^{\circ}$, then the measure of $\angle \mathrm{BCD}$ is:
A. $75^{\circ}$
B. $45^{\circ}$
C. $105^{\circ}$
D. $95^{\circ}$
113. $E$ is the mid-point of the median $A D$ of $\triangle A B C, B E$ is joined and produced to meet $A C$ at $F$. $F$ divides $A C$ in the ratio:
A. $1: 3$
B. $2: 1$
C. $2: 3$
D. $3: 2$
114. If $\sqrt{ } 7=2.646$, then the value of $1 / \sqrt{ } 28$ up to three places of decimal is:
A. 0.185
B. 0.187
C. 0.189
D. 0.183
115. A milkman mixed the water with milk to gain $25 \%$ by selling the mixture at cost price. The ratio of water and milk is:
A. $4: 5$
B. $1: 4$
C. $5: 4$
116. In $\triangle A B C$, the external bisectors of the angles $\Delta \mathrm{B}$ and $\Delta \mathrm{C}$ meet at the point O . If $\Delta A=70^{\circ}$, the the measure of $\triangle B O C$ is:
A. $50^{\circ}$
B. $75^{\circ}$
C. $60^{\circ}$
D. $55^{\circ}$

## Question Nos. 117 to 121

Directions: Study the bar char \& answer the Questions.

Income and Expenditure (in Crore Rs.) in 2001 of five companies

117. The company earning the maximum percentage of profit in the year 2001 is:
A. M
B. P
C. $N$
D. Q
118. For company R, if the expenditure had increased by 20\% in the year 2001 from the year 2000 and the company had earned profit of $10 \%$ in 2000, the company's income in 2000 was? (in crore)
A. 37.25
B. 41.67
C. 38.5
D. 35.75
119. If the income of company $Q$ in 2001 was $10 \%$ more than 2000 and the company had earned a profit of $20 \%$ in 2000, then its expenditure in 2000 (in crores) was:
A. 28.28
B. 32.32
C. 29.09
D. 34.34
120. The companies $M$ and $N$ together had a percentage of profit/loss of:
A. $10 \%$ loss
B. $10 \%$ profit
C. $12 \%$ loss
D. No loss and No profit
121. In 2001, the approximate percentage of profit/loss of all the five companies taken together is equal to:
A. $4 \%$ loss
B. $6.48 \%$ profit
C. $6.88 \%$ loss
D. $4.65 \%$ profit
122. The ratios of circumference and diameter of a circle is $22: 7$. If the circumference be $14 / 7 \mathrm{~m}$, then the radius of the circle is:
A. 1 m
B. $1 / 4 \mathrm{~m}$
C. $1 / 2 \mathrm{~m}$
D. $1 / 3 \mathrm{~m}$
123. The angle of depression of a point situated at a distance of 70 m from the base of a lower is $60^{\circ}$. The height of the tower is:

124. If $x+y+z=6$ and $x y+y z+z x=10$, the value of $x^{3}+y^{3}+z^{3}-3 x y z$ is:
A. 40
B. 36
C. 42
D. 48
125. A man bought some eggs of which $10 \%$ are rotten. He gives $80 \%$ of the remainder to his neighbours. Now he is left out with 36 eggs. How many eggs he bought?
A. 72
B. 40
C. 200
D. 100
126. If $4 \sin ^{2} \Theta-1=0$ and angle $\Theta$ is less than $90^{\circ}$. The value of $\cos ^{2} \Theta+\tan ^{2} \Theta$ is:
(Take $0^{\circ}<\Theta<90^{\circ}$ )
A) 11
B) $\frac{12}{11}$
C) 17
15
D) $\frac{13}{12}$

## Question Nos. 127 to 130

Directions: Study the Pie chart carefully and answer the questions.

127. Ratio of members of cricket club only and foot ball club only is;
A. 3 : 1
B. 2 : 1
C. 1:2
D. $1: 3$
128. Number of students who are members of cricket club only?
A. 41
B. 40
C. 35
D. 42
129. Percentage of students who are not members of any club is:
A. $10 \%$
B. $5 \%$
C. 8

D, 6\%
130. Number of students who are members of both the club is:
A. 500
B. 650
C. 600
D. 550
131. A train passed two bridges of lengths 500 m and 250 m in 100 seconds and 60 seconds respectively. The length of the train is:
A. 152 m
B. 125 m
C. 120 m
D. 250 m
132. The exponential form of $\sqrt{ }(\sqrt{2} \times \sqrt{ } 3)$ is:
A. $6^{-1 / 2}$
B. $6^{1 / 4}$
C. $6^{1 / 2}$
D. 6
133. The sum of two numbers is 75 and their difference is 25 . The product of the two numbers is:
A. 1000
B. 125
C. 1350
D. 1250
134. If the angle of elevation of the sun changes from $45^{\circ}$ to $60^{\circ}$ then the length of the shadow of a pillar decreases by 10 m . The height of the pillar is:
A. $15(\sqrt{ } 3+1) \mathrm{m}$
B. $5(\sqrt{3}+1) \mathrm{m}$
C. $5(3+\sqrt{ } 3) \mathrm{m}$
D. $5(3-\sqrt{ } 3) \mathrm{m}$
135. A single discount equivalent to the series of discounts $20 \%, 10 \%$ and $5 \%$ is equal to:
A. $32 \%$
B. $31.6 \%$
C. $30.7 \%$
D. $30 \%$
136. The distance between the centres of two circles of radii 6 cm and 3 cm is 15 cm . The length of the transverse common tangent to the circle is:
A. $6 \sqrt{6} \mathrm{~cm}$
B. 12 cm
C. $7 \sqrt{ } 6 \mathrm{~cm}$
D. 18 cm
137. If $0^{\circ}<\Theta<90^{\circ}$ and $\operatorname{cosec} \Theta=\cot ^{2} \Theta$ then the value of the expression $\operatorname{cosec}^{4} \Theta-$ $2 \operatorname{cosec}^{3} \Theta+\cot ^{2} \Theta$ is equal to:
A. 2
B. 1
C. 3
D. 0
138. A, B and C can complete a work in 10, 12 and 15 days respectively. A left the work

5 days before the work was completed and $B$ left 2 days after A had left. Number of days required to complete the whole work was:

| A) $8 \frac{2}{3}$ |
| :--- |
| c) 7 |

B) 6

| A) $8 \frac{2}{3}$ |
| :--- |
| c) 7 |

D) $6 \frac{2}{3}$
139. The total surface area of right circular cylinder with radius of the base 7 cm and height 20 cm is:
A. $1000 \mathrm{~cm}^{2}$
B. $1188 \mathrm{~cm}^{2}$
C. $140 \mathrm{~cm}^{2}$
D. $900 \mathrm{~cm}^{2}$
${ }^{140)}$ If.
$x-\frac{1}{x}=2$,
then the value of the following is:
$\mathrm{x}^{3}-\frac{1}{\mathrm{x}^{3}}=$ ?
A. 14
B. 2
C. 11
D. 15
141. 20 litres of a mixture contains milk and water in the ratio $3: 1$. Then the amount of milk to be added to the mixture so as to have milk and water in the ratio $4: 1$ is:
A. 7 litres
B. 6 litres
C. 4 litres
D. 5 litres
142. The marked price is $10 \%$ higher than the cost price. A discount of $10 \%$ is given on the marked price. In this kind of sale, the seller -
A. bears no loss, no gain
B. 3
A. 72
B. 18
C. 36
B. loses 1\%
C. gains $1 \%$
D. gain $2 \%$
143. State electricity board gives $15 \%$ discount on electric bills if it is paid before due date. One person gets Rs. 54 discount. The amount of actual bill was:
A. Rs. 360
B. Rs. 362
C. Rs. 361
D. Rs. 359
144. $X$ can do a piece of work in 24 days. When he had worked for 4 days, $Y$ joined him. If complete work was finished in 16 days, $Y$ can alone finish that work in:
A. 36 days
B. 18 days
C. 27 days
D. 42 days
145. The sum of money which when given on compound interest at $18 \%$ per annum would fetch Rs. 960 more when the interest is payable half yearly than when it was payable annually for years is:
A. Rs. 60000
B. Rs. 50000
C. Rs. 40000
D. Rs. 30000
146. A car goes 20 metres in a second. Find its speed in Km/hr.
D. 20
147. The sum of two numbers is 37 and the difference of their squares is 185 , then the difference of the two numbers is:
A. 10
C. 4
D. 5
148) The value of the following is:

$$
\left(2-\frac{1}{3}\right)\left(2-\frac{3}{5}\right)\left(2-\frac{5}{7}\right) \cdots-\cdots\left(2-\frac{997}{999}\right)
$$

A) $\frac{1001}{000}$
B) $\frac{5}{999}$
C) 1001
D) $\frac{1001}{5}$
149. The ratio of the length of a rod and its shadow is $1: \sqrt{ } 3$. The angle of elevation of the sum is:
A. $90^{\circ}$
B. $30^{\circ}$
C. $45^{\circ}$
D. $60^{\circ}$
150. If bananas are bought at the rate of 4 for a rupee, how many must be sold for a rupee so as to gain $331 / 3 \%$.
A. 2
B. 2.5
C. 4
D. 3

## Part - IV. General Awareness

151. The capital of Rawanda is:
A. Bogota
B. Kigali
C. Copenhagen
D. Libreville
152. The fastest, costlier and relatively small form of storage managed by computer system hardware is:
A. Flash Memory
B. Main Memory
C. Disk
D. Cache
153. The disease which has been eradicated?

## A. Small pox

B. Chicken pox
C. Mumps
D. Measles
154. Which bank is limited to the needs of agriculture and rural finance?
A. SBI
B. NABARD
C. IFC
D. RBI
155. Richter scale is used for measuring:
A. Intensity of earthquake
B. Velocity of wind
C. Humidity of air
D. Density of liquid
156. Which of these travels in glass with minimum velocity?
A. Violet light
B. Yellow light
C. Green light
D. Red light
157. J.B. Say's Law of Market was not accepted by:
A. Marshall
B. Malthus
C. David Ricardo
D. Adam Smith
158. To conserve coral reefs the Govt. of India declared one of the following as Marine Park:
A. Gulf of Kutch
B. Gulf of Mannar
C. Andaman Islands
D. Lakshadweep Islands
159. The deficiency of vitamin A causes?
A. Night blindness
B. Beri-beri
C. Rickets
D. Pellagra
160. 'Madhu bani' a style of folk paintings is popular in which of the following states in India?
A. Madhya Pradesh
B. Uttar Pradesh
C. West Bengal
D. Bihar
161. Which of the following is one of the characteristics of civil services th India?
A. Neutarality and Impartiality
B. Partisan
C. Temporary Political Executive nexus
D. All of the given options
162. The abbreviation LHC stands for which machine?
A. Light Heat Collider
B. Large Hardron Collider
C. Large High Collider
D. Long Heavy Collider
163. How many organs are there in
U.N.O.?
A. 06
B. 04
C. 05
D. 03
164. World Human Rights Day is observed on:
A. Dec. 10
B. Dec. 7
C. Sep. 5
D. April 8
165. Indian Economy is a:
A. Capitalist Economy
B. Mixed Economy
C. Independent Economy
D. Communist Economy
166. USB is $\qquad$ Type of strorage device:
A. Secondary
B. Primary
C. Auxillary
D. Tertiary
167. Atoms having the same number of protons but different number of neutrons are called:
A. Anions
B. Higgs-boson
C. Isotops
D. Cations
168. The name of the Laccadive, Minicoy and Amindivi islands was changed to Lakshadweep by an act of Parliamcnt in-
A. 1970
B. 1972
C. 1973
D. 1971
169. Air is said to be saturated when:
A. its pressure is minimum
B. its thickness is maximum
C. it blows over the barren
D. it contains maximum of water vapour
170. Who was the first Vijayanagar ruler to wrest the important fort of Goa from the Bahamanis?
A. Hari hara I
B. Reva Raya II
C. Bukka I
D. Hari hara II
171. Which of the following monuments is the oldest?
A. Qutab Minar
B. Khajuraho
C. Taj Mahal
D. Ajanta Caves
172. Which amendment of the constitution lowered the voting age from 21 years to 18 years?
A. $64^{\text {th }}$ Amendment
B. $60^{\text {th }}$ Amendment
C. $63^{\text {rd }}$ Amendment
D. $61^{\text {st }}$ Amendment
173. Who was Akbar's guardian?
A. Baiiram Khan
b. Tansen
C. Amir Khusru
D. Abdul Fazl
174. Excretion in Hemichordates takes place by:
A. Glomerulus
B. Mesonephron
C. Pronephron
D. Metanephron
175. Who invented the battery?
A. Roentgen
B. William III
B. Maxwell
C. Bismark
C. Faraday
D. Fadrick William IV
D. Volta
176. When was the railway system established in India?

## A. 1853

B. 1953
182. The $1^{\text {st }}$ battle of Panipat was fought in the year.
A. 1761
B. 1516
C. 1556
D. 1526
183. In India, Dugong (Sea Cow) is found in the bioreserve site of ?
A. Sundarban
B. Nok rek
C. Manas
D. Gulf of Mannar
184. Which is the best planned city in India?
A. Salem
B. Coimbatore
C. Chandigarh
D. New Delhi
185. The sloan "Garibi Hatao" was included in the:
A. Second plan
B. Fourth plan
C. Fifth plan
D. First plan
186. Ezra cup is associated with which sports?
A. Hockey
B. Rowing
A. Non of the options
B. Uttari Gangotri
C. Yamunotri
D. Dakshin Gangotri
181. Who advocated Nazim in Germany ?
A. Adolf Hittler
C. Football
D. Polo
187. Hari Prasad Chaurasia is renowned player of:

## A. Flute

B. Shehnai
C. Tabla
C. Electrometallurgy
D. Sarod
188. Life originated by chemosynthesis was proved in the laboratory by
A. Miller
B. Pasteur
C. Sanger
D. Aristotle
189. The development process under capitalism has been described as "Creative Destruction" by:
A. J.S. Mill
B. Karl Marx
C. Hansen
D. Schumpeter
190. Which of the following is commonly used in preparing custard powder?
A. Maize
B. Wheet
C. Raagi
D. Rice
191. Project Tiger was introduced in:
A. 1984
B. 1995
C. 1973
D. 2001
192. To become a judge of the High court one must be a practicing advocate of the High court for at least.
A. 15 years
B. 20 years
C. 10 years
D. 5 years
193. The use of heat treatment of one that includes smelting and roasting is termed:
A. Hydrometallhurgy
B. Cryometallurgy
200. All vital atmospheric processes leading to various climatic \& whether conditions take place in the:
A. Troposphere
B. Stratosphare
C. Ionosphere
D. Exosphere

