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NAME $\qquad$

# TEST BOOKLET 

TARA/SSC-HS/T1/02

Time Allowed: Two Hours
Maximum Marks: 200
ROLL NO. $\qquad$

## INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET DOES NOT HAVE ANY UN PRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.

## 2. ENCODE CLEARLY THE TEST BOOKLET SERIES A, B, C OR D AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.

3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. Do NOT write anything else on the Test Booklet.
4. This Test Booklet contains 200 items (Questions). Each item is printed in English and Hindi. Each item comprises FOUR responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response with you consider the best. In any case, choose ONLY ONE response for each item.
5. You have to mark all your responses ONLY on the separate Answer Sheet provided. See direction in the answers sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer sheet the response to various items in the Test booklet, you have to fill in some particulars in the answer sheets as per instruction sent to you with your Admission Certificate.
8. After you have completed filling in all responses on the answer sheet and the examination has concluded, you should hand over to Invigilator only the answer sheet. You are permitted to take away with you the Test Booklet.
9. Sheet for rough work are appended in the Test Booklet at the end.

## 10. Penalty for Wrong answers

THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE
(i). There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-fourth (0.25) of the marks assigned to that question will be deducted as penalty.
(ii). If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to that question.
(iii). If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

## PART - A <br> INTELLIGENCE AND REASONING

Directions: (Q. 1-9) Select the related letters/word/ number/figure from the given alternatives.
1.


(a)

(b)

(c)

(d)
2. TRADE : UQBCF : : PLATE : ?
(a) QMBUF
(b) QKBSF
(c) QKBUF
(d) QMZUD
3. $42: 56:: 72:$ ?
(a) 90
(b) 92
(c) 100
(d) 51
4. $6: 18:: 4:$ ?
(a) 12
(b) 16
(c) 2
(d) 6
5. RESPONSIBLE : KHMOD : : SENSITIVE : USRD : : CLARIFICATION : ?
(a) KSEBSN
(b) MHZHHZ
(c) NSBEQK
(d) PUDGSM
6. COUNSEL: BITIRAK : : GUIDANCE : ?
(a) FPHZZKAB
(b) HOHYBJBA
(c) EOHYZKBB
(d) FOHYZJBB
7. KNOB:DOOR:
(a) RING: EAR
(b) BELT:TROUSERS
(c) NOSE: FACE
(d) NECKLACE:NECK
8. Fast : Hunger : : Race : ?
(a) Smartness
(b) Strength
(c) Horse
(d) Fatigue
9. Antonym : Synonym : : Analysis : ?
(a) Synthesis
(b) Synchronize
(c) Simplify
(d) Summarise

Directions: (Q. 11-16) Select the one which is different from the other three responses.
10.
(a) Snooker
(b) Table Tennis
(c) Badminton
(d) Billiards
11. (a) PQ
(b) AU
(c) CD
(d) RB
12.
(a) CPBO
(b) BODQ
(c) ANHU
(d) ESGT
(a) BFJNRV
(b) CGKOSW
(c) DHLPTX
(d) EIMPSW
14.
(a) 81
(b) 8
(c) 16
(d) 625
15.
(a) $576-12$
(b) 611-13
(c) $198-11$
(d) $824-14$

(a)

(b)

(c)

(d)

Directions: (Q. 17 and 18) These questions are based on the following coding pattern : 'EFGHIJK' are coded letters representing 'VUTSRQP'. Choose the right code for the words given in capital letters from the answer choices given under each.
17. LIMIT
(a) KNRNC
(b) ORNRG
(c) JKOKG
(d) RSTSG
18. POCKET
(a) KLXPUC
(b) KLXPVG
(c) KLXGUP
(d) KLXVPG
19. How many such 5 's are there in the following number sequence each of which is immediately preceded by 3 or 5 but not immediately followed by 8 or 9 ?
35954553584567357554523510
(a) Three
(b) Four
(c) Five
(d) None of these
20. $\mathrm{D}-23, \mathrm{~F}-21, \mathrm{H}-19, \mathrm{~J}-17$, ?
(a) $\mathrm{K}-18$
(b) $\mathrm{M}-18$
(c) $\mathrm{O}-21$
(d) $\mathrm{L}-15$

Directions : (Q. 21-22) From the four logical diagrams, select the one which best illustrates the relationship among the three given classes in the questions.

(a)

(b)

(c)
(d)
21. Birds, fruits, mangoes
22. Criminals, lawyers, bandits
23. If in a code language 'PUTREFY' is written as 'XPQSTRL' and 'NAVIGATE' is written as 'GYMOWYQT', how is 'AVIARY' written in that language?
(a) YOMYLS
(b) YMOYLS
(c) YMOYSL
(d) YOMYSL
24. In a queue of boys, Mahesh is at 10th place from right side and Suresh at 10th place from left side. If both change their places mutually, Suresh comes at 27th place from left side. What would be the place of Mahesh from right side ?
(a) 25 th
(b) 29th
(c) 26th
(d) 10th
25. In some code language, STATION is written as URCRKMP. How can BRING be written in the same code language ?
(a) DSKPH
(b) DTKLH
(c) DSGLH
(d) DPKLI
26. Select the word which cannot be formed by taking letters from the word 'ADULTERATION'-
(a) RELATION
(b) RETURN
(c) RETAIL
(d) TOILET
27. Select the world which cannot be formed by taking letters from the word 'CARPENTER'-
(a) CARPET
(b) PAINTER
(c) REPENT
(d) NECTAR
28. Rohit is seventeenth from the left end of a row of 29 boys and Karan is seventeenth from the right end of the same row. How many boys are there between them in the row ?
(a) 5
(b) 4
(c) 6
(d) 3
29. Ajay ranked sixteenth from the top and twenty-ninth from the bottom among those who passed the examination. Six boys did not participate in the completion and five failed in it. How many boys were there in the class?
(a) 44
(b) 50
(c) 40
(d) 55

Directions: (Q. 30-34) In each of the following questions, numbers are arranged in a particular pattern.
Such of the series has a blank space. Choose the missing number from the given alternatives and mark its letter on your answer sheet.
30. 6, 13, 28, 59.. $\qquad$
(a) 111
(b) 222
(c) 122
(d) 333
31. $0,2,3,5,8,10,15,17,24,26$,
(a) 28
(b) 30
(c) 32
(d) 35
32. $21,25,34,50$

111, 160
(a) 86
(b) 72
(c) 75
(d) 59
33. $6,4,12,8,18,12$.
(a) 24
(b) 16
(c) 8
(d) 6
$5,9,17,29,45,65, \ldots \ldots \ldots \ldots$
(a) 83
(b) 85
(c) 87
(d) 89
35. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it? $\mathrm{a}_{-} \mathrm{aabb}{ }_{-} \mathrm{ab} \mathrm{b}_{-}$
(a) baaaa
(b) babab
(c) baaba
(d) $\mathrm{b} b \mathrm{aaa}$
36. Which one of the given responses would be a meaningful order of the following words ?

1. Grand father
2. Great grand father
3. Grand son
4. Son
5. Father

| (a) | 3 | 4 | 5 | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| (b) | 4 | 1 | 3 | 5 | 2 |
| (c) | 1 | 2 | 3 | 4 | 5 |
| (d) | 2 | 3 | 1 | 5 | 4 |

37. If the day before yesterday was Friday, what day will two days after the day after tomorrow be ?
(a) Saturday
(b) Thursday
(c) Friday
(d) Sunday
38. A statement is given followed by two conclusions I and II. You have to consider the statement to be true even if it seem s to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statement.
Statement : Tension is detrimental to physical and mental health.
Conclusions :
I. To be healthy one should be free from tension.
II. Mental health depends upon the tension one experiences.
(a) Only I follows
(b) Only II follows
(c) Neither I nor II follows
(d) Both I and II follow
39. Two statements are given followed by four conclusions I, II, III and IV. 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 :

1. Some skirts are benches.
2. No bence is table.

## Conclusions :

I. Some skirts are tables.
II. Some benches are skirts.
III. All benches are skirts.
IV. Some tables are skirts.
(a) Only I follows
(b) Only II follows
(c) Only II and IV follows
(d) Only I and III follows
40. There are five houses $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, in a row. A is right side of b and left side of $\mathrm{C} . \mathrm{O}$ is the right side of A . B is right of D . Which house is in the middle?
(a) O
(b) A
(c) B
(d) D
41. If $\mathrm{C}=3$ and $\mathrm{CAT}=24$, what is FAULT ?
(a) 60
(b) 57
(c) 64
(d) 72
42. Find out a set of number amongst the four sets of numbers given in the alternatives, which is most like the set given in the question.
$(14,20,3)$
(a) $(7,13,3)$
(b) $(5,10,15)$
(c) $(3,6,9)$
(d) $(4,8,16)$
43. Arrangement the following in a logical order.

1. Open Text book
2. Attend Assembly
3. Catch Bus
4. Wear Uniform
5. Get into classroom
(a) $4,2,3,5,1$
(b) $4,3,5,1,2$
(c) $4,3,2,5,1$
(d) $4,3,1,5,2$

Directions: (Q. 44-45) Find the missing number.
44.

(a) 10
(b) 13
(c) 12
(d) 14

(a) 3
(b) 7
(c) 2
(d) 1
46. A giri introduced a body as the son of the daughter of the father of her uncle. The boy is girl's ?
(a) Uncle
(b) Nephew
(c) Son
(d) Brother
47. A man is facing Northwest. He turns 90 degrees in the clockwise direction and then 135 degrees in the anti-clockwise direction. Which direction is he facing now ?
(a) West
(b) South-West
(c) North-East
(d) South-East
48. Count the numbers of triangles in the following figure-

(a) 27
(b) 23
(c) 29
(d) 31
49. From the given answer figures select the one in which the question figure is hidden / embedded.

## Question Figure :



## Answer Figures :


(a)

(b)

(c)

(d)
50. Which answer figure will complete the pattern in the question figure?


(a)

(b)

(c)

(d)

## PART - B

## GENERAL AWARENESS

51. With what is April 13, 1919 associated in the history of freedom struggle of India ?
(a) Start of civil disobedience movement
(b) Countrywide non cooperation movement
(c) Adoption of pledge for complete freedom of the country
(d) Massacre of Jalianwala Bagh
52. Todar Mal was associated with :
(a) Music
(b) Literature
(c) Law
(d) Land revenue reforms
53. Example of Vijaynagar Art can be found at-
(a) Somnath
(b) Hampi
(c) Amravati
(d) Pattadakal
54. Gandhiji's Dandi march started from-
(a) Bardoli
(b) Ahmedabad
(c) Surat
(d) Mumbai
55. When did India have its first General Elections ?
(a) 1947
(b) 1949
(c) 1950
(d) 1951
56. 'BRIC' countries signify which of the following group of countries ?
(a) Brazil, Russia, India and China
(b) Britain, Romania, Indonesia and Columbia
(c) Brazil, Russia, India and Cuba
(d) Belgium, Russia, Iceland and China
57. Which of the following states did not come into being in 1987?
(a) Mizoram
(b) Arunachal Pradesh
(c) Goa
(d) Manipur
58. Otto Von Bismarck was known as-
(a) Grand Commoner
(b) Man of blood and iron
(c) Grand old man
(d) Man of destiny
59. Where is Amarnath located ?
(a) Jammu and Kashmir
(b) $\quad \mathrm{Himachal}$

Pradesh
(c) Uttar Pradesh
(d) Uttrakhand
60. The biggest producers of spice in India is-
(a) Punjab
(b) Madhya Pradesh
(c) Gujarat
(d) Kerala
61. The Chairman of the Public Accounts Committee in the Indian Parliament is-
(a) The Leader of Opposition Party
(b) The Speaker of Lok Sabha
(c) The Deputy Speaker of Lok Sabha
(d) The Chairman of Rajya Sabha
62. Major Commercial crops in India are-
(a) Cotton, Pulses, Jute and Oil seeds
(b) Cotton, Oil seeds, Jute and Sugarcane
(c) Tea, Rubber, Tobacco and Jute
(d) Potatoes, Tea, Tobacco and Cotton
63. Consumer's sovereignty means-
(a) Consumers are free to spend their income as they like
(b) Consumers have the power to manage the economy
(c) Consumer's expenditures influence the allocation of resources
(d) Consumer goods are free from government control
64. Which of the following States has the highest number of slums as per the data recently released by the Ministry of Housing and Urban Poverty Alleviation?
(a) Uttar Pradesh
(b) West Bengal
(c) Maharashtra
(d) Andhra Pradesh
65. Exploitation of labour is said to exist when-
(a) Wage $=$ Marginal Revenue Product
(b) Wage $<$ Marginal Revenue Product
(c) Wage $>$ Marginal Revenue Product
(d) Marginal Revenue Product $=0$
66. Which of the following states came into existence on the basis of language ?
(a) West Bengal
(b) Andhra Pradesh
(c) Uttar Pradesh
(d) Bihar
67. Who among the following Presidents had been in office continuously for two terms ?
(a) Dr. Rajendra Prasad
(b) Dr. S. Radhakrishnan
(c) Dr. Zakir Hussain
(d) None of the above
68. Under which of the following conditions, the President can declare a state of Emergency?
(a) In a state of external invasion or internal disturbance
(b) When the rule of laws breaks down in some state
(c) Instability in financial condition
(d) None of the above
69. Who among the following Prime Ministers did not face the Parliament during his term of office ?
(a) Chandrashekhar
(b) Atal Bihar Vajpayee
(c) Charan Singh
(d) B. P. Singh
70. Sittings of Supreme Court take place in new Delhi. Under some unavoidable circumstance, by whose permission can the Chief Justice shift the sitting place elsewhere?
(a) President
(b) Parliament
(c) One request of Legislative Assembly
(d) On decision of majority of judges
71. First of all, the hypothesis of formation of constitution originated in which of the following countries ?
(a) France
(b) Switzerland
(c) Britain
(d) Japan
72. How many days of the Earth does the Mercury take to take one round of the Sun?
(a) 88
(b) 98
(c) 78
(d) None of the above
73. Branch of botany dealing with the study of algae is -
(a) Microbiology
(b) Phycology
(c) Agrostology
(d) Mycology
74. Spirit in contact with body gives cool sensation because it is-
(a) Liquid
(b) Transparent
(c) Highly volatile
(d) A good conductor
75. Tobacco smoke is injurious to health because it contains-
(a) Carbon monoxide
(b) Nicotine
(c) Polycyclic aromatic hydrocarbons
(d) Methylene
76. Kilowatt-hour is the unit of-
(a) Energy
(b) Power
(c) Force
(d) Momentum
77. The largest mixed gland of human body is-
(a) Thymus
(b) Liver
(c) Pancreas
(d) Spleen
78. Mercury is $\mathrm{a}-$
(a) Solid metal
(b) Liquid metal
(c) Solid non-metal
(d) Liquid-non-metal
79. The mass of Jupiter is approximately-
(a) One tenth of the solar mass
(b) One thousandth of the solar mass
(c) One hundredth of the solar mass
(d) Half the solar mass
80. Headquarters of North-Eastern Railway is located at which of the following cities ?
(a) Guwahati
(b) Gorakhpur
(c) Kolkata
(d) Bhubaneshwar
81. Which area of India receives the least rainfall ?
(a) Eastern Rajasthan
(b) Western Tamil Nadu
(c) Western Ghats
(d) Ladakh
82. 'Jhum' is -
(a) A type of cultivation
(b) The name of a river valley
(c) Folk dance of Bihar
(d) A tribe
83. Out of the given substances, the substance made only from carbon is -
(a) Acetic acid
(b) Graphite
(c) Sugar
(d) Methana
84. When was Indian National Congress founded ?
(a) In 1875
(b) In 1885
(c) In 1895
(d) None of the above
85. Who among the following was a member of the constituent Assembly, constituted in July 1946 ?
(a) Dr. Rajendra Prasad(
(b) K. M. Munshi
(c) Mahatma Gandhi
(d) Abul Kalam Azad
86. Following was the name of the mother of Chhatrapati Shivaji -
(a) Jodhabai
(b) Lakshmibai
(c) Jeejabai
(d) Putlibai
87. Which one of the following is not the official language of the UNO ?
(a) Arabic
(b) Chinese
(c) Portuguese
(d) Spanish
88. Who is regarded as the architect of the Indian Constitution?
(a) B. N. Rao
(b) Dr. Rajendra Prasad
(c) Jawahar Lal Nehru
(d) Dr. B. R. Ambedkar
89. Which one of the following is not a benefit of Saliva?
(a) It facilitates swallowing
(b) It increases RBCs in the body
(c) It keeps the mouth and teeth clean
(d) It aids speech by facilitating movements of lips and tongue
90. Mumps is a viral disease that cause inflammation of-
(a) Parotid gland
(b) Sublingual gland
(c) Submaxillary gland
(d) Infraorbital gland
91. A man cannot see clearly beyond 10 metres. The disease he suffers from-
(a) Far sight
(b) Myopia
(c) Cataract
(d) Hypermetropia
92. When Hydrogen starts burning in air, it produces ?
(a) Ammonia
(b) Water
(c) Methana
(d) Carbonic Acid
93. Indira Krishnamurthy Nooyi is the CEO of which famous company?
(a) Pepsi Co
(b) Coca Cola
(c) SAIL
(d) General Electric
94. 8th March is celebrated as -
(a) International Labour Day
(b) Population Day
(c) International Women's Day
(d) Earth Day
95. March 21 st is celebrated as -
(a) World Forestry Day
(b) International Environment Day
(c) World Day
(d) Meteorological Day
96. The muscle covering the outermost part of cranium is -
(a) Gallia Eponeurotica
(b) Gallia Perineurotica
(c) Gallia Hyponeurotica
(d) Gallia Epineurotica
97. Who first postulated that DNA has a structure of double-helix shape?
(a) Newton
(b) Edward Jenner
(c) Madame and Pierre Curie
(d) Watson and Crick
98. Plain of Ganga is an example of -
(a) Morphogenetic plain
(b) Depositional plain
(c) Outwash plain
(d) Eroded plain
99. Maximum percentage of the compound that is found in the stone formed in kidney is -
(a) Calciumoxalate
(b) Magnesium sulphate
(c) Sodium chloride
(d) Sodium phosphate
100. Number of cranial nerves in human body is -
(a) 12 pairs
(b) 13 pairs
(c) 14 pairs
(d) 15 pairs

## PART - C

## NUMERICAL APTITUDE

101. If $\theta$ be a positive acute angle satisfying $\cos ^{2} \theta+\cos ^{4} \theta$ $=1$, then the value of $\tan ^{2} \theta+\tan ^{4} \theta$ is
(a) $\frac{3}{2}$
(b) 1
(c) $\frac{1}{2}$
(d) 0
102. The value of $\tan 4^{\circ} \cdot \tan 43^{\circ} \cdot \tan 47^{\circ} \cdot \tan 86^{\circ}$ is
(a) 2
(b) 3
(c) 1
(d) 4
103. If $\frac{\sin \theta+\cos \theta}{\sin \theta-\cos \theta}=3$, then the value of $\sin ^{4} \theta-\cos ^{4} \theta$ is
(a) $\frac{1}{5}$
(b) $\frac{2}{5}$
(c) $\frac{3}{5}$
(d) $\frac{4}{5}$
104. If $\cos ^{2} \alpha+\cos ^{2} \beta=2$, then the value of $\tan ^{3} \alpha+\sin ^{5} \beta$ is :
(a) -1
(b) 0
(c) 1
(d) $\frac{1}{\sqrt{3}}$
105. If $\cos x+\cos y=2$, the value of $\sin x+\sin y$ is
(a) 0
(b) 1
(c) 2
(d) -1
106. If $x, y$ are acute angles, $0<x+y<90^{\circ}$ and $\sin (2 x-$ $\left.20^{\circ}\right)=\cos \left(2 y+20^{\circ}\right)$, then the value of $\tan (x+y)$ is:
(a) $\frac{1}{\sqrt{3}}$
(b) $\frac{\sqrt{3}}{2}$
(c) $\sqrt{3}$
(d) 1
107. What number multiplied by 48 will give the same product as 173 multiplied by 240 ?
(a) 545
(b) 685
(c) 865
(d) 495
108. 20 women can do a worked in 16 days, 16 men can complete the same work in 15 days. What is the ratio between the capacity of a man and a woman?
(a) $3: 4$
(b) $4: 3$
(c) $5: 3$
(d) data inadequate
109. A can do a piece of work in 6 days alone and $B$ alone can do it in 8 days. A and B undertook to it for rupees 640. With the help of C, they finished it in 3 days. How much paid to C ?
(a) 60
(b) 80
(c) 100
(d) 120
110. Find the least perfect square number which is divisible by 12,15 and $25-$
(a) 400
(b) 900
(c) 1300
(d) 1600
111. The cost of rupees 2,800 of 3.5 stock at 94 will be-
(a) 2,632
(b) 2,500
(c) 2,362
(d) 2,178
112. A candidate who gets $20 \%$ marks in the examination fails by 30 marks but another candidate who gets $32 \%$ marks get 42 marks more the minimum pass marks. The pass percentage is-
(a) $25 \%$
(b) $33 \%$
(c) $36 \%$
(d) $40 \%$
113. The angle between the hands of a clock is maximum at -
(a) 4 O'clock
(b) 9 O'clock
(c) 6 O'clock
(d) 5 O'clock
114. $(79)^{2}=$ ?
(a) 6421
(b) 6681
(c) 6111
(d) 6241
115. $(17)^{2}+(23)^{2}=$ ?
(a) 718
(b) 818
(c) 988
(d) 828
116. What is the approximate answer of the following ?
$12833+133 \%$ of $1655-\frac{7}{5}$ of $3533=?$
(a) 10000
(b) 10500
(c) 11000
(d) 9500
117. $9999+8888+777+?=19700$
(a) 36
(b) 16
(c) 64
(d) 26
118. 60 ? $6 \times 111=666666$
(a) 0
(b) 2
(c) 1
(d) 6
119. Market price of an article is Rs. 500. The shopkeeper sells the article at successive discounts of $15 \%$ and $10 \%$. Another shopkeeper sells the same article and gives the successive discounts of $9 \%$ and $16 \%$. From which shopkeeper the customer will get more benefit?
(a) First
(b) Second
(c) Equal from both
(d) None of the above
120. There is a copper wire of 1 cm diameter and 8 cm length. It is moulded in a wire of 18 cm length. What would be the diameter of this new wire?
(a) $1 / 30 \mathrm{~cm}$
(b) $2 / 15 \mathrm{~cm}$
(c) $2 / 3 \mathrm{~cm}$
(d) $1 / 15 \mathrm{~cm}$
121. Sakshi gave away $20 \%$ of her stamp collection to Jyoti and $15 \%$ to Aruna. If she still has 520 stamps, then how many did she have initially?
(a) 700
(b) 600
(c) 800
(d) 1000
122. If the ratio of boys to girls in a class is $5: 3$, then which of the following CANNOT be the number of children in that class ?
(a) 40
(b) 96
(c) 150
(d) 24
123. If $x \odot y$ represents the number of integers greater than $x$ and less then $y$, what is the value of $-\pi \odot \sqrt{2}$ ?
(a) 4
(b) 5
(c) 2
(d) 3
124. If $\frac{A+5 B}{2 B}=A-2 B$ then what is the value of $A$ when $B=-1$ ?
(a) 3
(b) 0.333
(c) 0.222
(d) 2
125. Perimeter of a square-shaped waste land is 208 metres. Width of the path around it is 2 metre. At the rate of Rs. 12.5 per metre, what would be the total cost of fencing around the path ?
(a) Rs. 2500
(b) Rs. 2700
(c) Rs. 2800
(d) None of these
126. What would be the radius of that circle whose areas is equal to the sum of the areas of the circles of radius of 5 m and 12 m each?
(a) 13 m
(b) 14 m
(c) 15 m
(d) None of the above
127. Seventh day of a month lies on three days before Friday. Which will be the day on the 19th date of this month ?
(a) Sunday
(b) Monday
(c) Wednesday
(d) Friday
128. A train of 750 m length is running at a rate of $60 \mathrm{~km} /$ hr . How long will it take to cross a signal post ?
(a) 50
(b) 40
(c) 55
(d) 45
129. A sold an article to B at a profit of $22.5 \%$ and $B$ sold to C at $7.5 \%$ profit and B sold to C at $7.5 \%$ profit. C paid Rs. 5267 and 50 Paise for that article. At what cost did a purchase that article?
(a) 3500
(b) 4000
(c) 4500
(d) 5000
130. Lengths of the parallel sides of a trapezium are 11 cm and 25 cm , respectively. Other two sides are of 15 cm and 13 cm , respectively. Area of the trapezium will be-
(a) $189 \mathrm{~cm}^{2}$
(b) $216 \mathrm{~cm}^{2}$
(c) $256 \mathrm{~cm}^{2}$
(d) None of these
131. What would be the value of $x$, if $3^{(x-y)}=27$ and $3^{(\mathrm{x}+\mathrm{y})}=243 \quad ?$
(a) 0
(b) 2
(c) 4
(d) 6
132. If the length of a rectangle is decreased by $50 \%$ and the breadth is increased by $80 \%$ then find the $\%$ change in the area of the rectangle -
(a) $5 \%$
(b) $10 \%$
(c) $20 \%$
(d) $50 \%$
133. If 12 carpenters, working 6 hours a day can make 460 chairs in 24 days, how many chairs will 18 carpenters make in 36 days, each working 8 hours a day?
(a) 1260
(b) 1320
(c) 920
(d) 1380
134. What is the sum of all even numbers up to 300 ?
(a) 20650
(b) 22650
(c) 24650
(d) 18650
135. Ten years ago, Raman was $1 / 3$ as old as he will 20 years from now. Raman is now -
(a) 20 years
(b) 25 years
(c) 27 years
(d) 30 years
136. A towel, when bleached was found to have lost $20 \%$ of its length and $10 \%$ of its breadth. The \% decrease in its area is-
(a) $10 \%$
(b) $10.8 \%$
(c) $20 \%$
(d) $28 \%$
137. I am three times as old as my son. Five years, I shall be $2 \frac{1}{2}$ time as old as my son. My present age is -
(a) 15 years
(b) 30 years
(c) 45 years
(d) 60 years
138. An amount of Rs. 1655 and Paise 90 is distributed among Amit, Bipin and Chandra in such a way that Amit gets Rs. 3 for every Rs. 2 to Amit and Chandra gets Rs. 3 for every Rs. 4 to Bipin. How much did Amit get?
(a) Rs. 456 paise 80
(b) Rs. 472 Paise 70
(c) Rs. 486 Paise 90
(d) None of these
139. A 20 metres long wire is to be cut so that one piece is $2 / 3$ times as long as the other. What should be length of longer piece?
(a) 131.1 m
(b) 13.15 m
(c) 12 m
(d) 12.5 m
140. A man divided his property so that his daughter's share to his wife's share and the wife's share to son are both in the ratio of $3: 1$. If the son gets Rupees 10,000 less than the daughter, find the total worth of the property-
(a) 15,250
(b) 16,250
(c) 17,500
(d) 18,500
141. A sum of money amounts to Rupees 6000 in 2 years. If the interest on the sum for that time is rupees 1,000 , find the rate of simple interest-
(a) $5 \%$
(b) $10 \%$
(c) $20 \%$
(d) $25 \%$
142. Five years ago, the average age of $P$ and $Q$ was 15 years. Average age of $\mathrm{P}, \mathrm{Q}$ and R today is 20 years. How old will R be after 10 years ?
(a) 20
(b) 25
(c) 30
(d) 36
143. While Suresh set out on a journey he found that the tank of his scooter was $2 / 3$ full. After riding for some hours, he spent 3 litres and lent his friend another 3 litres of petrol. Suresh then found that he had $1 / 6$ th of the tank full. What was the full capacity of his petrol tank ?
(a) 12 litres
(b) 15 litres
(c) 16 litres
(d) 20 litres
144. $O$ and $C$ are respectively the orthocentre and circumcenter of an acute-angled triangle PQR. The points P and O are joined and produced to meet the side QR at S . If $\angle \mathrm{PQS}=60^{\circ}$ and $\angle \mathrm{QCR}=130^{\circ}$, then $\angle \mathrm{RPS}=$
(a) $30^{\circ}$
(b) $35^{\circ}$
(c) $100^{\circ}$
(d) $60^{\circ}$
145. The ratio of the areas of the circumcircle and the ineircle of an equilateral triangle is
(a) $2: 1$
(b) $4: 1$
(c) $8: 1$
(d) $3: 1$

DIRECTIONS (146-150) : Study the following table carefully and answer the questions given below:

Number of students in five disciplines of a college over the years

| Discipline <br> Year | Arts | Sci. | Com. | Manag. | Agri. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 2001 | 240 | 358 | 275 | 215 | 314 |
| 2002 | 260 | 390 | 286 | 234 | 365 |
| 2003 | 275 | 374 | 265 | 269 | 336 |
| 2004 | 284 | 368 | 290 | 255 | 348 |
| 2005 | 296 | 415 | 272 | 284 | 326 |
| 2006 | 312 | 432 | 364 | 276 | 383 |

146. In which year the percentage change in case of the Agriculture discipline was highest to the previous year?
(a) 2002
(b) 2003
(c) 2004
(d) 2006
147. How much approximate percentage was increased in the number of students of Commerce discipline from 2003 to 2004 ?
(a) 14
(b) 18
(c) 20
(d) 9
148. In which year the difference in number of students of Arts and Science was exactly 130 ?
(a) 2001
(b) 2002
(c) 2004
(d) 2006
149. The total number of students in Agriculture in 2001 and 2005 together was approximately what percent of number of students of the same discipline in 2002 ?
(a) 75
(b) 165
(c) 65
(d) 175
150. In which discipline was there a continuous increase in number of students over the given years?
(a) Science
(b) Agriculture
(c) Arts
(d) Commerce
151. किस वर्ष कला और विज्ञान में विद्यार्थियों की संख्या के बीच का अंतर ठीक 130 था ?
(a) 2001
(b) 2002
(c) 2004
(d) 2006
152. 2001 और 2005 में मिलाकर कृषि में विद्यार्थियों की कुल संख्या इसी संकाय में 2002 में विद्यार्थियों की संख्या का लगभग कितना प्रतिशत थी ?
(a) 75
(b) 165
(c) 65
(d) 175
153. दिए गए वर्षों में किस संकाय में विद्यार्थियों की संख्या में सतत वृद्धिहुई थी ?
(a) विज्ञान
(b) कृषि
(c) कला
(d) वाणिज्य

## PART - D

## ENLGLISH COMPREHENSION

Directions: In questions no. 151 to 155, some of the sentences have errors and some are correct. Find out which part of a sentence has an error and blacken the rectangle corresponding to the appropriate letter ( $A, B, C$ ). If a sentence is free from errors, blacken the rectangle corresponding to (d) in the Answer Sheet.
151.(a) My friend asked me
(b) if I can lend him my Parker pen
(c) for a few days.
(d) No error.
152.(a) The school is
(b) within hundred yards
(c) from the church.
(d) No error.
153. (a) The police broke upon the robbers
(b) when they were in the lonely place
(c) to divide their booty.
(d) No error.
154.(a) Jayesh is getting
(b) fatter because he
(c) does not take exercise at all
(d) No error.
155.(a) I am thinking of
(b) to go to Agra
(c) for my cousin's marriage.
(d) No error.

Directions: In questions no. 156 to 160, sentences are given with blanks to the filled in with an appropriate word. Four alternatives are suggested for each question. Choose the correct alternative out of the four and indicate it by blackening the appropriate rectangle in the Answer Sheet.
156. The window of our room $\qquad$ he rear.
(a) overlooks
(b) opens
(c) opposes
(d) adjoins
157. Their $\qquad$ to scale the mountain peak was an absolute failure.
(a) attempt
(b) desire
(c) anxiety
(d) proposal
158. $\qquad$ between labour and management is inevitable in any industrial society.
(a) co-ordination
(b) competition
(c) friction
(d) association
159. Macbeth is a tragedy of a man who was $\qquad$ with great qualities
(a) empowered
(b) endowed
(c) obsessed
(d) possessed
160. Changes in the socio-economic environment have generated a sense of $\qquad$ crisis among the people.
(a) deliberate
(b) fearful
(c) damaging
(d) profound

Directions: In questions no. 161 to 165 , out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer Sheet.
161.REVOKE
(a) repudiate
(b) repeal
(c) impute
(d) force
162.REPRISAL
(a) denial
(b) reluctance
(c) unequivocal
(d) retaliation
163.FASTIDIOUS
(a) faint
(b) dainty
(c) delicious
(d) dormant
164.ATTRIBUTE
(a) Infer
(b) impute
(c) inhere
(d) inundate
165.DIALECTIC
(a) argumentative
(b) instructive
(c) constructive
(d) destructive

Directions: In question no. 166 to 170, out of the four alternatives, choose the word opposite in meaning to the given word and mark it in the Answer Sheet.
166.DICTATORSHIP
(a) democracy
(b) tyranny
(c) aristocracy
(d) self-rule
167.EVENTUALLY
(a) primarily
(b) resultantly
(c) initially
(d) objectively
168.PHENOMENAL
(a) ordinary
(b) experiential
(c) natural
(d) spiritual
169. NONCHALANT
(a) fearful
(b) cowardly
(c) patriotic
(d) excited
(a) love
(b) loathe
(c) abhor
(d) despise

Directions: In questions no. 171 to 175, four alternatives are given for the meaning of the given Idiom/ phrase. Choose the alternative which best expresses the meaning of the Indian/Phrase and mark in the Answer Sheet.
171.To smell a rat
(a) Signs of plague epidemic (b) Bad smell
(c) Suspect foul dealings
(d) To be in a bad mood
172.To be above board
(a) To have a good height
(b) To be honest in any deal
(c) To have no debts
(d) To be able to swim
173. To havex the gift of the gab
(a) A talent for speaking
(b) To do exactly the right thing
(c) To be cheerful
(d) To get lots of gifts
174.To fall flat
(a) Retreat
(b) To meet accidentally
(c) Quarrel
(d) To be met with a cold reception
175.Right-hand man
(a) An honest person
(b) Most efficient assistant
(c) One who cannot use his left hand
(d) A foolish person

Directions: In questions no. 176 to 180, a sentence or underlined part thereof is given which may need improvement. Alternatives are given at (a), (b) and (c) below, which may be a better option. In case no improvement is needed, your answer is (d). Darken the appropriate rectangle in the Answer Sheet.
176. The old man felled some trees in the garden with hardly no effort at all.
(a) hard effort
(b) hardly any effort
(c) a hardly any effort
(d) No improvement
177.The company goes to great length to ensure that employees can be comfortable in their work environment.
(a) are comfortable
(b) will be comfortable
(c) should be comfortable
(d) No improvement
178.I want you to clearly understand that excuses won't do.
(a) you clearly to understand
(b) you to understand clearly
(c) to clearly understand you
(d) No improvement
179. The reason why he wrote the letter was because he could not contact him over the phone.
(a) why he wrote the letter was since
(b) for which he wrote the letter because
(c) why he wrote the letter was that
(d) No improvement
180. While we would like that all Indian Children to go to school, we need to ponder why they do not.
(a) that all the Indian children
(b) if all the children of India
(c) all Indian children
(d) No improvement

Directions: In questions no. 181 to 185, out of four alternatives, choose the one which can be substituted, for the given words/sentence and indicate it by blackening the appropriate rectangle in the Answer Sheet.
181. Mercy-killing of patients who are incurably ill
(a) circumspection
(b) benignity
(c) euthanasia
(d) apoplexy
182. General act of forgiveness on a national occasion
(a) benediction
(b) emancipation
(c) investiture
(d) amnesty
183. Passing off someone else's writing as one's own
(a) copying
(b) patenting
(c) plagiarism
(d) adaptation
184. A lake of sea water
(a) archipelago
(b) lagoon
(c) gorge
(d) inundation
185. The science of making watches
(a) graphology
(b) morphology
(c) aneroid
(d) horology

Directions: In question no. 186 to 190, groups of four words are given. In each group, one word is correctly spelt. Find the correctly spelt word and mark your answer in the Answer Sheet.
186.(a) Occured
(b) Occurad
(c) Ocurred
(d) Occurred
187.(a) Swelte
(b) Filpant
(c) Licentious
(d) Puessile
188. (a) Grief
(b) Breif
(c) Recieve
(d) Diceive
189. (a) Furnituer
(b) Exampel
(c) Medicine
(d) Sampal
190.
(a) Exaggerate
(b) Exeggrate
(c) Exagerate
(d) Exadgerate

Directions: In the following passage (question no. 191 to 200), some of the words have been left out. First read the passage over and try to understand what is about. Then fill in the blanks with the help of the alternatives given. Mark your answer in the Answer Sheet.

## PASSAGE(Q. Nos.191-200)

The North-East India is Asia in miniature, a place ...(191)... the brown and yellow races ...(192)... and mingle. There are at least $262 \ldots$ (193)... ethnic groups and the region is home to more than 150 million people, if one includes Bangladesh. Take ...(194)... example the state of Manipur, which ...(195)... Burma, with a population of 1.8 million people. It is home to about 30 separate linguistic and ethnic groups including the Taraos, ...(196)... number less than 400 individuals ...(197)... the ages and the mountains, the people of this winding trail ...(198)... an anthropological and sociological ...(199)... to South East Asia, where the roots of many ...(200)...

| 191.(a) when | (b) although |
| :--- | :--- |
| (c) where | (d) to |
| 192.(a) meet | (b) desert |
| (c) form | (d) find |
| 193.(a) identical | (b) closed |
| (c) corresponding |  |
| (d) homogeneous |  |
| 194.(a) from | (b) for |
| (c) again | (d) besides |
| 195.(a) holds | (b) stretches |
| (c) rules | (d) borders |

196.(a) who
(b) though
(c) amidst
(d) hence
197.(a) Bringing
(b) Demanding
(c) Beginning
(d) Allowing
198.(a) construct
(b) form
(c) broke
199.(a) problem
(d) settled
(b) anathema
(c) bridge
(d) window
200.(a) opportunities
B.sadly
(c) since


