

# SSC COMBINED GRADUATE LEVEL EXAM

**Held on: 26-06-2011**

**Second Sitting**

## PART A

### GENERAL INTELLIGENCE & REASONING

1. There are three baskets of fruits. First basket has twice the number of fruits in the 2nd basket. Third basket has  $\frac{3}{4}$ th of the fruits in the first. The average of the fruits in all the baskets is 30. What is the number of fruits in the first basket?  
(A)20 (B)30  
(C)35 (D)40
  2. From my house I walked 5 km towards North. I turned right and walked 3 km. Again I went one km to the south. How far am I from my house?  
(A)7 km (B)6 km  
(C)4 km (D)5 km
  3. A and B are standing as a distance of 20 km from each other on a straight East-West road. A and B start walking simultaneously eastwards and westwards respectively and both cover a distance of 5 km. Then A turns to his left the walks 10 km. B turns to his right and walks 10 km at the same speed. Then both turn to their left and cover a distance of 5 km at the same speed. What will be distance between them?  
(A)10 km (B)30 km  
(C)20 km (D)25 km
  4. From the given alternative words, select the word which cannot be formed using the letters of the given word:  
REFORMATION  
(A)REFRAIN (B)MOTION  
(C)REFRACT (D)FORMAT
- Directions: From the given alternative words, select the word which can be formed using the letters of the given word.**
5. MANUFACTURE  
(A)FRACTURE (B)MANNER  
(C)MATTER (D)FACE
  6. If in a certain language, PLAYER is coded as QNDCJX, then how SINGER will be coded in the same language?  
(A)TKQKJX (B)TKJKQX  
(C)TKQKXJ (D)TKQXJK
  7. If in a certain code, 95789 is written as EGKPT and 2436 is written as ALUR, the how will 24539 be written in that code?  
(A)ALEUT (B)ALGTU  
(C)ALGUT (D)ALGRT

8. A statement is given followed by four alternative arguments. Select on which is most appropriate.

**Statement : White clothes are**

women more often is summer because

- (A) they are thin and cool
- (B) they are bad absorbers of heat
- (C) they can be easily washed
- (D) they are easily available in summer

**Directions: In question nos. 9 to 17, select the related letter/word/number/figure from the given alternatives.**

9. Procession : Route :: Earth : ?

- (A) Space (B) Sun
- (C) Orbit (D) Highway

10. FERTILIZER : CROPS :: ?

- (A) TEACHER : EDUCATION
- (B) CHLORINE : WATER
- (C) TONIC : BODY
- (D) PESTICIDE : RATS

11. LOCKER : KMNPDJLDFQS :: LEFT : ?

- (A) KNCDSGSU (B) KMDFEFSU
- (C) KMDFEFUS (D) KMDEFGUS

12. YWUS : BDFH :: WUSQ : ?

- (A) DFHJ (B) FHJL
- (C) JLNP (D) RTVX

13. ADCB : KNML :: EHGf : ?

- (A) DGFE (B) RUST
- (C) QRST (D) ZYXW

14. BCDF : GHIK :: LMNP : ?

- (A) QRST (B) QRTS
- (C) QRSU (D) QRSV

15. IC : 6 :: DP : ?

- (A) 14 (B) 10
- (C) 12 (D) 16

16. ABCD : WXYZ :: EFGH : ?

- (A) STUV (B) ZYXW
- (C) VUTS (D) WXZY

17. 83 : 25 :: 29 : ?

- (A) 44 (B) 49
- (C) 40 (D) 63

**Directions: In question nos. 18 to 22, find the odd number/letters/figures/number pair from the given alternatives.**

18. (A) Ladder

- (B) Staircase
- (C) Bridge
- (D) Escalator

19. (A) Talking (B) Walking

- (C) Sleeping (D) Running

20. (A) DWHS (B) BYDW

- (C) CWFS (D) EVJQ

21. (A) DHLP (B) TXBF

- (C) JNRV (D) YBEH

22. (A) 1 (B) 65

- (C) 8 (D) 64

23. Find the number that does not belong to the group of number for lack of common property.

- (A) 945 (B) 625
- (C) 743 (D) 853

24. Find out the set of numbers amongst the four sets of numbers given in the alternatives which is not like the set given in the question.

Given set: (8, 56, 72)

- (A) (7, 56, 63) (B) (3, 15, 24)
- (C) (6, 42, 54) (D) (5, 30, 35)

25. In the following question, number of letters are skipped in between by a particular rule. Which of the following series observes the rule?

- (A) AEJOTY (B) AFKPUZ
- (C) AFKPTY (D) AEINRV

26. Insert the correct missing number from the choices given below:

2 cm 7 cm 9 cm 18 cm 36 cm 72 cm

157 150 141 123 87 ?

- (A)36 (B)15  
(C)51 (D)69

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

- 27.1. Noble 2. Nobiliary  
3. Noblesse 4. Nobility  
5. Nobble  
(A)1, 4, 3, 2, 5 (B)3, 4, 1, 2, 5  
(C)5, 2, 4, 1, 3 (D)2, 4, 3, 5, 1

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

- an \_ nn \_ ana \_ na \_ nan \_ a  
(A)Annan (B)Aanan  
(C)Nanna (D)Naana

**Directions: In question nos. 29 to 33, a series is given with one/two term missing. Choose the correct alternative from the given ones that will complete the series.**

29. MNOABCPQRDEFST ??

- (A)GK (B)UV  
(C)GH (D)UG

30.  $5 \cdot 9 \cdot ? = 84$

- $8 \cdot 6 \cdot 4 = 56$   $7 \cdot 3 \cdot 7 = 70$   
(A)4 (B)7  
(C)5 (D)6

31. 9, 8, 10, 16, 11, ? 12, 64

- (A)28 (B)36  
(C)25 (D)32

32. 34, 18, 10, ?

- (A)8 (B)5  
(C)7 (D)6

33. Find the wrong number in the series.

- 7, 28, 63, 124, 215, 342  
(A)28 (B)63  
(C)124 (D)342

34. In a class Rajan got the 11th rank and he was 31st from the bottom of the list of boys passed. Three boys did not take the examination and one failed. What is the total strength of the class?

- (A)32 (B)42  
(C)45 (D)46

35. In a family, mother's age is twice that of daughter's age. Father is 10 years older than mother. Brother is 20 years younger than his mother and 5 years older than his sister. What is the age of the father?

- (A)62 years (B)60 years  
(C)58 years (D)55 years

36. Rahul and Robin are brothers. Pramod is Robin's father. Sheela is Pramod's sister. Prema is Pramod's niece. Shubha is Sheela's granddaughter. How is Rahul related to Shubha?

- (A)Brother (B)Cousin  
(C)Uncle (D)Nephew

37. In a survey of a town, it was found that 65% of the people surveyed watch the news on T.V., 40% read a newspaper and 25% read a newspaper and watch the news on T.V.

What per cent of the people surveyed neither watch the news on T.V. nor read a newspaper?

- (A)5% (B)10%  
(C)20% (D)15%

38. In the year 1996, the Republic Day was celebrated on Friday. On which day was the Independence Day celebrated in the year 2000?

- (A)Tuesday (B)Monday  
(C)Friday (D)Saturday

39. Mr. and Mrs. Gopal have 3 daughters and each daughter has one brother. How many persons are there in the family?

- (A) 5 (B) 6  
(C) 7 (D) 8

40. In Ravi's clock shop, two clocks were brought for repairs. One clock has the cuckoo coming out every sixteen minutes, while the other one has the cuckoo coming out every eighteen minutes. Both cuckoos come out at 12.00 noon. When will they both come out together again?

- (A) 2.06 PM (B) 2.08 PM  
(C) 2.24 PM (D) 2.32 PM

Directions: In question nos. 41 and 42, select the missing number from the given responses.

41.

169	64	81	30
625	?	49	50
1296	576	100	70

- (A) 324 (B) 289  
(C) 441 (D) 361

42.

1	2	3
4	5	6
7	8	9
27	28	?

- (A) 49 (B) 50  
(C) 51 (D) 52

43. The number of road accidents in a city is increasing month by month as given below. Find out of the number of accidents in the month of June.

Month	Jan	Feb	March	April	May	June
No. of accidents	4	8	16	28	44	?

- (A) 64 (B) 48  
(C) 52 (D) 40

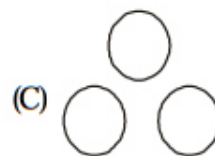
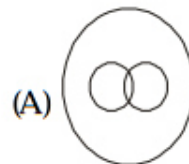
44. If ' $\times$ ' means 'addition', ' $-$ ' means 'division', ' $\div$ ' means 'subtraction' and ' $+$ ' means 'multiplication', then which of the following equations is correct?

- (A)  $16 + 5 - 10 \times 4 \div 3 = 9$   
(B)  $16 - 5 \times 10 \div 4 + 3 = 12$   
(C)  $16 + 5 \div 10 \times 4 - 3 = 9$   
(D)  $16 \times 5 \div 10 \div 4 - 3 = 19$

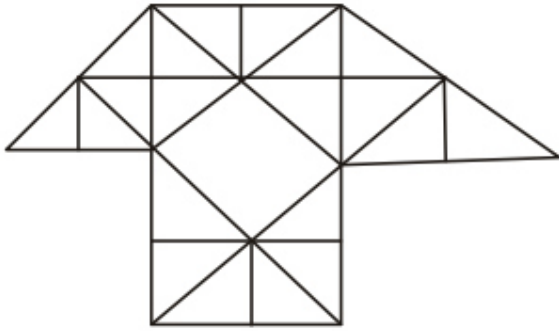
45. A man starts from a point, walks 8 km towards North, turns right and walks 12 km, turns left and walks 7 km, turns and walks 24 km towards South, turns right and walks 12 km. In which direction is he from the starting point?

- (A) North (B) South  
(C) West (D) East

46. Which diagram correctly represents the relationship between **Human beings**, **Teachers**, **Graduates**?



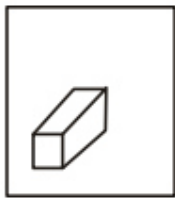
47. How many triangles are there in the given figures?



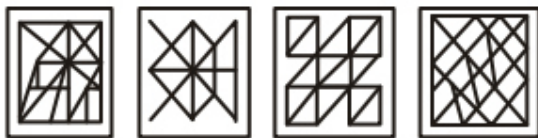
- (A) 29                      (B) 38  
(C) 40                      (D) 35

Directions: From the given answer figures, select the one in which the question figures is hidden/embedded.

48. Question figure.



Answer figures



- (A)                      (B)                      (C)                      (D)

Directions: In a mirror is placed on the line MN, the which of the answer figures is the right image of the given figure?

49. Question figure



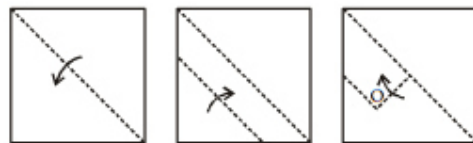
Answer figures



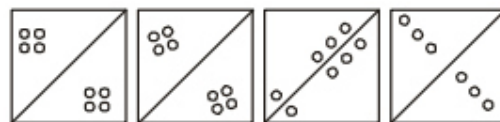
- (A)                      (B)                      (C)                      (D)

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

50. Question figures



Answer figures



- (A)                      (B)                      (C)                      (D)



**PART —B****GENERAL AWARENESS**

51. Lambert's law is related to  
(A) Reflection (B) Refraction  
(C) Interference (D) Illumination
52. The coral reefs are the marine counterparts of  
(A) Temperate forest  
(B) Tropical rain forests  
(C) Savannahs (D) Scrubland
53. The Refrigerant 'FREON' is  
(A) Calcium Tetra Fluoride  
(B) Difluoro Dichloro Methane  
(C) Fluorspar and Felspar  
(D) Hydrofluosilicic acid
54. In the budget speech on February 28, 2011, the Finance Minister has announced that an international award with prize money of Rs. 1 crore is being instituted in the memory of Rabindranath Tagore for promoting  
(A) international peace  
(B) emancipation of underprivileged  
(C) universal brotherhood  
(D) human rights
55. The strong earthquake-cum-tsunami which has moved Japan's main island Honshu by a few feet has also caused Earth's axis to wobble by about  
(A) 1 inch (B) 2 inch  
(C) 4 inch (D) 6 inch
56. WILILEAKS, a whistleblowers website is an international organisation based in  
(A) U.S.A. (B) U.K.  
(C) Sweden (D) Norway
57. 'Nomadic Elephant' was the joint military exercise held some time back in India between India and  
(A) China (B) U.S.A.  
(C) Russia (D) Mongolia
58. The maximum limit on poll expenditure for parliamentary constituencies has been raised in February, 2011 to  
(A) 30 lacks (B) 35 lacks  
(C) 40 lacks (D) 50 lacks
59. Who received Sangeet Natak Akademi's Ustad Bismillah Khan Yuva Puraskar for Dance in 2009?  
(A) Omkar Shrikant Dadarkar  
(B) Ragini Chander Sarkar  
(C) Abanti Chakravorty and Sukracharya Rabha  
(D) K. Nellai Manikandan
60. Which of the following folk dances is associated with Jammu and Kashmir?  
(A) Jhora (B) Veedhi  
(C) Rauf (D) Suisini
61. Which of the following books has been written by Kamala Das?  
(A) Witness the Night  
(B) The Red Devil  
(C) Earth and Ashes  
(D) Tonight This Savage Rite
62. Who invented the Jet Engine?  
(A) Karl Benz (B) Sir Frank Whittle  
(C) Thomas Savery  
(D) Michael Faraday
63. South-South dialogue is associated with  
(A) Co-operation among developing nations  
(B) Arms conference  
(C) Summit meeting between developed and developing countries  
(D) All the above
64. The reserve held by Commercial Banks over and above the statutory minimum, with the RBI are called  
(A) Cast reserves (B) Deposit reserves  
(C) Excess reserves  
(D) Momentary reserves

65. Who is authorized to issue coins in India?  
 (A) Reserve Bank of India  
 (B) Ministry of Finance  
 (C) State Bank of India  
 (D) Indian Overseas Bank
66. Which four countries are called the Asian Tigers?  
 (A) Hong Kong, Singapore, South Korea, Taiwan  
 (B) Hong Kong, China, Singapore, Taiwan  
 (C) Hong Kong, Malaysia, Singapore, China  
 (D) Hong Kong, South Korea, China, Taiwan
67. In the Budget Estimates for 2011-12, an allocation of Rs. 300 crore has been made for promoting output of pulses in 60,000 villages in rainfed areas with a view to attaining self sufficiency in pulse in a period of  
 (A) two years (B) three years  
 (C) four years (D) five years
68. In the budget for 2011-12 presented by the Finance Minister on 28-2-2011, the growth rate for the year 2010-11 was projected at  
 (A) 7.6% (B) 8.0%  
 (C) 8.6% (D) 9.0%
69. The 'break-even' points where  
 (A) marginal revenue equals marginal cost  
 (B) average revenue equals average cost  
 (C) total revenue equals total cost  
 (D) none of the above
70. The method of Impeachment of the President of India is adopted from  
 (A) U.S.A. (B) U.K.  
 (C) U.S.S.R. (D) France
71. In the English Schedule of the Constitution of India, which languages were added subsequently?  
 (A) English, Sindhi, Marathi, Sanskrit  
 (B) Sanskrit, Sindhi, Konkani, Manipuri  
 (C) Sindhi, Konkani, Manipuri, Nepali  
 (D) Marathi, Oriya, Konkani, Nepali
72. Indian Parliament Means  
 (A) Rajya Sabha – Lok Sabha  
 (B) Rajya Sabha – Lok Sabha – Prime Minister  
 (C) President of India – Rajya Sabha – Lok Sabha  
 (D) President of India – Vice President of India – Lok Sabha – Rajya Sabha
73. Generally the soil of the northern plains of India has been formed by  
 (A) degradation  
 (B) aggradation  
 (C) weathering in situ  
 (D) erosion
74. Hiuen Tsang visited India during the reign of  
 (A) Chandragupta I (B) Chandragupta II  
 (C) Harshavardhana  
 (D) Rudradaman
75. The Muslim adventurer who destroyed the Nalanda University was  
 (A) Alla-ud-din Khilji  
 (B) Muhammad-bin-Tughlak  
 (C) Muhammad-bin-Bhaktiyar  
 (D) Muhammad-bin-Quasim
76. Painting reached its highest level of development during the reign of  
 (A) Akbar (B) Aurangzeb  
 (C) Jahangir (D) Shah Jahan
77. The communal electorate was introduced for the first time in India in  
 (A) 1919 (B) 1935  
 (C) 1906 (D) 1909
78. The two states which had non-Congress Ministries in 1937 were  
 (A) Bengal and Punjab  
 (B) Punjab and NWEP  
 (C) Madras and Central Provinces  
 (D) Bihar and Uttar Pradesh
79. Sea breeze is formed during  
 (A) Day time (B) Night time  
 (C) Both (D) Seasonal

80. What percentage of world's freshwater is stored as glacial ice?  
(A) 50% (B) 10%  
(C) 70% (D) 30%
81. Which one of the following rivers of India does not make a delta?  
(A) Ganges (B) Godavari  
(C) Mahanandi (D) Tapi
82. Which one of the following state has the longest coastline?  
(A) Maharashtra (B) Tamil Nadu  
(C) Gujarat (D) Andhra Pradesh
83. The pass located in Himanchal Pradesh is  
(A) Shipkila (B) Zojila  
(C) Nathula (D) Jelepala
84. Match the following and select the correct answer from the codes given below:  
**Crops Producing state**  
(a) Tea (1) Himanchal Pradesh  
(b) Sugarcane (2) Assam  
(c) Groundnut (3) Uttar Pradesh  
(d) Apple (4) Gujarat  
(A) a-2, b-4, c-1, d-3  
(B) a-2, b-3, c-4, d-1  
(C) a-3, b-2, c-1, d-4  
(D) a-4, b-3, c-1, d-2
85. An example of false fruit is  
(A) Apple (B) Guava  
(C) Mango (D) Tomato
86. Normal fasting blood sugar level per 100 ml. of blood in man is  
(A) 30 – 50 mg (B) 50 – 70 mg  
(C) 80 – 100 mg (D) 120 – 140 mg
87. Rate of interest is determined by  
(A) The rate of return of the capital invested  
(B) Central Government  
(C) Liquidity preference  
(D) Commercial Banks
88. The vector of disease sleeping sickness is  
(A) sand-fly (B) house-fly  
(C) fruit-fly (D) tse-tse fly
89. For how many years have the dinosaurs been extinct?  
(A) About 25 million years  
(B) About 65 million years  
(C) About 100 million years  
(D) About 135 million years
90. A geostationary satellite revolves round the earth from  
(A) East to West  
(B) West to East  
(C) North to South  
(D) South to North
91. Among the following materials sound travels fastest in  
(A) Steel (B) Air  
(C) Vacuum (D) Water
92. The rear side of the moon was photographed by  
(A) Viking I  
(B) Viking II  
(C) Luna III  
(D) Mariner IX
93. Which phenomenon do bats or dolphins use to find prey, predators or obstacles?  
(A) Refraction of sound  
(B) Formation of beats  
(C) Scattering of sound  
(D) Echo location
94. What did the first electronic digital computer contain?  
(A) Transistors (B) Valves  
(C) Core memory  
(D) Semiconductor memory
95. Microsoft Office's personal information manager is  
(A) Outlook (B) Internet Explorer  
(C) Organizer (D) Access
96. Hard steel contains  
(A) 2 to 5 per cent carbon  
(B) 0.5 to 1.5 per cent carbon  
(C) 0.1 to 0.4 per cent carbon  
(D) 0.01 to 0.04 per cent carbon



97. Cement is formed by strongly heating a mixture of

- (A) limestone and graphite
- (B) limestone and clay
- (C) chalk and graphite
- (D) clay and graphite

98. Glass is a

- (A) superheated solid
- (B) superheated liquid

(C) supercooled gas

(D) superheated liquid

99. The temperature of oxy-acetylene flame is around

- (A) 2800° C
- (B) 3200° C
- (C) 4000° C
- (D) 1500° C

100. Which is the most stable eco-system?

- (A) Desert
- (B) Ocean
- (C) Mountain
- (D) Forest

## PART-C

## NUMERICAL APTITUDE

101. A reduction of 20% in the price of an apple enables a man to buy 10 apples more for Rs. 54. The reduced price of apple per dozen is  
(A)Rs. 4.32 (B)Rs. 12.96  
(C)Rs. 10.80 (D)Rs. 14.40
102. Price of a commodity has increased by 60%. By what per cent must a consumer reduce the consumption of the commodity so as not to increase the expenditure?  
(A)37 (B)37.5  
(C)40.5 (D)60
103. The cost of an apple is twice that of a banana and the cost of a banana is 25% less than that of a guava. If the cost of each type of fruit increase by 10%, then the percentage increase in cost of 4 bananas, 2 apples and 3 guavas is  
(A)10% (B)12%  
(C)16% (D)18%
104. Walking  $\frac{6}{7}$ th of his usual speed, a man is 12 minutes too late. The usual time taken by him to cover that distance is  
(A)1 hour  
(B)1 hour 12 minutes  
(C)1 hour 15 minutes  
(D)1 hour 20 minutes
105. If I walk at 5 km/hour, I miss a train by 7 minutes. If, however, I walk at 6 km/hour, I reach the station 5 minutes before the departure of the train. The distance (in km) between my house and the station is  
(A)6 (B)5  
(C)4 (D)3
106. Rs. 800 becomes Rs. 956 in 3 years at a certain rate of simple interest. If the rate of interest is increased by 4%, what amount will Rs. 800 become in 3 years?  
(A)Rs. 1020.80 (B)Rs. 1025  
(C)Rs. 1052 (D)Rs. 1050
107. Simple interest on a certain sum is  $\frac{16}{25}$  of the sum. The rate per cent if the rate per cent and time (in years) are equal, is  
(A)6% (B)8%  
(C)10% (D)12%
108. If the difference between S.I. and C.I. for 2 years on a sum of money lent at 5% is Rs. 6, then the sum is  
(A)Rs. 2200 (B)Rs. 2400  
(C)Rs. 2600 (D)Rs. 2000
109. A hemisphere and a cone have equal bases. If their heights are also equal, the ratio of their curved surface will be  
(A)  $1:\sqrt{2}$  (B)  $\sqrt{2}:1$   
(C) 1 : 2 (D) 2 : 1
110. If  $x = \frac{\sqrt{5}+1}{\sqrt{5}-1}$ , then, the value of  $5x^2 - 5x - 1$  is  
(A) 0 (B) 3  
(C) 4 (D) 5
111. When  $2^{23}$  is divided by 10, the remainder will be  
(A) 2 (B) 3  
(C) 4 (D) 8
112. The value of  $3 \div \frac{3}{3 + \frac{1}{3 + \frac{1}{3}}}$  is  
(A)  $\frac{40}{11}$  (B)  $\frac{43}{11}$   
(C)  $\frac{46}{11}$  (D)  $\frac{41}{11}$

113. Find the unit digit in the product  $(4387)^{245} \times (621)^{72}$   
 (A) 1 (B) 2  
 (C) 5 (D) 7
114. If  $\sqrt{2} = 1.4142$  find the value of  

$$2\sqrt{2} + \sqrt{2} + \frac{1}{2+\sqrt{2}} + \frac{1}{\sqrt{2}-2}$$
  
 (A) 1.4144  
 (B) 2.8284  
 (C) 28.284  
 (D) 2.4142
115. If  $X * Y = Y^2 + Y^2 - XY$  then  $11 * 13$  is  
 (A) 117 (B) 147  
 (C) 290 (D) 433
116. The value of  $\frac{(3.2)^3 - 0.008}{(3.2)^3 + 0.64 + 0.04}$  is  
 (A) 0 (B) 2.994  
 (C) 3.208 (D) 3
117. If  $\frac{1}{a^3} = 11$ , then the value of  $a^2 - 33ia$  is  
 (A) 1331331 (B) 1331000  
 (C) 1334331 (D) 1330030
118. If  $\sqrt{a + \frac{x}{961}} = \frac{32}{31}$ , then the value of  $x$  is  
 (A) 63 (B) 61  
 (C) 65 (D) 64
119. If  $a$  and  $b$  are odd numbers, then which of the following is even?  
 (A)  $a + b + ab$  (B)  $a + b - 1$   
 (C)  $a + b + 1$  (D)  $a + b + 2ab$
120. 216 - 1 is divisible by  
 (A) 11 (B) 13  
 (C) 17 (D) 19
121. The HCF and LCM of two numbers are 12 and 924 respectively. Then the number of such pairs is  
 (A) 0 (B) 1  
 (C) 2 (D) 3
122. What is the least number which, when divided by 4, 6, 7, 8 gives the remainder 3 but is divisible by 9?  
 (A) 1463 (B) 1573  
 (C) 1683 (D) 1793
123. Three numbers are in the ratio 3 : 4 : 5. The sum of the largest and the smallest equals the sum of the second and 52. The smallest number is  
 (A) 20 (B) 27  
 (C) 39 (D) 52
124. If the radius of a circle is increased by 50%, its area is increased by  
 (A) 125% (B) 100%  
 (C) 75% (D) 50%
125. A and B working separately can do a piece of work in 9 and 12 days respectively. If the work for a day alternately with a beginning, the work would be completed in  
 (A) 10 3 days (B) 1 10 2 days  
 (C) 10 4 days (D) 1 10 3 days
126. A and B together can do a work in 10 days. B and C together can do the same work in 6 days. A and C together can do the work in 12 days. Then A, B and C together can do the work in  
 (A) 28 days (B) 14 days  
 (C) 5 7 days (D) 2 8 7 days
127. A does half as much work as B in three-fourth of the time. If together they take 18 days to complete a work, how much time shall B take to do it alone?  
 (A) 30 days (B) 35 days  
 (C) 40 days (D) 45 days
128. If a wire is bent into the shape of a square, then the area of the square so formed is  $81 \text{ cm}^2$ . When the wire is rebent into a

- semicircular shape, then the area (in  $\text{cm}^2$ ) of the semicircle will be (Take  $\pi = 7$ )
- (A)22 (B)44  
(C)77 (D)154
129. Marbles of diameter 1.4 cm are dropped into a cylindrical beaker containing some water and are fully submerged. The diameter of the beaker is 7 cm. Find how many marbles have been dropped in it if the water rises by 5.6 cm.  
(A)50 (B)150  
(C)250 (D)350
130. Water is flowing at the rate of 3 km/hr through a circular pipe of 20 cm internal diameter into a circular cistern of diameter 10 m and depth 2 m. In how much time will the cistern be filled?  
(A)1 hr (B)1 hr 40 mins  
(C)1 hr 20 mins (D)2 hr 40 mins
131. A bicycle wheel makes 5000 revolutions in moving 11 km. The diameter of the wheel, in cm, is  
(A)35 (B)55  
(C)65 (D)70
132. At each corner of a triangular field of sides 26 m, 28 m and 30 m, a cow is tethered by a rope of length 7 m. The area (in  $\text{m}^2$ ) ungrazed by the cows is  
(A)336 (B)259  
(C)154 (D)77
133. A shopkeeper allows 23% commission on his advertised price and still makes a profit of 10%. If he gains Rs. 56 on one item, his advertised price of the item, in Rs. is  
(A)820 (B)780  
(C)790 (D)800
134. The single discount equal to three consecutive discounts of 10%, 12% and 5% is  
(A)26.27% (B)24.76%  
(C)9% (D)11%
135. If  $x : y = 5 : 6$ , then  $(3x^2 - 2y^2) : (y^2 - x^2)$  is  
(A)7 : 6 (B)11 : 3  
(C)3 : 11 (D)6 : 7
136. An alloy contains copper, zinc and nickel in the ratio of 5 : 3 : 2. The quantity of nickel in kg that must be added to 100 kg of this alloy to have the new ratio 5 : 2 : 3, is  
(A)8 (B)10  
(C)12 (D)15
137. The ratio of the ages of Ram and Rahim 10 years ago was 1 : 3. The ratio of their ages five years hence will be 2 : 3. Then the ratio of their present ages is  
(A)1 : 2 (B)3 : 5  
(C)3 : 4 (D)2 : 5
138. The incomes of A, B and C are in the ratio 7 : 9 : 12 and their expenditures are in the ratio 8 : 9 : 15. If A saves  $\frac{1}{4}$  of his income, then the savings of A, B and C are in the ratio of  
(A)69 : 56 : 48 (B)47 : 74 : 99  
(C)37 : 72 : 49 (D)56 : 99 : 69
139. Out of 4 numbers, whose average is 60, the first one is one-fourth of the sum of the last three. The first number is  
(A)15 (B)45  
(C)48 (D)60
140. The average of 25 observations is 13. It was later found that an observation 73 was wrongly entered as 48. The new average is  
(A)12.6 (B)14  
(C)15 (D)13.8

141. If the cost price of 10 articles is equal to the selling price of 8 articles, then gain per cent is  
 (A) 10% (B) 8%  
 (C) 50% (D) 25%

142. An article is marked 40% above the cost price and discount of 30% is allowed. What is the gain or loss percentage?  
 (A) 10% gain  
 (B) 5% gain  
 (C) 2% loss  
 (D) 12% loss

143. A man bought oranges at the rate of 8 for Rs. 34 and sold them at the rate of 12 for Rs. 57. How many oranges should be sold to earn a net profit of Rs. 45?  
 (A) 90 (B) 100  
 (C) 135 (D) 150

144. A man sells two articles for Rs. 5000 each neither losing nor gaining in the deal. If he sold of them at a gain of 25%, the other article is sold at a loss of

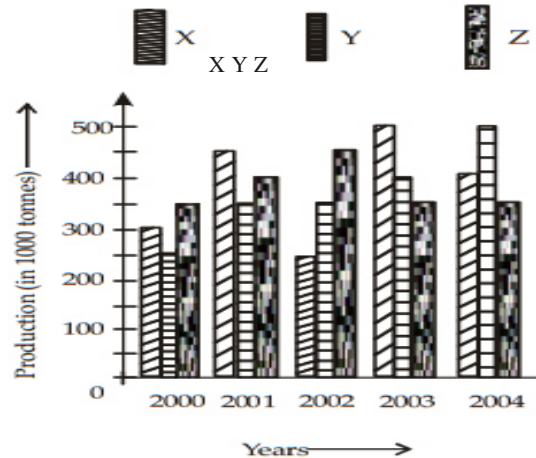
(A)  $25\frac{2}{3}$  (B) 2  $16\frac{2}{3}$

(C)  $17\frac{2}{3}$  (D) 1  $18\frac{2}{3}$

145. By selling an article for Rs. 144, a person gained such that the percentage gain equals the cost price of the article. The cost price of the article is  
 (A) Rs. 90 (B) Rs. 80  
 (C) Rs. 75 (D) Rs. 60

146. The average age of 11 players of a cricket team is increased by 2 months when two of them aged 18 years and 20 years are replaced by two new players. The average age of the new players is  
 (A) 19 years 1 month  
 (B) 19 years 6 month  
 (C) 19 years 11 month  
 (D) 19 years 5 month

The following graph shows the production of wheat flour (in 1000 tonnes) by three companies X, Y and Z over the years. Study the graph and answer Question Nos. 147 to 150.



147. What is the difference between the production of company Z in 2004 and company Y in 2000 (in thousand tonnes)?  
 (A) 2000 (B) 200  
 (C) 20 (D) 100

148. What is the ratio of the average production of Company X in the period 2002-2004 to the average production of company Y in the same period?  
 (A) 1 : 1 (B) 15 : 17  
 (C) 23 : 25 (D) 27 : 29

149. What is the percentage increase in the production of company Y from 2002 to 2003?

(A) 24 (B) 6  $16\frac{7}{8}$

(C) 25 (D) 40

150. The average production for five years was maximum for which company?  
 (A) X and Z both (B) Y  
 (C) Z (D) X and Y both

## PART D

## ENGLISH COMPREHENSION

**Directions: In questions nos. 151 to 155, out of the four alternatives, choose the one which best expresses the meaning of the given word and mark it in the Answer Sheet.**

151. Poignant  
(A) showy (B) sad  
(C) silly (D) snobbish
152. Querulous  
(A) critical (B) curious  
(C) complaining (D) ambiguous
153. Audacious  
(A) brilliant (B) powerful  
(C) bold (D) frightening
154. Perilous  
(A) hazardous (B) rigorous  
(C) resilient (D) requisite
155. Reverie  
(A) determination (B) rigorous  
(C) reality (D) requisite

**Directions: In question nos. 156 to 160, choose the word opposite in meaning to the given word and mark in the Answer Sheet.**

156. Autonomous  
(A) self-government  
(B) dependent  
(C) defensive  
(D) neutral
157. Deceitful  
(A) sincere (B) useful  
(C) plain (D) honest
158. Exonerate  
(A) admit (B) release  
(C) convict (D) reject
159. Exaggerate  
(A) underwrite (B) understate  
(C) ignore (D) condemn

160. Controversial  
(A) indisputable (B) restrained  
(C) controlled (D) appeasing

**Directions: In questions nos. 161 to 165, four alternatives are given for the Idiom/Phrase and bold italicized in the sentence. Choose the alternative which best expresses the meaning of the Idiom/Phrase and mark it in the Answer Sheet.**

161. To strain every nerve  
(A) to make utmost efforts  
(B) to feel weak and tired  
(C) to be a diligent worker  
(D) to be methodical in work
162. To flog a dead horse  
(A) to whip a dead horse  
(B) to attempt to do the impossible  
(C) waste one's efforts  
(D) to take advantage of a weakness
163. To show a clean pair of heels  
(A) to hide (B) to escape  
(C) to pursue (D) to follow
164. To die in harness  
(A) premeditated murder  
(B) dying young in an accident  
(C) to die while in service  
(D) to be taken by surprise
165. To feather one's nest  
(A) to make a residential house  
(B) something that lasts for a short time  
(C) to profit in a dishonest way  
(D) none of the above

**Directions: In questions nos. 166 to 170, a sentence 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).**



Blacken the appropriate rectangle [ ] in the Answer Sheet.

166. A taller Sikh rushed forward than any of his comrades.  
 (A) A Sikh, taller than any of this comrades, rushed forward  
 (B) A Sikh rushed forward taller than any of his comrades  
 (C) A Sikh rushed forward than any of his comrades taller  
 (D) No improvement
167. An author in the reign of Queen Anne who was famous lived in a cottage.  
 (A) An author in the reign, who was famous, of Queen Anne lived in a cottage  
 (B) In the reign of Queen Anne, an author lived in a cottage, who was famous  
 (C) An author who was famous in the reign of Queen Anne lived in a cottage  
 (D) No improvement
168. In the absence of your support, he would have lost the election.  
 (A) Lacking your support, he would have lost the election  
 (B) But for your support, he would have lost the election  
 (C) He would have lost the election, if you had not support him  
 (D) No improvement
169. My uncle is enough rich to buy a car.  
 (A) My uncle is rich enough to buy a car  
 (B) My uncle is richer enough to buy a car  
 (C) My uncle is enough richer to buy a car  
 (D) No improvement
170. Walking along the road, an old man ran over the lorry.  
 (A) Walking along the road, an old man ran behind the lorry  
 (B) Running along the road, the lorry ran over an old man  
 (C) The lorry ran over an old man walking along the road  
 (D) No improvement

**Directions: In questions nos. 171 to 175, 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.**

171. (A) persistence (B) thesaurus  
 (C) conspicuous (D) renaissance
172. (A) acoustic (B) norcoctic  
 (C) pesimist (D) permanent
173. (A) impetous (B) ignoable  
 (C) ignominious (D) idiosyncrasy
174. (A) Inconsistant (B) Repentant  
 (C) Exponant (D) Excultent
175. (A) demagogue (B) deliverance  
 (C) delinquency (D) deliberative

**Directions: In question nos. 176 to 180, out of the 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.**

176. A person who has no money to pay off his debts  
 (A) Insolvent (B) Poor  
 (C) Destitute (D) Pauper
177. Words uttered impiously about God  
 (A) amoral (B) philosophy  
 (C) logic (D) blasphemy
178. Quibble  
 (A) Premeditate (B) Prenominate  
 (C) Prevaricate (D) Preponderate
179. One who compiles a dictionary  
 (A) geographer (B) lexicographer  
 (C) lapidist (D) linguist
180. A test in which cells from diseased organs are removed and tested  
 (A) Biopsy (B) Autopsy  
 (C) Operation (D) Amputation

**Directions: In the following passage (181 to 190), some of the words have been left out. First read**

the passage over and try to understand what it is about. Then fill in the blanks with the help of the alternatives given. Mark your answer in the Answer Sheet.

**PASSAGE**  
**(Question Nos. 181 to 190)**

A 181 becomes a flowing stream only 182 there is continuity of 183 life in a society. In 184 words, a 185 culture comes into 186 when people 187 a continuous way of life. Such 188 expresses itself 189 various ways in common tradition and 190 of conduct.

- 181.(A) civilization (B) culture  
(C) idea (D) philosophy
- 182.(A) at (B) what  
(C) when (D) as
- 183.(A) individual (B) nature's  
(C) society's (D) collective
184. (A) different (B) difficult  
(C) other (D) many
- 185.(A) distinctive (B) unique  
(C) clean (D) foggy
- 186.(A) phase (B) existence  
(C) action (D) thinking
- 187.(A) develop (B) create  
(C) follow (D) end
- 188.(A) inconsistency (B) uniqueness  
(C) greatness (D) continuity
- 189.(A) in (B) of  
(C) with (D) at
- 190.(A) rules (B) regulations  
(C) norms (D) laws

**Directions (191-195): In the following questions, some of the sentences have errors and some are correct. Find out which part of a sentence has an error. The number of that part is your answer. If a sentence is free from errors, then your answer is (d) i.e., No error.**

- 191.If you had told (a) / I would have helped you (b) / solve the problem. (c) / No error (d).
- 192.“The Arabian Nigh” (a) / are indeed (b) / an interesting book. (c) / No error (d).
- 193.He (a) / lover her (b) / despite of himself (c) / No error (d).
- 194.Of all the models (a) / Jessica is (b) / the more good-looking one (c) / No error (d).
- 195.When I went there (a) / Charles is playing (b) / a game of chess. (c) / No error (d).

**Directions (196-200): In the following questions, sentences are given with blanks to be filled in with an appropriate words. Four alternatives are suggested for each question.**

Choose the correct alternative out of the four.

- 196.\_\_\_\_\_ your instructions, we have closed you bank account.  
(a)In lieu of (b)With regard to  
(c)In accordance with  
(d)On account of
- 197.\_\_\_\_\_ she is cleaver, she often makes mistakes.  
(a)Despite (b)Since  
(c)Although (d)Yet
- 198.Do you prefer \_\_\_\_\_ or traditional art forms?  
(a)archaic (b)contemporary  
(c)foreign (d)simultaneous
- 199.The farmers \_\_\_\_\_ their farms, if they had known that a thunderstorm was approaching.  
(a)will leave (b)would leave  
(c)will have left (d)would have left
- 200.The Paralympics is a competition for the \_\_\_\_\_  
(a)disadvantaged (b)discouraged  
(c)disabled (d)despised