SSC
Combined Graduate Level
(Tier - 1) Exam

Date : 26-6-2011   *(Ist Meeting)*

PART - (A) : GENERAL INTELLIGENCE & REASONING

Directions : *In questions no. 1 to 9, select the related letters/words/numbers from the given alternatives.*

1. 6 : 64 : : 11 : ?
   - (a) 144
   - (b) 169
   - (c) 121
   - (d) 124

2. 123 : 4 : : 726 : ?
   - (a) 23
   - (b) 26
   - (c) 14
   - (d) 12

3. Fish : Scales : : Bear : ?
   - (a) Feathers
   - (b) Leaves
   - (c) Fur
   - (d) Skin

4. Writer : Pen : : ?
   - (a) Needle : Tailor
   - (b) Artist : Brush
   - (c) Painter : Canvas
   - (d) Teacher : Class

5. NUMERAL : UEALRMN : : ALGEBRA : ?
   - (a) LRBAGEA
   - (b) BARLAGE
   - (c) LERAGBA
   - (d) LERABGA

6. BDAC : FHEG : : NPMO : ?
   - (a) RQTS
   - (b) QTRC
   - (c) TRQS
   - (d) RTQS

7. FGHI : OPQR : : BCDE : ?
   - (a) KLMJ
   - (b) KLMN
   - (c) IUVW
   - (d) STUW

8. PNLJ : IGEC : : VTRP : ?
   - (a) OMKI
   - (b) RSTU
   - (c) QSRC
   - (d) RPOM

9. 17 : 60 : : 20 : ?
   - (a) 57
   - (b) 69
   - (c) 81
   - (d) 93

Directions : *In questions no. 10 to 15, find the odd number/letters/word from the given alternatives.*

10. (a) 162
    - (b) 405
    - (c) 567
    - (d) 644

11. (a) 156
    - (b) 201
    - (c) 273
    - (d) 345

12. (a) Flute
    - (b) Violin
    - (c) Guitar
    - (d) Sitar

13. (a) Prod
    - (b) Sap
    - (c) Jab
    - (d) Thrust

14. (a) JKOP
    - (b) MNST
    - (c) CABD
    - (d) OPWX

15. (a) CAFD
    - (b) TSWV
    - (c) IGLJ
    - (d) OMRP

16. In the following question, number of letters are skipped in between by a particular rule. Which of the following series observes the rule ?
    - (a) ABFGJK
    - (b) ACFJOU
    - (c) MPQSTV
    - (d) ADFHJL

17. Find out the pair of numbers that does not belong to the group for lack of common property.
    - (a) 11-115
    - (b) 10-90
    - (c) 9-72
    - (d) 8-56

Directions : *Which one of the given responses would be a meaningful descending order of the following ?*

18. 1. Major   2. Captain
    3. Colonel   4. Brigadier
    5. Lt. General
    - (a) 5, 4, 3, 1, 2
    - (b) 5, 1, 4, 2, 3
    - (c) 4, 5, 1, 3, 2
    - (d) 3, 4, 2, 5, 1

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

19. 1. Dissident   2. Dissolve
    3. Dissent   4. Dissolute
    5. Dissolution
    - (a) 3, 1, 4, 5, 2
    - (b) 3, 2, 1, 4, 5
    - (c) 3, 1, 4, 2, 5
    - (d) 3, 2, 4, 5, 1

20. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it ?
    _cb_ cab_baca_cba_ab
    - (a) cabcb
    - (b) abccb
    - (c) bacbc
    - (d) bcaba

Directions : *In questions no. 21 to 24 a series is given, with one/two term(s) missing. Choose the correct alternative from the given ones that will complete the series.*

21. 4, 196, 16, 169, ?, 144, 64
    - (a) 21
    - (b) 81
    - (c) 36
    - (d) 32

22. 8, 15, 36, 99, 288, ...?......
    (a) 368   (b) 676
    (c) 855   (d) 908

23. XYZCBAUVWFE ......? ......?......
    (a) DR   (b) RS
    (c) DS   (d) MN

24. reoc, pgme, nikg, lkii, ...?...
    (a) acef   (B) jmgk
    (c) efgh   (d) wxyz

25. Among her children, Ganga's favourites are Ram and Rekha. Rekha is the mother of Sharat, who is loved most by his uncle Mithun. The head of the family is Ram Lal, who is succeeded by his sons Gopal and Mohan. Gopal and Ganga have been married for 35 years and have 3 children. What is the relation between Mithun and Mohan ?
    (a) Uncle   (b) Son
    (c) Brother   (d) No relation

26. Find the wrong number in the series.
         6, 9, 15, 22, 51, 99
    (a) 99   (b) 51
    (c) 22   (d) 15

27. In a row of girls, Kamla is 9th from the left and Veena is 16th from the right. If they interchange their positions, Kamla becomes 25th from the left. How many girls are there in the row ?
    (a) 34   (b) 36
    (c) 40   (d) 41

28. Ravi has spent a quarter (1/4) of his life as a boy, one-fifth (1/5) as a youth, one-third (1/3) as a man and thirteen (13) years in old age. What is his present age ?
    (a) 70 years   (b) 80 years
    (c) 60 years   (d) 65 years

29. Five boys A, B, C, D, E are sitting in a park in a circle. A is facing South-West, D is facing South-East, B and E are right opposite A and D respectively and C is equidistant between D and B. Which direction is C facing ?
    (a) West   (b) South
    (c) North   (d) East

30. At what time are the hands of clocks together between 6 and 7 ?
    (a) $32\frac{8}{11}$ minutes past 6   (b) $34\frac{8}{11}$ minutes past 6
    (c) $30\frac{8}{11}$ minutes past 6   (d) $32\frac{5}{7}$ minutes past 6

31. Out of 100 families in the neighbourhood, 50 have radios, 75 have TVs and 25 have VCRs. Only 10 families have all three and each VCR owner also has a TV. If some families have radio only, how many have only TV ?
    (a) 30   (b) 35
    (c) 40   (d) 45

32. Suresh was born on 4th October 1999. Shashikanth was born 6 days before Suresh. The Independence day of that year fell on Sunday. Which day was Shashikanth born ?
    (a) Tuesday   (b) Wednesday
    (c) Monday   (d) Sunday

33. From the given alternative words, select the word which **cannot** be formed using the letters of the given word :
    'CONCENTRATION'
    (a) CONCERN   (b) NATION
    (c) TRAIN   (d) CENTRE

34. In a certain office, 1/3 of the workers are women, 1/2 of the women are married and 1/3 of the married women have children. If 3/4 of the men are married and 2/3 of the married men have children, then what part of workers are without children ?
    (a) 5/18   (b) 4/9
    (c) 11/18   (d) 17/36

35. If a man on a moped starts from a point and rides 4 km South, then turns left and rides 2 km to turn again to the right to ride 4 km more, towards which direction is he moving ?
    (a) North   (b) West
    (c) East   (d) South

36. Ganesh cycles towards South-West a distance of 8 m, then he moves towards East a distance of 20 m. From there he moves towards North-East a distance of 8 m, then he moves towards West a distance of 6 m. From there he moves towards North-East a distance of 2 m. Then he moves towards West a distance of 4 m and then towards South-West 2 m and stops at that point. How far is he from the starting point ?
    (a) 12 m   (b) 10 m
    (c) 8 m   (d) 6 m

37. Two statements are given followed by four inferences. Select the alternative which is most appropriate.
    Statements :
    I. India is becoming industrialised.
    II. Pollution is a problem associated with industrialisation.
    Inferences :
    I. All industrial centres are polluted.
    II. India is polluted.
    III. Polluted nations are industrialised.
    IV. India may become polluted.
    (a) All are appropriate
    (b) None is appropriate
    (c) Only IV is appropriate
    (d) Only II is appropriate

38. From the given alternative words, select the word which can be formed using the letters of the given word :
'DETERMINATION'
(a) DECLARATION
(b) NATIONAL
(c) TERMINATED
(d) DEVIATION

39. If in a certain code HYDROGEN is written as JCJZYSSD, then how can ANTIMONY be written in that code ?
(a) CPVKOQPA
(b) CRZQWABO
(c) ERXMQSRC
(d) GTZOSUTE

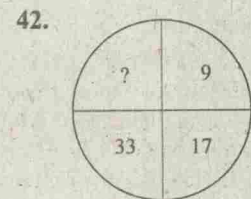40. If DELHI is coded as 73541 and CALCUTTA as 82589662, then how can CALICUT be coded ?
(a) 5279431
(b) 5978013
(c) 8251896
(d) 8543691

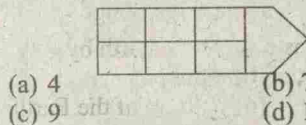**Directions :** *In questions no. 41 and 42, select the missing number from the given responses.*

41.

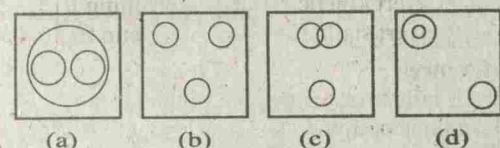| 2	7	9
7	3	4
9	8	?
126	168	216

(a) 8
(b) 3
(c) 6
(d) 36

42.

(a) 60
(b) 68
(c) 55
(d) 65

43. How many rectangles are there in the given diagram?

(a) 4
(b) 7
(c) 9
(d) 18

44. Which of the following diagrams represents the relationship among Sun, Moon and Star?

(a)   (b)   (c)   (d)

45. Some equations have been solved on the basis of a certain system. Find the correct answer for the unsolved equation on that basis.
If $9 * 7 = 32$, $13 * 7 = 120$, $17 * 9 = 208$, then $19 * 11 = ?$
(a) 150   (b) 180   (c) 210   (d) 240

46. Forecast the Growth Rate for the year 1995 from the following data :

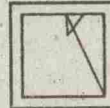| Year	1990	1991	1992	1993	1994	1995
Growth Rate →	3.5	3.7	4.1	4.9	6.5	?

(a) 7.8   (b) 8.6   (c) 9.7   (d) 9.9

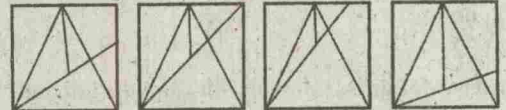47. If '−' stands for '÷', '+' stands for '×', '÷' for '−' and '×' for '+', which one of the following equations is correct?
(a) $30 - 6 + 5 \times 4 \div 2 = 27$
(b) $30 + 6 - 5 \div 4 \times 2 = 30$
(c) $30 \times 6 \div 5 - 4 + 2 = 32$
(d) $30 \div 6 \times 5 + 4 - 2 = 40$

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

48. Question Figure

Answer Figures

(a)   (b)   (c)   (d)

Directions : *If a mirror is placed on the line MN, then which of the answer figures is the correct image of the given questions figure?*

49. Question Figure

Answer Figures

(a)   (b)   (c)   (d)
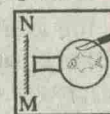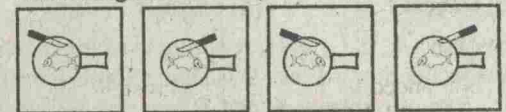
Directions : *A piece of paper is folded and cut as shown below in the questions figures. From the given answer figures, indicate how it will appear when opened.*

50. Question Figures

Answer Figures

(a)   (b)   (c)   (d)

PART - (B) : GENERAL AWARENESS

51. Judicial review in the Indian Constitution is based on :
   (a) Rule of Law
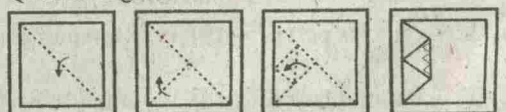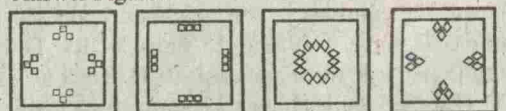   (b) Due process of Law
   (c) Procedure established by Law
   (d) Precedents and Conventions

52. The Drafting of the Constitution was completed on :
   (a) 26th January 1950   (b) 26th December 1949
   (c) 26th November 1949   (d) 30th November 1949

53. Who was the President of the Constituent Assembly ?
   (a) Pt. Jawahar Lal Nehru   (b) Sardar Patel
   (c) Dr. Rajendra Prasad   (d) Dr. B.R. Ambedkar

54. Which innovative discussion process is introduced by the Indian Parliament to the World Parliamentary systems ?
   (a) Question hour   (b) Zero hour
   (c) Resolutions   (d) Presidential speech

55. The Judges of the Supreme Court retire at the age of :
   (a) 60 years   (b) 65 years
   (c) 62 years   (d) 58 years

56. When there is an official change in the exchange rate of domestic currency, then it is called :
   (a) Appreciation   (b) Depreciation
   (c) Revaluation   (d) Deflation

57. Inflation redistributes income and wealth in favour of :
   (a) Pensioners   (b) Poor
   (c) Middle class   (d) Rich

58. The fringe benefit tax was introduced in the budget of :
   (a) 2003-04   (b) 2004-05
   (c) 2005-06   (d) 2006-07

59. In the Budget estimates for 2011-12, an allocation of : 400 crore has been made to bring in a green revolution in the East in the cropping system of :
   (a) Wheat   (b) Rice
   (c) Jowar   (d) Pulses

60. As announced by the Finance Minister in his budget speech on 28-2-2011, the income tax exemption limit for individuals other than senior citizens and women has been raised to :
   (a) ₹1,80,000   (b) ₹1,90,000
   (c) ₹ 2,00,000   (d) ₹ 2,50,000

61. Who among the following British persons. admitted the Revolt of 1857 as a national revolt ?
   (a) Lord Dalhousie   (b) Lord Canning
   (c) Lord Ellenborough   (d) Disraeli

62. The Greek ambassador sent to Chandragupta Maurya's court was :
   (a) Kautilya   (b) Seleucus Nicator
   (c) Megasthenes   (d) Justin

63. Identify the European power from whom Shivaji obtained cannons and ammunition.
   (a) The French   (b) The Portuguese
   (c) The Dutch   (d) The English

64. The call of "Back to the Vedas" was given by
   (a) Swami Vivekananda
   (b) Swami Dayanand Saraswati
   (c) Aurobindo Ghosh
   (d) Raja Ram Mohan Roy

65. Simon Commission was boycotted by the , nationalist leaders of India because
   (a) they felt that it was only an eyewash
   (b) all the members of the Commission were English
   (c) the members of the Commission were biased against India
   (d) it did not meet the demands of the Indians

66. The lowest layer of the atmosphere is
   (a) Stratosphere   (b) Thermosphere
   (c) Troposphere   (d) Mesosphere

67. The Konkan Railway connects
   (a) Goa - Mangalore
   (b) Roha - Mangalore
   (c) Kanyakumari — Mangalore
   (d) Kanyakumari — Mumbai

68. Bark of this tree is used as a condiment —
   (a) Cinnamon   (b) Clove
   (c) Neem   (d) Palm

69. How much of the Earth's land surface is desert ?
   (a) 1/10th   (b) l/5th
   (c) l/3rd   (d) l/6th

70. Which of the following is called the 'shrimp capital of India' ?
   (a) Mangalore   (b) Nagapatnam
   (c) Kochi   (d) Nellore

71. River Indus originates from
   (a) Hindukush range   (b) Himalayan range
   (c) Karakoram range   (d) Kailash range

72. The atmospheric air is held to the Earth by
   (a) gravity   (b) winds
   (c) clouds   (d) rotation of the Earth

73. The function of ball bearings in a wheel is
   (a) to increase friction
   (b) to convert kinetic friction into rolling friction
   (c) to convert static friction into kinetic friction
   (d) just for convenience

74. 'Shock-absorbers' are usually made of steel as it
   (a) is not brittle   (b) has lower elasticity
   (c) has higher elasticity (d) has no ductile property

75. The first computer made available for commercial use was
   (a) MANIAC   (b) ENIAC
   (c) UNIVAC   (d) EDSAC

76. A communication network which is used by large organizations over regional, national or global area is called
    (a) LAN   (b) WAN
    (c) MAN   (d) VAN

77. Who was the architect of North and South Blocks of the Central Secretariat in Delhi ?
    (a) Sir Edward Lutyens (b) Herbert Baker
    (c) Robert Tor Russell (d) Antonin Raymond

78. Saliva helps in the digestion of
    (a) Fats   (b) Starch
    (c) Proteins   (d) Vitamins

79. The longest bone in the human body is
    (a) Ulna   (b) Humerus
    (c) Femur   (d) Tibia

80. Red data book gives information about species which are
    (a) extinct   (b) endangered
    (c) dangerous   (d) rare

81. Which of the following is the smallest bird ?
    (a) Pigeon   (b) Parrot
    (c) Humming bird   (d) House sparrow

82. The time period of a pendulum when taken to the Moon would
    (a) remain the same (b) decrease
    (c) become zero   (d) increase

83. Indian Army's Operation 'Saiyam' was related to
    (a) Kashmir
    (b) Indo-China Border in the Central Region
    (c) North-East
    (d) Indo-Pak Border in Punjab and Rajasthan

84. Which of the following could be used as fuel in propellant or rockets ?
    (a) Liquid Hydrogen + Liquid Nitrogen
    (b) Liquid Oxygen + Liquid Argon
    (c) Liquid Nitrogen + Liquid Oxygen
    (d) Liquid Hydrogen + Liquid Oxygen

85. The addition of gypsum to portland cement helps in
    (a) increasing the strength of cement
    (b) rapid setting of cement
    (c) preventing rapid setting of cement
    (d) reduction in the cost of cement

86. White lung disease is prevalent among the workers of
    (a) Paper industry   (b) Cement industry
    (c) Cotton industry (d) Pesticide industry

87. Iodoform is used as an
    (a) antipyretic   (b) analgesic
    (c) antiseptic   (d) anaesthetic

88. An artificial ecosystem is represented by
    (a) pisciculture tank (b) agricultural land
    (c) zoo   (d) aquarium

89. The constituents of automobile exhaust that can cause cancer is/are
    (a) Oxides of nitrogen
    (b) Carbon monoxide
    (c) Polycyclic hydrocarbons
    (d) Lead

90. The optimum dissolved oxygen level (in mg/litre) required for survival of aquatic organisms is
    (a) 4 - 6   (b) 2 - 4
    (c) 8-10   (d) 12 -16

91. The world's only floating national park is situated in
    (a) Manipur   (b) Kuala Lumpur
    (c) Bilaspur   (d) Dispur

92. According to the latest 'Education Development Index' based on a series of surveys conducted by the National University of Education, Planning and Administration and released in February, 2011, the state with the highest Development Index is
    (a) Tamil Nadu   (b) Kerala
    (c) Punjab   (d) Gujarat

93. The 'Project Snow Leopard' to conserve the endangered species, launched by the Union Ministry of Environment and Forests covers the states of
    (a) Jammu & Kashmir and Himachal Pradesh only
    (b) Jammu & Kashmir, Himachal Pradesh and Uttarakhand only
    (c) Jammu & Kashmir, Himachal Pradesh, Uttarakhand and Arunachal Pradesh only
    (d) Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh and Sikkim

94. In the Railway Budget for 2011-12, an outlay of ₹ 57,630 crore has been announced for adding new lines with length of
    (a) 1000 km   (b) 1200 km
    (c) 1300 km   (d) 1500 km

95. The strong earthquake-cum-tsunami which has moved Japan's main island by a few feet and has caused the Earth's axis to wobble is expected to lead to the shortening of the day by
    (a) 1.6 microseconds (b) 2.3 microseconds
    (c) 3.1 microseconds (d) 3.4 microseconds

96. Which of the following folk/tribal dances is associated with Uttar Pradesh ?
    (a) Veedhi   (b) Thora
    (c) Tamasha   (d) Rauf

97. Which of the following books has been written by Atiq Rahimi ?
    (a) Earth and Ashes (b) This Savage Rite
    (c) The Red Devil   (d) Witness the Night

98. Who is the recepient of the Sahitya Akademi Award 2010 in Hindi Literature category ?
    (a) Uday Prakash   (b) Laxman Dubey
    (c) Nanjil Nandan   (d) Mangat Badal

99. The 2010 FIFA World Cup Final was held at
    (a) Paris   (b) Berlin
    (c) Johannesburg   (d) London

100. Who of the following received Sangeet Natak Akademi's Ustad Bismillah Khan Yuva Puruskar for 2009 in 'Hindustani Vocal Music' ?
    (a) Omkar Shrikant Dadarkar
    (b) Ragini Chander Shekar
    (c) Abanti Chakravorty and Sukracharya Rabha
    (d) K. Nellai Manikandan

PART - (C) : NUMERICAL APTITUDE

101. The value of $\dfrac{3\sqrt{2}}{\sqrt{3}+\sqrt{6}} - \dfrac{4\sqrt{3}}{\sqrt{6}+\sqrt{2}} + \dfrac{\sqrt{6}}{\sqrt{3}+\sqrt{2}}$ is

    (a) 4   (b) 0

    (c) $\sqrt{2}$ (d) $3\sqrt{6}$

102. $\sqrt{6+\sqrt{6+\sqrt{6+\ldots}}} = ?$

    (a) 2.3   (b) 3

    (c) 6   (d) 6.3

103. The square root of $\left(\dfrac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}\right)$ is

    (a) $\sqrt{3}+\sqrt{2}$ (b) $\sqrt{3}-\sqrt{2}$

    (c) $\sqrt{2}\pm\sqrt{3}$ (d) $\sqrt{2}-\sqrt{3}$

104. The remainder when 3^{21} is divided by 5 is

    (a) 1   (b) 2

    (c) 3   (d) 4

105. The value of $\dfrac{2\frac{1}{3}-1\frac{2}{11}}{3+\dfrac{1}{3+\dfrac{1}{3+\frac{1}{3}}}}$ is

    (a) $\dfrac{38}{109}$ (b) $\dfrac{109}{38}$

    (c) 1   (d) $\dfrac{116}{109}$

106. The last digit of $(1001)^{2008}+1002$ is

    (a) 0   (b) 3

    (c) 4   (d) 6

107. $\sqrt[3]{1-\dfrac{127}{343}}$ is equal to

    (a) $\dfrac{5}{9}$ (b) $1-\dfrac{1}{7}$

    (c) $\dfrac{4}{7}$ (d) $1-\dfrac{2}{7}$

108. If the sum of two numbers be multiplied by each number separately, the products so obtained are 247 and 114. The sum of the numbers is

    (a) 19   (b) 20

    (c) 21   (d) 23

109. Find a number, one-seventh of which exceeds its eleventh part by 100.

    (a) 1925   (b) 1825

    (c) 1540   (d) 1340

110. If $x * y = (x+3)^2(y-1)$ then the value of $5 * 4$ is

    (a) 192   (b) 182

    (c) 180   (d) 172

111. $\dfrac{(0.05)^2 + (0.41)^2 + (0.073)^2}{(0.005)^2 + (0.041)^2 + (0.0073)^2}$ is

    (a) 10   (b) 100

    (c) 1000   (d) None of these

112. If $9\sqrt{x} = \sqrt{12} + \sqrt{147}$ then $x = ?$

    (a) 2   (b) 3

    (c) 4   (d) 5

113. A and B can complete a piece of work in 8 days, B and C can do it in 12 days, C and A can do it in 8 days. A, B and C together can complete it in

    (a) 4 days   (b) 5 days

    (c) 6 days   (d) 7 days

114. X is 3 times as fast as Y and is able to complete the work in 40 days less than Y. Then the time in which they can complete the work together is

    (a) 15 days   (b) 10 days

    (c) $7\frac{1}{2}$ days   (d) 5 days

115. A copper wire is bent in the shape of a square of area 81 cm2. If the same wire is bent in the form of a semicircle, the radius (in cm) of the semicircle is (Take $\pi = \dfrac{22}{7}$)

    (a) 16   (b) 14

    (c) 10   (d) 7

116. The volume (in m^3) of rain water that can be collected from 1.5 hectares of ground in a rainfall of 5 cm is

    (a) 75   (b) 750

    (c) 7500   (d) 75000

117. A river 3 m deep and 40 m wide is flowing at the rate of 2 km per hour. How much water (in litres) will fall into the sea in a minute ?

    (a) 4,00,000   (b) 40,00,000

    (c) 40,000   (d) 4,000

118. The L.C.M. of three different numbers is 120. Which of the following **cannot** be their H.C.F. ?

    (a) 8   (b) 12

    (c) 24   (d) 35

119. A number when divided by 49 leaves 32 as remainder. This number when divided by 7 will have the remainder as

    (a) 4   (b) 3

    (c) 2   (d) 5

120. In an examination a student scores 4 marks for every correct answer and loses 1 mark for every wrong answer. If he attempts all 75 questions and secures 125 marks, the number of questions he attempts correctly is

    (a) 35   (b) 40
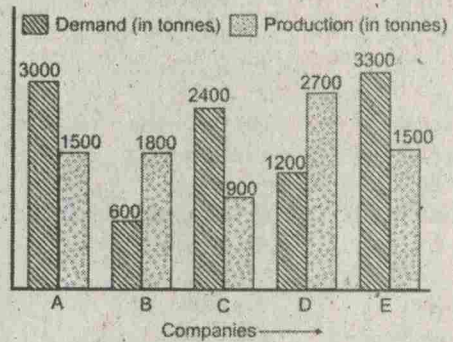
    (c) 42   (d) 46

121. The traffic lights at three different road crossings change after 24 seconds, 36 seconds and 54 seconds respectively. If they all change simultaneously at 10 : 15 : 00 AM, then at what time will they again change simultaneously ?
    (a) 10 : 16 : 54 AM   (b) 10 : 18 : 36 AM
    (c) 10 : 17 : 02 AM   (d) 10 : 22 : 12 AM

122. A can do a work in 12 days. When he had worked for 3 days, B joined him. If they complete the work in 3 more days, in how many days can B alone finish the work ?
    (a) 6 days   (b) 12 days
    (c) 4 days   (d) 8 days

123. Among three numbers, the first is twice the second and thrice the third. If the average of the three numbers is 49.5, then the difference between the first and the third number is
    (a) 54   (b) 28
    (c) 39.5   (d) 41.5

124. The mean of 50 numbers is 30. Later it was discovered that two entries were wrongly entered as 82 and 13 instead of 28 and 31. Find the correct mean.
    (a) 36.12   (b) 30.66
    (c) 29.28   (d) 38.21

125. A bicycle wheel makes 5000 revolutions in moving 11 km. Then the radius of the wheel (in cm) is
    (Take $\pi = \dfrac{22}{7}$)
    (a) 70   (b) 35
    (c) 17.5   (d) 140

126. The perimeter of a triangle is 40 cm and its area is 60 cm^2. If the largest side measures 17 cm, then the length (in cm) of the smallest side of the triangle is
    (a) 4   (b) 6
    (c) 8   (d) 15

127. A shopkeeper allows a discount of 10% to his customers and still gains 20%. Find the marked price of the article which costs ?
    (a) ₹ 600   (b) ₹ 540
    (c) ₹ 660   (d) ₹ 580

128. What single discount is equivalent to two successive discounts of 20% and 15% ?
    (a) 35%   (b) 32%
    (c) 34%   (d) 30%

129. In a business partnership among A, B, C and D, the profit is shared as follows :
    $$\frac{A's\ share}{B's\ share} = \frac{B's\ share}{C's\ share} = \frac{C's\ share}{D's\ share} = \frac{1}{3}$$
    It the total profit is shared as follows :
    (a) ₹ 21,12,500   (b) ₹1,37,500
    (c) ₹ 90,000   (d) ₹ 2,70,000

130. A can contains a mixture of two liquids A and B in the ratio 7 : 5. When 9 litres of mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7 : 9. Litres of liquid A contained by the can initially was
    (a) 10   (b) 20
    (c) 21   (d) 25

131. What number should be added to or subtracted from each term of the ratio 17 : 24 so that it becomes equal to 1 : 2 ?
    (a) 5 is subtracted   (b) 10 is added
    (c) 7 is added   (d) 10 is subtracted

132. The ratio of weekly incomes of A and B is 9 : 7 and the ratio of their expenditures is 4 : 3. If each saves ₹200 per week, then the sum of their weekly incomes is :
    (a) ₹ 3,600   (b) ₹ 4,200
    (c) ₹ 4,800   (d) ₹ 5,600

133. If 30% of A is added to 40% of B, the answer is 80% of B. What percentage of A is B ?
    (a) 30%   (b) 40%
    (c) 70%   (d) 75%

134. A man can row 6 km/h in still water. If the speed of the current is 2 km/h, it takes 3 hours more in upstream than in the downstream for the same distance. The distance is
    (a) 30 km   (b) 24 km
    (c) 20 km   (d) 32 km

135. If the selling price of 10 articles is equal to the cost price of 11 articles, then the gain percent is
    (a) 10   (b) 11
    (c) 15   (d) 25

136. While selling a watch, a shopkeeper gives a discount of 5%. If he gives a discount of 6%, he earns ₹ 15 less as profit. What is the marked price of the watch ?
    (a) ₹ 1,250   (b) ₹ 1,400
    (c) ₹ 1,500   (d) ₹ 750

137. Krishna purchased a number of articles at ₹ 10 for each and the same number for ₹14 each. He mixed them together and sold them for ₹ 13 each. Then his gain or loss percent is :
    (a) Loss $8\frac{1}{3}$%   (b) Gain $8\frac{2}{3}$%
    (c) Loss $8\frac{2}{3}$%   (d) Gain $8\frac{1}{3}$%

138. A trader bought two horses for ₹19,500. He sold one at a loss of 20% and the other at a profit of 15%. If the selling price of each horse is the same, then their cost prices are respectively
    (a) ₹ 10,000 and ₹ 9,500
    (b) ₹ 11,500 and ₹ 8,000
    (c) ₹ 12,000 and ₹ 7,500
    (d) ₹ 10,500 and ₹ 9,000

139. The cost price of an article is 40% of the selling price. What percent of the cost price is the selling price ?
    (a) 140%   (b) 200%
    (c) 220%   (d) 250%

140. If 90% of A = 30% of B and B = 2x% of A, then the value of x is
    (a) 450   (b) 400
    (c) 300   (d) 150

141. When the price of sugar decreases by 10%, a man could buy 1 kg more for ₹270. Then the original price of sugar per kg is
    (a) ₹ 25   (b) ₹ 30
    (c) ₹ 27   (d) ₹ 32

142. If the price of sugar is raised by 25%, find by how much percent a householder must reduce his consumption of sugar so as not to increase his expenditure ?
    (a) 10   (b) 20
    (c) 18   (d) 25

143. The difference between the compound interest and simple interest on ₹ 10,000 for 2 years is ₹25. The rate of interest per annum is
    (a) 5%   (b) 7%
    (c) 10%   (d) 12%

144. A student goes to school at the rate of 2-1/2 km/h and reaches 6 minutes late. If he travels at the speed of 3 km/h, he is 10 minutes early. The distance (in km) between the school and his house is
    (a) 5   (b) 4
    (c) 3   (d) 1

145. A sum of money placed at compound interest doubles itself in 4 years. In how many years will it amount to four times itself ?
    (a) 12 years   (b) 13 years
    (c) 8 years   (d) 16 years

146. The simple interest on a sum for 5 years is one-fourth of the sum. The rate of interest per annum is
    (a) 5%   (b) 6%
    (c) 4%   (d) 8%

Directions : (147-150) : *The following graph shows the demand and production of cotton by 5 companies A, B, C, D and E. Study the graph and answer questions 147 to 150.*

147. The production of company D is how many times that of the production of the company A ?
    (a) 1.8   (b) 1.5
    (c) 0.5   (d) 0.4

148. The demand for company B is what percent of the demand for company C ?
    (a) 1.5   (b) 2.5
    (c) 25   (d) 30

149. What is the ratio of companies having more demand than production to those having more production than demand ?
    (a) 2 : 3   (b) 4 : 1
    (c) 3 : 2   (d) 1 : 4

150. What is the difference (in tonnes) between average demand and average production of the five companies taken together ?
    (a) 320   (b) 420
    (c) 2100   (d) 1050

PART - (D) : ENGLISH 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 corresponding to the appropriated letter (a, b, c). If a sentence is free from errors, blacken the rectangle corresponding to (d) in the Answer Sheet.*

151. His son (a)/ is working (b)/ very hardly.(c)/ No error. (d)

152. Do you know that it was I (a)/ who has done (b)/ this piece of beautiful work? (c)/ No error. (d)

153. The company has ordered (a)/ some (b)/ new equipments. (c)/ No error. (d)

154. The future of food companies (a)/ seems quite secure (b)/ owed to ever-growing demand. (c)/ No error. (d)

155. The vaccine (a)/ when hit the Indian market (b)/ is dogged by controversy. (c)/ No error. (d)

Directions: *In questions no. 156 to 160, sentences are given with blanks to the filled in with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four.*

156. If you had followed the rules, you .... disqualified.
    (a) will not be
    (b) would not be
    (c) will not have been
    (d) would not have been

157. The housewife .... the cakes burning, and ran to switch off the oven.
    (a) smell   (b) smells
    (c) smelt   (d) smelling

158. .... an old legend, King Shirham lived in India.
    (a) In the event of   (b) Due to
    (c) According to   (d) In reference to

159. .... you leave no, you will be late.
    (a) Until   (b) Till
    (c) Unless   (d) Although

160. The ... were arrested for illegally hunting the bears.

(a) poachers   (b) rangers
(c) soldiers   (d) villagers

Directions: *In Q. 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. GENIAL
    (a) Cordial   (b) Unselfish
    (c) Careful   (d) Specific
162. ACCRUE
    (a) Accumulate   (b) Accommodate
    (c) Grow   (d) Suffice
163. LOQUACIOUS
    (a) Talkative   (b) Slow
    (c) Content   (d) Unclear
164. VINDICTIVE
    (a) Imaginative   (b) Accusative
    (c) Spiteful   (d) Aggressive
165. INCLEMENT
    (a) Selfish   (b) Active
    (c) Unfavourable   (d) Inactive

Directions: *In questions no. 166 to 170, choose the word opposite in meaning to the given word and mark it in the Answer Sheet.*

166. SYNTHETIC
    (a) Natural   (b) Plastic
    (c) Cosmetic   (d) Apathetic
167. ACCORD
    (a) Disagreement   (b) Welcome
    (c) Disrespect   (d) Conformity
168. INFIRMITY
    (a) Employment   (b) Indisposition
    (c) Strength   (d) Weakness
169. FEASIBLE
    (a) Useful   (b) Impractical
    (c) Uneven   (d) Important
170. METICULOUS
    (a) Forgetful   (b) Destructive
    (c) Careless   (d) Flagrant

Directions: *In (171-175), four alternatives are given for the meaning of the given Indiom/Phrase. Choose the alternative which best expresses the meaning of the Indiom /Phrase and mark it in the Answer Sheet.*

171. To be all at sea
    (a) a family voyage
    (b) lost and confused
    (c) in the middle of the ocean
    (d) a string of islands
172. To take to one's heels
    (a) to walk slowly   (b) to run away
    (c) to march forward   (d) to hop and jump
173. To bite the dust
    (a) eat voraciously   (b) have nothing to eat
    (c) eat roots   (d) none of the above
174. A bolt from the blue
    (a) a delayed event   (b) an inexplicable event
    (c) an unexpected event   (d) an unpleasant event

175. Cold comfort
    (a) absurdity   (b) deception
    (c) slight satisfaction   (d) foolish proposal

Directions: *In questions no. 176-180, a sentence or underlined part thereof is given which many need improvement. Alternatives are given of (a), (b) and (c) below, which may be a better option. In case no improvement is needed, your answer is (d).*

176. My friend lives in a nearby street <u>whose name</u> I have forgotten.
    (a) the name of which   (b) which name
    (c) of which name   (d) No improvement
177. He both won a medal and a scholarship.
    (a) He won a medal and a scholarship both.
    (b) Both he won a medal and a scholarship.
    (c) He won both a medal and a scholarship.
    (d) No improvement
178. He has for good left India.
    (a) He has left for good India.
    (b) He has left India for good.
    (c) Good he has left India.
    (d) No improvement
179. We are credibly informed that the murderer has given himself up.
    (a) We are informed that the murderer has credibly given himself up.
    (b) We are informed that the murderer has credibly himself up.
    (c) We are informed that credibly the murderer has given up himself.
    (d) No improvement.
180. We generally select <u>one of the most intelligent student of the school</u> for this award.
    (a) one of the most intelligent students of the school
    (b) one of the intelligent most students of the school
    (c) one of the intelligent most student of the school
    (d) No improvement

Directions: *In questions no. 181-185, out of the four alternatives, choose the one which can be substituted for the given words/sentence.*

181. Pertaining to cattle
    (a) Canine   (b) Feline
    (c) Bovine   (d) Verminous
182. To look at someone in an angry or threatening way
    (a) Glower   (b) Gnaw
    (c) Gnash   (d) Grind
183. A post with little work but high salary
    (a) Director   (b) Trustee
    (c) Sinecure   (d) Ombudsman
184. Something that causes death
    (a) Dangerous   (b) Fatal
    (c) Brutal   (d) Horrible
185. A person who writes decoratively
    (a) Calligrapher   (b) Collier
    (c) Choreographer   (d) Cartographer

Directions: *In questions no, 186-190, groups of four words are given. In each group, one word is correctly spelt. Find the correctly spelt word .*

186. (a) Malaign   (b) Arraign
    (c) Asigne   (d) Degine
187. (a) Harrassment   (b) Embarrasment
    (c) Fulfilment   (e) Denoument
188. (a) Agnostik   (b) Accomplice
    (c) Advercity   (d) Acrimonous
189. (a) Dysentery   (b) Momentry
    (c) Cementary   (d) Comentary
190. (a) Ebulient   (b) Jubilant
    (c) Iminent   (d) Tolernt

Directions : *In the following passage (questions no. 191 to 200), 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.*

The Solar System has been a complicated wonder for the astronomers. This is a **(191)** to which we many never have the exact answer. Man has wondered **(192)** the age of the Earth **(193)** ancient times. There were all kinds of **(194)** that seemed to have the **(195)**. But man could not begin to **(196)** about the question scientifically until about 400 years **(197)**.

When it was proved that the **(198)** revolved round the Sun and the Earth was a **(199)** of our Solar System, when scientists knew where to **(200)**.

191. (a) problem   (b) question
    (c) matter   (d) query
192. (a) around   (b) out
    (c) about   (d) on
193. (a) since   (b) during
    (c) around   (d) from
194. (a) ideas   (b) opinions
    (c) stories   (d) matters
195. (a) solution   (b) novel
    (c) book   (d) answer
196. (a) read   (b) think
    (c) open   (d) guess
197. (a) now   (b) time
    (c) then   (d) ago
198. (a) Moon   (b) time
    (c) Earth   (d) Mars
199. (a) part   (b) division
    (c) opening   (d) centre
200. (a) end   (b) begin
    (c) think   (d) work

Answer-Sheet

1. (b)	2. (d)	3. (c)	4. (c)	5. (d)	6. (d)	7. (b)	8. (a)	9. (b)	10. (d)
11. (a)	12. (a)	13. (b)	14. (c)	15. (b)	16. (b)	17. (a)	18. (a)	19. (a)	20. (c)
21. (c)	22. (c)	23. (a)	24. (b)	25. (d)	26. (c)	27. (c)	28. (c)	29. (d)	30. (a)
31. (c)	32. (b)	33. (d)	34. (c)	35. (d)	36. (b)	37. (c)	38. (c)	39. (b)	40. (c)
41. (c)	42. (d)	43. (d)	44. (d)	45. (d)	46. (c)	47. (a)	48. (c)	49. (c)	50. (c)
51. (c)	52. (c)	53. (c)	54. (c)	55. (b)	56. (c)	57. (d)	58. (c)	59. (b)	60. (a)
61. (d)	62. (c)	63. (b)	64. (b)	65. (b)	66. (c)	67. (b)	68. (a)	69. (b)	70. (d)
71. (d)	72. (a)	73. (b)	74. (c)	75. (c)	76. (b)	77. (b)	78. (b)	79. (c)	80. (b)
81. (c)	82. (d)	83. (d)	84. (d)	85. (b)	86. (d)	87. (c)	88. (d)	89. (d)	90. (a)
91. (a)	92. (b)	93. (d)	94. (c)	95. (c)	96. (b)	97. (a)	98. (a)	99. (c)	100. (a)
101. (b)	102. (b)	103. (a)	104. (c)	105. (a)	106. (b)	107. (b)	108. (a)	109. (a)	110. (a)
111. (b)	112. (b)	113. (c)	114. (a)	115. (d)	116. (b)	117. (d)	118. (d)	119. (a)	120. (b)
121. (b)	122. (a)	123. (a)	124. (c)	125. (b)	126. (c)	127. (a)	128. (b)	129. (c)	130. (c)
131. (d)	132. (*)	133. (d)	134. (b)	135. (a)	136. (c)	137. (d)	138. (b)	139. (d)	140. (d)
141. (b)	142. (b)	143. (a)	144. (b)	145. (c)	146. (a)	147. (a)	148. (c)	149. (c)	150. (b)
151. (c)	152. (b)	153. (d)	154. (c)	155. (c)	156. (d)	157. (c)	158. (c)	159. (c)	160. (a)
161. (a)	162. (a)	163. (a)	164. (c)	165. (c)	166. (a)	167. (a)	168. (c)	169. (b)	170. (c)
171. (b)	172. (b)	173. (d)	174. (c)	175. (c)	176. (d)	177. (c)	178. (b)	179. (a)	180. (a)
181. (c)	182. (a)	183. (c)	184. (b)	185. (a)	186. (b)	187. (c)	188. (b)	189. (a)	190. (b)
191. (b)	192. (c)	193. (d)	194. (b)	195. (d)	196. (b)	197. (d)	198. (c)	199. (a)	200. (c)