

SSC GRADUATE LEVEL TIER-I EXAM

HELD ON : 08.07.2012 (NORTH ZONE : MORNING SHIFT-2)

(ALSO USEFUL FOR SSC FCI ASSISTANT GRADE-III EXAM)

GENERAL INTELLIGENCE AND REASONING

Directions (1-9) : In the following questions, select the related letters/word/number from the given alternatives.

- Length : Metre :: Power : ?
(1) Calories (2) Degree
(3) Watt (4) Kilogram
- Square : Cube :: Circle : ?
(1) Ellipse (2) Parabola
(3) Cone (4) Sphere
- Paper : Tree :: Glass : ?
(1) Window (2) Sand
(3) Stone (4) Mirror
- ACFJ : ZXUQ :: EGIN : ?
(1) VUSQ (2) VRPM
(3) UTRP (4) VTRM
- ACEG : DFHJ :: QSUW : ?
(1) TVXZ (2) TQST
(3) MNPR (4) EGIJ
- BGIK : FILO :: FHJL : ?
(1) JGMP (2) JGPM
(3) GJPM (4) GJMP
- 10 : 91 :: 9 : ?
(1) 69 (2) 72
(3) 89 (4) 97
- 7 : 56 :: 9 : ?
(1) 63 (2) 81
(3) 90 (4) 99
- 20 : 50 :: 100 : ?
(1) 150 (2) 250
(3) 200 (4) 156

Directions (10-18) : In the following questions, find the odd number/letters/number pair from the given alternatives.

- (1) Pathology (2) Geology
(3) Cardiology (4) Radiology
- (1) Rivulet (2) Stream
(3) River (4) Pond
- (1) Konark (2) Madurai
(3) Dilwara (4) Ellora
- (1) RTW (2) QOM
(3) IKG (4) IKM

- (1) EFH (2) OPQ
(3) BCE (4) IJL
- (1) DH (2) FJ
(3) HK (4) PR
- (1) 24 (2) 49
(3) 80 (4) 15
- (1) 121 (2) 324
(3) 523 (4) 729
- (1) 704, 11 (2) 256, 4
(3) 832, 13 (4) 310, 5
- Arrange the following words in their ascending order, as in a dictionary:
1. Pick 2. Pith
3. Pile 4. Perk
5. Pour
(1) 4, 1, 2, 3, 5
(2) 4, 1, 3, 2, 5
(3) 4, 3, 2, 1, 5
(4) 5, 4, 3, 2, 1
- Arrange the following words in their ascending order:
1. Millennium
2. Diamond Jubilee
3. Silver Jubilee
4. Centenary
5. Golden Jubilee
(1) 2, 3, 5, 4, 1 (2) 2, 5, 3, 1, 4
(3) 3, 5, 2, 4, 1 (4) 2, 3, 5, 1, 4
- Arrange the following words in their descending order:
1. Weekly 2. Bi-annual
3. Fortnightly 4. Monthly
5. Annual
(1) 1, 3, 4, 2, 5 (2) 2, 5, 4, 1, 3
(3) 4, 1, 2, 3, 5 (4) 5, 2, 4, 3, 1
- Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it ?
a _ abc _ ca _ ab _ bca _ ab
(1) b a b c c (2) b c a b b
(3) a b c b c (4) b c a b c
- Directions (23-27) :** In the following questions, a series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

- BCFG JKNO, RSVW, __ ?
(1) ZADE (2) HIKL
(3) STUX (4) MNPQ
 - CIM, HNR, MSW, __ ?
(1) SXA (2) UYB
(3) RXB (4) ZEH
 - 2, 3, 6, 7, 14, 15, __ ?
(1) 16 (2) 30
(3) 31 (4) 32
 - 3120, __ ? , 122, 23, 4
(1) 488 (2) 621
(3) 610 (4) 732
 - 0, 5, 60, 615, __ ?
(1) 6030 (2) 6170
(3) 6130 (4) 6000
 - Nithya is Sam's sister. Mogan is Sam's father. Selvan is Rajan's son. Rajan is Mogan's brother. How is Nithya related to Selvan ?
(1) Daughter (2) Sister
(3) Cousin (4) Wife
 - A boy's age is one-fourth of his father's age. The sum of the boy's age and his father's age is 35. What will be father's age after 8 years ?
(1) 15 (2) 28
(3) 35 (4) 36
 - A man said to a lady "Your mother's husband's sister is my aunt". How is the lady related to man ?
(1) Sister (2) Mother
(3) Daughter
(4) Granddaughter
 - If South East becomes North, then what will South West become ?
(1) North (2) West
(3) East (4) North West
- Directions (32) :** From the given alternatives select the word which **cannot** be formed using the letters of the given word.
- CONTENTION
(1) TONIC (2) NOTE
(3) NATION (4) NOTION

53. In a certain code language, GRAPE is written as 27354 and FOUR is written as 1687. How is GROUP written in that code?
 (1) 27384 (2) 27684
 (3) 27685 (4) 27658

34. WAYIN is written as TXVFK. How LBUK can be written in that code?
 (1) IYRH (2) KATJ
 (3) JZSI (4) NDWM

55. In a certain code language, if the word PARTNER is coded as OZQSMQ, then what is the code for the word SEGMENT?
 (1) TFHFOU (2) RDFLDMS
 (3) RDELDM (4) RDPEDNS

36. If DOCTOR is written as FQEVQT, how PATIENT can be written in that code?
 (1) RVKGPV (2) RCKPGVV
 (3) RCVKGPV (4) RVCKGVP

Directions (37-38) : In the following questions, find the missing number.

37.

21	24	36
11	14	12
3	?	4
77	112	108

(1) 2 (2) 4
 (3) 3 (4) 5

38.

12	16	18
16	16	20
5	7	?
197	263	356
(1) 9	(2) -4	
(3) 4	(4) -8	

39. If \div means $+$, $-$ means \times , \times means \div , $+$ means $-$, then
 $90 + 18 - 6 \times 30 \div 4 = ?$
 (1) 64 (2) 65
 (3) 56 (4) 48

40. If $73 + 46 = 42$ and $95 + 87 = 57$, then $62 + 80 = ?$
 (1) 32 (2) 48
 (3) 64 (4) 36

41. Based on the given data, estimate the number of "Television-buyers" for the year 1990.

1982	1984	1986	1988	1990
447	458	489	540	?

- (1) 611 (2) 591
 (3) 571 (4) 601

42. A man coming out of the backdoor of his house which is facing East, walked for one kilometre, turned to his right and walked for another kilometre. Then he turned to his right and walked a kilometre again. Where was he from his house at the end?
 (1) 1 km away in north
 (2) 1 km away in south
 (3) 1 km away in east
 (4) 1 km away in west

43. Two squads of soldiers A and B, facing East and West respectively received the following commands - Left Turn, About Turn, Right Turn, Left Turn. Which directions would the squads A and B face at the end?
 (1) East, West
 (2) West, East
 (3) North, South
 (4) South, North

Directions (44-45) : In the following questions, two statements are given, followed by two conclusions I and II. You have to consider the 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.

44. **Statements :**
 (1) Due to contamination of water, large number of people were admitted to hospital.
 (2) The symptoms were of Typhoid.

Conclusions :
 I. Contamination of water may lead to Typhoid.
 II. Typhoid is a contagious disease.

- (1) Only conclusion I is true
 (2) Only conclusion II is true
 (3) Both conclusions I and II are true
 (4) Both conclusions I and II are false

45. **Statements :**
 (1) 60% of the government employees went on strike.
 (2) Mr. Gopal is a government employee.

Conclusions :

- I. Mr. Gopal went on strike
 II. Mr. Gopal did not participate in the strike.
 (1) Only conclusion I follows
 (2) Only conclusion II follows
 (3) Both conclusions I and II follow
 (4) Either conclusion I or II follows

Directions : In question no. 46, which answer figure will complete the question figure?

46. **Question Figure**



Answer Figures



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

Question Figure



Answer Figures

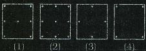


Directions : In question no. 48, a piece of paper is folded and punched as shown below in the question figure. From the given answer figures, indicate how it will appear when opened?

48. **Question Figure**



Answer Figures



Directions (49) : If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure ?

49. Question Figure



Answer Figures



Directions (50) : A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., 'R' can be represented by 13, 22, etc. and 'P' can be represented by 67, 76, etc. Similarly, you have to identify the set for the word SHRI.

50. MATRIX I

	0	1	2	3	4
0	R	H	E	L	I
1	I	E	L	R	H
2	H	L	R	I	E
3	E	R	I	H	L
4	L	I	H	E	R

MATRIX II

	5	6	7	8	9
5	B	S	N	A	D
6	D	N	B	S	A
7	A	B	D	N	S
8	S	D	A	B	N
9	N	A	S	D	B

- (1) 58, 02, 13, 01
- (2) 85, 42, 31, 14
- (3) 68, 20, 13, 32
- (4) 85, 02, 44, 30

GENERAL AWARENESS

- 51. A movement along the demand curve of a commodity occurs due to change in
 - (1) income of the consumers
 - (2) its own price
 - (3) taste of the consumers
 - (4) expectations of the consumers
- 52. GNP calculation through Expenditure Method does not include
 - (1) Gross Domestic Private Investments
 - (2) Net Foreign Investments
 - (3) Depreciation Expenditures
 - (4) Private Consumption Expenditure
- 53. The Cobb-Douglas Production function $Q = AL^aK^{1-a}$ is based on
 - (1) increasing returns to scale
 - (2) decreasing returns to scale
 - (3) constant returns to scale
 - (4) fluctuating returns to scale
- 54. Find the odd one out of the following:
 - (1) Delhi Transport Corporation
 - (2) Indian Railways
 - (3) Kingfisher Airlines
 - (4) Reliance Industries Limited
- 55. Monetary Policy in India is laid down and executed by
 - (1) Union Government
 - (2) ASSOCHAM
 - (3) Reserve Bank of India
 - (4) FICCI
- 56. Which one of the following subjects is not available on the Union List ?
 - (1) Census
 - (2) Banking
 - (3) Trade Union
 - (4) Foreign Loans
- 57. The term "closure" in Parliamentary terminology implies
 - (1) the end of session of Parliament
 - (2) stoppage of debate on a motion
 - (3) end of a day's proceedings
 - (4) None of the above
- 58. Which of the following is not correctly matched ?
 - (1) Article 14 — Equality before law

- (2) Article 16 — Equal opportunities
 - (3) Article 17 — Abolition of titles
 - (4) Article 18 — Permission of military titles
59. Which of the following Presidents held office for two consecutive terms ?
- (1) Dr. S. Radhakrishnan
 - (2) Dr. Zakir Hussain
 - (3) Dr. Rajendra Prasad
 - (4) Both (1) and (3)
60. Which Amendment Act reduced the voting age from 21 to 18 ?
- (1) 42nd
 - (2) 44th
 - (3) 52nd
 - (4) 61st
61. Match the following:
- a. Vikrama Era : 1. A. D. 248
 - b. Saka Era : 2. A. D. 320
 - c. Kalachuri Era : 3. 58 B.C.
 - d. Gupta Era : 4. A. D. 78
- (1) a1, b2, c3, d4
 - (2) a3, b4, c1, d2
 - (3) a4, b3, c2, d1
 - (4) a2, b1, c4, d3
62. Mahavira was the
- (1) 21st Tirthankara
 - (2) 24th Tirthankara
 - (3) 23rd Tirthankara
 - (4) 22nd Tirthankara
63. Which one among the following woman scholars challenged the invincible Yajnavalkya in debate?
- (1) Ghosa
 - (2) Apala
 - (3) Maitreyi
 - (4) Gargi
64. Which one of the following event made the crown of England to take over the Indian Administration ?
- (1) Battle of Plassey
 - (2) Battle of Buxar
 - (3) The Carnatic Wars
 - (4) The Sepoy Mutiny
65. Who built the famous Dilwāra temple at Mount Abu in Rajasthan in the 13th century ?
- (1) Mahendrapala
 - (2) Mahipala
 - (3) Rajyapala
 - (4) Tejapala
66. GIS stands for
- (1) Global Institute for Soils
 - (2) Geographical International Studies

- (3) Geographical Information Systems
(4) Global Information Statistics
67. Which of the following is a Trans-Himalayan river?
(1) Ganga (2) Yamuna
(3) Sutlej (4) Ravi
68. Match the following using codes given below:
- | | |
|-------------------------|----------------------|
| List I
(Forest Type) | List II
(Regions) |
| a. Tropical | |
| Evergreen | 1. Siwaliks |
| b. Monsoon | 2. Shillong |
| c. Temperate | 3. West Bengal |
| d. Mangrove | 4. Nilgiris |
| a b c d | |
| (1) 2 4 1 3 | |
| (2) 3 1 4 2 | |
| (3) 2 1 4 3 | |
| (4) 3 4 1 2 | |
69. On which river is the Nagarjunasagar Project located?
(1) Krishna (2) Godavari
(3) Cauvery (4) Tapi
70. Suez Canal joins
(1) Persian Gulf and Arabian Sea
(2) Red Sea and Mediterranean Sea
(3) Mediterranean Sea and Black Sea
(4) Red Sea and Arabian Sea
71. Drug which helps to reduce anxiety and brings about calmness is
(1) tranquiliser
(2) diuretic
(3) analgesic
(4) antihistamine
72. A keel is absent in
(1) Chicken (2) Ostrich
(3) Duck (4) Peacock
73. Broad spectrum antibiotics are produced by
(1) Streptomyces
(2) Aspergillus
(3) Pencillium
(4) Bacillus
74. The pigment that protect plants from harmful effect of ultraviolet rays is
(1) Chlorophyll (2) Carotenoid
(3) Phycocyanin (4) Plastid
75. Glycogen, starch and cellulose are polymers of
(1) Fructose (2) Glucose
(3) Lactose (4) Maltose
76. Black death is
(1) Cancer (2) Plague
(3) AIDS (4) Gonorrhoea
77. Stars appear to move from east to west because the
(1) whole universe is moving from east to west
(2) earth is revolving round the sun
(3) earth is rotating from east to west
(4) earth is rotating from west to east
78. On the moon, an astronaut cannot drink lemonade with the help of a straw because
(1) acceleration due to gravity on the moon is less
(2) there is no atmosphere on the moon
(3) lemonade evaporates instantaneously on the moon
(4) None of the above
79. A particle moving with uniform speed *is* **correct**
(1) must have uniform velocity
(2) cannot have uniform velocity
(3) may have uniform velocity
(4) will have no velocity
80. Device which uses sound waves for detection and ranging is called
(1) Radar
(2) Sonar
(3) Pukar
(4) None of the above
81. What is the name of the network topology in which there are bi-directional links between each possible node?
(1) Ring (2) Star
(3) Tree (4) Mesh
82. LAN stands for
(1) Local Area Nodes
(2) Large Area Network
(3) Large Area Nodes
(4) Local Area Network
83. Dry Ice is nothing but
(1) Gaseous carbon dioxide
(2) Washing soda
(3) Solid carbon dioxide
(4) Carbon monoxide
84. Which one of the following is obtained as slag in a blast furnace?
(1) Calcium Carbonate
(2) Calcium Sulphate
(3) Calcium Chloride
(4) Calcium Silicate
85. When H_2 gas is allowed to expand from a region of high pressure to a region of low pressure, the temperature of the gas
(1) decreases to a small extent
(2) increases
(3) does not change
(4) decreases suddenly
86. In the industrial production of vegetable ghee, the process involved is
(1) dissociation (2) reduction
(3) oxidation (4) ionisation
87. Which of the following weeds has been found useful to check water pollution caused by industrial effluents?
(1) Parthenium
(2) Elephant grass
(3) Water hyacinth
(4) Both (1) and (2) above
88. In which year the Chernobyl Nuclear Power Plant of the former USSR had accident that caused escape of radio nuclides into atmosphere?
(1) 1979 (2) 1980
(3) 1984 (4) 1986
89. Certain desert lizards excrete their wastes in dry form. This serves as a means of
(1) protective mechanism against their predators
(2) limiting factor of the organism
(3) adaptation of the organism to the environment
(4) countering the problem of food scarcity
90. Which one is regarded as "World heritage forest"?
(1) Nandan Kanan in Odisha
(2) Kaziranga in Assam
(3) Sundarbans in West Bengal
(4) Indian Botanical Garden, Shibpur in West Bengal
91. Kidney can be taken from a dying person who has the
(1) cessation of neurological function only

QUANTITATIVE APTITUDE

- (2) cessation of cardiac function only
 (3) cessation of respiratory function only
 (4) cessation of kidney function only

92. There is no life on moon because it has no

- (1) Nitrogen (2) Sulphur
 (3) Oxygen (4) Water

93. Losoong is a festival celebrated in

- (1) Tibet
 (2) Arunachal Pradesh
 (3) Sikkim (4) Kerala

94. The commodity for which India spends the largest amount to import is

- (1) Foodgrains
 (2) Crude petroleum
 (3) Fertilisers
 (4) Iron and Steel

95. In which categories did Marie Curie win her two different Nobel Prizes?

- (1) Physics and Chemistry
 (2) Chemistry and Medicine
 (3) Physics and Medicine
 (4) Chemistry and Peace

96. Michael Phelps won ___ gold medals in swimming events in the Beijing Olympics.

- (1) 6 (2) 7
 (3) 8 (4) 9

97. Spot the odd one from the following:

- (1) Tarapur (2) Trombay
 (3) Kalpakkam (4) Narora

98. Which one of the following players has the unique distinction of winning 50 Doubles Titles in ATP tour history?

- (1) Leander Paes
 (2) Andy Roddick
 (3) Novak Djokovic
 (4) Roger Federer

99. As per the 2011 census, the state with the largest gap in male and female literacy is

- (1) Uttar Pradesh
 (2) Madhya Pradesh
 (3) Rajasthan (4) Kerala

100. Which among the following is termed 'Hot Money'?

- (1) FII (2) FDI
 (3) ADR (4) GDR

101. If $\cot A + \frac{1}{\cot A} = 2$, then

$\cot^2 A + \frac{1}{\cot^2 A}$ is equal to

- (1) 4 (2) $\sqrt{2}$
 (3) 1 (4) 2

102. If $f(x) = \sin^2 x + \operatorname{cosec}^2 x$, then the minimum value of $f(x)$ is

- (1) 1 (2) 1.5
 (3) 2 (4) 3

103. A car is travelling on a straight road leading to a tower. From a point at a distance of 500 m from the tower, as seen by the driver, the angle of elevation of the top of the tower is 30° . After driving towards the tower for 10 seconds, the angle of elevation of the top of the tower as seen by the driver is found to be 60° . Then the speed of the car is

- (1) 135 km/hr. (2) 110 km/hr.
 (3) 120 km/hr. (4) 90 km/hr.

104. If θ is a positive acute angle and $\tan \theta + \cot \theta = 2$, then the value of $\sec \theta$ is

- (1) $\frac{1}{\sqrt{2}}$ (2) $\sqrt{2}$
 (3) 1 (4) 0

105. The value of x in the following figure is



- (1) 40° (2) 70°
 (3) 50° (4) 60°

106. The angle of depression of a point from the top of a 200 m high tower is 45° . The distance of the point from the tower is

- (1) $\frac{200}{\sqrt{3}}$ m (2) 200 m

(3) $200\sqrt{3}$ m

(4) None of these

107. If $\sin \theta + \cos \theta = \sqrt{2} \sin(90^\circ - \theta)$, then $\cot \theta$ is equal to

- (1) $\sqrt{2} + 1$ (2) $\frac{1}{\sqrt{2} + 2}$
 (3) $\sqrt{2} - 1$
 (4) None of these

108. If A and B are positive acute angles such that $\sin(A - B) = \frac{1}{2}$

and $\cos(A + B) = \frac{1}{2}$, then A and

B are given by

- (1) $A = 45^\circ, B = 15^\circ$
 (2) $A = 15^\circ, B = 45^\circ$
 (3) $A = 30^\circ, B = 30^\circ$
 (4) None of these

109. If $7 \sin^2 \theta + 3 \cos^2 \theta = 4$, and θ is a positive acute angle, then $\tan \theta$ is equal to

- (1) $\frac{1}{3}$ (2) $\frac{1}{7}$
 (3) $\frac{1}{\sqrt{3}}$ (4) $\sqrt{3}$

110. A wheel makes 360 revolutions in a minute. The number of radians through which it turns in one second is

- (1) $12\pi^\circ$ (2) $11\pi^\circ$
 (3) $10\pi^\circ$ (4) $8\pi^\circ$

111. $\frac{\sec^2 \theta - \cot^2(90^\circ - \theta)}{\operatorname{cosec}^2 67^\circ - \tan^2 23^\circ} + \sin^2 40^\circ + \sin^2 50^\circ$ is equal to

- (1) 0 (2) 4
 (3) 2 (4) 1

112. If P denotes the perimeter and S denotes the sum of the distances of a point within a triangle from its angular points, then

- (1) $P < S$ (2) $P \leq S$
 (3) $S < P$ (4) $S \leq P$

113. Two circles touch each other externally at a point P and a direct common tangent touches the circles at the points Q and R respectively. Then $\angle QPR$ is

- (1) 45° (2) 180°
 (3) 90° (4) 60°

114. In triangle ABC, AB = 12 cm, $\angle B = 60^\circ$, the perpendicular from A to BC meets it at D. The bisector of $\angle ABC$ meets AD at E. Then E divides AD in the ratio
- (1) 3 : 1 (2) 6 : 1
(3) 1 : 1 (4) 2 : 1

115. If $a : b = 2 : 3$, $b : c = 4 : 5$ and $c : d = 6 : 7$, then $a : d =$
- (1) 12 : 35 (2) 24 : 35
(3) 16 : 35 (4) 24 : 25

116. The value of $\sqrt[3]{0.0000729}$ is
- (1) 0.03 (2) 0.09
(3) 0.9 (4) 0.3

117. If the average of x and $\frac{1}{x}$ be 1, then the value of $x^{10} + \frac{1}{x^{10}}$ is
- (1) -2 (2) 2
(3) 0 (4) 1

118. If the operation \odot is defined for all real numbers a and b by the relation $a \odot b = \frac{a^2 b}{3}$, then $2 \odot [3 \odot (-1)] = ?$
- (1) 2 (2) 4
(3) -4 (4) -2

119. O is the centre of a circle. AB is a chord of the circle but not its diameter. OC is perpendicular to AB. If $OC = CB$ and radius of the circle be 7 cm, then the length of AB is
- (1) $7\sqrt{2}$ cm (2) 14 cm
(3) 7 cm (4) $\frac{7}{\sqrt{2}}$ cm

120. In ΔABC , D, E, F are mid-points of AB, BC, CA respectively and $\angle B = 90^\circ$, AB = 6 cm, BC = 8 cm. Then area of ΔDEF (in sq. cm) is
- (1) 24 (2) 28
(3) 6 (4) 12

121. In a triangle ABC, the angles at B and C are 1.5 and 2.5 times of the angle at A respectively, then angle at B is
- (1) 36° (2) 54°
(3) 48° (4) 72°

122. In xy -plane, a straight line L_1 bisects the 1st quadrant and another straight line L_2 trisects

the 2nd quadrant being closer to the axis of y . The acute angle between L_1 and L_2 is

(1) 60° (2) 120°
(3) 90° (4) 75°

123. If ABCDEF is a regular hexagon, then ΔACE is
- (1) a right-angled triangle
(2) an obtuse-angled triangle
(3) an isosceles triangle
(4) an equilateral triangle

124. ABCD is a cyclic quadrilateral whose vertices are equidistant from the point O (centre of the circle). If $\angle COD = 120^\circ$ and $\angle BAC = 30^\circ$, then the measure of $\angle BCD$ is
- (1) 180° (2) 150°
(3) 60° (4) 90°

125. P owns $\frac{2}{3}$ shares of a company

and the rest of the shares is equally divided among Q and R. If the profit on each share increases from 5% to 7%, P earns an extra 800 rupees. The investment of R on the shares is

(1) Rs. 20,000 (2) Rs. 15,000
(3) Rs. 10,000 (4) Rs. 40,000

126. A sum of money lent at compound interest for 2 years at 20% per annum would fetch Rs. 482 more, if the interest was payable half yearly than if it was payable annually. The sum is
- (1) Rs. 30,000 (2) Rs. 40,000
(3) Rs. 10,000 (4) Rs. 20,000

127. A man travels $\frac{2}{15}$ of the total journey by rail, $\frac{9}{20}$ by car and the remaining 10 km on foot. His total journey in km is
- (1) 36 (2) 40
(3) 30 (4) 24

128. A merchant bought 140 cupboards at an auction. He sold 80 of them at a profit of Rs. 4,000 and the rest at a loss of Rs. 1,200. On the whole, he gained 10%. Then the cost of each cupboard is
- (1) Rs. 210 (2) Rs. 190
(3) Rs. 200 (4) Rs. 180

129. If $3x^2 - 4x - 3 = 0$, then the value

of $x - \frac{1}{x}$ is

(1) 3 (2) 4

(3) $\frac{3}{4}$ (4) $\frac{4}{3}$

130. $a : b$ for the greatest possible value of $5 - (3a - b)^2$ is
- (1) 3 : 5 (2) 1 : 5
(3) 1 : 3 (4) 3 : 1

131. If $a + b + c = 6$, $a^2 + b^2 + c^2 = 14$, find the value of $bc + ca + ab$.
- (1) 22 (2) 25
(3) 20 (4) 11

132. Find the value of the expression $x^3 - 12x^2 + 12x^3 - 12x^2 + 12x - 1$ when $x = 11$.
- (1) 12 (2) 0
(3) 10 (4) 11

133. If $x + \frac{1}{x} = 2$, find the value of

$$\left(x^2 + \frac{1}{x^2}\right) \left(x^3 + \frac{1}{x^3}\right)$$

(1) 8 (2) 2
(3) 6 (4) 4

134. If $x = \frac{\sqrt[3]{m+1} + \sqrt[3]{m-1}}{\sqrt[3]{m+1} - \sqrt[3]{m-1}}$, then the value of $x^3 - 3mx^2 + 3x - m$ is

(1) 0 (2) $m - \frac{1}{m}$

(3) $m + \frac{1}{m}$ (4) 1

135. A can finish a work in 24 days, B in 9 days and C in 12 days. B and C start the work but they are forced to leave after 3 days. The remaining work was done by A in

(1) 10 days (2) $10\frac{1}{2}$ days

(3) 5 days (4) 6 days

136. When 7 is subtracted from thrice a number, the result is 14. What is the number?

(1) 8 (2) 9

(3) 6 (4) 7

137. The least number which should be multiplied to 243 to get a perfect cube is

- (1) 6 (2) 9
(3) 2 (4) 3
138. In a basket, there are 125 flowers. A man goes to worship and offers as many flowers at each temple as there are temples in the city. Thus he needs 5 baskets of flowers. Find the number of temples in the city.

(1) 25 (2) 24
(3) 27 (4) 26

139. Product of the three consecutive numbers whose sum is 15, is

(1) 120 (2) 150
(3) 125 (4) 105

140. The simplified value of

$$999\frac{1}{7} + 999\frac{2}{7} + 999\frac{3}{7} + 999\frac{4}{7} \\ + 999\frac{5}{7} + 999\frac{6}{7} \text{ is}$$

(1) 10009 $\frac{2}{7}$ (2) 5994 $\frac{6}{7}$

(3) 9999 $\frac{2}{7}$ (4) 5997

141. 50 boxes with equal weights were loaded in a ship. 5 more boxes each weighing 105 kg were later added, making the average weight of all the 55 boxes as 95 kg. The weight of each of the 50 boxes first loaded is

(1) 98 kg (2) 94 kg
(3) 95 kg (4) 92 kg

142. In a club, the average age of the members is 30 years, the average age of the male members is 34 years and that of the female members is 26 years. The percentage of the male members is

(1) 50% (2) 60%
(3) 30% (4) 40%

143. In 60 litres beverage, the ratio of syrup and water is 3 : 7. If the ratio of the syrup and water is to be made 2 : 5, then the amount of water to be further added is

(1) 5 litres (2) 2.5 litres
(3) 2 litres (4) 3 litres

144. If a trader sold an article at Rs. 3,060 after allowing 15% and 10% successive discounts on marked price, then the marked price is

(1) Rs. 5,000 (2) Rs. 6,000
(3) Rs. 3,000 (4) Rs. 4,000

145. The area of a trapezium is 105 sq. m and, the lengths of its parallel sides are 9 m and 12 m respectively. Then the height of the trapezium is

(1) 15 m (2) 12 m
(3) 5 m (4) 10 m

- Directions (146-150) :** The following pie chart shows the marks obtained by a student in an examination, who scored 720 marks in all. Study the diagram and answer the questions given below.



146. The marks scored in Science are

(1) 200 (2) 300
(3) 75 (4) 150

147. The subject in which the student

scored $16\frac{2}{3}\%$ of his total score is

(1) Bengali
(2) History
(3) English
(4) Mathematics

148. The subject in which the student scored 180 marks is

(1) Mathematics
(2) Bengali
(3) English
(4) Science

149. The marks scored in Mathematics and English together differ from the total marks scored in Bengali, History and Science by

(1) 85 (2) 61
(3) 120 (4) 72

150. The marks scored in English, differ from the marks scored in Science by

(1) 75 (2) 15
(3) 30 (4) 60

- Directions (151-155) :** In the following questions, some parts of the sentences have errors and some have none. Find out which part of a sentence has an error. The number of that part is the answer. If a sentence is free from error, your answer is (4) i.e. No error.

151. I could (1) hardly believe (2) what he said. (3) No error (4)
152. The Government wanted to play the role (1) of a facilitator only and was (2) keen on optimal development. (3) No error (4)
153. Admittance for (1) the inaugural ceremony was (2) only by special tickets. (3) No error (4)
154. Pulses when well cooked (1) are not only appetizing (2) as well as nutritious. (3) No error (4)
155. Martin Luther king was one of the leaders (1) who (2) has followed Mahatma Gandhi. (3) No error (4)

- Directions (156-160) :** In the following questions, sentences are given with blanks to be filled in with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four as your answer.

156. In certain traditions, the husband is _____ as the breadwinner and the wife is expected to play a _____ role.
(1) counted; unequal
(2) treated; unique
(3) perceived; subordinate
(4) believed; subservient
157. The two parties have to _____ each other's sensibilities and _____ towards a win-win merger.
(1) seek; move
(2) develop; look
(3) respect; work
(4) accept; develop
158. I _____ that my pocket _____ picked.
(1) realized; had been
(2) had realized; was
(3) _____
(4) had realized; has been
159. Joseph _____ from his job because he was _____ for promotion.

- (1) left; declined,
- (2) gave up; refused
- (3) left; asked
- (4) resigned; sidelined

160. Only _____ people are _____ after death.

- (1) virtual; known
- (2) virtuous; remembered
- (3) brave; forgotten
- (4) vicious; admired

Directions (161-165) : In the following questions, out of the four alternatives, choose the one which best expresses the meaning of the given word as your answer.

161. Fallacy

- (1) smart move
- (2) unfounded fear
- (3) famous invention
- (4) mistaken belief

162. Diligent

- (1) conceited
- (2) great
- (3) hard working
- (4) proud

163. Garrulous

- (1) grumpy
- (2) important
- (3) friendly
- (4) talkative

164. Zenith

- (1) hope
- (2) ideal
- (3) pinnacle
- (4) reality

165. Proximity

- (1) nearness
- (2) affinity
- (3) prospect
- (4) rapport

Directions (166-170) : In the following questions, choose the word opposite in meaning to the given word as your answer.

166. Gregarious

- (1) delight
- (2) unsociable
- (3) social
- (4) stern

167. Taciturn

- (1) talkative
- (2) yielding
- (3) tactful
- (4) foolish

168. Archaic

- (1) updated
- (2) antediluvian
- (3) modern
- (4) obsolete

169. Inadvertent

- (1) advertise
- (2) pretend
- (3) indifferen.
- (4) deliberate

170. Verbose

- (1) bogus
- (2) brief
- (3) written
- (4) rubbish

Directions (171-175) : In the following questions, four alternatives are given for the idiom/phrase printed in **bold**. Choose the alternative which best expresses the meaning of the idiom/phrase as your answer.

171. In spite of his recent financial troubles, Ashok has not learnt **to cut his coat according to his cloth**.

- (1) overcome his problems
- (2) wear modest clothes
- (3) improve his tailoring abilities
- (4) live within his income

172. She keeps **blowing hot and cold** and therefore, nobody can befriend her for long.

- (1) being friendly at one moment and unfriendly the next
- (2) trying to cool the situation down and then raking it up again
- (3) being unfriendly and critical
- (4) being good and bad alternately

173. The secretary had the information **at her fingertips**.

- (1) on her typewriter
- (2) readily available
- (3) in the compact disc
- (4) not accessible

174. **To take the bull by the horns**

- (1) to check rumours from spreading
- (2) to inflict a crushing defeat upon the enemy
- (3) to face danger
- (4) to restrain anger

175. Consoling her daughter, the mother said that there was no use **crying over spilled milk**.

- (1) to slip and spill milk
- (2) complaining about an event that cannot be changed
- (3) worrying about the milk that was spilled
- (4) to cry having a glass of milk

Directions (176-180) : In the following questions, a part of the sentence is printed in **bold**. Below are given alternatives to the **bold** part at (1), (2) and (3) which may improve the sentence. Choose the correct alternative. In case no improvement is needed, your answer is (4).

176. It rained **bitterly** throughout the day, spoiling all our plans to go out.

- (1) strongly
- (2) fiercely
- (3) intermittently
- (4) No improvement

177. Hardly had he finished the novel **than the principal called him**.

- (1) then the principal called him
- (2) and the principal called him
- (3) when the principal called him
- (4) No improvement

178. **It is rumoured** that the road will be closed tomorrow.

- (1) has been told
- (2) has been announced
- (3) has been talked
- (4) No improvement

179. You should meet the **concerned programme co-ordinators** for registration.

- (1) programme co-ordinators
- (2) programme co-ordinators concerned
- (3) respected programme co-ordinators
- (4) No improvement

180. The patient was writing in **depression** on the bed.

- (1) pain
- (2) sorrow
- (3) happiness
- (4) No improvement

Directions (181-185) : In the following questions, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

181. The book won the prestigious award **after the death of its author**.

- (1) inordinately
- (2) successively
- (3) vicariously
- (4) posthumously

182. Spending too much time thinking about and admiring one's own appearance or abilities

- (1) Narcissism
- (2) Nepotism
- (3) Aphorism
- (4) Euphemism

183. Socio-economic order that existed in medieval Europe

- (1) Socialism
- (2) Feudalism
- (3) Communism
- (4) Democracy

184. Scholarly and learned
 (1) Wise (2) Vivacious
 (3) Stoic (4) Erudite
185. A system of government in which the laws of the State are believed to be the laws of God.
 (1) Theocracy (2) Democracy
 (3) Secularism (4) Socialism

Directions (186-190) : In the following questions, there are four different words out of which one is misspelt. Find the misspelt word as your answer.

186. (1) territoreal (2) pharmacy
 (3) rapture (4) remainder
187. (1) cartilage (2) marriage
 (3) privilage (4) carriage
188. (1) autocracy (2) hypocrisy
 (3) democracy (4) idiosyncracy
189. (1) laboratory (2) dispensary
 (3) foundry (4) observatory
190. (1) gauge (2) gauze
 (3) gaudy (4) gaurantee

Directions (191-200) : In the following questions, you have two brief passages with 5 questions following each passage. Read the passages carefully and choose the best answer to each question out of the four alternatives.

PASSAGE-I

(Question Nos. 191 – 195)

Modernity-snobbery, though not exclusive to our age, has come to assume an unprecedented importance. The reasons for this are simple and of a strictly economic character. Thanks to modern machinery, production is outrunning consumption. Organized waste among consumers is the first condition of our industrial prosperity. The sooner a consumer throws away the object he has bought and buys another, the better for the producer. At the same time the producer must do his bit by producing nothing but the most perishable articles.

191. The expression 'production is outrunning consumption' means
 (1) production is falling short of consumption
 (2) consumption is much more than production
 (3) production is in excess of consumption
 (4) production and consumption are running close to each other

192. The best definition of the term 'Modernity-snobbery' is
 (1) paying too much attention to use things of the latest design
 (2) giving undue attention to social position
 (3) better status for those who are up-to-date
 (4) those who are modern get more respect in the society

193. According to the author, 'modern machinery' is giving rise to
 (1) more waste
 (2) industrial prosperity
 (3) more markets
 (4) variety to the consumers

194. The production of more dispensable articles is necessary because it will
 (1) satisfy the immediate needs of the customers
 (2) compel the customers to go in for new articles
 (3) attract more customers
 (4) keep the factories working

195. For industrial prosperity, 'modernity-snobbery' is important because it induces people to
 (1) buy only the most expensive articles to maintain social position
 (2) help in the production of duplicate articles
 (3) buy articles which are perishable
 (4) discard old things for new ones

PASSAGE-II

(Question Nos. 196 – 200)

Reality television is a genre of television programming which, it is claimed, presents unscripted dramatic or humorous situations, documents, actual events, and features ordinary people rather than professional actors. Although the genre has existed in some form or another since the early years of television, the current explosion of popularity dates from around 2000. Part of reality television's appeal is due to its ability to place ordinary people in extraordinary situations. Reality television also has the potential to turn its participants into national celebrities, in talent and performance programmes such as Pop Idol, though

'Survivor' and 'Big Brother' participants also reach some degree of celebrity. Some commentators have said that the name "reality television" is an inaccurate description for several styles of programmes included in the genre. In competition based programmes such as 'Survivor' and other special-living-environment shows like 'The Real World', the producers design the format of the show and control the day-to-day activities and the environment, creating a completely fabricated world in which the competition is worked out. Producers specifically select the participants, and use carefully designed scenarios, challenges, events, and settings to encourage particular behaviour and conflicts.

196. The participants in the Reality Shows are
 (1) comedians
 (2) national celebrities
 (3) professional actors
 (4) ordinary people

197. The format of competition based programmes is decided by the
 (1) writer of the script
 (2) professional actors
 (3) producer
 (4) participants

198. In the first sentence, the writer says, 'it is claimed' because
 (1) some people insist on the statement
 (2) he wants to distance himself from the statement
 (3) he agrees with the statement
 (4) everyone agrees with the statement

199. Reality television
 (1) has only been popular since 2000
 (2) has been popular approximately since 2000
 (3) has been popular since the start of television
 (4) has been popular since well before 2000

200. Reality TV appeals to some because it
 (1) shows average people in exceptional circumstances
 (2) can turn ordinary people into celebrities
 (3) shows eligible males dating women
 (4) uses exotic locations