

SSC MULTI TASKING STAFF (NON TECHNICAL) EXAM

Exam Held On: 20-02-2011

GENERAL INTELLIGENCE AND REASONING

Directions (1-3) : In each of the following questions select the related letters / word / number from the given alternatives.

1. AGMS : CIOU :: DJPV : ?
 (1) BHNY (2) STUV
 (3) FLRX (4) MNOP
2. 85 : 42 :: 139 : ?
 (1) 68 (2) 69
 (3) 70 (4) 67
3. CAT : DDY :: BIG : ?
 (1) CLL (2) CLM
 (3) CML (4) CEP

Directions (4-5) : In each of the following questions find the odd number from the given alternatives.

4. (1) 111 (2) 242
 (3) 551 (4) 383
5. (1) 80 - 9 (2) 64 - 8
 (3) 36 - 6 (4) 7 - 49

Directions (6-8) : In each of the following questions a series is given with one term missing. Choose the correct alternative from the given ones that will complete the series :

6. ASY, BRX, CQW, ?
 (1) DVP (2) DPV
 (3) PDV (4) PQD
7. 56, 42, 30, 20, ? , 6
 (1) 15 (2) 12
 (3) 18 (4) 14
8. Y, S, N, J, G, ?
 (1) F (2) E
 (3) H (4) I
9. Substitute the correct mathematical symbols in place of * in the following equation:
 $16 * 4 * 5 * 14 * 6$
 (1) \div - = \times (2) - \times + =
 (3) \div \times = + (4) \div + = -

10. Find out the missing number.

8	9	9
6	7	8
9	11	?
39	52	59

- (1) 10 (2) 11
 (3) 12 (4) 13

11. Find out the *wrong* number from the given series.
 5, 27, 61, 122, 213, 340, 509
 (1) 27 (2) 61
 (3) 122 (4) 509
12. If $2 \times 2 = 16$, $2 \times 3 = 36$, $2 \times 4 = 64$, then $2 \times 6 = ?$
 (1) 72 (2) 80
 (3) 96 (4) 144
13. In the following series, the equations are solved on the basis of a certain system. Find out the correct answer for the unsolved equation on that basis.
 $9 \times 8 \times 6 = 896$; $7 \times 6 \times 8 = 678$; $8 \times 7 \times 5 = ?$
 (1) 875 (2) 785
 (3) 578 (4) 758
14. If 'x' means '-', '-' means 'x', '+' means '+' and '+' means '+', then
 $(15 - 10) \div (130 + 10) \times 50 = ?$
 (1) 1800 (2) 113
 (3) 2000 (4) 123
15. If the letters in 'PRABA' are coded as 27595 and 'THILAK' are coded 368451, how can 'BHARATHI' be coded?
 (1) 96575368 (2) 57686535
 (3) 96855368 (4) 37536689
16. A father tells his son, "I was three times of your present age when you were born." If the father's present age is 48 years, how old was the boy 4 years ago?
 (1) 24 years (2) 8 years
 (3) 12 years (4) 16 years
17. A and B are brother and sister respectively. C is A's father, D is C's sister and E is D's mother. How is B related to E?
 (1) Grand-daughter
 (2) Great-grand-daughter
 (3) Aunt
 (4) Daughter
18. Four persons M, N, O and P are playing cards. M is on the right of N and P is on the left of O. Then which of the following are partners?

- (1) P and O (2) M and P
 (3) M and N (4) N and P

19. If 'EDITION' is written as 'IDETNOI' how is 'MEDICAL' written in that code?
 (1) DEMILAC
 (2) LACIMED
 (3) DIEMCAL
 (4) CADILEM

Directions : Two statements are given followed by two conclusions I and II. You have to consider the two statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements.

20. Statements :

1. All English movies are violent.
2. Some people like watching English movies.

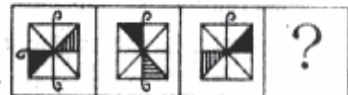
Conclusions :

- I. All people watching English movies like violence.
- II. All people who like violence watch English movies.

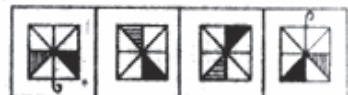
- (1) Only I follows
- (2) Only II follows
- (3) Neither I nor II follows
- (4) Both I and II follow

Directions : Select the missing figure from the given response.

21. Question Figures :

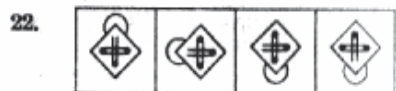


Answer Figures:



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

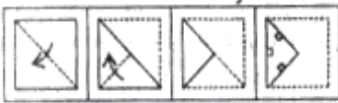
Directions : Find the odd figure from the given alternatives.



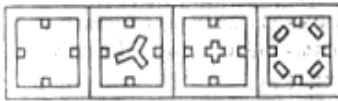
- (1) (2) (3) (4)

23. A paper is folded and cut as shown in the given question figures. When opened which of the four answer figures will it resemble?

Question Figures



Answer Figures



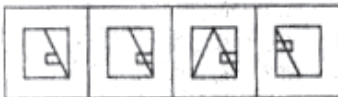
(1) (2) (3) (4)

Directions : Which answer figure will complete the question figure?

24. Question Figure



Answer Figures



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

25. Which of the following figures represents the relationship between Building material, Cement and Wood?



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

NUMERICAL APTITUDE

26. The sum of the squares of 3 consecutive positive numbers is 365. The sum of the numbers is
- (1) 30 (2) 33
(3) 36 (4) 45
27. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, then the dividend is
- (1) 4236 (2) 4306
(3) 4336 (4) 5336
28. The units digit of the expression $25^{625} + 36^{525} + 73^{54}$ is
- (1) 6 (2) 5
(3) 4 (4) 0

29. Simplify:

$$\frac{\frac{1}{3} + \frac{1}{4} \left[\frac{2}{5} - \frac{1}{2} \right]}{1 \frac{2}{3} \text{ of } \frac{3}{4} - \frac{3}{4} \text{ of } \frac{4}{5}}$$

(1) $\frac{37}{78}$ (2) $\frac{37}{13}$

(3) $\frac{74}{78}$ (4) $\frac{74}{13}$

30. $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}}$

$-\frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2}$ is equal to

(1) 5 (2) 3

(3) 1 (4) 0

31. A and B can do a piece of work in 8 days, B and C can do it in 24 days,

while C and A can do it in $8\frac{4}{7}$

days. In how many days can C do it alone?

(1) 60 (2) 40

(3) 30 (4) 10

32. A is thrice as good a workman as B and therefore is able to finish a job in 40 days less than B. Working together, they can do it in

(1) 14 days

(2) 13 days

(3) 20 days

(4) 15 days

33. The LCM of two numbers is 4 times their HCF. The sum of LCM and HCF is 125. If one of the numbers is 100, then the other number is

(1) 5 (2) 25

(3) 100 (4) 125

34. The average of three numbers is 135. The largest number is 195 and the difference between the other two is 20. The smallest number is

(1) 65 (2) 95

(3) 105 (4) 115

35. If I purchased 11 books for ₹ 100 and sold 10 books for ₹ 110, the percentage of profit per book sold is

(1) 10 (2) 11.5

(3) 17.3 (4) 21

36. Ratio between the monthly incomes of A and B is 9 : 8 and the

ratio between their expenditures is 8 : 7. If they save ₹ 500 each, find A's monthly income.

(1) ₹ 3,500

(2) ₹ 4,000

(3) ₹ 4,500

(4) ₹ 5,000

37. If $x : y = 3 : 4$, then the value of

$$\frac{5x - 2y}{7x + 2y} =$$

(1) $\frac{7}{25}$ (2) $\frac{7}{23}$

(3) $\frac{7}{29}$ (4) $\frac{7}{17}$

38. A sphere and a cube have equal surface areas. The ratio of the volume of the sphere to that of the cube is

(1) $\sqrt{\pi} : \sqrt{6}$ (2) $\sqrt{6} : \sqrt{\pi}$

(3) $\sqrt{2} : \sqrt{\pi}$ (4) $\sqrt{\pi} : 3$

39. The difference between a discount of 35% and two successive discounts of 20% on a certain bill was ₹ 22. The amount of the bill was

(1) ₹ 200 (2) ₹ 220

(3) ₹ 1,100 (4) ₹ 2,200

40. In measuring the sides of a rectangle, there is an excess of 5% on one side and 2% deficit on the other. Then the error percent in the area is

(1) 3.3 (2) 3.0

(3) 2.9 (4) 2.7

41. An equilateral triangle and a regular hexagon have the same perimeter. The ratio of the area of the triangle to that of the hexagon is

(1) 3:2 (2) 2:3

(3) 1:2 (4) 1:4

42. Walking at the rate of 4 km an hour, a man covers a certain distance in 3 hours 45 minutes. If he covers the same distance on cycle, cycling at the rate of 16 km/hour, the time taken by him is

(1) 55.45 minutes

(2) 54.55 minutes

(3) 55.44 minutes

(4) 45.55 minutes

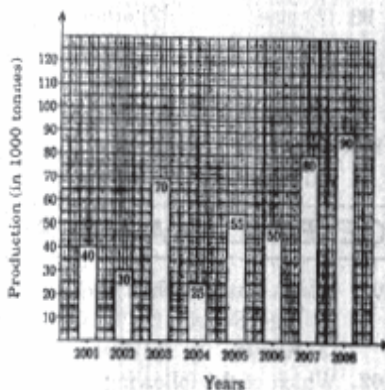
43. In a certain time, the ratio of a certain principal and the simple interest obtained from it are in the ratio

tio 10 : 3 at 10% interest per annum. The number of years the money was invested is

- (1) 1 (2) 3
(3) 5 (4) 7
44. A cloth merchant sold half of his cloth at 40% profit, half of remaining at 40% loss and the rest was sold at the cost price. In the total transaction his gain or loss will be
- (1) 20% gain
(2) 25% loss
(3) 10% gain
(4) 15% loss
45. In an examination, 1100 boys and 900 girls appeared. 50% of the boys and 40% of the girls passed the examination. The percentage of candidates who failed
- (1) 45 (2) 45.5
(3) 50 (4) 54.5
46. When the price of cloth was reduced by 25%, the quantity of cloth sold increased by 20%. What was the effect on gross receipt of the shop?
- (1) 5% increase
(2) 5% decrease
(3) 10% increase
(4) 10% decrease

Directions (47-50) : Study the following graph and answer the questions given below it.

Production of salt by a company (in 1000 tonnes) over the years



47. What was the percentage decline in the production of salt from 2003 to 2004?
- (1) 64.2 (2) 180
(3) 62.4 (4) 107
48. The average production of 2004 and 2005 was exactly equal to the average production of which of the following pairs of years?

- (1) 2006, 2007 (2) 2005, 2006
(3) 2002, 2006 (4) 2001, 2005

49. What was the percentage increase in production of salt in 2008 compared to that of 2001?

- (1) 55.5 (2) 125
(3) 150 (4) 220

50. In how many of the given years was the production of salt more than the average production of the given years?

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

GENERAL ENGLISH

Directions (51 - 55) : In the following questions, some of the sentences have errors and some are correct. Find out which part of a sentence has an error. If there is no error, the answer is (4). (Ignore errors of punctuation, if any).

51. When Anand reached the village (1) / he found that (2) / reports about him preceded him. (3) / No error (4)
52. Our success or our failure (1) / largely depend (2) / upon our actions. (3) / No error. (5)
53. The poor man (1) / poisoned him (2) / and his own children. (3) / No error. (4)
54. It was in 2006 (1) / that we first flew (2) / to the United States. (3) / No error. (4)
55. The children's dog (1) / slept quietly (2) / in their uncle's house. (3) / No error. (4)

Directions (56 - 60) : 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.

56. We must _____ help to the people hit by the cyclone.
(1) contribute (2) summon
(3) impart (4) render
57. The metals and minerals sector _____ currently highly volatile.
(1) are (2) is
(3) was (4) were
58. We should not mix with those people who have an _____ reputation.
(1) unsavoury
(2) unsteady
(3) unsafe
(4) unsanctified

59. It was said of Akbar that he rarely _____ more than three hours a day.

- (1) sleeps (2) is sleeping
(3) had slept (4) slept

60. As the bare mountains turned green, the people found _____ looking forward to spring.

- (1) they (2) them
(3) their (4) themselves

Directions (61 - 65) : In the following questions, out of the four alternatives choose the one which best expresses the meaning of the given word.

61. Cease
(1) stop (2) lapse
(3) close (4) arrest
62. Liability
(1) debt (2) debit
(3) asset (4) credit
63. Integration
(1) symmetry (2) unity
(3) coordination
(4) compromise
64. Discriminate
(1) compare
(2) distinguish
(3) comprehend
(4) connect.
65. Appear
(1) see (2) allow
(3) seem (4) enter

Directions (66 - 70) : In the following questions, choose the word which is most opposite in meaning to the given word.

66. Wicked
(1) cunning (2) good
(3) tricky (4) crooked
67. Block
(1) clean (2) ease
(3) cure (4) clear
68. Vanity
(1) honesty (2) truthfulness
(3) modesty (4) decency
69. Negligent
(1) inattentive (2) imprudent
(3) insignificant (4) careful
70. Neat
(1) sloppy (2) fragrant
(3) spruce (4) orderly

Directions (71 - 75) : In the following questions, four alternatives are given for the bold idiom/phrase. Choose the alternative which best expresses the meaning of the given idiom/phrase.

71. The police **closed the book on** the murder case.
 (1) solved the case of
 (2) stopped working on
 (3) handed the case over to another agency
 (4) refused to take up
72. His arguments **cut no ice with** me.
 (1) had no influence on me
 (2) did not hurt me
 (3) did not benefit me
 (4) did not make me proud
73. There was a job for me **to cut my teeth on**.
 (1) to gain experience
 (2) to try
 (3) to sharpen my wits
 (4) to earn a decent salary
74. The **carrot and stick** policy pays dividends in every organisation.
 (1) fair and foul
 (2) continuous vigilance
 (3) democratic
 (4) reward and punishment
75. Unless you **grease his palms** he will not do your work.
 (1) talk to him
 (2) flatter him
 (3) beat him
 (4) bribe him

Directions (76 – 80) : 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).

76. **If I was you** I would not sign the document.
 (1) If I have been you
 (2) If I were you
 (3) If I had been you
 (4) No improvement
77. They were astonished **through** his failure in the examination.
 (1) from
 (2) at
 (3) with
 (4) No improvement
78. The increasing sale of luxuries is an **index** of the country's prosperity.
 (1) appendix
 (2) pointer
 (3) mark
 (4) No improvement

79. When are you **starting** to write to your friend?
 (1) wanting
 (2) going
 (3) thinking
 (4) No improvement
80. I prefer **to ride than to walk**.
 (1) ride to walk
 (2) riding than walking
 (3) riding to walking
 (4) No improvement

Directions (81–85) : In the following questions, out of the four alternatives choose the one which can be substituted for the given words / sentence.

81. To give one's authority to another
 (1) Assign (2) Delegate
 (3) Represent (4) Designate
82. One who intervenes between two or more parties to settle differences
 (1) Neutral (2) Intermediary
 (3) Judge (4) Connoisseur
83. The absence of law and order
 (1) Rebellion (2) Mutiny
 (3) Revolt (4) Anarchy
84. A voice that cannot be heard
 (1) Unheard
 (2) Faint
 (3) Audible
 (4) Inaudible
85. High sea waves caused by underwater earthquake
 (1) Tsunami (2) Tornado
 (3) Hurricane (4) Cyclone

Directions (86 – 90) : In the following questions, groups of four words are given. In each group, one word is correctly spelt. Find the correctly spelt word.

86. (1) budgetery (2) bugetary
 (3) budgetary (4) budgetry
87. (1) occurence (2) occurrence
 (3) ocurence (4) occurance
88. (1) pidistrian (2) pedestrian
 (3) pedestrian (4) pidestrian
89. (1) seperately (2) separately
 (3) seperatley (4) separatly
90. (1) embarrassed
 (2) embarassed
 (3) embarrased (4) embarased

Directions (91 – 100) : In the following passage, 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.

When Anil passed his final university examination and got his **(91)** he decided to **(92)** and invited all his friends to a party to be **(93)** the following Sunday. He spent most of that Saturday **(94)** things ready and at 7.40 the first guest arrived. After that a steady **(95)** of people **(96)** and Anil was busy chatting to people and introducing them to one another. Anil had a wide **(97)** of friends and not everyone at the party knew everyone **(98)**. 'A party is always a good way to break the **(99)** and get people talking', Anil thought. The party soon got going and there was a feeling of relief at the **(100)** that the examinations were over and that a long summer holiday lay ahead.

91. (1) licence
 (2) bachelorhood
 (3) degree (4) diploma
92. (1) celebrate
 (2) feast
 (3) entertain
 (4) commemorate
93. (1) planned (2) celebrated
 (3) offered (4) held
94. (1) preparing (2) putting
 (3) getting (4) doing
95. (1) stream (2) current
 (3) river (4) movement
96. (1) turned out (2) turned up
 (3) turned in (4) turned down
97. (1) number (2) group
 (3) circle (4) round
98. (1) else (2) other
 (3) different (4) person
99. (1) silence (2) atmosphere
 (3) monotony (4) ice
100. (1) subject (2) point
 (3) fact (4) matter

GENERAL AWARENESS

101. Which state is rich in jute?
 (1) West Bengal (2) Tamil Nadu
 (3) Kerala (4) Orissa
102. Which of the following countries are connected by the Palk Strait?
 (1) India and Sri Lanka
 (2) North Korea and South Korea
 (3) Pakistan and China
 (4) Britain and France
103. Match the following:
 1. Hazaribagh a. Coal
 2. Neyveli b. Iron
 3. Jharia c. Lignite
 4. Rourkela d. Mica

- (1) 1c, 2d, 3a, 4b
 (2) 1d, 2c, 3a, 4b
 (3) 1a, 2b, 3c, 4d
 (4) 1d, 2c, 3b, 4a
104. What is the minimum percentage of votes a political party must get to acquire the status of a registered party?
 (1) 1% (2) 2%
 (3) 3% (4) 4%
105. Who estimated the National Income for the first time in India?
 (1) Mahalanobis
 (2) Dadabhai Naoroji
 (3) V.K.R.V. Rao
 (4) Sardar Patel
106. Economic development depends on :
 (1) Natural resources
 (2) Capital formation
 (3) Size of the market (4)
 All of the above
107. National Income is generated from :
 (1) any money-making activity
 (2) any laborious activity
 (3) any profit-making activity
 (4) any productive activity
108. Money supply is governed by the
 (1) Planning Commission
 (2) Finance Commission
 (3) Reserve Bank of India
 (4) Commercial Banks
109. The headquarters of WTO is at :
 (1) New York (2) Uruguay
 (3) Doha (4) Geneva
110. Which state is called the 'Rice Bowl' of India?
 (1) Andhra Pradesh
 (2) Tamil Nadu
 (3) Kerala
 (4) Karnataka
111. The highest waterfall of India is
 (1) Shimsha falls
 (2) Hogenakkal falls
 (3) Courtallam falls
 (4) Jog falls
112. Which one of the following is known as the 'immovable property' in the cell?
 (1) Carbohydrate
 (2) Fat
 (3) Protein
 (4) Nucleic acid
113. Water from soil enters into the root hairs owing to :
 (1) Atmospheric pressure
 (2) Capillary pressure
 (3) Root pressure
 (4) Osmotic pressure
114. What is meant by a 'pir' in the Sufi tradition?
 (1) The Supreme God
 (2) The Guru of the Sufis
 (3) The greatest of all Sufi saints
 (4) The orthodox teacher who contests the Sufi beliefs
115. Khalsa Panth was created by Guru Gobind Singh in which year ?
 (1) 1599 (2) 1707
 (3) 1699 (4) 1657
116. Who propounded the Panchsheel Principles ?
 (1) Mahatma Gandhi
 (2) Lord Buddha
 (3) Pandit Jawahar Lal Nehru
 (4) Swami Dayanand Saraswati
117. On April 12, 1944 Subhash Chandra Bose hoisted the INA Flag in a town. In which State/ Union Territory is that town now ?
 (1) Andaman and Nicobar Islands
 (2) Tripura
 (3) Manipur
 (4) Mizoram
118. Arrange the following Magadhan dynasties in chronological order:
 I. Nandas II. Sisunagas
 III. Mauryas IV. Haryankas
 (1) IV, II, III and I
 (2) II, I, IV and III
 (3) IV, II, I and III
 (4) III, I, IV and II
119. The term of office of the Comptroller and Auditor General of India is —
 (1) 3 years (2) 4 years
 (3) 5 years (4) 6 years
120. Who was the first Chief Election Commissioner of India ?
 (1) G.V. Mavlankar
 (2) T. Swaminathan
 (3) K.V.K. Sundaram
 (4) Sukumar Sen
121. What IS the retirement age for a Supreme Court Judge?
 (1) 62 years (2) 68 years
 (3) 65 years (4) 70 years
122. Name the 'Political Guru' of Mahatma Gandhi.
 (1) Gopalakrishna Gokhale
 (2) Bal Gangadhar Tilak
 (3) Aurobindo Ghosh
 (4) Lala Lajpat Rai
123. The average life span of red blood corpuscles is about
 (1) 100 - 200 days
 (2) 100 - 120 days
 (3) 160 - 180 days
 (4) 150 - 200 days
124. Dormancy period of animals during winter season is called :
 (1) Aestivation (2) Hibernation
 (3) Regeneration (4) Mutation
125. The angle in which a cricket ball should be hit to travel maximum horizontal distance is :
 (1) 60° with horizontal
 (2) 45° with horizontal
 (3) 30° with horizontal
 (4) 15° with horizontal
126. The minimum number of geostationary satellites needed for uninterrupted global coverage is :
 (1) 3 (2) 2
 (3) 4 (4) 1
127. The best conductor of electricity among the following is :
 (1) Copper (2) Iron
 (3) Aluminium (4) Silver
128. Breeding and management of bees is known as :
 (1) Sericulture (2) Silviculture
 (3) Pisciculture (4) Apiculture
129. The vitamin necessary for coagulation of blood is :
 (1) Vitamin B (2) Vitamin C
 (3) Vitamin K (4) Vitamin E
130. Which of the following is not a computer network?
 (1) Wide area network
 (2) Local area network
 (3) Personal network
 (4) Metropolitan area network
131. When a group of computers is connected together in a small area without the help of telephone lines, it is called :
 (1) Remote Communication Network (RCN)
 (2) Local Area Network (LAN)
 (3) Wide Area Network (WAN)
 (4) Value Added Network (VAN)
132. Which one of the following elements is used in the manufacture of fertilizers ?
 (1) Fluorine (2) Potassium
 (3) Lead (4) Aluminium
133. Natural rubber is the polymer of
 (1) Isoprene (2) Styrene
 (3) Butadiene (4) Ethylene

134. In addition to hydrogen, the other abundant element present on Sun's surface is
 (1) Helium (2) Neon
 (3) Argon (4) Oxygen
135. Which of the following is the major constituent of LPG?
 (1) Methane (2) Ethane
 (3) Propane (4) Butane
136. Flight Recorder is technically called :
 (1) Dark box
 (2) Blind box
 (3) Black box
 (4) Altitude meter
137. Santosh Trophy is associated with :
 (1) Hockey
 (2) Football
 (3) Basketball
 (4) Badminton
138. Kathakali classical dance originated in :
 (1) Kerala
 (2) Karnataka
 (3) Rajasthan
 (4) Tamil Nadu
139. The first effective vaccine against polio was prepared by :
 (1) J.H. Gibbon
 (2) Jonas E. Salk
 (3) Robert Edwards
 (4) James Simpson
140. Who discovered sea route to India via the 'Cape of Good Hope'?
 (1) Vasco da Gama
 (2) Amundsen
 (3) Christopher Columbus
 (4) John Cabot
141. The 16-year-old school-boy, Arjun Vajpai who became the youngest Indian to successfully climb the world's highest peak, Mount Everest, on May 22, 2010, is from which state?
 (1) Uttar Pradesh
 (2) Madhya Pradesh
 (3) National Capital Territory of Delhi
 (4) Uttarakhand
142. Which one of the following is an 'Air-to-Air' missile?
 (1) Prithvi (2) Agni
 (3) Akash (4) Astra
143. Yuan is the currency of :
 (1) Japan (2) China
 (3) Italy (4) Yugoslavia

144. IUCN categorized major threatened species under :
 (1) seven classes
 (2) five classes
 (3) six classes
 (4) four classes
145. Minamata disease was caused by :
 (1) Mercury (2) Lead
 (3) Cadmium (4) Zinc
146. Ozone layer is present in
 (1) Troposphere (2) Ionosphere
 (3) Stratosphere (4) Exosphere
147. The National Integration Council (NIC) is chaired by the :
 (1) Prime Minister
 (2) Finance Minister
 (3) Home Minister
 (4) President of India
148. The first atomic bomb was thrown over :
 (1) Nagasaki (2) Hiroshima
 (3) Tokyo (4) Hong Kong
149. Which of the following countries has entered into an agreement with India for the supply of Advanced Jet Trainer (HAWK)?
 (1) Russia (2) U.S.A.
 (3) England (4) France
150. The name of the 'Cargo Ship' which sank off Mumbai coast recently, causing oil spill in the Arabian Sea, was :
 (1) Sagar Jyoti
 (2) Venus
 (3) MSC Chitra
 (4) Golden Eagle

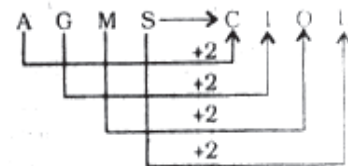
ANSWERS

1.(3)	2.(2)	3.(1)	4.(2)
5.(1)	6.(2)	7.(2)	8.(2)
9.(3)	10.(4)	11.(1)	12.(4)
13.(2)	14.(2)	15.(1)	16.(2)
17.(1)	18.(4)	19.(1)	20.(1)
21.(2)	22.(3)	23.(4)	24.(2)
25.(2)	26.(2)	27.(4)	28.(4)
29.(1)	30.(1)	31.(1)	32.(4)
33.(2)	34.(2)	35.(4)	36.(3)
37.(3)	38.(2)	39.(4)	40.(3)
41.(2)	42.(2)	43.(2)	44.(3)
45.(4)	46.(4)	47.(1)	48.(3)
49.(2)	50.(3)	51.(3)	52.(2)
53.(2)	54.(2)	55.(4)	56.(4)
57.(2)	58.(1)	59.(4)	60.(4)

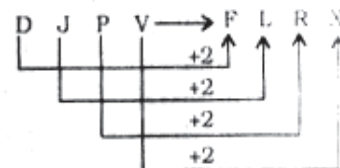
61.(1)	62.(1)	63.(2)	64.(2)
65.(3)	66.(2)	67.(4)	68.(3)
69.(4)	70.(1)	71.(2)	72.(1)
73.(1)	74.(4)	75.(4)	76.(2)
77.(2)	78.(4)	79.(2)	80.(3)
81.(2)	82.(2)	83.(4)	84.(4)
85.(1)	86.(3)	87.(2)	88.(3)
89.(2)	90.(1)	91.(3)	92.(1)
93.(4)	94.(3)	95.(1)	96.(2)
97.(3)	98.(1)	99.(4)	100.(3)
101.(1)	102.(1)	103.(2)	104.(2)
105.(3)	106.(4)	107.(4)	108.(3)
109.(4)	110.(1)	111.(4)	112.(4)
113.(2)	114.(2)	115.(3)	116.(3)
117.(1)	118.(3)	119.(4)	120.(4)
121.(3)	122.(1)	123.(2)	124.(2)
125.(2)	126.(2)	127.(4)	128.(4)
129.(3)	130.(3)	131.(2)	132.(2)
133.(1)	134.(1)	135.(4)	136.(3)
137.(2)	138.(1)	139.(2)	140.(1)
141.(1)	142.(4)	143.(2)	144.(1)
145.(1)	146.(3)	147.(1)	148.(2)
149.(3)	150.(3)		

EXPLANATIONS

1. (3)

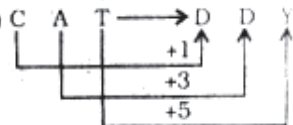


Similarly,

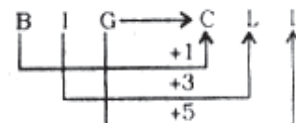


2. (2) $85 - 1 = 84$; $84 \div 2 = 42$
 $139 - 1 = 138$; $138 \div 2 = 69$

3. (1)



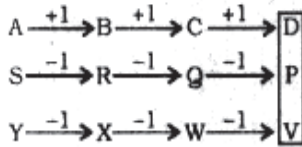
Similarly,



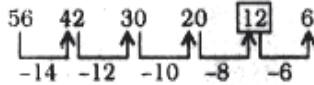
4. (2) 242 is an even number. All other numbers are odd numbers.

5. (1) $64 = (8)^2$; $36 = (6)^2$; $49 = (7)^2$
But, $(9)^2 = 81$

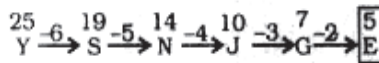
6. (2)



7. (2)



8. (2)

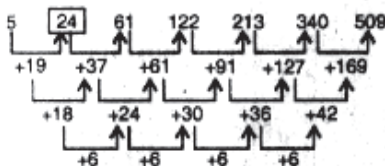


9. (3) $16 + 4 \times 5 = 14 + 6$
 $\Rightarrow 4 \times 5 = 20$

10. (4) $8 \times 6 - 9 = 48 - 9 = 39$
 $9 \times 7 - 11 = 63 - 11 = 52$
 $9 \times 8 - ? = 59$

$\Rightarrow ? = 72 - 59 = 13$

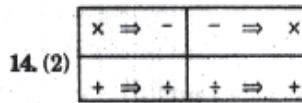
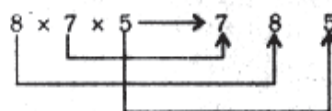
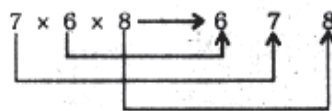
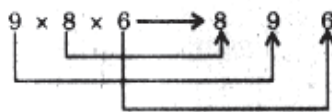
11. (1)



Therefore, the number 27 is wrong in the series. It should be replaced with 24.

12. (4) $2 \times 2 = 4$; $4 \times 4 = 16$
 $2 \times 3 = 6$; $6 \times 6 = 36$
 $2 \times 4 = 8$; $8 \times 8 = 64$
 $2 \times 6 = 12$; $12 \times 12 = 144$

13. (2)



14. (2)

$$\begin{aligned} ? &= (15 - 10) + (130 + 10) \times 50 \\ &\Rightarrow ? = (15 \times 10) + (130 + 10) - 50 \\ &\Rightarrow ? = (150) + (13) - 50 \\ &\Rightarrow ? = 163 - 50 = 113 \end{aligned}$$

15. (1) P R A B A

↓ ↓ ↓ ↓ ↓

2 7 5 9 5

T H I L A K

↓ ↓ ↓ ↓ ↓ ↓

3 6 8 4 5 1

Therefore,

B H A R A T H I

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

9 6 5 7 5 3 6 8

16. (2) Present age of the son

= 12 years

The father was 36 years old when the boy was born.

= $12 \times 3 = 36$ years

$0 + 12 = 12$ years and $36 + 12$

= 48 years

Therefore, 4 years ago the boy was

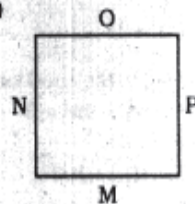
= $12 - 4 = 8$ years

17. (1) E is mother of C and D.

C is father of A and B.

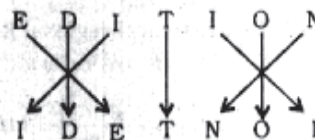
Therefore, B is the granddaughter of E.

18. (4)

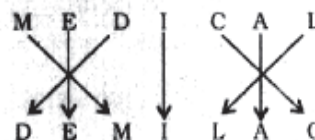


N and P are partners.

19. (1)



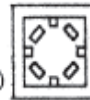
Similarly,



20. (1) Only Conclusion I follows. As all English movies are violent, the people who like watching English movies like violence. But it is not necessary that all people who like violence watch English movies.

21. (2) In each subsequent figure one curve is deleted and the shaded parts of square move two sectors in clockwise direction.

22. (3) The figure (3) is different from the other three figures. The position of semi-circle in figure (3) is different.

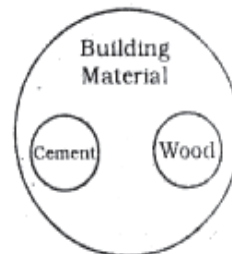


23. (4)



24. (2)

25. (2) Cement is different from wood. But both are building materials.



26. (2) $10^2 + 11^2 + 12^2$
 $= 100 + 121 + 144 = 365$
 \therefore Required sum = $10 + 11 + 12 = 33$

27. (4) Divisor = $5 \times$ Remainder
 $= 5 \times 46 = 230$

$$\text{Quotient} = \frac{230}{10} = 23$$

\therefore Dividend = Divisor \times Quotient + Remainder
 $= 230 \times 23 + 46$
 $= 5290 + 46 = 5336$

28. (4) Unit's digit in the expansion of 25^{6251}
 $=$ Unit's digit in the expansion of $5^{6251} = 5$

$36^{528} =$ Unit's digit in $6^{528} = 6$

Now, $3^1 = 3$, $3^2 = 9$, $3^3 = 27$; $3^4 = 81$, $3^5 = 243$...

$\therefore 73^{54} = 73^{52} \times 73^2$
 $= 3^2 = 9$

∴ Required digit = Unit's digit of the sum $5 + 6 + 9 = 0$

29. (1) Expression

$$\frac{\frac{1}{3} + \frac{1}{4} \left[\frac{4-5}{10} \right]}{\frac{3}{4} \times \frac{5}{3} - \frac{4}{5} \times \frac{3}{4}}$$

$$= \frac{\frac{1}{3} - \frac{1}{4} \times \frac{1}{10}}{\frac{5}{4} - \frac{3}{5}} = \frac{\frac{3}{40}}{\frac{5}{4} - \frac{3}{5}}$$

$$= \frac{\frac{40-3}{120}}{\frac{25-12}{20}} = \frac{37}{120} \times \frac{20}{13} = \frac{37}{78}$$

30. (1) $\frac{1}{3-\sqrt{8}} = \frac{1}{3-\sqrt{8}} \times \frac{3+\sqrt{8}}{3+\sqrt{8}}$

$$= \frac{3+\sqrt{8}}{9-8} = 3+\sqrt{8}$$

Similarly, $\frac{1}{\sqrt{8}-\sqrt{7}} = \sqrt{8} + \sqrt{7}$

$$\frac{1}{\sqrt{7}-\sqrt{6}} = \sqrt{7} + \sqrt{6}$$

∴ Expression

$$= (3+\sqrt{8}) - (\sqrt{8} + \sqrt{7})$$

$$+ (\sqrt{7} + \sqrt{6}) - (\sqrt{6} + \sqrt{5}) + (\sqrt{5} + 2)$$

$$= 3 + \sqrt{8} - \sqrt{8} - \sqrt{7} + \sqrt{7} + \sqrt{6}$$

$$- \sqrt{6} - \sqrt{5} + \sqrt{5} + 2$$

$$= 3 + 2 = 5$$

31. (1) $(A+B)$'s 1 day's work = $\frac{1}{8}$

$$(B+C)$$
's 1 day's work = $\frac{1}{24}$

$$(C+A)$$
's 1 day's work = $\frac{7}{60}$

On adding all three,

2(A+B+C)'s 1 day's work

$$= \frac{1}{8} + \frac{1}{24} + \frac{7}{60}$$

$$= \frac{15+5+14}{120} = \frac{34}{120}$$

∴ (A+B+C)'s 1 day's work

$$= \frac{17}{120}$$

∴ C's 1 day's work

$$= \frac{17}{120} - \frac{1}{8} = \frac{17-15}{120} = \frac{1}{60}$$

∴ C alone will complete the work in 60 days.

32. (4) Time taken by A to complete the work = x days

∴ Time taken by B to complete the work = 3x days

$$\therefore 3x - x = 2x = 40$$

$$\Rightarrow x = 20 \text{ and } 3x = 60$$

∴ (A+B)'s 1 day's work

$$= \frac{1}{20} + \frac{1}{60} = \frac{3+1}{60}$$

$$= \frac{4}{60} = \frac{1}{15}$$

∴ A and B together will complete the work in 15 days.

33. (2) If LCM be L and HCF be H, then

$$L = 4H$$

$$\therefore H + 4H = 125$$

$$\Rightarrow 5H = 125$$

$$\Rightarrow H = \frac{125}{5} = 25$$

$$\therefore L = 4 \times 25 = 100$$

∴ Second number

$$= \frac{L \times H}{\text{First number}}$$

$$= \frac{100 \times 25}{100} = 25$$

34. (2) According to the question,

$$195 + x + x + 20 = 135 \times 3$$

$$\Rightarrow 2x + 215 = 405$$

$$\Rightarrow 2x = 405 - 215 = 190$$

$$\therefore x = \frac{190}{2} = 95$$

= Smallest number

35. (4) If a articles are bought for Rs. x and b articles are sold for Rs. y, then

$$\text{Gain per cent} = \left(\frac{ya - xb}{xb} \right) \times 100$$

$$= \frac{(11 \times 110 - 10 \times 100)}{10 \times 100} \times 100$$

$$= \frac{1210 - 1000}{1000} \times 100 = 21\%$$

36. (3) If the ratio of the incomes of A and B be a : b and that of their expenses be c : d and each saves Rs. x, then,

$$A's \text{ income} = \frac{ax(d-c)}{ad-bc}$$

$$= \frac{9 \times 500(7-8)}{9 \times 7 - 8 \times 8}$$

$$= 9 \times 500 = \text{Rs. } 4500$$

37. (3) $\frac{x}{y} = \frac{3}{4}$ (Given)

$$\therefore \frac{5x-2y}{7x+2y} = \frac{5 \cdot \frac{x}{y} - 2}{7 \cdot \frac{x}{y} + 2}$$

$$= \frac{5 \times \frac{3}{4} - 2}{7 \times \frac{3}{4} + 2} = \frac{15-8}{21+8} = \frac{7}{29}$$

38. (2) If the radius of the sphere be r units and the edge of the cube be x units, then

Surface area of sphere = Surface area of cube

$$\Rightarrow 4\pi r^2 = 6x^2$$

$$\Rightarrow \frac{r^2}{x^2} = \frac{6}{4\pi} = \frac{3}{2\pi} \Rightarrow \frac{r}{x} = \frac{\sqrt{3}}{\sqrt{2\pi}}$$

$$\therefore \frac{\frac{4}{3}\pi r^3}{x^3} = \frac{4}{3}\pi \times \left(\frac{\sqrt{3}}{\sqrt{2\pi}} \right)^3$$

$$= \frac{4\pi \times 3\sqrt{3}}{3 \times 2\sqrt{2} \pi \sqrt{\pi}}$$

$$= \frac{12\sqrt{3}}{6\sqrt{2} \sqrt{\pi}} = \sqrt{6} : \sqrt{\pi}$$

39. (4) Single equivalent discount of two successive discounts of 20% each

$$= \left(20 + 20 - \frac{20 \times 20}{100} \right) \%$$

$$= 36\%$$

If the amount of the bill be Rs. x then

$$\therefore (36 - 35)\% \text{ of } x = 22$$

$$\Rightarrow \frac{x}{100} = 22 \Rightarrow x = \text{Rs. } 2200$$

40. (3) Required percentage

$$= \left(x + y + \frac{xy}{100} \right) \%$$

Negative sign for decrease

$$= \left(5 - 2 - \frac{5 \times 2}{100} \right) \% = 2.9\%$$

41. (2) If the side of an equilateral triangle be x units and side of regular hexagon be y units, then

$$3x = 6y \Rightarrow \frac{x}{y} = 2$$

$$\therefore \frac{\frac{\sqrt{3}}{4} x^2}{6 \times \frac{\sqrt{3}}{4} y^2} = \frac{1}{6} \times 4 = \frac{2}{3}$$

42. (2) Distance covered on foot

$$= 4 \times 3 \frac{3}{4} \text{ km.} = 15 \text{ km.}$$

\therefore Time taken on cycle

$$= \frac{\text{Distance}}{\text{Speed}} = \frac{15}{16.5} \text{ hour}$$

$$= \frac{15 \times 60}{16.5} \text{ minutes}$$

$$= 54.55 \text{ minutes}$$

43. (2) Time = $\frac{\text{S.I.} \times 100}{\text{Principal} \times \text{Rate}}$

$$= \frac{3}{10} \times \frac{100}{10} = 3 \text{ years}$$

44. (3) Let the merchant bought 100 metres of cloth for Rs. 100.

\therefore Total S.P.

$$= \text{Rs.} \left(\frac{50 \times 140}{100} + \frac{25 \times 60}{100} + 25 \right)$$

$$= \text{Rs.} (70 + 15 + 25) = \text{Rs.} 110$$

\therefore Gain per cent = 10%

45. (4) Failed candidates

$$= \frac{1100 \times 50}{100} + \frac{900 \times 60}{100}$$

$$= 550 + 540 = 1090$$

\therefore Required percentage

$$= \frac{1090}{2000} \times 100 = 54.5$$

46. (4) Required per cent effect

$$= \left(20 - 25 - \frac{20 \times 25}{100} \right) \%$$

$$= (-5 - 5) \% = -10\%$$

Negative sign shows decrease

47. (1) Percentage decrease

$$= \frac{70 - 25}{70} \times 100$$

$$= \frac{4500}{70} = 64.2$$

48. (3) It is obvious from the graph.

Required average production

$$= 40000 \text{ tonnes}$$

49. (2) Percentage increase

$$= \frac{90 - 40}{40} \times 100 = 125$$

50. (3) Average production

$$\left(\frac{40 + 30 + 70 + 25 + 55 + 50 + 80 + 90}{8} \right) 1000 \text{ tonnes}$$

$$= \frac{440}{8} \times 1000 = 55000 \text{ tonnes}$$

Years having more production than

it = 2003, 2007 and 2008

51. (3) If two events happen in the past, then Past Perfect is used with the event that happens earlier.

Hence, reports about him had preceded him should be used here.

52. (2) Singular subjects connected with 'or' agree with singular verb. Hence, largely depends..... should be used here.

53. (2) Here, poisoned himself..... should be used.

54. (2) Here, when we first flew... should be used. To express time, we use 'when'.

55. (4) No error 56. (4) render

57. (2) is 58. (1) unsavoury

59. (4) slept 60. (4) themselves

61. (1) The word Cease (Verb) means : to stop happening or existing; to stop something from happening or existing.

Look at the sentences :

You never cease to amaze me!

He ordered his men to cease fire.

62. (1) The word Liability (Noun) means : the amount of money that a person or company owes; debt; thing that causes you a lot of problems.

Look at the sentence :

The company is reported to have liabilities of nearly Rs. 1 crore.

63. (2) The word Integration (Noun) means : the act or process of combining two or more things; the act of mixing people; the state of being whole; unity.

Look at the sentences :

The aim is to promote closer economic integration.

We should believe in national integration.

64. (2) The word Discriminate (Verb) means : to treat one thing worse/better than another in an unfair way; distinguish; differentiate.

Look at the sentence :

It is illegal to discriminate on grounds of race or religion.

65. (3) The word Appear (Verb) means : seem; to give the impression of being or doing something; to start to be seen.

Look at the sentence :

She appears a perfectly normal person.

66. (2) The word Wicked (Adjective) means : morally bad; unjust; spiteful; evil, mischievous; dangerous.

Its antonym should be good.

67. (4) The word Block (Verb) means : obstruct; hinder; to stop something from moving.

The word Clear (Verb) means : to move freely again; to no longer be blocked; to remove something.

Look at the sentence :

The traffic took a long time to clear after accident.

68. (3) The word Vanity (Noun) means : ostentatious display; futility; too much pride in your own appearance.

The word Modesty (Noun) means : the fact of not talking much about your abilities or possessions; decorum.

Look at the sentence :

He accepted the award with characteristic modesty.

69. (4) The word Negligent (Adjective) means : failing to give somebody/something enough care or attention; relaxed; not formal or awkward.

Look at the sentence :

The school had been negligent in not informing the child's parents about the incident.

Its antonym should be careful.

70. (1) The word Neat (Adjective) means : tidy and in order; carefully

gone or arranged; trim; good; excellent.

The word **Sloppy (Adjective)** means : that shows a lack of care, thought or effort.

71. (2) Idiom **close the book on something** means : to stop doing something because you no longer believe you will be successful or will find a solution.
72. (1) Idiom **cut no ice with somebody** means : to have no influence or effect on somebody.
73. (1) Idiom **cut your teeth on something** means : to do something that gives you your first experience of a particular type of work.
74. (4) Idiom **the carrot and the stick (approach)** means : You persuade somebody to try harder by offering them a reward if they do, or a punishment if they do not.
75. (4) Idiom **grease somebody's palm** means : to give somebody money in order to persuade them to do something dishonest; bribe.
76. (2) When a sentence expresses wish, condition or supposition, Plural Verb is used even with a singular subject.
77. (2) Preposition at/by should be used with the word 'astonish'.
- Look at the sentence :**
My parents looked astonished at my news.
78. (4) No improvement
79. (2) going
80. (3) If Noun/Pronoun/Gerund is used after 'prefer', 'to' should be used. If infinitive follows 'prefer', 'rather than' should be used.
- Look at the sentences :**
He prefers walking to riding.
He prefers to live rather than die.
81. (2) Delegate
82. (2) Intermediary
83. (4) Anarchy
84. (4) Inaudible
85. (1) Tsunami
86. (3) budgetary
87. (2) occurrence
88. (3) pedestrian
89. (2) separately
90. (1) embarrassed

91. (3) degree
92. (1) celebrate
93. (4) held
94. (3) getting
95. (1) stream
96. (2) turned up
97. (3) circle
98. (1) else
99. (4) ice
100. (3) fact
101. (1) West Bengal
102. (1) India and Sri Lanka
103. (2) 1d, 2c, 3a, 4b
104. (2) 2%
105. (3) V.K.R.V. Rao
106. (4) All of the above
107. (4) any productive activity
108. (3) Reserve Bank of India
109. (4) Geneva
110. (1) Andhra Pradesh
111. (4) It is situated in Karnataka on Shravati river. It's height is 25 mmt.
112. (4) Nucleic acid
113. (2) Capillary pressure
114. (2) The Guru of the Sufis
115. (3) 1699
116. (3) Pandit Jawahar Lal Nehru
117. (1) Andaman and Nicobar Islands
118. (3) IV, II, I and III
119. (4) 6 years
120. (4) Sukumar Sen
121. (3) 65 years
122. (1) Gopalakrishna Gokhale
123. (2) 100 - 120 days
124. (2) Hibernation
125. (2) 45° with horizontal
126. (2) 2
127. (4) Silver
128. (4) Apiculture
129. (3) Vitamin K

130. (3) Personal network
131. (2) Local Area Network (LAN)
132. (2) Potassium
133. (1) Isoprene
134. (1) Helium
135. (4) Butane
136. (3) Black box
137. (2) Football
138. (1) Kerala
139. (2) Jonas E. Salk
140. (1) Vasco da Gama
141. (1) Uttar Pradesh
142. (4) Astra
143. (2) China
144. (1) The more general term used by the IUCN for species at risk of extinction is threatened species, which also includes the less-at-risk category of vulnerable species together with endangered and critically endangered. IUCN categories include : (1) Extinct (2) Extinct in the wild (3) Critically endangered (4) Endangered (5) Vulnerable (6) Near threatened (7) least concern
145. (1) Mercury
146. (3) Stratosphere
147. (1) Prime Minister
148. (2) First atom bomb was dropped on Hiroshima, Japan (August 6, 1945) while second atom bomb was dropped on Nagasaki, Japan (August 9, 1945).
149. (3) England
150. (3) MSC Chitra

