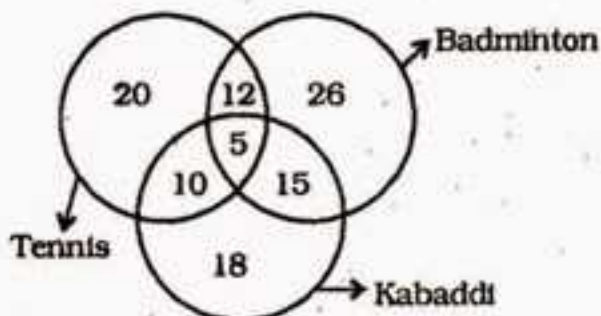1. Which of these states has the longest international border ?
   (1) Nagaland  (2) Mizoram
   (3) Arunachal Pradesh
   (4) Assam
2. Which of these fabrics is named after a French dress maker ?
   (1) Linen      (2) Crepe
   (3) Georgette   (4) Chiffon
3. Who was the founder of Sikhism ?
   (1) Guru Govind Singh
   (2) Guru Ramdass
   (3) Guru Nanak
   (4) Ranjeet Singh
4. Who is the founder of Patna's famous Super 30 institute that coaches economically backward students for IIT JEE ?
   (1) Anurag Anand
   (2) Sushil Kumar
   (3) Anand Kumar
   (4) Nitish Kumar
5. Shri Narendra Modi is the _____ of India.
   (1) Speaker of Lok Sabha
   (2) Prime Minister
   (3) Leader of Opposition
   (4) President
6. National Unity Day is celebrated in India on _____.
   (1) 30th January
   (2) 29th August
   (3) 31st October
   (4) 2nd October
7. Which continent is the Giraffe native to ?
   (1) Australia   (2) Africa
   (3) America    (4) Asia
8. Sumo is a traditional form of wrestling of which country ?
   (1) China
   (2) Japan
   (3) Vietnam
   (4) South Korea
9. Amir Khusro was the famous poet in the court of _____.
   (1) Shah Jahan
   (2) Alauddin Khilji

(3) Akbar
(4) Sher Shah Suri
10. Which of these medical conditions is classified into Type–1 and Type–2 ?
    (1) Diabetes
    (2) Hepatitis
    (3) Night Blindness
    (4) Common Cold
11. Who is the Commander-in-Chief of the Indian Armed Forces ?
    (1) Prime Minister
    (2) Vice-President
    (3) Chief of Army Staff
    (4) President
12. The surface of which of these planets is **not** solid ?
    (1) Jupiter      (2) Mars
    (3) Venus       (4) Mercury
13. With which main ingredient is litti, a food item from Bihar, stuffed ?
    (1) Onion       (2) Potato
    (3) Vegetables  (4) Gram Flour
14. Which natural phenomenon conducts carbon dioxide fixation in plants ?
    (1) Sunlight    (2) Rain
    (3) Thunder
    (4) Cosmic Rays
15. Other than cricket which game also has a striker ?
    (1) Ludo        (2) Kho- Kho
    (3) Carrom      (4) Chess
16. Islamic State is not waging a battle against
    (1) Ukraine     (2) Lebanon
    (3) Iraq        (4) Syria
17. Which of these places got its name from a local word for mangrove trees ?
    (1) Vrindavan
    (2) Sunderbans
    (3) Mussoorie   (4) Madhubani
18. Name the Chief Minister of Jharkhand.
    (1) Babulal Marandi
    (2) Arjun Munda
    (3) Raghubar Das
    (4) Hemant Soren

19. If you are in Red Fort, which city are you visiting ?
    (1) Agra        (2) Hyderabad
    (3) Jaipur      (4) Delhi
20. Which of these is **not** a port city on the Arabian Sea ?
    (1) Panaji
    (2) Vishakhapatnam
    (3) Mumbai
    (4) Mangalore
21. Which of these Asian countries is **not** landlocked ?
    (1) Afghanistan
    (2) Laos
    (3) Mongolia
    (4) Cambodia
22. Which was the first hill passenger railway opened in India in 1881 ?
    (1) Kalka Shimla Railway
    (2) Matheran Hill Railway
    (3) Nilgiri Mountain Railway
    (4) Darjeeling Himalayan Railway
23. What does CO stand for ?
    (1) Carbon
    (2) Carbon monoxide
    (3) Coal
    (4) Carbon dioxide
24. Raslila dance is associated with which God ?
    (1) Lord Shiva
    (2) Lord Ganesha
    (3) Lord Indra
    (4) Lord Krishna
25. Which of the following is an Indian online retail company ?
    (1) Alibaba Group
    (2) Amazon
    (3) eBay
    (4) Jabong

**Directions (26-30) :** Complete the following series each of which follows a certain pattern.

26. 3, 12, 27, 48, 75, 108, ?.
    (1) 162        (2) 183
    (3) 192        (4) 147
27. 49, 121, 169, 289, _____ ?
    (1) 361        (2) 529
    (3) 400        (4) 441

**28.** a_ccabc_a_cc_bcc
  (1) c b c b          (2) b c b a
  (3) b a c b          (4) b b c c

**29.** _cbacb_dbad_adc_.
  (1) d a c b          (2) b c a a
  (3) c c a a          (4) c b d d

**30.** 2, 3, 4, 6, 8, 12, 16, 24, ___?___ .
  (1) 36               (2) 30
  (3) 32               (4) 40

**Directions (31-35) :** In the following questions, find the odd one out.

**31.** (1) Nepal          (2) Germany
  (3) China          (4) India

**32.** (1) BY             (2) CV
  (3) DW             (4) AZ

**33.** (1) 18             (2) 27
  (3) 33             (4) 9

**34.** (1) Snooker        (2) Chess
  (3) Hockey        (4) Billiards

**35.** (1) IFG            (2) QOP
  (3) XVW            (4) ECD

**36.** 24 : 36 :: ? : 72
  (1) 48             (2) 60
  (3) 56             (4) 40

**37.** Convict : Jail : : Lawyer : ?
  (1) Field          (2) Hospital
  (3) Office         (4) Court

**38.** Rabies : Dog : : Ebola : ?
  (1) Fish           (2) Mosquito
  (3) Cat            (4) Bats

**39.** If 26th January, 2015 is Monday what was the day on 26th January, 2011 ?
  (1) Tuesday        (2) Wednesday
  (3) Thursday       (4) Monday

**40.** If 'a' means multiplication, 'b' means minus, 'c' means plus and 'd' means division, then
  5a 3b 2c [4d 4] = ___?___ .
  (1) 6              (2) 0
  (3) 14             (4) 12

**41.** GTU : JWX :: CMN : ?
  (1) FQR            (2) FPQ
  (3) FPR            (4) FOP

**Directions (42 - 45) :** The figure given below consists of three intersecting circles which represent set of players who play tennis, badminton and kabaddi. Each region in the figure is represented by a number.



**42.** How many players play Kabaddi ?
  (1) 48             (2) 28
  (3) 38             (4) 43

**43.** Which number represents the set of players who play only Tennis ?
  (1) 20             (2) 15
  (3) 5              (4) 18

**44.** Which number represents the set of players who play both tennis and badminton but not kabaddi ?
  (1) 10             (2) 12
  (3) 15             (4) 5

**45.** Which game is played by least number of players ?
  (1) Tennis         (2) Badminton
  (3) Kabaddi        (4) All the three

**46.** The average of eleven numbers is 30. If average of first ten numbers is 22 then what is the eleventh number ?
  (1) 8              (2) 80
  (3) 30             (4) 110

**47.** If 59 is added to a square of a number, the result is 900. What is the number ?
  (1) 30             (2) 28
  (3) 29             (4) 27

**48.** If C is to the West of A and B is to the South of A, in what direction is B with respect to C ?
  (1) NW             (2) SE
  (3) NE             (4) SW

**49.** Deepa and Seema together do a work in 6 days. Deepa can complete the same work alone in 9 days. In how many days will Seema complete the work alone ?
  (1) 18 days        (2) 3 days
  (3) 12 days        (4) 15 days

**50.** The population of a city was 70,000. It increased by 8%. What is the population now ?
  (1) 76,000         (2) 76,500
  (3) 76,600         (4) 75,600

**51.** What will be the Highest Common Factor of 4, 8 and 12 ?
  (1) 1              (2) 4
  (3) 8              (4) 2

**52.** If CORRECTION is coded as DPSSFDUJPO, how would EMOTION be coded ?
  (1) FPNUJPO        (2) FNPUJOP
  (3) FNPUPOJ        (4) FNPUJPO

**53.** A motorcycle covers 60 km. in 3 hours. Its speed is doubled. What distance will it cover in the next 1 hour ?
  (1) 360 km.        (2) 40 km.
  (3) 60 km.         (4) 120 km.

**54.** 75 of $\dfrac{1}{30} \div \dfrac{1}{2}$ = ?
  (1) 1.25           (2) 2.5
  (3) 12.5           (4) 5

**55.** Ramesh walks 25 metre towards North. He then turns left and walks for 20 metre. He then again turns left and walks for 25 metre. He then turns left and walks for 50 metre. How far is he from his starting position ?
  (1) 30 metre       (2) 50 metre
  (3) 120 metre      (4) 70 metre

**56.** At what % of simple interest per annum will Rs. 400 amount to Rs. 520 in five years ?
  (1) 6%             (2) 5%
  (3) 5.5%           (4) 24%

**57.** The radius of a circular field is 31.5 metre. What is its circumference ?
  (1) 198 metre      (2) 154 metre
  (3) 237 metre      (4) 110 metre

**58.** The difference of cubes of two consecutive numbers is 127. What are the numbers ?
  (1) 5 and 6        (2) 4 and 5
  (3) 6 and 7        (4) 7 and 8

**59.** The length of a rectangular field is increased by 20% and breadth is decreased by 20%. What is the per cent increase or decrease in its area ?
  (1) 20% increase
  (2) 4% decrease
  (3) 1% increase
  (4) No change

**60.** Amar is twenty fourth in a queue starting from either end. How many persons are there in the queue ?
  (1) 46             (2) 49
  (3) 47             (4) 48

**61.** Ram moves 10 km towards East then moves 10 km right, again moves 10 km right. In which direction is he now from the starting point ?
  (1) North          (2) West
  (3) South          (4) East

**62.** 0.0050 ÷ 0.05 + 0.05 = ?
  (1) 0.15           (2) 0.05
  (3) 0.16           (4) 0.50

**63.** A shirt priced at Rs. 1500 is being sold at a discount of 40% + 60%. What is its price after discount ?
(1) Rs. 0  (2) Rs. 1400
(3) Rs. 540  (4) Rs. 360

**64.** The sum of two digits of a number is 13. If 9 is subtracted from the number, the digits are interchanged. What is the number ?
(1) 76  (2) 87
(3) 78  (4) 67

**65.** The sum of four consecutive positive integers is 82, then the smallest one of them is :
(1) 20  (2) 19
(3) 22  (4) 21

**66.** Raul moves 8 km towards West and then turns towards left and travels for 6 km. How far is Raul from his starting point and in which direction ?
(1) NE 2 km  (2) SE 14 km
(3) NW 10 km  (4) SW 10 km

**67.** What is the Lowest Common Multiple of 2, 3 and 7 ?
(1) 42  (2) 21
(3) 14  (4) 6

**68.** There are 1500 students in a school. 15% are Muslims. 7% Sikhs, 8% Christians and remaining are Hindus. How many Hindu students are there in the school ?
(1) 1470  (2) 700
(3) 1050  (4) 1200

**69.** 20 dogs can eat 20 hens in 10 days. In how many days can 40 dogs eat 40 such hens ?
(1) 1  (2) 20
(3) 30  (4) 10

**70.** If BANGLE is coded as ELGNAB. How would SANDAL be coded ?
(1) LADNSA  (2) LANDAS
(3) LADNAS  (4) LADANS

**71.** If Wednesday falls on 26th January, then what day will it be on the last day of January ?
(1) Friday  (2) Monday
(3) Sunday  (4) Thursday

**72.** 60% is equal to
(1) $\frac{6}{9}$  (2) $\frac{9}{10}$
(3) $\frac{3}{5}$  (4) $\frac{7}{9}$

**73.** Average height of a class of 12 students is 180 cm. The average decreases to 179 cm when the height of the class teacher is also added. What is the height of the teacher ?
(1) 168 cm  (2) 167 cm
(3) 179.5 cm  (4) 166 cm

**74.** $3 - 1 + 3 \times 6 \div 3 - 1 = ?$
(1) 11  (2) – 3
(3) 7  (4) 9

**75.** Rishi earned Rs. 83.2 at compound rate of interest 8% per annum over two years. How much did he invest ?
(1) Rs. 600  (2) Rs. 500
(3) Rs. 540  (4) Rs. 503.2

**76.** If $\frac{1}{4}$ of third-part of a number is equal to 5, then the number is :
(1) 15  (2) 60
(3) 12  (4) 20

**77.** If × stands for division, ÷ stands for subtraction, + stands for multiplication and – stands for addition, then $6 \times 2 \div 2 - 4 + 2 = ?$
(1) 0  (2) 4
(3) 10  (4) 9

**78.** In a group of seven teams, each team plays against one another twice. How many total matches will be played in the group ?
(1) 49  (2) 42
(3) 48  (4) 28

**79.** A bus travels at a speed of 75 km/hr for 45 minutes and then travels at a speed of 90 km/hr for 45 minutes. What distance will it cover in one and a half hour ?
(1) 123.75 km  (2) 165 km
(3) 125 km  (4) 82.5 km

**80.** How many even numbers are there in the following sequence of numbers which are immediately preceded by an odd number but immediately followed by an even number ?
5 1 4 7 3 9 8 5 7 2 6 3 1 5 8 6 3 8 5 2 7 4 3 4 9 6
(1) Two  (2) One
(3) Four  (4) Three

**81.** $0.105 + 1.05 + 0.515 + 0.015 = ?$
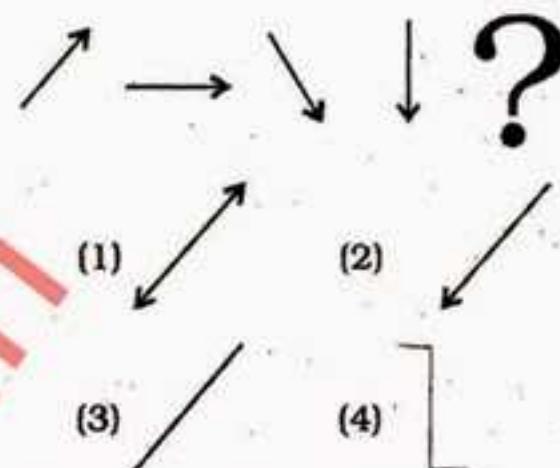(1) 1.685  (2) 1.675
(3) 1.75  (4) 1.785

**82.** Which is the largest fraction ?
(1) $\frac{3}{4}$  (2) $\frac{7}{9}$
(3) $\frac{7}{8}$  (4) $\frac{9}{10}$

**83.** Average of 8 numbers is 42. If 9 is subtracted from each number then what is the new average ?
(1) 33  (2) 34
(3) 25  (4) 9

**84.**



**85.** What is the ratio of 20 paise and Rs. 4 ?
(1) 1 : 8  (2) 1 : 16
(3) 1 : 20  (4) 1 : 5

**86.** A shopkeeper sold a shirt for Rs. 728 at a loss of 9%. If he had sold for Rs. 792, what would have been the gain/loss per cent ?
(1) 8% loss  (2) 9% profit
(3) 1% loss  (4) 8% profit
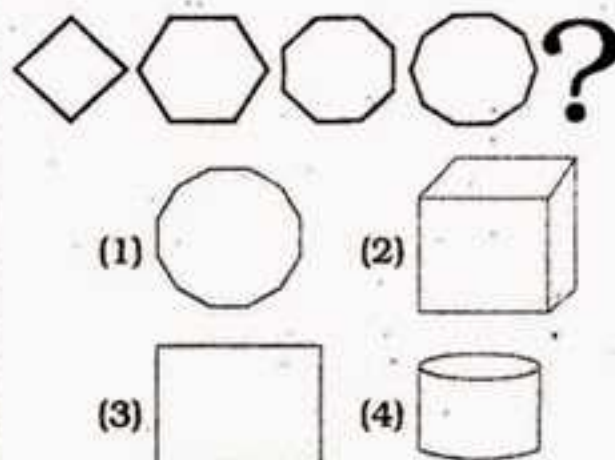
**87.** Convert $\frac{9}{10}$ into decimal.
(1) 90  (2) 1.90
(3) 0.09  (4) 0.9

**88.** Shyam sold a bag for Rs. 598.9 at a gain of 13%. What was its cost price ?
(1) Rs. 550  (2) Rs. 530
(3) Rs. 585  (4) Rs. 500

**89.**

90. In a certain code SEAT is coded as RDZS. How would READ be coded ?
(1) QDZC    (2) QDCZ
(3) QDZE    (4) QDZD

91. What time will a runner take to run a distance of 8 km at a speed of 15 km/hr ?
(1) 35 minutes
(2) 33 minutes
(3) 31 minutes
(4) 32 minutes

92. If PERFECTION is coded as EFREPNOITC, how will IMPOSTER be coded ?
(1) OPIMRETS (2) OPMIRETS
(3) OPMIERTS (4) OPMIREST

93. The area of a square field is 196 sq. metre. What would be the length of the rope required to fence the field from any three sides ?
(1) 56 metre    (2) 42 metre
(3) 52 metre    (4) 147 metre

94. If 40% of a number is 184, then what is the value of 85% of the number ?
(1) 333    (2) 391
(3) 380    (4) 328

95. A TV is bought for Rs. 42,000 and sold for Rs. 49,140. What is the gain per cent ?
(1) 9%    (2) 7.14%
(3) 17%    (4) 7%

96. For making which sweet is winter melon or white gourd soaked in sugar syrup ?
(1) Jalebi    (2) Petha
(3) Gulab Jamun
(4) Murabba

97. Which of these is an essential component of most acids ?
(1) Hydrogen (2) Oxygen
(3) Helium    (4) Nitrogen

98. Sir Creek is a disputed territory between India and _____.
(1) Myanmar (2) Nepal
(3) Pakistan (4) Bangladesh

99. Which of these is essential to keep bones strong in the body ?
(1) Iodine    (2) Zinc
(3) Fats    (4) Calcium

100. How many different kinds of zodiac signs are there in Astrology ?
(1) 12    (2) 16
(3) 14    (4) 11

101. The Nobel Peace Prize for 2014 has been awarded to
(1) Kailash Satyarthi
(2) Barack Obama
(3) Kailash Satyarthi and Tawakkul Karman
(4) Kailash Satyarthi and Malala Yousafzai

102. The autobiography of which freedom fighter is titled 'Atmakatha' which he wrote during his prison time in Bankipore Jail in Patna ?
(1) Rajendra Prasad
(2) Ram Manohar Lohia
(3) Lal Bahadur Shastri
(4) Jayaprakash Narayan

103. Which was the first element to be artificially produced ?
(1) Technetium
(2) Francium
(3) Einsteinium
(4) Promethium

104. Who was the host of TV show 'Big Boss 8' ?
(1) Salman Khan
(2) Amitabh Bachchan
(3) Shah Rukh Khan
(4) Amir Khan

105. Which of the following is not a social networking website ?
(1) Facebook    (2) hi5
(3) Wikipedia (4) Twitter

106. In the Northern Hemisphere, around which date does the summer solstice occur ?
(1) 21st June (2) 22nd July
(3) 23rd May (4) 31st March

107. Which of these fruits is not rich in vitamin C ?
(1) Orange    (2) Kiwi
(3) Lemon    (4) Apple

108. Deepika Kumari is associated with which sport ?
(1) Shooting    (2) Wrestling
(3) Archery    (4) Football

109. Which of these countries is an archipelago ?
(1) Laos    (2) Chile
(3) Philippines (4) Argentina

110. Flight 17, which was shot down over Ukraine was a scheduled international passenger flight to Kuala Lumpur from :
(1) Amsterdam (2) Moscow
(3) Paris    (4) London

111. Manik Sarkar is the Chief Minister of
(1) Assam    (2) Tripura
(3) West Bengal
(4) Sikkim

112. Kaziranga National Park is most famous for :
(1) Swamp Deer
(2) Wild Ass
(3) One-horned Rhinoceros
(4) Asiatic Lion

113. Which was the last autonomous territory or protectorate to integrate with the Indian union ?
(1) Puducherry (2) Sikkim
(3) Diu    (4) Goa

114. Which country will host the 2016 Summer Olympic Games ?
(1) Argentina    (2) Russia
(3) Japan    (4) Brazil

115. Rann of Kutch is situated in which state ?
(1) Bihar    (2) Rajasthan
(3) Gujarat
(4) Maharashtra

116. Which new university named after an ancient centre of learning in its vicinity, began its academic session in 2014 ?
(1) Takshila    (2) Nalanda
(3) Pushpagiri
(4) Vikramshila

117. The sign for which mathematical function is the logo of the Red Cross society ?
(1) Subtraction
(2) Multiplication
(3) Division    (4) Addition

118. Who was the ruling Governor General of India when the power was transferred from the East India Company to the British crown ?
(1) Lord Irwin
(2) Lord Canning
(3) Lord Curzon
(4) Lord Mountbatten

119. Wangchuck dynasty is the ruler of which country ?
(1) Brunei    (2) Indonesia
(3) Myanmar (4) Bhutan

120. Which of these Union Cabinet ministers have never served as the Chief Minister of any State or Union territory ?
(1) Ram Vilas Paswan
(2) D.V. Sadananda Gowda
(3) Rajnath Singh
(4) Sushma Swaraj

## ANSWERS

| | | | |
|---|---|---|---|
| 1. (3) | 2. (3) | 3. (3) | 4. (3) |
| 5. (2) | 6. (3) | 7. (2) | 8. (2) |
| 9. (2) | 10. (1) | 11. (4) | 12. (1) |
| 13. (4) | 14. (1) | 15. (3) | 16. (1) |
| 17. (2) | 18. (3) | 19. (4) | 20. (2) |
| 21. (4) | 22. (4) | 23. (2) | 24. (4) |
| 25. (4) | 26. (4) | 27. (1) | 28. (2) |
| 29. (1) | 30. (3) | 31. (2) | 32. (2) |
| 33. (3) | 34. (3) | 35. (1) | 36. (1) |
| 37. (4) | 38. (4) | 39. (2) | 40. (3) |
| 41. (2) | 42. (1) | 43. (1) | 44. (2) |
| 45. (1) | 46. (4) | 47. (3) | 48. (2) |
| 49. (1) | 50. (4) | 51. (2) | 52. (4) |
| 53. (2) | 54. (4) | 55. (1) | 56. (1) |
| 57. (1) | 58. (3) | 59. (2) | 60. (3) |
| 61. (3) | 62. (1) | 63. (4) | 64. (1) |
| 65. (2) | 66. (4) | 67. (1) | 68. (3) |
| 69. (4) | 70. (3) | 71. (2) | 72. (3) |
| 73. (2) | 74. (3) | 75. (2) | 76. (2) |
| 77. (4) | 78. (2) | 79. (1) | 80. (1) |
| 81. (1) | 82. (4) | 83. (1) | 84. (2) |
| 85. (3) | 86. (1) | 87. (4) | 88. (2) |
| 89. (1) | 90. (1) | 91. (4) | 92. (2) |
| 93. (2) | 94. (2) | 95. (3) | 96. (2) |
| 97. (1) | 98. (3) | 99. (1) | 100. (1) |
| 101. (4) | 102. (1) | 103. (1) | 104. (1) |
| 105. (3) | 106. (1) | 107. (4) | 108. (3) |
| 109. (3) | 110. (1) | 111. (2) | 112. (3) |
| 113. (2) | 114. (4) | 115. (3) | 116. (2) |
| 117. (4) | 118. (2) | 119. (4) | 120. (1) |

## EXPLANATIONS

1. (3) Arunachal Pradesh has the longest international boundary among the states in the country with 1,680 km – 160 km with Bhutan, 1,080 with China and 440 km with Myanmar. It is the most north-eastern position among the other states in the north-east region of India.

2. (3) Georgette is a sheer, lightweight, dull-finished crepe fabric named after the early 20th century French dressmaker Georgette de la Plante. Originally made from silk, Georgette is made with highly twisted yarns. It is springier and less lustrous than the closely related chiffon.

3. (3) Guru Nanak was the founder of Sikhism and the first of the Sikh Gurus. Sikhism is the fifth-largest organized religion in the world, with approximately 30 million adherents. Punjab, India is the only state in the world with a majority Sikh population.

4. (3) Super 30 was started in Patna, Bihar, under the banner of 'Ramanujan School of Mathematics', by Anand Kumar. Established in 2002, the program selects 30 talented candidates each year from economically backward sections of society and trains them for the IIT-JEE.

5. (2) Narendra Modi is the 15th and current Prime Minister of India, in office since 26 May 2014. Modi, a leader of the Bharatiya Janata Party, previously served as the Chief Minister of Gujarat from 2001 to 2014. He is currently the Member of Parliament from Varanasi.

6. (3) The government, in October 2014, decided to observe the birth anniversary of Sardar Vallabhbhai Patel on October 31 as "Rashtriya Ekta Diwas' ( National Unity Day) every year. Patel, nicknamed the Iron Man of India, was the first home minister of the country.

7. (2) Giraffes are native to Africa and can be found in a range that extends from Chad in Central Africa to South Africa. They occur mainly in arid regions such as savannas, grasslands, and open woodlands.

8. (2) Sumo is a competitive full-contact wrestling sport where a wrestler attempts to force another wrestler out of a circular ring. It originated in Japan, the only country where it is practiced professionally. It is generally considered to be a modern Japanese martial art.

9. (2) Amir Khusrau was associated with the royal courts of more than seven rulers of the Delhi Sultanate. However, he was the poet laureate of Alauddin Khalji's court. His "Khazainul ul-Futuh" (Treasures of victory) records Alauddin's wars and administrative services.
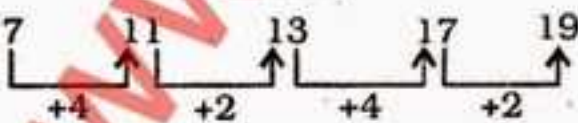
10. (1) In general, people with diabetes either have a total lack of insulin (type 1 diabetes) or they have too little insulin (type 2 diabetes). Type 1 and Type 2 diabetes are called juvenile-onset or insulin-dependent diabetes and adult-onset or non-insulin-dependent diabetes respectively.

11. (4) The President of India acts as de jure Commander in chief of the Armed Forces, while de facto control lies with the executive. The Ministry of Defence is charged with the responsibilities of defense of the country.

12. (1) Inner planets such as Mercury, Venus, Earth, the Moon, Mars and its moons, the asteroids, the moons of the outer planets, and Kuiper Belt objects have solid surfaces. The outer planets Jupiter, Saturn, Uranus and Neptune are gas giants. They do not have solid surfaces.

13. (4) Litti consists of wheat and sattu (gram flour or lentil) formed into balls with spices, and then filled with ghee (clarified butter) via a hole. The litti are traditionally baked over a cow-dung fire.

14. (1) The process of conversion of carbon dioxide into sugar is called carbon fixation. Plants convert light energy of sunlight into chemical energy that is stored in carbohydrate molecules, such as sugar. In photosynthesis, energy from sunlight drives the carbon fixation pathway.

15. (3) Carrom is a "strike and pocket" table game of Eastern origin similar to billiards and table shuffleboard. The striker used is smooth and round with a diameter of not more than 4.13 cm and weighing not more than 15.00 gms.

**16.** (1) The Islamic State is an Islamist rebel group that controls territory in Iraq and Syria and also has operations in eastern Libya, the Sinai Peninsula of Egypt, Lebanon and other areas of the Middle East. The group has been designated as a terrorist organisation by the United Nations.

**17.** (2) The Sundarbans is a natural region in Bengal. Its name is derived from the Sundari trees (the mangrove species Heritiera fomes) that are found in Sundarbans in large numbers. Sundari trees have a thick canopy, and the undergrowth is mostly seedlings of the mangrove trees.

**18.** (3) Raghubar Das is currently chief minister of Jharkhand state of India. He was sworn in as the 10th chief minister of Jharkhand state on 28 December 2014. He belongs to Bharatiya Janata Party.

**19.** (4) The Red Fort is located in the centre of Delhi, the capital of India. It was constructed by Shah Jahan, the fifth Mughal Emperor, in 1648 It was the residence of the Mughal emperor of India for nearly 200 years, until 1857.

**20.** (2) Visakhapatnam is a port city located on the southeast coast of Bay of Bengal. It is often called as "The Jewel of the East Coast". It is the largest city in Andhra Pradesh.

**21.** (4) Cambodia is bordered by Thailand to the northwest, Laos to the northeast, Vietnam to the east, and the Gulf of Thailand to the southwest. It is not a land-locked country. It is located in the southern portion of the Indochina Peninsula in Southeast Asia.

**22.** (4) The Darjeeling Himalayan Railway, the very first hill passenger Railway in India, was opened in 1881. It is a narrow-gauge railway from Siliguri to Darjeeling connecting two districts, Jalpaiguri and Darjeeling, in West Bengal.

**23.** (2) Carbon monoxide (CO) is a colorless, odorless, and tasteless gas that is slightly less dense than air. It is toxic to humans. Carbon monoxide is produced from the partial oxidation of carbon-containing compounds.

**24.** (4) Raslila is a folk dance drama of northern India, mainly Uttar Pradesh, based on scenes from the life of Krishna. It is often freely rendered as "the dance of love". The Indian classical dance of Kathak evolved from the 'Raslila of Braj.

**25.** (4) Jabong is an Indian fashion and lifestyle e-commerce portal, selling apparel, footwear, fashion accessories, beauty products, fragrances, home accessories and other fashion and lifestyle products. The company is headquartered in Gurgaon, NCR.
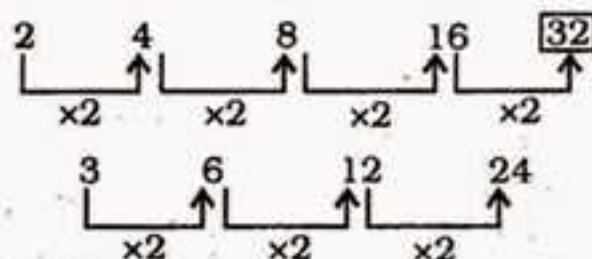
**26.** (4)



**27.** (1) $(7)^2 = 49$
$(11)^2 = 121$
$(13)^2 = 169$
$(17)^2 = 289$

$(19)^2 = \boxed{361}$



**28.** (2) $a\,\boxed{b}\,c\,c/a\,b\,c\,\boxed{c}\,/a\,\boxed{b}$

$c\,c/\boxed{a}\,b\,c\,c$

**29.** (1) $\boxed{d}\,c\,b\,a/\,c\,b\,\boxed{a}\,d/\,b\,a\,d$

$\boxed{c}\,/\,a\,d\,c\,\boxed{b}$

**30.** (3) There are two alternating series :



**31.** (2) Except Germany, all others are Asian countries. Germany is in Europe.

**32.** (2) Except CV, all others are pairs of opposite letters.
B ↔ Y ; D ↔ W ; A ↔ Z
The opposite letter of C is X.

**33.** (3) Except 33, all others are multiples of 9.

**34.** (3) Except Hockey, all others are indoor games. Again, hockey is played between two teams consisting of 11 players each.

**35.** (1) 



**36.** (1) $\dfrac{24 \times 3}{2} = 36$

Similarly,

$\dfrac{48 \times 3}{2} = 72$

**37.** (4) Convict is kept in jail. Similarly, lawyer practises in court.

**38.** (4) Rabies is spread through dogs. Similarly, ebola is spread through bats.

**39.** (2) The number of odd days from 2011 to 2014
= 1 + 2 + 1 + 1 = 5 days
2012 was a leap year.
So, 26th January, 2011
= Monday – 5 = Wednesday

**40.** (3)

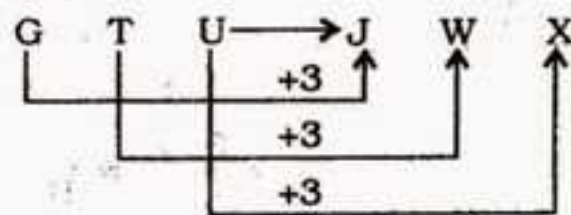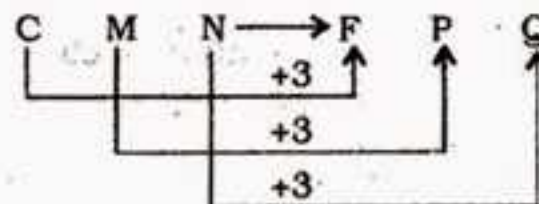| $a \Rightarrow \times$ | $b \Rightarrow -$ |
|---|---|
| $c \Rightarrow +$ | $d \Rightarrow +$ |

$5\,a\,3b\,2c\,[4\,d\,4] = ?$
$\Rightarrow ? = 5 \times 3 - 2 + [4 \div 4]$
$\Rightarrow ? = 15 - 2 + 1 = 14$

**41.** (2)



Similarly,

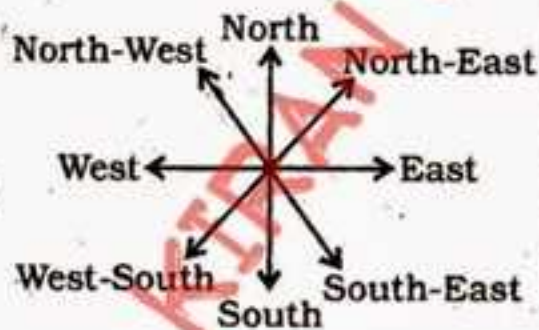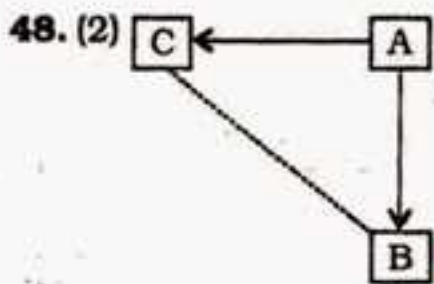**42.** (1) The number of players who play Kabaddi = 5 + 10 + 15 + 18
= 48

**43.** (1) The number of players who play only tennis = 20

**44.** (2) The number of players who play both tennis and badminton but not Kabaddi = 12

**45.** (1) Number of players who play Kabaddi = 48
Number of players who play Badminton = 58
Number of players who play Tennis = 47

**46.** (4) Eleventh number
= 30 × 11 − 10 × 22
= 330 − 220 = 110

**47.** (3) Let the number be $x$.
According to question,
$x^2 + 59 = 900$
$\Rightarrow x^2 = 900 − 59 = 841$
$\therefore x = \sqrt{841} = 29$

**48.** (2)





B is in South–East direction with respect to C.

**49.** (1) Time taken by Seema
= $x$ days (let)
According to question.
$\dfrac{1}{x} + \dfrac{1}{9} = \dfrac{1}{6}$
$\Rightarrow \dfrac{1}{x} = \dfrac{1}{6} − \dfrac{1}{9} = \dfrac{3−2}{18} = \dfrac{1}{18}$
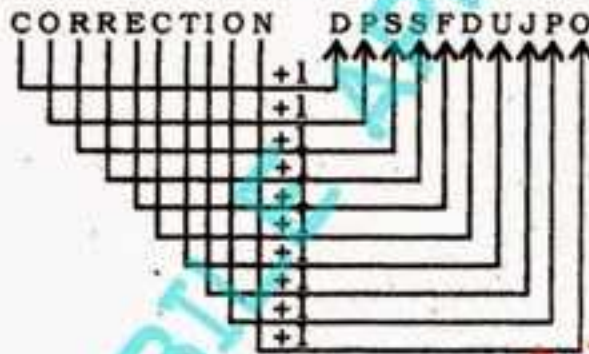$\Rightarrow x = 18$ days

**50.** (4) Present population of city
= $P_0 \left(1 + \dfrac{R}{100}\right)^T$
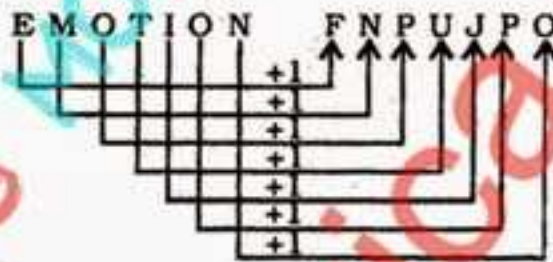
$= 70000 \left(1 + \dfrac{8}{100}\right)$

$= 70000 \times \dfrac{108}{100} = 75600$

**51.** (2) $4 = 2 \times 2$
$8 = 2 \times 2 \times 2$
$12 = 2 \times 2 \times 3$
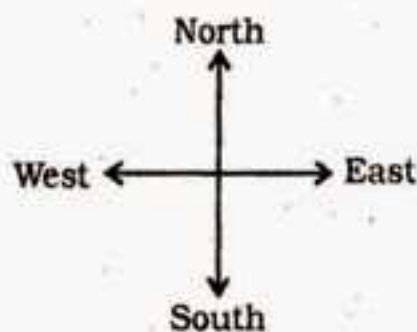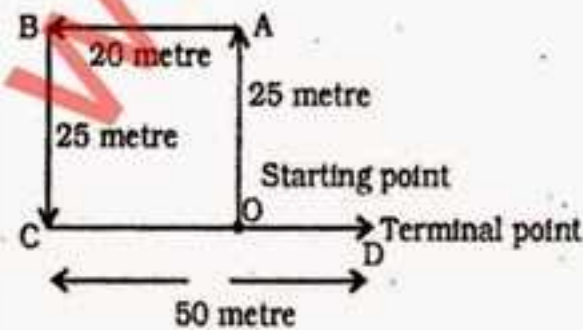$\therefore$ HCF = $2 \times 2 = 4$

**52.** (4)



Similarly,



**53.** (2) Speed = $\dfrac{\text{Distance}}{\text{Time}} = \dfrac{60}{3}$
= 20 kmph
New speed = 2 × 20 = 40 kmph
$\therefore$ Required distance = 40 km.

**54.** (4) ? = $75 \times \dfrac{1}{30} \times 2 = 5$

**55.** (1)



Required distance = OD
= CD − CO = 50 − 20 = 30 metre

**56.** (1) S.I = 520 − 400 = Rs. 120
Rate = $\dfrac{\text{S.I} \times 100}{\text{Principal} \times \text{Time}}$
$= \dfrac{120 \times 100}{400 \times 5} = 6\%$ per annum

**57.** (1) Circumference of circle
= $2\pi r$
$= 2 \times \dfrac{22}{7} \times 31.5 = 198$ metre

**58.** (3) Of the given options,
$7^3 − 6^3 = 343 − 216 = 127$

**59.** (2) Required answer
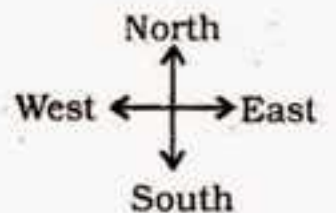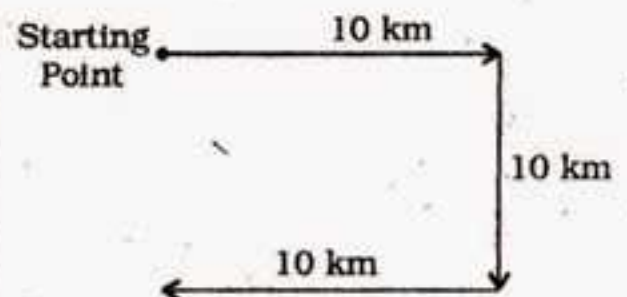$= \left(x + y + \dfrac{xy}{100}\right) \%$
$= \left(20 − 20 − \dfrac{20 \times 20}{100}\right) \%$
$= − 4 \%$
Negative sign shows decrease.

**60.** (3) Number of persons in the queue
= 23 + 23 + 1
= 47

**61.** (3)



Clearly, Ram stays to the south.

**62.** (1) ? = $0.0050 \times \dfrac{1}{0.05} + 0.05$
= 0.1 + 0.05 = 0.15

**63.** (4) Single equivalent discount
$= \left(x + y − \dfrac{xy}{100}\right) \%$
$= \left(40 + 60 − \dfrac{40 \times 60}{100}\right) \%$

$= (100 - 24)\% = 76\%$

$\therefore$ Required price of shirt

$= 24\%$ of 1500

$= \dfrac{1500 \times 24}{100} = $ Rs. 360

**64.** (1) Number $= 10x + y$

$x + y = 13$ ....(i)

$10x + y - 9 = 10y + x$

$\Rightarrow 10x + y - 10y - x = 9$

$\Rightarrow 9x - 9y = 9 \Rightarrow 9 (x - y) = 9$

$\Rightarrow x - y = 1$ .... (ii)

Adding both equations,

$2x = 14 \Rightarrow x = 7$

From equation (ii),

$7 - y = 1 \Rightarrow y = 7 - 1 = 6$

$\therefore$ Number $= 7 \times 10 + 6 = 76$

**Note :** It is better to solve such questions by hit and trial.

$76 \Rightarrow 7 + 6 = 13$

$76 - 9 = 67$

**65.** (2) Four consecutive positive integers

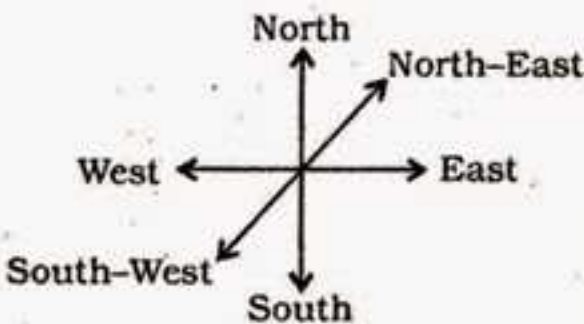$\Rightarrow x, x + 1, x + 2, x + 3.$

$\therefore x + x + 1 + x + 2 + x + 3 = 82$

$\Rightarrow 4x + 6 = 82$

$\Rightarrow 4x = 82 - 6 = 76$

$\Rightarrow x = \dfrac{76}{4} = 19$

**66.** (4)



A — 8 km — O Starting Point

6 km

B



North
North-East
West
East
South-West
South

$\angle BAO = 90°$

From right angled triangle OAB,

Required distance $= \overrightarrow{OB}$

$= \sqrt{OA^2 + AB^2}$

$= \sqrt{8^2 + 6^2} = \sqrt{64 + 36}$

$= \sqrt{100} = 10$ km.

Clearly, the direction is south-west.

**67.** (1) Required LCM $= 2 \times 3 \times 7$

$= 42$

**68.** (3) Percentage of Hindu students

$= 100 - (15 + 7 + 8)$

$= 100 - 30 = 70\%$

$\therefore$ Number of Hindu students

$= \dfrac{1500 \times 70}{100} = 1050$

**69.** (4)

| Dogs | Hens | Days |
|------|------|------|
| 20 ↑ | 20 ↓ | 10 ↓ |
| 40 ↓ | 40 ↓ | x ↓ |

$\therefore \left.\begin{array}{c} 40 : 20 \\ 20 : 40 \end{array}\right\} :: 10 : x$

$\Rightarrow 40 \times 20 \times x = 20 \times 40 \times 10$

$\Rightarrow x = \dfrac{20 \times 40 \times 10}{40 \times 20} = 10$ days

**70.** (3) The letters of the word BANGLE are coded in reverse order.

$\therefore$ SANDAL $\Rightarrow$ LADNAS

**71.** (2) There are 31 days in January.

$\therefore 26 + 5 \Rightarrow 31$

Wednesday + 5 days $\Rightarrow$ Monday

**72.** (3) $60\% = \dfrac{60}{100} = \dfrac{3}{5}$

**73.** (2) Decrease in average height $= 1$ cm.

$\therefore$ Height of teacher

$= 180 - 13 \times 1$

$= 167$ cm.

**74.** (3) $? = 3 - 1 + 3 \times 6 \div 3 - 1$

$= 3 - 1 + \dfrac{3 \times 6}{3} - 1$

$= 3 - 1 + 6 - 1 = 9 - 2 = 7$

**75.** (2) Principal $=$ Rs. P (let)

$\therefore$ C.I. $= P\left[\left(1 + \dfrac{R}{100}\right)^T - 1\right]$

$\Rightarrow 83.2$

$= P\left[\left(1 + \dfrac{8}{100}\right)^2 - 1\right]$

$\Rightarrow 83.2 = P [(1.08)^2 - 1]$

$\Rightarrow 83.2 = P (1.1664 - 1)$

$\Rightarrow 83.2 = P \times 0.1664$

$\Rightarrow P = \dfrac{83.2}{0.1664} = \dfrac{832 \times 1000}{1664}$

$= $ Rs. 500

**76.** (2) Number $= x$ (let)

According to question,

$\dfrac{x}{3} \times \dfrac{1}{4} = 5$

$\Rightarrow \dfrac{x}{12} = 5$

$\Rightarrow x = 12 \times 5 = 60$

**77.** (4)

| $\times \Rightarrow +$ | $+ \Rightarrow -$ |
|---|---|
| $+ \Rightarrow \times$ | $- \Rightarrow +$ |

$6 \times 2 \div 2 - 4 + 2 = ?$

$\Rightarrow ? = 6 \div 2 - 2 + 4 \times 2$

$\Rightarrow ? = 3 - 2 + 8 = \boxed{9}$

**78.** (2) Two teams make a match.

$\therefore$ Each team plays twice with each other.

$\therefore$ Number of matches

$= {}^7C_2 \times 2$

$= \dfrac{7 \times 6}{2} \times 2 = 42$

**79.** (1) Distance $=$ Speed $\times$ Time

$\therefore$ Required distance

$= \left(75 \times \dfrac{45}{60} + 90 \times \dfrac{45}{60}\right)$ km.

$= (56.25 + 67.5)$ km.

$= 123.75$ km.

**80.** (1)

| Odd number | Even number | Even number |
|---|---|---|

5 1 4 7 3 9 8 5 | 726 | 1 | 586 | 3852

74 34 96

**81.** (1) $? = 0.105 + 1.05 + 0.515 + 0.015$

$= 0.105$

$\quad 1.050$

$\quad 0.515$

$\quad \underline{0.015}$

$\quad \underline{1.685}$

**82.** (4) Decimal equivalent of each fraction :

$$\frac{3}{4} = 0.75 \; ; \; \frac{7}{9} = 0.78$$

$$\frac{7}{8} = 0.875 \; ; \; \frac{9}{10} = 0.9$$

**83.** (1) Average will decrease by 9.
∴ Required average
= 42 – 9 = 33

**84.** (2) In each next step the design rotates through 45° clockwise.

**85.** (3) Required ratio = 20 : 400
= 1 : 20

**86.** (1) Cost price of shirt

$$= \frac{100}{100 - loss\%} \times S.P.$$

$$= \frac{100}{100 - 9} \times 728$$

$$= \frac{100}{91} \times 728 = Rs. \; 800$$

On selling for Rs. 792,
Loss = 800 – 792 = Rs. 8

$$Loss\% = \frac{8}{800} \times 100 = 8\%$$

**87.** (4) $\frac{9}{10} = 0.9$

**88.** (2) C.P. of bag = Rs. $x$ (let).
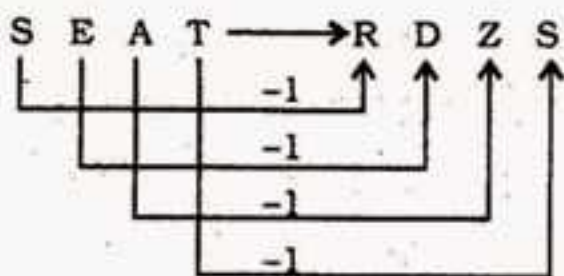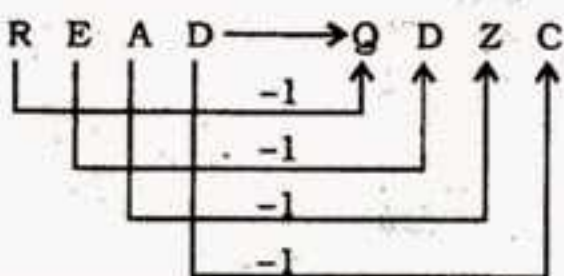According to question,

$$x \times \frac{113}{100} = 598.9$$

$$\Rightarrow x = \frac{598.9 \times 100}{113} = Rs. \; 530$$

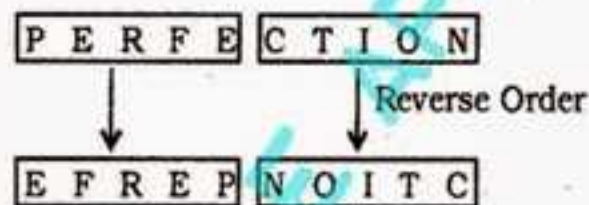**89.** (1) In each next step the number of sides is increased by two.

**90.** (1)

```
S   E   A   T ──────→ R   D   Z   S
│   │   │   │    -1  ↑   ↑   ↑   ↑
│   │   │   └────-1──┘   │   │   │
│   │   └──────-1────────┘   │   │
│   └────────-1──────────────┘   │
└──────────-1────────────────────┘
```

Similarly,

```
R   E   A   D ──────→ Q   D   Z   C
│   │   │   │    -1  ↑   ↑   ↑   ↑
│   │   │   └────-1──┘   │   │   │
│   │   └──────-1────────┘   │   │
│   └────────-1──────────────┘   │
└──────────-1────────────────────┘
```

**91.** (4) Time = $\dfrac{Distance}{Speed}$

$$= \frac{8}{15} \; hour$$

$$= \left(\frac{8}{15} \times 60\right) \; minutes$$

$$= 32 \; minutes$$

**92.** (2)

| P E R F E | C T I O N |
| --- | --- |
| ↓ | ↓ Reverse Order |
| E F R E P | N O I T C |

Similarly,

| I M P O | S T E R |
| --- | --- |
| ↓ | ↓ |
| O P M I | R E T S |

**93.** (2) Side of square field
$= \sqrt{196} = 14$ metre
∴ Required length of rope
= 3 × 14 = 42 metre

**94.** (2) Let the number be $x$.

$$\therefore \quad \frac{x \times 40}{100} = 184$$

$$\Rightarrow x = \frac{184 \times 100}{40} = 460$$

$$\therefore \quad 85\% \; of \; 460 = \frac{460 \times 85}{100}$$

$$= 391$$

**95.** (3) Profit = Rs. (49140 – 42000)
= Rs. 7140
∴ Gain per cent

$$= \frac{7140}{42000} \times 100 = 17\%$$

**96.** (2) Petha is made from the white gourd or ash gourd vegetable (also known as winter melon or white pumpkin). It is a translucent soft candy from North India and Pakistan (Punjab region and metros).

**97.** (1) Swedish chemist Svante Arrhenius attributed the properties of acidity to hydrogen ions (H+) or protons in 1884. So acids are substances which increase the concentration of hydrogen ions (H+), or more accurately, hydronium ions (H3O+), when dissolved in water.

**98.** (3) Sir Creek is a 96 km strip of water on the border of India and Pakistan. The creek, which opens up into the Arabian Sea, divides the Gujarat state of India from the Sindh province of Pakistan. The creek itself is located in uninhabited marshland.

**99.** (1) The body needs calcium to maintain strong bones. Almost all calcium is stored in bones and teeth, where it supports their structure and hardness. The body also needs calcium for muscles to move and for nerves to carry messages between the brain and body parts.

**100.** (1) There are 12 Zodiac signs: Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius and Pisces. These signs are the twelve 30° sectors of the ecliptic, starting at the vernal equinox, also known as the First Point of Aries.

**101.** (4) The 2014 Nobel Peace Prize was shared between Kailash Satyarthi of India and Malala Yousafzai of Pakistan. They were awarded "for their struggle against the suppression of children and young people and for the right of all children to education".

**102.** (1) 'Atmakatha' was authored by Dr. Rajendra Prasad. It is his autobiography written during his 3-year prison term in Bankipur Jail. He was the first President of the Republic of India.

**103.** (1) Technetium was the first artificially produced element. It was isolated by Carlo Perrier and Emilio Segre in 1937. Technetium was created by bombarding molybdenum atoms with deuterons that had been accelerated by a device called a cyclotron.

**104.** (1) Bigg Boss 8 was hosted by Bollywood actor Salman Khan. He has been hosting it since its third show. Bigg Boss is the Indian edition of Big Brother. Gautam Gulati was the winner of Bigg Boss 8.

**105.** (3) Wikipedia is a web-based, free-content encyclopedia project supported by the Wikimedia Foundation. It is based on a model of openly editable content. "Wikipedia" is a portmanteau of the words wiki (a technology for creating collaborative websites) and encyclopedia.

**106.** (1) Summer solstice refers to the two moments during the year when the path of the Sun in the sky is farthest north in the Northern Hemisphere or farthest south in the Southern Hemisphere. It occurs sometime between June 20 and June 22 in the northern hemisphere and between December 20 and December 23 each year in the southern hemisphere.

**107.** (4) Apples are not commonly credited with very significant vitamin C content. One apple provides roughly 10 percent of the daily recommended allowance for vitamin C. Though a raw apple, weighing 138 grams with skin, provides 6.3 milligrams of vitamin C; not all apples provide the same amount of vitamin C.

**108.** (3) Deepika Kumari is a famous Indian archer. She won a gold medal in the 2010 Commonwealth games in the women's individual recurve event. She is currently ranked World No. 2, and is a former world number one in archery.

**109.** (3) The Philippines is an archipelago that consists of 7,107 islands with a total land area of 300,000 square kilometers. The 11 largest islands contain 94% of the total land area. Its 36,289 kilometers coastline makes it the country with the 5th longest coastline in the world.

**110.** (1) Malaysia Airlines Flight 17 was a scheduled international passenger flight from Amsterdam to Kuala Lumpur that crashed on 17 July 2014 after being shot down, killing all 283 passengers and 15 crew on board. It crashed near Torez in Donetsk Oblast, Ukraine.

**111.** (2) Manik Sarkar has been Chief Minister of Tripura since March 1998. In assembly elections held in 2013, he became the chief minister for the fourth consecutive time. Known as "India's poorest chief Minister," he has the lowest monetary resources of all Chief Ministers of the country.

**112.** (3) Kaziranga National Park, located in the Golaghat and Nagaon districts of Assam, hosts two-thirds of the world's great one-horned rhinoceroses. It also boasts the highest density of tigers among protected areas in the world.

**113.** (2) Until 1975, Sikkim was an independent kingdom, albeit an Indian protectorate. In 1975, a referendum abolished the Sikkimese monarchy, and the territory was merged with India. Then by Constitutional Amendment Act, 1975 Sikkim was made full-fledged State of India.

**114.** (4) The 2016 Summer Olympics, officially known as the Games of the XXXI Olympiad, will be organized in Rio de Janeiro, Brazil. Brazil was chosen as the host country at the 121st IOC Session held in Copenhagen, Denmark, on October 2, 2009.

**115.** (3) Rann of Kutch is a large area of salt marshes located mostly in Sindh, Pakistan and the western tip of Gujarat (primarily the Kutch district), India. It is divided into two main parts: Great Rann of Kutch and Little Rann of Kutch. Kutch is the name of the district in Gujarat where this region is situated.

**116.** (2) The Nalanda University began its first academic session on September 1, 2014 with 15 students including five women. The newly established university is located in Rajgir, near Nalanda, Bihar. Nalanda University is exclusively a post-graduate and doctoral school.

**117.** (4) Red Cross on a white background, is the Emblem of Red Cross. It was recognized in 1864 as the distinctive sign for medical relief teams on the battle field. The Cross looks like the addition sign. The red cross symbolizes as an identifier for medical personal during war time.

**118.** (2) Lord Canning was the Governor General of India when under the Government of India Act, 1858 power was transferred from the British India Company to the British Crown. He announced the transfer of power at a grand Darbar at Allahabad on 1 November 1858. Canning became the first Governor General to adopt the additional title of Viceroy.

**119.** (4) The Wangchuck dynasty is the royal family of Bhutan. Kings of this dynasty have ruled Bhutan since it was re-unified in 1907. Jigme Khesar Namgyel Wangchuck, a scion of the Wangchuck dynasty, is the fifth and current reigning King of Bhutan.

**120.** (1) Ram Vilas Paswan is the president of the Lok Janshakti Party, eight time Lok Sabha member and a former Rajya Sabha MP. During his political career, he has been Union Minister of Railways; Communication and Information technology; Mines; Chemicals and Fertilizers; Consumer Affairs, Food and Public Distribution. ❑❑❑