

1. If a body of mass m is moving on a circular path of radius R with uniform velocity v, then the centripetal force is :

- (1)  $\frac{mv^2}{R}$
- (2)  $\frac{1}{2}mv^2$
- (3)  $\frac{mv}{R}$
- (4)  $\frac{1}{2}\frac{mv^2}{R}$

2. The SI unit of resistance is :  
(1) Joule (2) Ohm  
(3) Newton (4) Ampere

3. When an iron nail gets rusted, the weight of nail:  
(1) increases  
(2) decreases  
(3) neither increases nor decreases  
(4) None of these

4. The element common to all acids is :  
(1) oxygen (2) chlorine  
(3) sulphur (4) hydrogen

5. The main constituents of 'Bronze' are :  
(1) Cu and Ni  
(2) Cu and Zn  
(3) Cu and Sn  
(4) Zn and Sn

6. The plan for transfer of power to the Indians and partition of the country was laid down in:  
(1) Cabinet Mission Plan  
(2) Mountbatten Plan  
(3) Cripps Mission  
(4) The Government of India Act, 1935

7. 'Right to Information Act' came into force in the year:  
(1) 2005 (2) 2006  
(3) 2004 (4) 2007

8. Who was the second President of India ?  
(1) Dr. Zakir Hussain  
(2) Sri V.V. Giri  
(3) Sri N. Sanjeeva Reddy  
(4) Dr. S. Radha Krishnan

9. Who among the following is the 'First Law Officer' of the Government of India ?  
(1) The Solicitor General of India  
(2) The Attorney General of India  
(3) The Chief Justice of India  
(4) The Comptroller & Auditor General of India

10. What is the strength of the Bihar Legislative Assembly ?  
(1) 403 (2) 243  
(3) 294 (4) 200

11. The highest Commissioned Rank of the Indian Air Force is :  
(1) Air Chief Marshal  
(2) Admiral  
(3) Air Commodore  
(4) Brigadier

12. The largest animal fair of India is organised in :  
(1) Samastipur  
(2) Hajipur  
(3) Sonapur  
(4) Darbhanga

13. Who among the following was the first woman Judge of the Supreme Court of India ?  
(1) Sarojini Naidu  
(2) Meera Sahib Fatima Bibi  
(3) Sujata V. Manohar  
(4) Raj Kumari Amrita Kaur

14. How many banks were nationalised in India in the year 1969?  
(1) 11 (2) 12  
(3) 13 (4) 14

15. The period of First Five Year Plan was :  
(1) 1947- 1952 (2) 1949- 1954  
(3) 1951-1956 (4) 1956-1961

16. 2014 FIFA (Football) World Cup is scheduled to take place in which of the following countries ?

(1) Brazil (2) Argentina  
(3) Spain (4) France

17. Which of the following countries won the ICC Champions Trophy 2013 ?  
(1) England  
(2) Sri Lanka  
(3) India  
(4) South Africa

18. Nobel Prize is not given in which of the following fields ?  
(1) Physics (2) Biology  
(3) Chemistry (4) Peace

19. Wankhede Stadium is situated in :  
(1) Mumbai (2) Nagpur  
(3) Pune (4) Bengaluru

20. "The Leaning Tower of Pisa" is situated in :  
(1) France (2) England  
(3) Egypt (4) Italy

21. In the series 3, 9, 15, \_\_\_\_\_, what will be the 21st term?  
(1) 117 (2) 121  
(3) 123 (4) 129

22. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series :

$$11\frac{1}{9}, 12\frac{1}{2}, 14\frac{2}{7}, 16\frac{2}{3}, ?$$

- (1)  $8\frac{1}{3}$
- (2) 20

- (3)  $19\frac{1}{2}$
- (4)  $22\frac{1}{3}$

23. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series :  
45, 54, 47, 2, 49, 56, 51, 57, 53  
(1) 55  
(2) 48  
(3) 50  
(4) None of these

24. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series :

$$\frac{2}{3}, \frac{4}{7}, 2, \frac{11}{21}, \frac{16}{31}$$

- (1)  $\frac{5}{9}$
- (2)  $\frac{6}{11}$
- (3)  $\frac{7}{13}$
- (4)  $\frac{9}{17}$

25. Find the wrong number in given series :

- 7, 28, 63, 124, 215, 342, 511
- (1) 7
  - (2) 28
  - (3) 124
  - (4) 215

26. Choose the missing terms out of the given alternatives for the series :

- A, B, B, D, C, F, D, H, E, Z, 2
- (1) E, F
  - (2) F, G
  - (3) F, I
  - (4) J, F

27. Choose the missing term out of the given alternatives for the series :

- AYBZC, DWEXF, GUHVI, JSKTL, Z
- (1) MQORN
  - (2) MQNRO
  - (3) NQMOR
  - (4) QMONR

28. Rhythm is related to Music in the same way as Design is related to :

- (1) Symmetry
- (2) Architect
- (3) Beauty
- (4) Building

29. Neck is related to Tie in the same way as Waist is related to :

- (1) Watch
- (2) Belt
- (3) Ribbon
- (4) Shirt

30. College is related to Student in the same way as Hospital is related to :

- (1) Doctor
- (2) Nurse
- (3) Treatment
- (4) Patient

31. Choose the odd one that does not belong to the group :

- (1) Mew
- (2) Bark
- (3) Shout
- (4) Howl

32. Choose the odd one that does not belong to the group :

- (1) Tomato
- (2) Brinjal
- (3) Cucumber
- (4) Potato

33. Choose the odd one that does not belong to the group :

- (1) BCDE
- (2) JKLM
- (3) STUV
- (4) WXYZ

34. Choose the odd one that does not belong to the group :

- (1) Principal : School
- (2) Soldier : Barrack
- (3) Artist : Troupe
- (4) Singer : Chorus

35. Which of the words given in alternatives can be formed by using the letters of the word : **CORRESPONDING**

- (1) DISCERN
- (2) RESPONSE
- (3) REPENT
- (4) CORRECT

36. If in a certain language, 'oka peru' means 'fine cloth', 'meta lisa' means 'clear water' and 'dona lisa peru' means 'fine clear weather', which word in that language means 'weather'?

- (1) peru
- (2) oka
- (3) meta
- (4) dona

37. If 'eraser' is called 'box', 'box' is called 'pencil', 'pencil' is called 'sharpener' and 'sharpener' is called 'bag', what will a child write with ?

- (1) Eraser
- (2) Box
- (3) Sharpener
- (4) Pencil

38. In a certain code, '786' means 'study very hard', '958' means 'hard work pays' and '645' means 'study and work'. Which of the following is the code for 'very'?

- (1) 8
- (2) 6
- (3) 7
- (4) Cannot be determined

39. Pointing to a man, Deepak said, "His only brother is father of my daughter's father". How is the man related to Deepak?

- (1) Grand Father
- (2) Father
- (3) Brother-in-Law
- (4) Uncle

40. Pointing to a photograph, Arun said, "She is the mother of my

son's wife's daughter." How is Arun related to the lady?

- (1) Uncle
- (2) Cousin
- (3) Father-in-law
- (4) None of these

41. Rasik walks 20 m North. Then he turns right and walks 30 m. Then he turns right and walks 35 m. Then he turns left and walks 15 m. Then he again turns left and walks 15 m. In which direction and how many metres away is he from his original position ?

- (1) 15 metre West
- (2) 45 metre East
- (3) 30 metre West
- (4) 30 metre East

42. A man is facing South. He turns 135° in the anticlockwise direction and then 180° in the clockwise direction. Which direction he is facing now?

- (1) North-East
- (2) North - West
- (3) South-East
- (4) South-West

43. What will be the difference between the sum of the odd digits and the sum of the even digits in the number 857423 ?

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

44. In a clock, the angle traced by the hour hand in 12 hours is :

- (1) 360°
- (2) 180°
- (3) 90°
- (4) 30°

45. How many days are there in a Leap year?

- (1) 367
- (2) 366
- (3) 364
- (4) 365

46. Which of the following is not a prime number ?

- (1) 97
- (2) 191
- (3) 221
- (4) 61

47. The unit digit in  $(3^{95} \times 6^{59} \times 7^{71})$  is :

- (1) 1
- (2) 2
- (3) 4
- (4) 6

48.  $\frac{5}{6} \times \frac{2}{9} + \frac{4}{9} \div \frac{6}{7} = ?$

- (1) 0.4
- (2) 0.32
- (3) 0.49
- (4) 0.36

49.  $\frac{(569+163)^2 - (569-163)^2}{569 \times 163} = ?$

- (1) 2  
(2) 4  
(3) 406  
(4) None of these

50. The L.C.M. and H.C.F. of the numbers 15, 30 and 6 are :

- (1) 30 and 3 (2) 60 and 6  
(3) 60 and 3 (4) 30 and 6

51. If  $\sqrt{3} = 1.732$  and  $\sqrt{2} = 1.414$

then the value of  $\frac{1}{\sqrt{3} + \sqrt{2}}$  is

- (1) 0.064 (2) 0.308  
(3) 0.318 (4) 2.146

52.  $\sqrt[3]{4 \frac{12}{125}} = ?$

- (1)  $1\frac{3}{5}$  (2)  $1\frac{2}{5}$

- (3)  $2\frac{2}{5}$

(4) None of these

53. If the sum of a few numbers is 450 and their mean is 50. If another number 100 is included, the mean would become :

- (1) 60 (2) 55  
(3) 75 (4) 150

54. Six persons went to a hotel for taking their meals. Five of them spent ₹32 each on their meals while the sixth person spent ₹80 more than the average expenditure of all the six. Total money spent by all the persons is :

- (1) ₹192 (2) ₹240  
(3) ₹288 (4) ₹336

55. The number that should be added to both the numerator

and denominator of  $\frac{4^2}{9^2}$  so

that the fraction becomes  $\frac{4}{9}$  is

- (1) 0 (2) 36  
(3) 16 (4) 81

56. What percent of 7.2 kg is 18 gms ?

(1) 0.025% (2) 0.25%

(3) 2.5% (4) 25%

57. Two numbers are less than a third number by 30% and 37% respectively. How much percent is the second number less than the first ?

- (1) 10% (2) 15%  
(3) 20% (4) 25%

58. If the numerator of a fraction is increased by 20% and the denominator is decreased by 10%, the value of the fraction

becomes  $\frac{16}{21}$ . The original fraction is :

- (1)  $\frac{3}{5}$  (2)  $\frac{4}{7}$

- (3)  $\frac{2}{3}$  (4)  $\frac{5}{7}$

59. A table is bought for ₹950 and sold at ₹1140. What is the percentage gain?

- (1) 25% (2) 35%  
(3) 30% (4) 20%

60. ₹6400 is divided among three

workers in the ratio  $\frac{3}{5} : 2 : \frac{5}{3}$ .

The share of the second worker is :

- (1) ₹2500  
(2) ₹3000  
(3) ₹3200  
(4) ₹3840

61. The sides of a triangle are in

the ratio  $\frac{1}{3} : \frac{1}{4} : \frac{1}{5}$  and its per-

imeter is 94 cm. The length of the smallest side is :

- (1) 18.8 cm (2) 23.5 cm  
(3) 24 cm (4) 31.3 cm

62. 3 men or 5 women can finish a piece of work in 12 days. How long will 6 men and 5 women take to finish the work ?

- (1) 4 days (2) 10 days  
(3) 15 days (4) 20 days

63. A pipe fills  $\frac{3}{7}$  of a bucket in 1

minute. The rest of the bucket can be filled in :

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

- (3)  $\frac{7}{3}$  minutes

(4) None of these

64. An athlete runs 200 metre race in 24 seconds. His speed is :

- (1) 20 km/hr (2) 24 km/hr  
(3) 28.5 km/hr (4) 30 km/hr

65. A man covers half of his journey at the speed of 6 km/hr and the remaining half at the speed of 3 km/hr. His average speed is :

- (1) 3 km/hr (2) 4 km/hr  
(3) 4.5 km/hr (4) 9 km/hr

66. The area of a rectangle is 12 sq. metre and its length is 3 times its breadth. What is the perimeter of the rectangle ?

- (1) 14 m (2) 18 m  
(3) 24 m (4) 16 m

67. If the radius of a sphere is r, then its volume is :

- (1)  $\frac{4}{3}\pi r^3$  cubic units

- (2)  $\frac{1}{3}\pi r^3$  cubic units

- (3)  $\frac{2}{3}\pi r^3$  cubic units

(4) None of these

68. An angle whose measure is more than 90° but less than 180° is called :

- (1) Acute angle  
(2) Obtuse angle  
(3) Right angle  
(4) Reflex angle

69.  $\sin 60^\circ \cdot \cos 30^\circ + \cos 60^\circ \cdot \sin 30^\circ = ?$

- (1)  $\frac{3}{2}$  (2)  $\frac{5}{2}$

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

70. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

$\frac{2}{\sqrt{5}}, \frac{3}{5}, \frac{4}{5\sqrt{5}}, \frac{5}{25}, ?$

$$(1) \frac{6}{5\sqrt{5}}$$

$$(2) \frac{6}{25\sqrt{5}}$$

$$(3) \frac{6}{125}$$

$$(4) \frac{7}{25}$$

71. In ancient India, which of the following was the capital of Kalinga ?

- (1) Ujjain (2) Taxila  
(3) Toshali (4) Patliputra

72. Who was the founder of Chola dynasty ?

- (1) Vijayalaya (2) Rajaraja  
(3) Rajendra I  
(4) None of these

73. Who among the following was not the part of Navaratna (nine jewels) of Akbar ?

- (1) Birbal (2) Faizi  
(3) Adil Shah (4) Todarmal

74. Which of the following is not a correct pair ?

- (1) The Scindia : Gwalior  
(2) The Holkar : Poona  
(3) The Gaekwad : Baroda  
(4) The Bhousele : Nagpur

75. Who among the following is associated with the 'Drain of Wealth' theory ?

- (1) Dadabhai Naoroji  
(2) Subhash Chandra Bose  
(3) Iqbal  
(4) Dr. Rajendra Prasad

76. 'Rama Krishna Mission' was founded by :

- (1) Subhash Chandra Bose  
(2) Swami Vivekanand  
(3) Dayanand Saraswati  
(4) Acharya Ramkrishna

77. After suppression of 'The Revolt of 1857', Bahadur Shah II:

- (1) was deported to Rangoon  
(2) was executed  
(3) escaped to Nepal  
(4) None of these

78. The Indus Civilization was primarily :

- (1) Tribal (2) Rural  
(3) Urban (4) Local

79. Which of the following was the language in which Buddha preached ?

(1) Urdu (2) Pali

(3) Hindi (4) English

80. The Lion Capital at Sarnath is associated with :

- (1) Ashoka (2) Gopala  
(3) Bimbisara (4) Ajatshatru

81. Who was first Mughal ruler who separated religion from politics ?

- (1) Aurengzeb (2) Shahjahan  
(3) Akbar (4) Babur

82. Who said, "Swaraj is my birth-right and I will have it"?

- (1) Mahatma Gandhi  
(2) Jawahar Lal Nehru  
(3) Subhash Chandra Bose  
(4) Bal Gangadhar Tilak

83. The percentage of India's total population employed in agriculture is nearly :

- (1) 90% (2) 30%  
(3) 40% (4) 65% to 70%

84. The oldest mountains in India are :

- (1) Himalayas (2) Aravalis  
(3) The Naga Hills  
(4) Sivalik Hills

85. A 'lunar eclipse' occurs when :

- (1) The moon comes between the earth and the sun  
(2) The earth comes between the sun and the moon  
(3) The sun comes between the earth and the moon  
(4) The sun, the earth and the moon make an angle of 90°

86. The position of the earth or any other planet in its orbit when it is at its nearest point to the sun is called :

- (1) Perihelion (2) Aphelion  
(3) Solstice (4) Axis

87. The percentage of Oxygen in the atmosphere is about :

- (1) 29% (2) 78%  
(3) 21% (4) 0.03%

88. 'Kanchanjunga' mountain peak is in :

- (1) India (2) Nepal  
(3) China (4) Tibet

89. Which of the following 'Divisions' of East Central Railway is biggest in terms of number of employees ?

(1) Mughalsarai

(2) Danapur

(3) Samastipur

(4) Dhanbad

90. Kavaratti is the capital of:

- (1) Lakshadweep  
(2) Daman and Diu  
(3) Dadra and Nagar Haveli  
(4) Mizoram

91. Which is the correct chain through which the food enters our body ?

- (1) mouth - stomach - large intestine - small intestine - food pipe  
(2) mouth - food pipe - small intestine - stomach - large intestine  
(3) mouth - food pipe - stomach - small intestine - large intestine  
(4) mouth - food pipe - stomach - large intestine - small intestine

92. Ascorbic acid is :

- (1) Vitamin-D  
(2) Vitamin-B  
(3) Vitamin-A  
(4) Vitamin-C

93. Which of the following is the busiest human organ ?

- (1) Nose (2) Heart  
(3) Kidney (4) Liver

94. Which of the following is a disorder in which low bone mass and increased fragility takes place ?

- (1) Osteoporosis  
(2) Arthritis  
(3) Rheumatism  
(4) Colic

95. The Central Nervous System of human beings consists of:

- (1) Fore Brain and Hind Brain  
(2) Fore Brain, Mid Brain and Cerebellum  
(3) Brain and Spinal Cord  
(4) None of these

96. Which of the following devices connects the computers and works based on telephone lines?

- (1) Antenna (2) UPS  
(3) CPU (4) Modem

**97.** C-DAC stands for:

- (1) Centre for Development of Anti - Corruption
- (2) Centre for Development and Advanced Circuits
- (3) Centre for Development of Advanced Computing
- (4) Centre for Development of Advancement in Computers

**98.** Which of the following computers defeated world chess champion Garry Kasparov ?

- (1) PARAM
- (2) CRAYK-1-S
- (3) Deep Blue
- (4) None of these

**99.** At absolute zero temperature, the kinetic energy of the molecules :

- (1) becomes maximum
- (2) becomes minimum
- (3) remains constant
- (4) becomes zero

**100.** Which among the following is the best conductor of heat ?

- |             |             |
|-------------|-------------|
| (1) Mercury | (2) Silver  |
| (3) Leather | (4) Benzene |