YADURISE

Yaduvanshi Renowned Intellectual Search Exam

Class - 7th

Reg. No./ Student ID ..... Name.....

PART - I
SCIENCE

1. An object may appear to be moving to one person and the same object may appear to be at rest to the another person. This statement is
   (A) always correct (B) always false
   (C) some times correct and some times false (D) cannot say
2. A particle is moving in a circle of diameter 10m. The distance covered by it on completing 2 revolutions is
   (A) 40m (B) 20m (C) 20π m (D) zero
3. A person moves through 100m in going from A to B and travels the same distance in returning from B to A. His displacement is
   (A) 100m (B) 200m (C) $100\sqrt{2}$ m (D) zero
4. A cyclist goes once round a circular track of diameter 105 meter in 5 minutes. What is his speed.
   (A) 1.1 m/s (B) 21.2 m/s (C) 0.11 m/s (D) 11 m/s
5. If C, F and K are temperature on celsius, Fahrenheit and Kelvin scales, ΔC, ΔF and ΔK are the change in temperatures in celsius, Fahrenheit and Kelvin scales respectively, the correct relation among the following is
   (A) $\frac{C}{5}=\frac{F}{9}=\frac{K-273}{5}$ (B) $\frac{\Delta C}{5}=\frac{\Delta F}{9}=\frac{\Delta K}{5}$
   (C) $\frac{\Delta C}{5}=\frac{\Delta F-32}{9}=\frac{\Delta K-273}{5}$ (D) $\frac{C}{5}=\frac{F}{9}=\frac{K}{5}$
6. A : At high altitude regions the cooking of food becomes difficult.
   B : water boils at lower temperature when the pressure is low
   (A) Both A and B are wrong
   (B) A and B are correct and B is not correct explanation of A
   (C) A and B are correct and B is correct explanation of A
   (D) A is correct but B is wrong
7. The change in temperature of a body is 20°C then the change in temperature on kelvin scale is
   (A) 293 K (B) 25 K (C) 20 K (D) 253 K
8. The temperature of the sun is measured with
   (A) Platinum thermometer (B) Gas thermometer
   (C) Pyrometer (D) Vapour pressure thermometer
9. On which of the following scales of temperature, the temperature is never negative
   (A) Celsius (B) Fahrenheit (C) Reumer (D) Kelvin
10. Heat is transmitted from higher to lower temperature through actual mass motion of the molecules in
    (A) conduction (B) convcetion (C) radiation (D) none of the above
11. When vapours condenses into liquid
    (A) it absorb heat (B) it liberates heat

(C) its temperature rises (D) its temperature decreases

12. A metal sheet with a circular hole is heated. The hole
(A) gets larger (B) gets smaller
(C) remains of the same size (D) gets deformed

13. 1 kWh = _____ MJ
(A) 36 (B) 0.36 (C) 3.6 (D) 360

14. Electric cell is device to obtain
(A) electric charge (B) electric force (C) electrons (D) electric energy from chemical energy

15. What is the material for electric fuse
(A) Copper (B) Constantan (C) Tin-lead alloy (D) Nichrome

16. Of the two bulbs in a house, one glows brighter than the other. Which of the two has a large resistance
(A) The bright bulb (B) The dim bulb
(C) Both have same resistance (D) The brightness does not depend upon the resistance

17. When a neutral metal sphere is charged by contact with a positively charged glass rod, the sphere
(A) loses electrons (B) gain electrons (C) loses protons (D) gain protons

18. First electro chemical cell was designed by
(A) Leclanche (B) Faraday
(C) Galvanic (D) Some one other than those mentioned above

19. During melting of ice, temperature remains constant at
(A) 100°C (B) 0°C (C) 4°C (D) –4°C

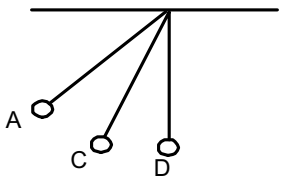
20. Which one is an element:
(A) Water (B) Oxygen (C) Carbondioxide (D) Sugar

21. Heating, exposing to light or passing electricity will only let to decompose
(A) element (B) compound (C) mixture (D) liquid

22. Nitric acid is combined with oxygen to produce brown fumes of
(A) Nitrogen oxide (B) Nitrogen dioxide (C) Carbon dioxide (D) Nitrogen

23. What is the meaning of N_2
(A) Two nitrogen molecules (B) Two seperate nitrogen atoms
(C) One nitrogen molecule (D) One nitrogen compound

24. Fig. Shows on oscillating pendulum:



Time taken by the bob to move from A to C is t_1 and from C to D is t_2 time period of this simple pendulum is:
(A) (t_1+t_2) (B) $2(t_1+t_2)$ (C) $3(t_1+t_2)$ (D) $4(t_1+t_2)$

25. When 5 resitance of 5Ω are connected in parallel then equivalent resistance in circuit is:
(A) 2 Ω (B) 1 Ω (C) 3 Ω (D) 25 Ω

26. A car moves with a speed of 40 km/h for 15 min. and then with a speed of 60 km/h for next 15 min. The total distance covered by car is:
(A) 100 km (B) 25 km (C) 15 km (D) 10 km

27. When a stone is thrown upward with an acceleration of 9.8 m/s^2 and initial velocity is 2 m/s then find the final velocity of stone when it reach a top:
(A) 5 m/s (B) 1 m/s (C) 0 (D) 3 m/s

28. $NaOH + HCl \longrightarrow NaCl + H_2O$ is a type of
(A) displacement reaction (B) neutralisation reaction
(C) double displacement reaction (D) both b and c

29. The equation $Cu + xHNO_3 \longrightarrow Cu(NO_3)_2 + yNO_2 + H_2O$. The values of x and y are
(A) 4 and 2 (B) 3 and 5 (C) 8 and 6 (D) 7 and 1

30. Which of the following is a correct pair according to increasing atomic number
(A) Na, Ne (B) Ca, Cl (C) He, H (D) Be, B

31. Acetic acid react with baking soda and produce which gas
(A) oxygen gas (B) nitrogen gas (C) hydrogen gas (D) carbon dioxide gas

32. How much energy is used for boiling water in a 15 KW kettle for 20 minutes?
(A) 240 KWh (B) 10 KWh (C) 5 KWh (D) None of these

33. What is a cyclone called in American continent?
(A) Hurricane (B) Tornado (C) Typhon (D) Thunderstorm

34. Cinnebar is an ore of
(A) Iron (B) Mercury (C) Lead (D) Zinc

35. Chemical formula of acetic acid
(A) HCOOH (B) CH_3COOH (C) C_2H_5OH (D) $NaHCO_3$

PART - II
MATHEMATICS

36. How many integer solutions exists for the equation $11x + 15y = -1$ such that both x and y are less than 100?
(A) 15 (B) 16 (C) 17 (D) 18

37. What is least value of $6A^2 + B^2$ where A and B are the digits of number 4A5B32, which is a multiple of 8 ?
(A) 0 (B) 16 (C) 4 (D) 502

38. Which of the following is the other name of a cube?
(A) A tetrahedron (B) A regular hexahedron
(C) A square antiprism (D) None of these

39. Let x, y, z be three observations. The mean of there observations is
(A) $\frac{x \times y \times z}{3}$ (B) $\frac{x + y + z}{3}$ (C) $\frac{x - y - z}{3}$ (D) None of these

40. The value of $\frac{10^{22} + 10^{20}}{10^{20}}$ is
(A) 10 (B) 101 (C) 10^{22} (D) 10^{42}

41. How many pieces of equal size can be cut from a rope of 30 m long, each measuring $3\frac{3}{4}$ m ?
(A) 6 (B) 8 (C) 10 (D) 9

42. The value of $3 - \frac{2}{1 + \frac{2}{2 - \frac{3}{5}}}$
(A) $\frac{37}{17}$ (B) $\frac{28}{7}$ (C) $\frac{38}{17}$ (D) $\frac{37}{15}$

43. If $\frac{-8}{5} = \frac{a}{10} = \frac{20}{b} = \frac{-45}{c}$, find the value of a, b and c respectively.
(A) 25, –36, –45 (B) 10, –18, 26 (C) 28, 12, 39 (D) –16, –12.5, 28.125

44. We divide additive inverse of 2 by their multiplicative inverse of 2. The answer is
(A) 2 (B) –1 (C) 1 (D) –4

45. The numerical coefficient of the term $-22x^2y^2$ is

(A) 22 (B) –22 (C) $22x^2$ (D) $-22x^2$

46. For any rational number a, b, c which among the following is false.
(A) $a \times b = b \times a$ (B) $a \times (b - c) = a \times b - a \times c$
(C) $a \times (b \div c) = a \times b \div a \times c$ (D) $a \times (b + c) = a \times b + a \times c$

47. If $\frac{p}{q}$ and $\frac{r}{s}$ are rational numbers, then $\frac{p}{q}$ is multiplicative inverse of $\frac{r}{s}$ if

(A) $\frac{p}{q} = \frac{r}{s}$ (B) $\frac{p}{q} + \frac{r}{s} = 1$ (C) $\frac{p}{q} \times \frac{r}{s} = 1$ (D) $\frac{p}{q} + \frac{r}{s} = 0$

48. Ram reads $\frac{1}{6}$ hour on the first day, $\frac{1}{4}$ hour on the second day, and $\frac{1}{3}$ hour on the third day, If this pattern continues, how long will he read on the fifth day?
(A) 20 minutes (B) 30 minutes (C) 25 minutes (D) 15 minutes

49. From a rope of 11 m long, two pieces of lengths $\frac{13}{5}$ m and $\frac{33}{10}$ m are cut off. What is the length of remaining rope?

(A) $\frac{51}{9}$ m (B) $\frac{51}{10}$ m (C) $\frac{41}{10}$ (D) $\frac{41}{9}$ m

50. If a train covers 120 km in 3 hours, how much time would it take to cover 150 km at the same rate?
(A) 3.75 hours (B) 3 hours (C) 2 hours (D) 2.75 hours

51. For a fixed base 10, if the exponant decreases by 1, the number becomes
(A) One–tenth of the previous number (B) Ten–times of the previous number
(C) Hundred times of the previous number (D) Thousand times of the previous number

52. If $7^{(x-y)} = 343$ and $7^{(x+y)} = 2401$, then x is equal to

(A) $\frac{1}{2}$ (B) $\frac{9}{2}$ (C) $\frac{7}{2}$ (D) $\frac{5}{2}$

53. Subodh purchased 50 dozens bananas for Rs. 150. Five dozen bananas could not be sold because they were rotten. At what price per dozen should Subodh sell the remaining bananas so that he makes a profit of 20%?
(A) Rs. 4 (B) Rs. 5 (C) Rs. 4.5 (D) Rs. 5.5

54. What is the product of $(x - a)(x^2 + ax + a^2)$?
(A) $x^3 + (ax - a)x + a$ (B) $x^3 - a^3$ (C) $x^3 + a^3$ (D) $x^3 - (a+b)x - ab$

55. A term of an expression having no literal factor is called a_____ .
(A) monomial (B) constant term (C) trinomial (D) variable

56. In a polynomial, the exponents of the variable are always.
(A) integers (B) positive integers (C) non-positive integers (D) none of these

57. If P is a prime number, then number of factors of P^2 is
(A) 2 (B) 5 (C) 3 (D) 4

58. How many number of faces does a solid sphere has?
(A) 1 (B) 2 (C) many (D) none

59. Which of the following can be other name of a cylinder?
(A) A triangular prism (B) A rectangular prism (C) A vertical prism (D) A circular prism

60. Arrange these rational numbers in ascending order $\frac{3}{8}, \frac{4}{12}, \frac{-7}{16}, \frac{-2}{3}$

(A) $\frac{3}{8}, \frac{4}{12}, \frac{-7}{16}, \frac{-2}{3}$ (B) $\frac{4}{12}, \frac{3}{8}, \frac{-7}{16}, \frac{-2}{3}$ (C) $\frac{-7}{16}, \frac{-2}{3}, \frac{4}{12}, \frac{3}{8}$ (D) $\frac{-2}{3}, \frac{-7}{16}, \frac{4}{12}, \frac{3}{8}$

PART - III
I.Q. (INTELLIGENCE QUOTIENT)

Note:- Choose any one of I.Q. (INTELLIGENCE QUOTIENT) or G.A. (GENERAL AWARENESS) in Part - III.

Directions (61-63): Select the related word/letters from the given alternatives.

61. MAN : PDQ : : WAN : ?
(A) YDQ (B) YQD (C) NAW (D) ZDQ

62. 544, 509, 474, 439, ?
(A) 404 (B) 406 (C) 408 (D) 410

63. DIC : 493 : : FAH : ?
(A) 442 (B) 431 (C) 681 (D) 618

64. 1000, 995, 980, 955, 920, 875, ?, ?
(A) 820, 755 (B) 810, 795 (C) 815, 765 (D) 745, 655

Directions(65): In each of the following questions, a group of three/four inter-related words is given. Choose a word from the given alternatives, that is similar to the given words and hence belongs to the same group.

65. Liver : Heart: Kidney
(A) Blood (B) Nose (C) Lung (D) Urine

66. Gorav walks 20km. towards North. He turns left and walks 40 km. He again turns left and walks 20 km. Finally he moves 20 km. after turning to the left. How far is he form his starting position?
(A) 30 km (B) 20 km (C) 50 km (D) 60 km

Directions(67): In each of the following questions, four pairs of words are given, out of which words in three/four pairs bear a certain common relationship. Choose the pair in which the words are differently related.

67. (A) Hard: Soft (B) Long : High (C) Sweet: Sour (D) Pointed : Blunt

Directions (68) : In each of the following questions, three of the given four are alike in a certain way and form a group. Which is the one that does not belong to that group in the following questions ?

68. (A) 1331 (B) 512 (C) 343 (D) 4913

69. If South-East became North, North-East becomes west and so on. What will west become?
(A) North-East (B) North-West (C) South-East (D) South-West

70. How many such pairs of letters are there in the word 'EXAMINATION', each of which has as many letters between them in the word, as they in the English alphabet?
(A) None (B) One (C) Two (D) Three

Directions(71-73) Study the following arrangement carefully and answer the questions given below:
M 4 P A 3 % R 5 # E J 2 $ D F 1 U H B @ 9 T W I 8 K N 6 © V 7 Z Q

71. If all the symbols in the above arrangement are dropped, which of the following will be the seventeenth from the left end ?
(A) 1 (B) F (C) 9 (D) B

72. Which of the following is the eighth to the right of the twentieth from the right end of the above arrangement?
(A) T (B) % (C) 2 (D) 6

73. How many such consonants are there in the above arrangement each of which is immediately preceded by a number but not immediately followed by another consonant ?
(A) None (B) One (C) Two (D) Three

74. A direction pole was situated on the crossing. Due to an accident the pole turned in such a manner that the pointer which was showing East, started showing South. One traveller went to the wrong direction thinking it to be west. In what direction actually he was travelling ?
(A) North (B) South (C) East (D) West

75. Sunny walked 6 metres facing towards East, then took a right turn and walked a distance of 9 metres. He then took a left turn and walked a distance of 6 metres. How far is he from the starting point ?
(A) 15 metres (B) 21 metres (C) 18 metres (D) cannot be determined

76. Ashish walks 10 metres towards the South. Turning to the left, he walks 20 metres and then moves to his right. After moving a distance of 20 metres, he turns to the right and walks 20 metres. Finally, he turns to the right and moves a distance of 10 metres, how far and in which direction is he from the starting point ?
(A) 10 metres North (B) 20 metres South (C) 20 metres North (D) 10 metres South

77 In a certain code, DECEMBER is written as ERMBCEDE. Which word will be written as ERMBVENO in that code ?
(A) AUGUST (B) SEPTEMBER (C) OCTOBER (D) NOVEMBER

78. If the alphabet is written in reverse order then which letter will be eighth to the left of the letter which is seventh from the right?
(A) N (B) O (C) P (D) Q

79 Which letter is seventh to the right of the letter which is 13th from the left in english alphabet?
(A) V (B) S (C) T (D) X

80. If the alphabet is written in reverse order then which letter will be seventh to the left of the letter which is eighth form the right?
(A) L (B) M (C) O (D) P

G.A. (GENERAL AWARENESS)

61. The Reserve Bank of India will soon issue new Rs. 2000 denomination bank notes which has Motif of which monument on the Reverse of the Note?
(A) Rani ki vav (B) Hampi with chariot (C) Ellora Caves (D) Mangalyan

62. Who won the IPL 2019?
(A) MI (B) KKR (C) DD (D) CSK

63. Kartarpur corridor build between India and Pakistan in the memory of
(A) 1000 birth anniversary of Guru Nanak dev (B) 450 birth anniversary of Guru Nanak dev
(C) 100 birth anniversary of Guru Nanak dev (D) 550 birth anniversary of Guru Nanak dev

64. What is the new name of Allahabad ?
(A) Prayagraj (B) Mathura (C) Ilahabad (D) None of these

65. Parliament of World's Religions, held for the first time in 1893, from September 11 to September 27 celebrate 2018 as ———— Anniversary of Swami Vivekananda Speech
(A) 150th (B) 100th (C) 125th (D) 200th

66. Which country President attended the 2019 Republic day as Chief Guest ?
(A) Japan (B) South Africa (C) Thailand (D) Malaysia

67. Atal setu is built across which River ?
(A) Chenab river (B) Mandovi river (C) Yamuna river (D) Krishna river

68. In which State is the Chief Minister's Good Governance Associates (CMGGA) scheme being implemented?
(A) Madhya Pradesh (B) Haryana (C) Rajasthan (D) Bihar

69. _____ topped the Medal tally of Khelo India Youth Games 2019 with _____ Medals.
(A) Maharashtra, 177 (B) Haryana, 228 (C) Maharashtra, 228 (D) Haryana, 177

70. Which of these festival has the name of a Zodiac sign in it:
(A) Vasant Panchami (B) Gudi Padwa (C) Makar Sankranti (D) None of these

71. Who was sworn in as the first acting Chief Justice of the Independent Andhra Pradesh Court post bifurcation of the state?
(A) Dilip Babasaheb Bhosale (B) Justice T B N Radhakrishnan
(C) Justice Praveen Kumar (D) Kalyan Jyoti Sengupta

72. In which Indian stale did the game of Polo originate?
(A) Manipur (B) Rajasthan (C) Meghalaya (D) West Bengal

73. Who was Rajnath Singh 'Surya' died recently?
(A) Writer and therapist (B) Politician and journalist

(C) Water conservator and environmentalist (D) Lyricist and composer

74. On which date was the Green Mizoram Day Celebrated?
(A) June 11, 2019 (B) June 12, 2019 (C) June 13, 2019 (D) June 14, 2019

75. Who has been appointed as the Director of the Central Bureau of Investigation (CBI)?
(A) Rishi Kumar Shukla (B) Alok Kumar Verma
(C) Rakesh Asthana (D) M. Nageshwara Rao

76. The Dr. A.P.J. Abdul Kalam National Memorial was built in memory of Kalam by the DRDO in which town?
(A) Madurai (B) Rameshwaram (C) Kodaikanal (D) Doddabetta

77. Chandrayaan-2 Mission launched from which Space Centre?
(A) Chandipur (B) U R Rao (C) Vikram Sarabhai (D) Satish Dhawan

78. Which Indian Organisation has launched a 'Yuva Vigyani Karyakram' for school children?
(A) CSIR (B) ISRO (C) DRDO (D) BARC

79. Recently in which State, a Women has been appointed as the State Home Minister?
(A) Nagaland (B) Odisha (C) Andhra Pradesh (D) Arunachal Pradesh

80. Which one of the following cities will host 2022 winter Olympics ?
(A) Tokyo (B) Atlanta (C) Beijing (D) Los Angeles