myclassroom

For students moving from class 7th to class 8th

Exam ID : 1229

Time : 1:30 Hrs

Max. Marks : 240

IMPORTANT INSTRUCTIONS

Note: All Questions are compulsory:

Section-1: It contains 30 questions in total.

Question No. 1 to 10 belongs to Physics.

Question No. 11 to 20 belongs to Chemistry.

Question No. 21 to 30 belongs to Biology.

Section-2: It contains 10 questions in total.

Question No. 31 to 40 belongs to Mathematics.

Section-3: It contains 20 questions in total.

Question No. 41 to 60 are to Mental Ability questions.

Marking Scheme: Each question carries 4 marks. **For each correct response, the candidate will get 4 marks. There is no negative marking for incorrect response or unattempted questions.**

Section-I (SCIENCE)

1. Leaves of trees, banner or flags flutter when wind blows. What will be the correct reason among following options?

   (a) Air occupies space   (b) Air is a mixture of gases

   (c) Air exerts pressure   (d) Air is colourless

2. Nearly all the analog clock make use of

   (a) straight line motion   (b) periodic motion

   (c) random motion   (d) circular motion

3. Which one of the following is based on the heating effect of current?

   (a) Geyser   (b) Hair dryer

   (c) Immersion rod   (d) All of these

4. In which of the following cases do we observe lateral inversion?

   (a) Plane mirror   (b) Convex mirror

   (c) Concave mirror   (d) All of these

5. If the current flowing through a fuse wire exceeds safety limit, the fuse will _____ thus breaking the circuit

   (a) melted away   (b) remains the same

   (c) damages the circuit   (d) makes the circuit remain connected

6. Following are precautions one must take in case of a storm is accompanied by lightning.

   (i) Do not take shelter under a tree.

   (ii) Do not take shelter under an umbrella with a metallic end.

   (iii) Do not take shelter in open garages, storage sheds, etc.

   (iv) Do not take shelter in a bus in the open. Which one of these is not correct?

   (a) (i)   (b) (ii)   (c) (iii)   (d) (iv)

7. A simple pendulum takes 42 sec. to complete 20 oscillations. What is its time period?

   (a) 2.1 s   (b) 4.2 s   (c) 21 s   (d) 8.40 s

8. The coil of wire contained in an electric heater is known as

   (a) component   (b) element   (c) circuit   (d) spring

9. Boojho and Paheli were given one mirror each by their teacher. Boojho found his image to be erect and of the same size whereas Paheli found her image erect and smaller in size. This means that the mirrors of Boojho and Paheli are, respectively

(a) plane mirror and concave mirror   (b) concave mirror and convex mirror

(c) plane mirror and convex mirror   (d) convex mirror and plane mirror

10. ……………….. is filled in the bulb of a thermometer. Fill in the blanks from given option.

(a) Mercury   (b) Lead   (c) Copper   (d) Silver

11. The term Sericulture is used for

(a) Culture of bacteria   (b) Rearing of silkworm

(c) Making silk fabric from silk yarn   (d) Production of sarees

12. Products of a neutralisation reaction are always

(a) an acid and a base.   (b) an acid and a salt.

(c) salt and water.   (d) a salt and a base.

13. Which of the following is a chemical change?

(a) Twinkling of stars   (b) Cooking of vegetables

(c) Cutting of fruits   (d) Boiling of water

14. Seas and oceans are full of water on earth. However, a very small percentage of water present on earth is available for us. This percentage is roughly

(a) 0.006%   (b) 0.06%   (c) 0.6%   (d) 6%

15. Which of the following is/are true when milk changes into curd?

(i) Its state is changed from liquid to semi-solid.

(ii) It changes colour.

(iii) It changes the taste.

(iv) The change cannot be reversed. Choose the correct option from below :

(a) (i) and (ii) are correct   (b) (ii) and (iii) are correct

(c) (i), (iii) and (iv) are correct   (d) (i) to (iv) are correct

16. Silk is derived from

(a) cocoon   (b) pupa   (c) egg   (d) moth

17. Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed

(a) Yellow in both acid and base.   (b) Yellow in acid and red in the base.

(c) Pink in acid and yellow in the base.   (d) Red in acid and blue in the base

18. When the soil is too basic, plants do not grow well in it. To improve its quality what must be added to the soil?

(a) Organic matter
(b) Quick lime

(c) Slaked lime
(d) Calamine solution

19. Iron pillar near the Qutub Minar in Delhi is famous for the following facts. Which of these facts is responsible for its long stability?

(a) It is more than 7 meters high

(b) It weighs about 6000 kg.

(c) It was built more than 1600 years ago

(d) It has not rusted after such a long period

20. "Every Drop Counts" is a slogan related to

(a) counting of drops of any liquid
(b) counting of water drops

(c) importance of water
(d) importance of counting

21. The water holding capacity is highest in :

(a) sandy soil
(b) clayey soil

(c) loamy soil
(d) Mixture of sandy and loamy soil

22. The air sacs at the end of the smallest air tubes inside the lungs are called :

(a) Alveoli
(b) Bronchi
(c) Bronchioles
(d) Larynx

23. In plants excess amount of CO_2 escapes through:

(a) Stomata
(b) Phloem
(c) Xylem
(d) Cambium

24. Source of carbohydrate is :

(a) Potato
(b) Tomato
(c) Pea
(d) Tea

25. Examine the following statements :

(a) Iron necessary for the human body is abundantly formed in green vegetables

(b) Zinc is one of the essential trace elements required for human body

(c) Fats and minerals are not the essential nutrients for a balanced diet of humans

(d) The foods that generate energy in the body after complete oxidation are in the form of the carbohydrates fats and proteins. Which one of the following alternatives is wrong?

(a) B
(b) A
(c) D
(d) C

26. Sunshine Vitamin is :

   (a) Vitamin –E   (b) Vitamin – D   (c) Vitamin – K   (d) Vitamin -A

27. Urea formation occurs by:

   (a) Arginine cycle   (b) Calvin cycle

   (c) Ornithine cycle   (d) Citrulline cycle

28. A pacemaker of SA node is found in :

   (a) Heart   (b) Kidney   (c) Liver   (d) Stomach

29. Heart disease is a:

   (a) Chronic disease   (b) Communicable disease

   (c) Degeneration disease   (d) Deficiency disease

30. Bacteria have the following cell organelle

   (a) Golgi bodies   (b) Chlorophyll

   (c) Mesosomes   (d) Mitochondria

Section-II (MATHEMATICS)

31. The product of two negative integers is

   (a) a positive integer

   (b) a negative integer

   (c) either a positive integer or a negative integer

   (d) none of these.

32. $(-10) \times 0 \times (-15)$ is equal to

   (a) 0   (b) 10   (c) 15   (d) 150

33. The multiplicative identity for integers is

   (a) 1   (b) –1

   (c) 0   (d) None of these

34. By what fraction should we multiply 4/5 to get 16/35 ?

   (a) 4/7   (b) 7/4

   (c) 4/5   (d) none of these

35. 5 cm is equal to

(a) 0.005 km

(b) 0.00005 km

(c) 0.000005 km

(d) None of these

36. The mean of the numbers 10,20, 30 and 40 is

(a) 20   (b) 25   (c) 330   (d) 50

37. The range of given data is : 49, 60, 47, 50, 47, 59, 58, 45, 53

(a) 10   (b) 15   (c) 20   (d) 2

38. The solution of the equation $10y - 20 = 30$ is

(a) 1   (b) 2   (c) 3   (d) 5

39. What is the measure of the complement of the angle 90°?

(a) 90°   (b) 0°   (c) 180°   (d) 360°

40. In which case of the following lengths of sides of a triangle, is it possible to draw a triangle?

(a) 3 cm, 4 cm, 7 cm

(b) 2 cm, 3 cm, 7 cm

(c) 3 cm, 4 cm, 5 cm

(d) 3 cm, 3 cm, 7 cm

Section-III (MAT)

41. 3, 5, 7, 9, 11, 13, 15, 17, ?

(a) 14   (b) 19   (c) 15   (d) 21

42. 2, 3, 5, 7, 11, ?, 17

(a) 14   (b) 13   (c) 10   (d) 4

43. 2, 5, 10, 17, ?

(a) 24   (b) 25   (c) 26   (d) 27

44. 0, 7, 26, ?, 124, 215

(a) 51   (b) 37   (c) 63   (d) 16

45. 3, 4, 10, 33, 136, ?

(a) 240   (b) 430   (c) 685   (d) 820

46. 11, 15, 21, 29, ?

(a) 40   (b) 41   (c) 37   (d) 39

47. 3, 6, 18, 72, 360, ?

(a) 720   (b) 1080 (c)   1600 (d) 2160

48. 6, 12, 7, 11, 8, 10, 9, ?

    (a) 8   (b) 9   (c) 11   (d) 10

49. A, C, ?, G, I

    (a) E   (b) D   (c) F   (d) H

50. V, T, R, ?, N, ?

    (a) O,M   (b) P,M   (c) L,P   (d) P,L

51. A, C, F, ?, O

    (a) G   (b) J   (c) H   (d) K

52. DC, DE, FE, ?, HG, HI

    (a) FE   (b) FG   (c) GF   (d) GH

53. CIR, GMV, KQZ, OUD, ?

    (a) PYH   (b) SYH   (c) SZI   (d) SYI

54. DTE, SBM, AJU, IRC, ?

    (a) OZL   (b) QYZ   (c) QZL   (d) QZK

55. 128, 110, 90, 68, ?

    (a) 36   (b) 42   (c) 44   (d) 48

56. 1, 2, 4, 7, ?, 16

    (a) 9   (b) 11   (c) 12   (d) 13

57. 6, 8, 9, 12, 14, 18, ?

    (a) 21   (b) 19   (c) 20   (d) none of these

58. 4, 9, 19, 34, 54, ?

    (a) 66   (b) 75   (c) 79   (d) 84

59. 31, 29, 24, 22, 17 ?, ?

    (a) 15, 13   (b) 10, 8   (c) 14, 12   (d) 15, 10

60. 3, 6, 11, 18, ?

    (a) 19   (b) 27   (c) 37   (d) none of these