Name .....

Batch..... Roll No. .....

Date: 21-07-2024

# FOUNDATION

## SCREENING MOCK TEST SERIES

| FN24$_M$/TP/C/ | PHYSICS+CHEMISTRY+BIOLOGY+MATHEMATICS | Class : VIII (Studying) |
|---|---|---|

## PHYSICS

1. Which of the following is a good conductor of electricity ?

   A) Wood B) Plastic C) Copper D) Diamond

2. What is the full form of LED ?

   A) Light Emitting Diode B) Light Electricity Diode

   C) Light Emitting Device D) Light Electricity Device

3. The total path length travelled by an object is called

   A) Speed B) Distance C) Velocity D) Displacement

4. Find the odd one out

   A) Mass B) Distance C) Speed D) Displacement

5. What is the S.I. unit of force ?

   A) Newton B) Kelvin C) Dyne D) kg

6. Find out the correct relationship from the following ?

   A) $P = F \times A$ B) $P = \frac{F}{A}$ C) $F = \frac{P}{A}$ D) $P = \frac{A}{F}$

7. The phenomenon of light coming back after hitting a smooth plane surface is called

   A) Reflection B) Refraction C) Dispersion D) Diffusion

8. Calculate the angle of reflection, if the angle of incidence is $60^o$ ?

   A) $30^o$ B) $60^o$ C) $90^o$ D) $120^o$

9. Which mode of heat transfer does not require a medium ?

   A) Conduction B) Convection C) Radiation D) Refraction

10. Which of the following device is used to measure temperature ?

    A) Barometer B) Odometer C) Thermometer D) Sphygmomanometer

11. Identify the electric component from the symbol given below ?

    A) Battery B) Resistor C) Capacitor D) Wire

12. Which type of breeze occurs during day time ?

    A) Sea breeze B) Land breeze C) Solar breeze D) All of the above

13. The device used to generate electricity is called a

    A) Cell B) Resistor C) Bulb D) Switch

14. What is the normal body temperature of a healthy person ?

    A) 37 K B) $37^oC$ C) 37 F D) None of these

15. 'Motion of a swing' is an example of

    A) Rectilinear motion B) Circular motion

    C) Rotational motion D) Oscillatory motion

16. A boy walks from his house to school with a speed of $\frac{35}{18}$ m/s. If he takes 2 hrs to reach school, calculate the distance from his house to school ?

A) 3.5 km B) 7 km C) 14 km D) 20 km

17. Friction can be reduced by using

A) Oil B) Powder C) Grease D) All of these

18. Which of the following surface causes more friction ?

A) Surface of tyres B) Surface of mirror C) Glossy tiles D) Marble slab

19. Which of the following is a scalar quantity ?

A) Force B) Pressure C) Velocity D) Acceleration

20. Name the liquid metal used in a thermometer ?

A) Aluminium B) Zinc C) Mercury D) Gold

21. Which type of mirror is used as rear view mirror in vehicles ?

A) Concave mirror B) Convex mirror C) Plane mirror D) All of these

22. According to snell's law $\frac{\sin i}{\sin r}$ =

A) $\frac{i}{r}$ B) 90 C) 0 D) a constant

23. The process by which heat flows from the hotter end to colder end of an object is called

A) Conduction B) Convection C) Radiation D) Polarization

24. Which of the following is a contact force ?

A) Magnetic force B) Frictional force C) Electrostatic force D) Gravitational force

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

A) Element B) Filament C) Component D) Rod

**CHEMISTRY**

26. A change in which one or more new substance are formed is called a

A) Chemical change B) Physical change C) Biological change D) Thermal change

27. Conversion of solid substance directly into gas is called

A) Solidification B) Sublimation C) Condensation D) Vaporisation

28. ..... can be used to separate mixture of water and acetone

A) Distillation B) Filtration C) Washing D) Magnetic separation

29. Ethanol and methanol having small difference in their boiling points. They can be separated by ..... method

A) Magnetic separation B) Distillation

C) Fractional distillation D) Magnetic separation

30. The method used to separate more than one solute dissolved in the same solvent is called ?

A) Centrifugation B) Froth floatation C) Adsorption D) Chromatography

31. What is the basis of naming of element Polonium ?

A) Country B) Scientist C) Colour D) Planet

32. What is the symbol of calcium ?

A) CA B) Ca C) cA D) ca

33. What is the formula of carbon dioxide

A) CO B) $CO_2$ C) $C_2O$ D) 2CO

34. What do you mean by inexhaustible natural resources

A) Resources present in unlimited quantity in nature and not likely to be exhausted by human activities

B) Resources present in unlimited quantity and exhausted by human activities

C) The amount of resources limited and exhausted by human activities

D) The amount of resources limited and not likely to be exhausted by human activities

35. Some exhaustible natural resources like coal, petroleum, natural gas formed from the dead remains of living organisms, these are called

A) Liquified petroleum gas B) Compressed natural gas

C) Fossil fuels D) Coal tar

36. What is the full form of CNG

A) Compressed natural gas B) Combustible natural gas

C) Compound natural gas D) Composite natural gas

37. Which gas is used as the fire exstinguisher, for fires involving electrical equipment and inflammable materials

A) $CO_2$ B) Nitrogen C) Oxygen D) Helium

38. A solution containing a small amount of solute is called

A) Dilute solvent B) Concentrated solution

C) Dilute solution D) Dilute solute

39. A solution obtained by dissolving maximum amount of solute at a given temperature is called

A) Dilute solution B) Concentrated solution

C) Unsaturated solution D) Saturated solution

40. Find out the colouring agent from the following

A) Vanillin B) Tartrazine C) Phosphoric acid D) Allyl hexanoate

41. Find out taste enhancer from the following

A) Vanillin B) Tartrazine C) Allyl hexanoate D) Erythrosine

42. What is the boiling point of water

A) 200$^oC$ B) 100$^oC$ C) 273$^oC$ D) 0$^oC$

43. What is the freezing point of water

A) 100$^oC$ B) 273$^oC$ C) 0$^oC$ D) 200$^oC$

44. When water is converted to ice its volume increases and what happens to density

A) decreases B) increases C) no change D) large increase

45. Why liquid droplets assume spherical shape ?

A) To increase surface area B) To decrease density

C) For acquire minimum surface area D) To increase volume

46. Complete the following reaction

$Mg + H_2O \rightarrow MgO + .....$

A) Oxygen B) Hydrogen C) Magnesium D) Nitrogen

47. Pure water has neither the properties of acid nor those of alkali. Hence it is called

A) Acidic solvent B) Alkaline solvent C) Amphoteric solvent D) Neutral solvent

48. The water in which soap does not lather easily is called

A) Hard water B) Soft water C) Heavy water D) Temporary water

49. The substances made of particles of different nature are called

A) Element B) Compound C) Mixture D) Pure substance

50. Suggest a method to separate kerosene and water from this mixture

A) Distillation B) Chromatography C) Centrifugation D) Separating funnel

**BIOLOGY**

51. The green revolution in India was brought about by importing

A) High yielding varieties of rice B) High yielding varieties of wheat

C) High yielding varieties of ground nut D) High yielding varieties of maize

52. The process of sowing seeds manually by sprinkling them into the soil is known as

A) Breeding B) Cultivation C) Broadcasting D) Levelling

53. Which of the following is an insecticide ?

A) Disyston B) Butachlor C) Dalapon D) Metachlor

54. Match the column

| | Column A | | Column B |
|---|---|---|---|
| a) | Kharif crop | i) | Olbbler |
| b) | Rabi crop | ii) | Hoe |
| c) | Plough | iii) | Paddy |
| d) | Sowing | iv) | Wheat |
| | | v) | Sickle |

A) a-iii, b-iv, c-ii, d-i B) a-iv, b-iii, c-ii, d-i

C) a-iv, b-iii, c-i, d-ii D) a-i, b-iii, c-iv, d-ii

55. Identify the bacterium that converts milk into curd

A) Acetobacter aceti B) Lactobacillus C) Streptococcus D) Salmonella

56. The process of food preservation used to store good in airtight containers after sterilization is called as

A) Smoking B) Pasteurization C) Drying D) Canning

57. Pseudomonas is

A) Nitrogen fixing bacteria B) Denitrifying bacteria

C) Nitrifying bacteria D) Both B and C

58. A disease is caused by a protozoan. It causes fever and can cause anemia which disease is described above

A) Cholera B) Malaria C) Filariasis D) Heptatitis B

59. Symbiotic nitrogen fixing cyanobacteria are present in
A) Azolla B) Pinus C) Cycas D) Gnetum

60. Parasitic roots are also called as sucking roots
A) They help to increase the fertility of the soil by nitrogen fixation
B) These roots absorb atmospheric air of respiration
C) They protrude into the host plant for absorption of nutrients
D) They have sucking tissues to absorb moisture from air

61. In this system of roots, primary roots and its branched roots are present ?
A) Adventitious root system B) Tap root system
C) Fibrous roots D) Terminal roots

62. A betel plant has these kinds of roots
A) Fleshy roots B) Clinging roots C) Respiratory roots D) Photosynthetic roots

63. Anaerobic respiration takes place in
A) Saccharomyces cerevisiae B) Cats
C) Frogs D) Fishes

64. Lungs are protected by two membrane covering called as
A) Meninges B) Diaphragm C) Pleural membrane D) Dura matter

65. Cutaneous respiration is the only mode of respiration in
A) Fish B) Earthworm C) Frog D) Human

66. Find the mismatched pair
A) Skin - Earthworm
B) Gills - Dolphins
C) Spiracles - Grass hopper
D) Lungs - Humans

67. Osmotic pressure is measured in
A) Pascals B) Bars C) Atmospheres D) All

68. Transport through which of the following is bidirectional ?
A) Xylem B) Phloem C) Root hairs D) Leaves

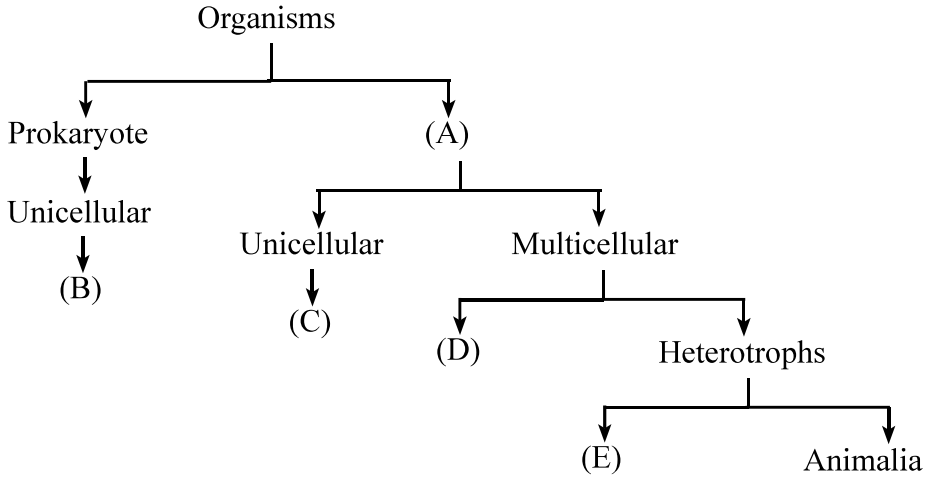
69. Transport of food over long distances through vascular system is called
A) Transpiration B) Transportation C) Translocation D) Conduction

70. Which vein carries oxygenated blood ?
A) Pulmonary vein B) Renal vein C) Thoracic vein D) Hepatic vein

71. The expulsion of urine from the urinary bladder is called
A) Filtration B) Micturition C) Diuresis D) Ultra filtration

72. Five kingdom classification was proposed by
A) R.H. Whittaker B) Aristotle C) Alexander Flemming D) Carl Linnaeus

73. Complete the flow chart




A) A-Eukaryotes, B-Monera, C-Protista, D-Autotrophs, E-Fungi

B) A-Autotrophs, B-Monera, C-Fungi, D-Protista, E-Eukaryotes

C) A-Monera, B-Fungi, C-Eukaryotes, D-Autotrophs, E-Protista

D) A-Monera, B-Protista, C-Fungi, D-Eukaryotes, E-Autotrophs

74. The trees of which of the following layer in a forest gets a lot of sunlight ?

A) Emergent layer B) Canopy C) Understorey D) Forest floor

75. The biotic component utilizes carbon dioxide from the atmosphere by the process known as

A) Respiration B) Transpiration C) Photosynthesis D) Decomposition

**MATHEMATICS**

76. If two lines are parallel, what is the relationship between their slopes ?

A) Same B) Different C) Zero D) Infinity

77. Multiply the fractions

$\frac{2}{3}\times\frac{3}{4}$

A) 1 B) 0 C) $\frac{1}{2}$ D) $\frac{3}{4}$

78. Which of the following statements is true

A) The sum of two positive integers is always positive

B) The sum of two negative integers is always positive

C) The sum of a positive and negative integer is always negative

D) The sum of two negative integers is always negative

79. Which of the following decimals is the greatest

A) 0.8 B) 0.085 C) 0.807 D) 0.089

80. What is the value of $(-3)\times(-5)$

A) $-15$ B) 15 C) 0 D) $-1$

81. What is the decimal representation of $\frac{3}{10}+\frac{2}{5}$

A) 0.5 B) 0.7 C) 0.8 D) 1.0

82. Simplify the fractions

$\frac{24}{32}$

A) $\frac{1}{2}$ B) $\frac{3}{4}$ C) $\frac{2}{3}$ D) $\frac{3}{8}$

83. What is the distance between two parallel lines ?

A) Zero B) Infinity C) Constant D) Variable

84. If two angles are complementary, then the sum of their measures is

A) 90 degrees B) 180 degrees C) 270 degrees D) 360 degrees

85. If two lines intersect, then the vertically opposite angles are

A) Equal and acute B) Equal and obtuse C) Equal and right angles D) Supplementary

86. In a triangle if the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of the other two sides, then the triangle is

A) Isosceles B) Equilateral C) Right angles D) Scalene

87. In a triangle the sum of any two sides is always

A) Less than the third side B) Greater than the third side

C) Equal to the third side D) None of these

88. If two triangles are congruent, then

A) They have the same shape but not necessarily the same size

B) They have the same size but not necessarily the same shape

C) They have the same shape and size

D) They have different shapes and sizes

89. Which of the following is a sufficient condition for two triangles to be congruent

A) SAS (side-Angle-Side) B) ASA (Angle-Side-Angle)

C) SSS (Side-Side-Side) D) All of the above

90. Solve the equation : 2x + 5 = 11

A) x = 2 B) x = 3 C) x = 4 D) x = 5

91. Which of the following is a linear equation in one variable

A) $x^2+2x+1=0$ B) 2x + 3 = 5 C) $x^3-2x^3+x+1=0$ D) $x^2-4x+4=0$

92. Which of the following is a rational number ?

A) $\sqrt{2}$ B) $\frac{3}{4}$ C) $\pi$ D) $2\sqrt{3}$

93. What is the additive identity for rational numbers ?

A) 0 B) 1 C) –1 D) 2

94. What is the value of $\sqrt{256}$

A) 12 B) 14 C) 16 D) 18

95. Which of the following number is a perfect square ?

A) 120 B) 121 C) 130 D) 140

96. Which of the following number is a perfect cube ?

A) 64 B) 65 C) 66 D) 67

97. What is the value of $2^3 \times 2^5$

A) $2^8$ B) $2^{10}$ C) $2^{12}$ D) $2^{15}$

98. Which of the following is equivalent to $\left(2^3\right)^4$

A) $2^7$ B) $2^{10}$ C) $2^{12}$ D) $2^{15}$

99. If $\frac{x}{2}+3=5$, then the value of x

A) 2 B) 4 C) 6 D) 8

100. What is the sum of (–7) and 5

A) –12 B) –2 C) 2 D) 12

Name .....

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# FOUNDATION

## SCREENING MOCK TEST SERIES

| FN24$_M$/TP/C/ | PHYSICS+CHEMISTRY+BIOLOGY+MATHEMATICS | Class : VIII (Studying) |
|---|---|---|

| PHYSICS | | CHEMISTRY | | BIOLOGY | | MATHEMATICS | |
|---|---|---|---|---|---|---|---|
| 1. | C | 26. | A | 51. | B | 76. | A |
| 2. | A | 27. | B | 52. | C | 77. | C |
| 3. | B | 28. | A | 53. | A | 78. | D |
| 4. | D | 29. | C | 54. | A | 79. | C |
| 5. | A | 30. | D | 55. | B | 80. | B |
| 6. | B | 31. | A | 56. | D | 81. | B |
| 7. | A | 32. | B | 57. | D | 82. | B |
| 8. | B | 33. | B | 58. | B | 83. | C |
| 9. | C | 34. | A | 59. | A | 84. | A |
| 10. | C | 35. | C | 60. | C | 85. | C |
| 11. | B | 36. | A | 61. | B | 86. | C |
| 12. | A | 37. | A | 62. | B | 87. | B |
| 13. | A | 38. | C | 63. | A | 88. | C |
| 14. | B | 39. | D | 64. | C | 89. | D |
| 15. | D | 40. | B | 65. | B | 90. | B |
| 16. | C | 41. | A | 66. | B | 91. | B |
| 17. | D | 42. | B | 67. | D | 92. | B |
| 18. | A | 43. | C | 68. | B | 93. | A |
| 19. | B | 44. | A | 69. | C | 94. | C |
| 20. | C | 45. | C | 70. | A | 95. | B |
| 21. | B | 46. | B | 71. | B | 96. | A |
| 22. | D | 47. | D | 72. | A | 97. | A |
| 23. | A | 48. | A | 73. | A | 98. | C |
| 24. | B | 49. | C | 74. | A | 99. | B |
| 25. | A | 50. | D | 75. | C | 100. | B |