

Question1: When a gas jar full of air is placed upside down on a gas jar full of bromine vapours, the red-brown vapours of bromine from the lower jar go upward into the jar containing air. In this experiment:

- (a) Air is heavier than bromine
- (b) Both air and bromine have the same density
- (c) Bromine is heavier than air
- (d) Bromine cannot be heavier than air because it is going upwards against gravity

Question2: When water at 0°C freezes to form ice at the same temperature of 0°C, then it:

- (a) Absorbs some heat
- (b) Releases some heat
- (c) Neither absorbs nor releases heat
- (d) Absorbs exactly $3.34 \times 10^5 \text{J/kg}$ of heat

Question3: The evaporation of a liquid can best be carried out in a:

- (a) Flask
- (b) China dish
- (c) Test tube
- (d) Beaker

Question4. What is the name of the metal which exists in liquid state at room temperature?

- (a) Sodium
- (b) Potassium
- (c) Mercury
- (d) Bromine

Question5. Mixture of two or more metals , or metals and non-metals called as.....

- (a) Alloy
- (b) Solution
- (c) Mixture
- (d) Metallic mixture

Question6. Sol and gel are examples of

- (a) Solid-solid colloids
- (b) Sol is a solid-liquid colloid and gel is liquid solid colloid
- (c) Sol is solid-solid colloid and gel is solid-liquid colloid
- (d) Sol is a liquid-solid colloid and gel is a solid-liquid colloid

Question7: The mass of a single atom of an element X is 2.65×10^{-23} g. The atomic mass and name of the element is:

- a) 16u, oxygen
- b) 16u, Sulphur
- c) 32u, oxygen
- d) 32u, Sulphur

Question8: An element X has valency equal to 3. What will be its formula with carbonate ions?

- a) $X_2(CO_3)_3$
- b) X_2CO_3
- c) XCO_3
- d) $X(CO_3)_3$

Question9: Which of the following has the smallest number of molecules?

- a) 2g of H_2 at STP
- b) 3.4g of NH_3
- c) 0.1 moles of CO_2
- d) 16g of O_2 gas

Question10: The electronic configuration of the element with atomic number 19 is

- (A) 2,8,7
- (B) 2,9,8
- (C) 2,8,8,1
- (D) 2,10,7

Question11: The valence electrons of an element are responsible for

- (A) Physical properties of an element
- (B) Chemical properties of an element
- (C) Both the properties
- (D) None of these

Question12: An element has electronic configuration 2,8,4 it will be classified as

- (A) Metal
- (B) Non metal
- (C) Metalloid
- (D) None of these

Question13. The third member of the Dobereiner triad consisting of lithium and sodium is :

- (a) Potassium
- (b) Hydrogen
- (c) Boron
- (d) Barium

Question14. If the two members of a Dobereiner triad are chlorine and iodine, the third member of this triad is :

- (a) Fluorine
- (b) Bromine
- (c) Sodium
- (d) Calcium

Question15. If the two members of a Dobereiner triad are sulphur and selenium, the third member of this triad is :

- (a) Calcium
- (b) Barium
- (c) Strontium
- (d) Tellurium

Question16. Full form of WBCs

- (a) White blood cilia
- (b) White bone cell
- (c) White bone cilia
- (d) White blood cells

Question17. Adipose tissue is found below the..... and between

- (a) Heart, lungs
- (b) Skin, internal organs
- (c) Brain, kidneys
- (d) Hairs, eyes

Question18. is present at the growing tips of stem and roots and increases its length

- (a) Parenchyma tissue
- (b) Meristematic tissue
- (c) Apical meristem
- (d) Roots

Question19: What is the phylum of Octopus?

- a) Mollusca
- b) Arthropoda
- c) Annelida
- d) Cnidarian

Question20: What is the mode of nutrition in bacteria?

- a) Autotrophic and heterotrophic
- b) Autotrophic
- c) Heterotrophic
- d) None of the options

Question21: What does a bacteria lack?

- a) Cell wall
- b) DNA
- c) Endoplasmic reticulum
- d) Cytoplasm

Question22: Formula to find the average velocity of a body is given by

- (a) $V_{av} = (u + v)/2$
- (b) $S_n = \{u + a/2(2n-1)\}$
- (c) $S = ut + 1/2 a t^2$
- (d) $V = u + at$

Question23: An object travels 20m in 5 sec and then another 40m in 5 se What is the average speed of the object?

- (a) 2m/s
- (b) 0 m/s
- (c) 12m/s
- (d) 6m/s

Question24: What is the other name for Apis cerana indica?

- a) Indian cow
- b) Indian bee
- c) Indian buffalo
- d) None of the options

Question25: A hammer of mass 500 g, moving at 50m/s, strikes a nail. The nail stops the hammer in a very short time of 0.01 s. The force of the nail on the hammer is

- (a) 3500N
- (b) 1000N
- (c) 2500N
- (d) 500N

Question26: The action and reaction forces referred to in the third law

- (a) Must act on different objects
- (b) Must act on the same object
- (c) May act on different objects
- (d) Need not be equal in magnitude but act in the same direction

Question27: An object will continue to accelerate until the

- (a) Resultant force begins to decrease
- (b) The velocity changes direction
- (c) Resultant force on it is increased continuously
- (d) Resultant force on it is zero

Question28: The relation between the weight of an object on the moon (W_M) and on the earth (W_E)

- (a) $W_M = 6 W_E$
- (b) $W_E = 1/6 W_M$
- (c) $W_M = W_E$
- (d) $W_M = 1/6 (W_E)$

Question29: The weight of an object is:

- (a) lesser on earth and greater on moon
- (b) Equal on both earth and moon
- (c) Greater on earth and lesser on moon
- (d) none of these

Question30: The upward force exerted by the liquid displaced by the body when it is placed inside the liquid is called

- (a) Buoyant force
- (b) Gravitational force
- (c) Centripetal force
- (d) Force of gravitation

Question31. Water stored in a dam possesses:

- (a) No energy
- (b) potential energy
- (c) kinetic energy
- (d) electrical energy

Question32. When a body falls freely towards the earth then the total energy

- (a) remains constant
- (b) increase
- (c) decrease
- (d) first increases and then decreases

Question33. Power of a woman is equal to:

- (a) work /time
- (b) work /time x work
- (c) work x time
- (d) time/work

Question34. Sound waves with frequency less than 20 Hz and more than 20000 Hz is called

- (a) Supersonic and ultrasonic
- (b) Sonic boom and supersonic
- (c) Infrasonic and sonic boom
- (d) Infrasonic and ultrasonic

Question35. The product of time-period and frequency is

- (a) Infinity
- (b) Zero
- (c) Unity
- (d) None of these

Question36. Sound waves are

- (a) Longitudinal
- (b) Partly longitudinal, partly transverse
- (c) Transverse
- (d) Sometimes longitudinal, sometimes transverse

Question37: The disease caused due to worm is

- a) Sleeping sickness
- b) Tetanus
- c) Rabies
- d) Filariasis

Question38: Penicillin is a drug that can

- a) An antibiotic that can kill bacteria
- b) Interfere in the biological pathway of bacteria
- c) None of the options
- d) Both Interfere in the biological pathway of bacteria and An antibiotic that can kill bacteria

Question39: The pathogens of disease are

- a) Protozoa
- b) Bacteria
- c) Virus
- d) All of the options

Question40: The life supporting zone of the earth is

- a) Lithosphere
- b) Biosphere
- c) Hydrosphere
- d) Atmosphere

Question41: Depletion of ozone molecules in the stratosphere is due to

- a) Halogen compound
- b) Fluorine compound
- c) Chlorine compound
- d) None of the options

Question42: On moon the temperature ranges from -190 degree C to 110 degree C. This is due to

- a) Water bodies present
- b) No bio geo chemical cycle
- c) No atmosphere
- d) No water bodies present

Question43: Leghorn is related to

- a) Poultry
- b) Apiculture
- c) Dairy farming
- d) Pisciculture

Question44: What is the process of growing two or more crops in a definite pattern?

- a) Inter-cropping
- b) Crop rotation
- c) Mixed cropping
- d) Organic cropping

Question45: Pasturage is related to

- a) Fishery
- b) Cattle
- c) Apiculture
- d) Sericulture

Answer:

1. c	2. b	3. b	4. c	5. a	6. b	7. a
	8. a	9. c	10. c	11. b	12. c	13. a
	14. b	15. d	16. d	17. b	18. c	19. a
	20. a	21. c	22. a	23. d	24. b	25. c
	26. a	27. d	28. d	29. c	30. a	31. b
	32. a	33. a	34. d	35. c	36. a	37. d
	38. c	39. a	40. b	41. a	42. c	43. a
	44. a	45. c				