

1. A concave lens always forms an image which is

- (a) real and erect
- (b) virtual and erect
- (c) real and inverted
- (d) virtual and inverted

ANS (B)

2. A vitamin requires cobalt for its activity. The vitamin is

- (a) Vitamin B12
- (b) Vitamin D
- (c) Vitamin B2
- (d) Vitamin A

ANS (A)

3. One of the constituents of tear gas is

- (a) Ethane
- (b) Ethanol
- (c) Ether
- (d) Chloropicrin

ANS (D)

4. The modulus of rigidity is the ration of

- (a) longitudinal stress to longitudinal strain
- (b) Volume stress to volume strain
- (c) shearing stress to shearing strain
- (d) tensile stress to tensile strain

ANS (B)

5. The propagation of sound waves in a gas involves

- (a) adiabatic compression and refraction
- (b) isothermal compression and rarefaction
- (c) isochoric compression and rarefaction
- (d) isobaric compression and rarefaction

ANS (A)

6. An stomic clock is based on transitions in

- (a) Sodium
- (b) Caesium
- (c) Magnesium
- (d) Aluminium

ANS (B)

7. Plasma membrane in eukaryotic celle is made up of

- (a) Phospholipid
- (b) Lipoprotein

- (c) Phospholipo-protein
- (d) Phospho-protein

ANS (A)

8. Which one of the following is also called the 'power plants' of the cell ?

- (a) Golgi body
- (b) Mitochondrion
- (c) Ribosome
- (d) Lysosome

ANS (B)

9. What is the chemical name of vinegar ?

- (a) Citric acid
- (b) Acetic acid
- (c) Pyruvic acid
- (d) Malic acid

ANS (B)

10. Which of the following is not a property of heavy water ?

- (a) Boiling point of heavy water is lower than that of, ordinary water
- (b) Density of heavy water is higher than that of ordinary water
- (c) Freezing point of heavy water is higher than that of ordinary water
- (d) It produces corrosion

ANS (A)

11. In which of the following processes is energy released ?

- (a) Respiration
- (b) Photosynthesis
- (c) Ingestion
- (d) Absorption

ANS (A)

12. Animals living in the three trunks are known as

- (a) Arboreal
- (b) Volant
- (c) Amphibious
- (d) Aquatic

ANS (A)

13. In input frequency of a full wave rectifier be n , then output frequency would be

- (a) n^2
- (b) n
- (c) $3n^2$
- (d) $2n$

ANS (A)

14. Heat transfer horizontally within the atmosphere is called

- (a) Conduction
- (b) Convection
- (c) Absorption
- (d) Advection

ANS (D)

15. Noise is measured in

- (a) Watt
- (b) REM
- (c) Centigrade
- (d) Decibel

ANS (D)

16. The bats can fly in the dark because

- (a) they can see the objects in darkness
- (b) they have weak legs and are likely to be attacked by predators
- (c) they generate flashes of light
- (d) they generate ultrasonic sound waves

ANS (D)

17. What changes will happen to a bow of ice and water kept at exactly zero degree Celsius?

- (a) All ice will melt
- (b) All water will become ice
- (c) No change will happen
- (d) Only some ice will melt.

ANS (C)

18. The art and science of map making is called

- (a) Remote Sensing
- (b) Cartography
- (c) Photogrammetry
- (d) Mapping

ANS (B)

19. Silver halides are used in photographic plates because they are

- (a) oxidised in air
- (b) soluble in hyposolution
- (c) reduced by light
- (d) totally colourless

ANS (C)

20. Tetra ethyle lead (TEL) is

- (a) a catalyst in burning fossil fuel

- (b) an antioxidant
- (c) a reductant
- (d) an antiknock compound

ANS (D)

21. Curie point is the temperature at which

- (a) Matter becomes radioactive
- (b) A metal loses magnetic properties
- (c) A metal loses conductivity
- (d) Transmutation of metal occurs.

ANS (B)

22. The isotope used for the production of atomic energy is

- (a) U-235
- (b) U-238
- (c) U-234
- (d) U-236

ANS (A)

23. The acceleration due to gravity at the equator

- (a) is less than that at the poles
- (b) is greater than that at the poles
- (c) is equal to that at the poles
- (d) does not depend on the earth's centripetal acceleration

ANS (A)

24. Which of the following is not a nucleon ?

- (a) Proton
- (b) Neutron
- (c) Electron
- (d) Positron

ANS (D)

25. The material used in the manufacture of lead pencil is

- (a) Graphite
- (b) Lead
- (c) Carbon
- (d) Mica

ANS (A)

26. Angle of friction and angle of repose are

- (a) equal to each other
- (b) not equal to each other
- (c) proportional to each other
- (d) None of the above

ANS (A)

27. What happens to a person who receives the wrong type of blood?

- (a) All the arteries constrict
- (b) All the arteries dialates
- (c) The RBCs agglutinate
- (d) The spleen and lymphnodes deteriorate

ANS (C)

28. If all bullets could not be removed from gun shot injury of a man, it may cause poisoning by

- (a) Mercury
- (b) Lead
- (c) Iron
- (d) Arsenic

ANS (D)

29. Ringworm is a disease.

- (a) Bacterial
- (b) Protozoan
- (c) Viral
- (d) Fungal

ANS (D)

30. Pituitary gland is situated in

- (a) the base of the heart
- (b) the base of the brain
- (c) the neck
- (d) the abdomen

ANS (B)

31. Saliva helps in the digestion of:

- (a) Fats
- (b) Starch
- (c) Proteins
- (d) Vitamins

ANS (B)

32. The longest bone in the human body is:

- (a) Ulna
- (b) Humerus
- (c) Femur
- (d) Tibia

ANS (C)

33. The time period of a pendulum when taken to the Moon would:

- (a) remain the same

- (b) decrease
- (c) become zero
- (d) increase

ANS (D)

34. The function of ball bearings in a wheel is:

- (a) to increase friction
- (b) to convert kinetic friction into rolling friction
- (c) to convert static friction into kinetic friction
- (d) just for convenience

ANS (B)

35. 'Shock-absorbers' are usually made of steel as it:

- (a) is not brittle
- (b) has lower elasticity
- (c) has higher elasticity
- (d) has no ductile property

ANS (C)

36. Which of the following could be used as fuel in propellant or rockets?

- (a) Liquid Hydrogen + Liquid Nitrogen
- (b) Liquid Oxygen + Liquid Argon
- (c) Liquid Nitrogen + Liquid Oxygen
- (d) Liquid Hydrogen + Liquid Oxygen

ANS (D)

37. The addition of gypsum to portland cement helps in:

- (a) increasing the strength of cement
- (b) rapid setting of cement
- (c) preventing rapid setting of cement
- (d) reduction in the cost of cement

ANS (C)

38. White lung disease is prevalent among the workers of:

- (a) Paper industry
- (b) Cement industry
- (c) Cotton industry
- (d) Pesticide industry

ANS (D)

39. Iodoform is used as an:

- (a) antipyretic
- (b) analgesic
- (c) antiseptic
- (d) anaesthetic

ANS (C)

40. An artificial ecosystem is represented by:

- (a) pisciculture tank
- (b) agricultural land
- (c) zoo
- (d) aquarium

ANS (D)

41. The constituents of automobile exhaust that can cause cancer is are:

- (a) Oxides of nitrogen
- (b) Carbon monoxide
- (c) Polycyclic hydrocarbons
- (d) Lead

ANS (D)

42. The optimum dissolved oxygen level (in mg/litre) required for survival of aquatic organisms is:

- (a) 4 – 6
- (b) 2 – 4
- (c) 8 – 10
- (d) 12 – 16

ANS (A)

43. The world's only floating national park is situated in:

- (a) Manipur
- (b) Kuala Lumpur
- (c) Bilaspur
- (d) Dispur

ANS (A)

44. Who invented vaccination for 'Small Pox'?

- (a) Sir Fredrick Grant Banting
- (b) Sir Alexander Fleming
- (c) Edward Jenner
- (d) Louis Pasteur

ANS (C)

45. BT seed is associated with

- (a) Rice
- (b) Wheat
- (c) Cotton
- (d) Oil seeds

ANS (C)

46. Which one of the following minerals is found in Monazite sand?

- (a) Potassium

- (b) Uranium
- (c) Thorium
- (d) Sodium

ANS (C)

47. In coriander, the useful parts are

- (a) roots & leaves
- (b) leaves & flowers
- (c) leaves & dried fruits
- (d) flowers & dried fruits

ANS (C)

48. Which plant is called Herbal Indian Doctor?

- (a) Amla
- (b) Mango
- (c) Neem
- (d) Tulsi

ANS (A)

49. The pH of human blood is

- (a) 7.2
- (b) 7.8
- (c) 6.6
- (d) 7.4

ANS (D)

50. Which amongst the following is largest endocrine gland in the body?

- (a) Thyroid
- (b) Parathyroid
- (c) Adrenal
- (d) Pituitary

ANS (A)