

## Physics Q&A - 29<sup>th</sup> July 2017

Q1. The first metal used by man was

- (a) gold
- (b) silver
- (c) copper
- (d) iron

Ans: c

Q2. The end product of alcoholic fermentation is

- (a) pyruvic acid
- (b) acetaldehyde
- (c) ethyl alcohol
- (d) formic acid

Ans: c

Q3. Milk is a

- (a) mixture
- (b) element
- (c) metal
- (d) None of these

Ans: a

Q4. Which one is not metal?

- (a) Sulphur
- (b) Sugar
- (c) Nitrogen
- (d) All of these

Ans: d

Q5. Protons and neutrons are bound in a nucleus by the

- (a) short range 'weak interaction'
- (b) short range 'strong interaction'
- (c) long range 'electromagnetic interaction'
- (d) long range 'gravitational interaction'

Ans: b

Q6. Which one among the following is used as a moderator in nuclear reactors?

- (a) Ozone
- (b) Heavy hydrogen
- (c) Heavy water
- (d) Hydrogen peroxide

Ans: c

Q7. The most important ore of Aluminium is —

- (a) Bauxite
- (b) Calamine
- (c) Calcite
- (d) Galena

Ans: a

Q8. Which one of the following elements exists in liquid state at room temperature?

- (a) Mercury
- (b) Lead
- (c) Sodium
- (d) Calcium

Ans: a

Q9. The metal constituent of chlorophyll is

- (a) Iron
- (b) Potassium
- (c) Manganese
- (d) Magnesium

Ans: d

Q10. Which one among the following does not have an allotrope?

- (a) Oxygen
- (b) Sulphur
- (c) Nitrogen
- (d) Carbon

Ans: c

Q11. The acid in gastric juice is

- (a) acetic acid
- (b) nitric acid

- (c) hydrochloric acid
- (d) sulphuric acid

Ans: c

Q12. Scattering of light takes place in

- (a) electroplating
- (b) electrolysis
- (c) solution of electrolyte
- (d) colloidal solution

Ans: d

Q13. Which is used in storage batteries?

- (a) Copper
- (b) Lead
- (c) Tin
- (d) Zinc

Ans: b

Q14. Stainless steel contains

- (a) Fe + Cr + Ni
- (b) Fe + Ni + Cu
- (c) Fe + Cr + Cu
- (d) Fe + C + Ni

Ans: a

Q15. The gas is commonly used in anaesthesia

- (a) methane
- (b) nitrous oxide
- (c) nitrogen
- (d) hydrogen peroxide

Ans: b

Q16. The clouds float in the atmosphere because of their low

- (a) temperature
- (b) velocity
- (c) pressure
- (d) density

Ans: d

Q17. Sound cannot travel through

- (a) solids
- (b) liquids
- (c) gases
- (d) vacuum

Ans: d

Q18. Noise and music differ in their

- (a) quality
- (b) tone
- (c) note
- (d) pitch

Ans: c

Q19. If a body is charged by rubbing it, its weight

- (a) remains precisely constant
- (b) increases slightly
- (c) decreases slightly
- (d) may increase slightly or may decrease slightly

Ans: d

Q20. At the time of short circuit, the current in the circuit

- (a) vary continuously
- (b) increases heavily
- (c) decreases substantially
- (d) does not change

Ans: b

Q21. A vibrating body

- (a) will always produce sound
- (b) may or may not produce sound if the amplitude of vibration is low
- (c) will produce sound which depends upon frequency
- (d) None of these

Ans: c

Q22. The special technique used in ships to calculate the depth of ocean beds is

- (a) LASER
- (b) SONAR
- (c) sonic boom
- (d) reverberation

Ans: b

Q23. When the distance between the object and the plane mirror increases

- (a) the image will changed
- (b) the size of the image will become less than the size of the object
- (c) the distance between the image and the plane mirror increases
- (d) the distance between the image and the plane mirror decreases

Ans: c

Q24. Butter paper is an example of ..... object.

- (a) a transparent
- (b) a translucent
- (c) an opaque
- (d) a luminous

Ans: b

Q25. When a ship floats on water

- (a) it displaces no water
- (b) the mass of water displaced is equal to the mass of the ship
- (c) the mass of water displaced is lesser than the mass of the ship
- (d) the mass of water displaced is greater than the mass of the ship

Ans: b

Q26. A long jumper runs before jumping because he

- (a) covers a greater distance
- (b) maintains momentum conservation
- (c) gains energy by running
- (d) gains momentum

Ans: b

Q27. A book is kept on the surface of a table. If the gravitational pull of the earth on the book is the force of action, then the force of reaction is exerted by

- (a) the book on the table
- (b) the book on the earth

- (c) the table on the book
- (d) the table on the earth

Ans: c

Q28. A body is thrown vertically upwards and then falls back on the ground. Its potential energy is maximum

- (a) on the ground
- (b) at the maximum height
- (c) during the return journey
- (d) both on the ground and at the maximum height

Ans: d

Q29. A jet engine works on the principle of conservation of

- (a) linear momentum
- (b) angular momentum
- (c) energy
- (d) mass

Ans: a

Q30. One feels heavier in a lift when the lift

- (a) is going down steadily
- (b) just begins to go up
- (c) is moving up steadily
- (d) descends freely

Ans: b