Physics Q&A - 28th July 2017:

Q1. To an astronaut in space, the sky will appear to be
(a) violet
(b) red
(c) blue
(d) black
Ans: d

Q2. On a rainy day, small oily films on water show brilliant colours. This is due to
(a) scattering
(b) interference
(c) polarisation
(d) none of these
Ans: b

Q3. Rainbow formation is due to
(a) absorption of sunlight by water droplets
(b) diffusion of sunlight through water droplets
(c) ionisation of water droplets
(d) refraction and reflection of sunlight by water droplets
Ans: d

Q4. Red light is used in traffic signals, because
(a) colour of blood is red
(b) animals can identify red
(c) red light disperses least
(d) red is the symbol of danger
Ans: c

Q5. Golden view of sea shell is due to
(a) diffraction
(b) dispersion
(c) polarisation
(d) reflection
Ans: a

Q6. A star appears twinkling in the sky because of
(a) scattering of light by atmosphere
(b) reflection of light by atmosphere
(c) refraction of light by atmosphere
(d) diffraction of light by atmosphere
Ans: c

Q7. When a strong beam of light is passed through a colloidal solution, the light will
(a) be scattered
(b) pass unchanged
(c) be absorbed
(d) be reflected
Ans: a

Q8. Persons suffering from myopia are advised to use
(a) convex lens
(b) concave lens
(c) plano-convex lens
(d) plano-concave lens
Ans: b

Q9. The primary colours in photography are
(a) red, blue, yellow
(b) red, yellow, green
(c) red, blue, green
(d) blue, yellow, green
Ans: c

Q10. Mirage is an example
(a) refraction of light only
(b) total internal, reflection of light only
(c) refraction and total internal reflection of light
(d) dispersion of light only
Ans: c

Q11. Optical fibres are based on the phenomenon of
(a) interference

(b) dispersion
(c) diffraction
(d) total internal reflection
Ans: d

Q12. The phenomenon of light associated with the appearance of blue colour of the sky is
(a) interference
(b) reflection
(c) refraction
(d) scattering
Ans: d

Q13. Lens in made up of
(a) pyrex glass
(b) flint glass
(c) ordinary glass
(d) cobalt glass
Ans: b

Q14. Lambert's law is related to
(a) reflection
(b) refraction
(c) interference
(d) illumination
Ans: d

Q15. A water tank appears shallower when it is viewed from top due to
(a) rectilinear propagation of light
(b) reflection
(c) total internal reflection
(d) refraction
Ans: d

Q16.Radioactivity was discovered by
(a) Rutherford
(b) Henry Becquerel
(c) Bohr

(d) Madame Curie
Ans: b

Q17. Photoelectric effect was discovered by
(a) Hertz
(b) Einstein
(c) Plank
(d) Bohr
Ans: a

Q18. A nanometre is equal to
(a) 10-4 cm
(b) 10-7 cm
(c) 10-8 cm
(d) 10-9 cm
Ans: b

Q19. Pyrometer is used to measure
(a) air pressure
(b) humidity
(c) high temperature
(d) intensity of earthquake
Ans: c

Q20. The apparatus used to measure the intensity of light is known as
(a) Anemometer
(b) Calorimeter
(c) Lux meter
(d) Altimeter
Ans: c

Q21. A man is standing on a boat in still water. If he walks towards the shore, the boat will
(a) move towards the shore
(b) move away from the shore
(c) remain stationary
(d) sink
Ans: b

Q22. Richter scale is used for measuring
(a) velocity of sound
(b) intensity of light
(c) amplitude of seismic waves
(d) intensity of sound
Ans: c

Q23. Electron beam therapy is a kind of radiation therapy to treat
(a) enlarged prostate gland
(b) gall bladder stones
(c) certain types of cancer
(d) kidney stones
Ans: c

Q24. A dynamo which is said to generate electricity actually acts as a
(a) Source of ions
(b) Source of electric charge
(c) Converter of energy
(d) Source of electrons
Ans: c

Q25. Which of the following is not an electromagnetic wave ?
(a) ɣ-rays
(b) cosmic rays
(c) Microwave
(d) None of these
Ans: b

Q26. Astronauts in space can't stand at one place, because
(a) there is no gravity
(b) viscous forces of the atmosphere are very strong
(c) solar wind exert an upward force
(d) atmospheric pressure is very low
Ans: a

Q27. To hear a clear echo, the minimum distance should be

(a) 165 feet
(b) 165 meter
(c) 16.5 feet
(d) 16.5 meter
Ans: d

Q28. A cut diamond sparkles because of its
(a) hardness
(b) high refractive index
(c) emission of light by the diamond
(d) absorption of light by the diamond
Ans: b

Q29. Finger prints on a piece of paper may be detected by sprinkling fluorescent powder on the paper and then looking it into
(a) mercury light
(b) sunlight
(c) infrared light
(d) ultraviolet light
Ans: d

Q30. Kerosene oil rises up in a wick of a lantern because of
(a) diffusion of the oil through the wick
(b) capillary action
(c) buoyant force of air
(d) the gravitational pull of the wick
Ans: b