

**Physics Q&A – 27<sup>th</sup> July 2017:**

Q1. According to the theory of relativity, which of the following always remains constant?

- (a) Length of an object
- (b) Time
- (c) Space
- (d) Velocity of light

Ans: D

Q2. A colour blind person cannot

- (a) see distant objects
- (b) see black colour
- (c) distinguished between certain colours
- (d) have persistence of vision

Ans: C

Q3. A mirage occurs because of

- (a) reflection by hot ground
- (b) total internal reflection by layers of air
- (c) interference of light
- (d) diffraction of light

Ans: B

Q4. A rear-view mirror for driving is

- (a) plain
- (b) concave
- (c) convex
- (d) inverted

Ans: C

Q5. A periscope works on the principal of

- (a) refraction
- (b) total internal reflection
- (c) diffraction
- (d) reflection

Ans: B

Q6. Which one of the following lenses should be used to correct the defect of astigmatism?

- (a) Cylindrical lens
- (b) Concave lens
- (c) Convex lens
- (d) Bifocal lens

Ans: A

Q7. In a laser (say neon laser) all the atoms emit the light waves of

- (a) same frequency
- (b) same amplitude
- (c) same phase
- (d) All of the above

Ans: D

Q8. Which colour is the complementary colour of yellow?

- (a) Blue
- (b) Green
- (c) Orange
- (d) Red

Ans: A

Q9. 'Short-sight' in human eye can be corrected by using proper

- (a) convex lens
- (b) concave lens
- (c) cylindrical lens
- (d) bifocal lens

Ans: B

Q10. Which of the following is used to split white light into different colours?

- (a) Glass slab
- (b) Convex lens
- (c) Concave lens
- (d) Prism

Ans: D

Q11. Hypermetropia or longsight can be corrected by using

- (a) Bifocal lenses
- (b) cylindrical lenses
- (c) concave lenses
- (d) convex lenses

Ans: D

Q12. In mirrors, the back surface is coated with a thin layer of

- (a) mercury
- (b) silver
- (c) red oxide
- (d) silver nitrate

Ans: B

Q13. Which colour of light shows maximum deviation when passed through a prism?

- (a) Red
- (b) Green
- (c) Violet
- (d) Yellow

Ans: C

Q14. Red light is used for signals because it has

- (a) long wavelength
- (b) high intensity
- (c) high frequency
- (d) low refraction in the medium

Ans: A

Q15. The sharpness of television image is termed as its

- (a) clarity
- (b) colour
- (c) resolution
- (d) graphics

Ans: C