

PPSC Physics Full Book

| Sr | Questions | Answers Choice |
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| 1 | For a prism of particular and given wavelength the resolving power varies as | A. First power of lens of its base B. Square of inverse length of its base C. Increases of length of its base D. Cube of the length of its base |
| 2 | The relation between refractive index and critical angle is. | A. $\sin C = 1/n$ B. $\sin n = 1/C$ C. $\sin c = 1$ D. $n = \sin C$ |
| 3 | Refraction contributes to the formation of. | A. Rainbows only B. Mirages only C. Echo D. Rainbows and mirages |
| 4 | Rainbows and mirage are formed by | A. Reflection only B. Refraction only C. dispersion only D. A combination of refraction, total internal refraction and dispersion |
| 5 | A ray of light from air into glass The angle of incidence is 30° if the refractive index of glass is 1.52 The angle of refraction will be. | A. 16.7° B. 19.3° C. 29.6° D. 39.3° |
| 6 | Refractive index of a medium is defined as. | A. speed of light in vacuum/speed of light in medium B. Speed of light in medium/Speed of light in vacuum C. Speed of light in air/speed of light in medium D. Speed of light in medium/Speed of light in air |
| 7 | Fiber optics system can be used for. | A. Word processing B. Image processing and receiving C. Image transmitting D. All of the above |
| 8 | The dioptric power of concave lens of 10 cm focal length is. | A. 0.1 dioptre B. 1.0 dioptre C. 10 dioptre D. -10 dioptre |
| 9 | Two convex lens focal length 'f' use in combination become telescope. When the distance between them is. | A. 1 B. 4f C. 2f D. f/2 |
| 10 | The power of lens in dioptres is | A. Its focal length in meters B. The reciprocal of its focal length in metres C. The reciprocal of length in metres D. The reciprocal of length in centimetres |
| 11 | A bi convex lens of a material of refractive index 1.5 has the radius of curvature of each side equal to 50 cm the power of the lens will be. | A. 0.5 dioptre B. 1.0 dioptre C. 1.5 dioptre D. 2.0 dioptre |
| 12 | If D1 and D2 are the powers of two lenses placed in contact then the power of the combination will be. | A. $D1+D2$ B. $D1-D2$ C. $D1/D2$ D. $D1 \times D2$ |
| 13 | Parallel rays of light are focused by a thin convex lens. A thin concave lens of the same focal length is then joined to the convex lens The focal point will. | A. Shift to infinity B. shift towards the lens by a small distance C. shift away from the lens by a small distance D. Remain at its original position |

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| 14 | The power of a convex lens is 5 D at what distance the object should be placed from the lens so that its real and 2 times larger image is formed. | A. 25 cm B. 30 cm C. 35 cm D. 40 cm |
| 15 | A convex lens of focal length 6 cm to be used to form a virtual image three times the size of the object Where must the lens be placed. | A. 1 cm B. 2 cm C. 3 cm D. 4 cm |
| 16 | A convex mirror is used to reflect light from an object placed 66 cm in front of the mirror. The focal length of the mirror is 46 cm Find the location of the image. | A. 23 cm B. -23 cm C. -27 cm D. 27 cm |
| 17 | The focal length of a thin converging lens is 10 cm What is the maximum distance from the lens that the object can be placed so that the lens acts as a magnifying glass. | A. 5 cm B. 10 cm C. 15 cm D. 20 cm |
| 18 | Reciprocal of the focal length is called. | A. Radius of curvature of the lens B. Power of the lens C. Aperture of the lens D. Resolving power |
| 19 | The relation between angle of incidence and angle of refraction is known as. | A. Snell's law B. Refractive index C. Index of refraction D. All of the above |
| 20 | When a ray light is incident at an acute angle to the boundary of the media the refracted ray. | A. Bends away from the normal B. Bends towards the normal C. Remains undeviated D. Is totally reflected |
| 21 | When a ray of light is incident perpendicularly to the boundary of two media. | A. It pass through without bending B. Its speed is faster in the optically denser medium C. It deviates from its original path D. It is totally reflected back |
| 22 | When the angle of incidence becomes larger than the critical angle no refraction occurs This is known as. | A. Diffraction B. Refraction C. Total internal reflection D. Diffuse reflection |
| 23 | The angle of incidence that causes the refracted ray in the rarer medium to bend through 90° is called. | A. Critical angle B. solid angle C. Plane angle D. Acute angle |
| 24 | When a ray of light traveling in a rare medium enters into a denser medium | A. It remains undeviated B. It is reflected back C. It bends towards the normal D. It bends away from the normal |
| 25 | When a ray of light travelling in a denser medium enters into a rarer medium. | A. It remains undeviated B. It is reflected back C. It bends towards the normal D. It bends away from the normal |
| 26 | The critical angle for a beam of light passing from water into air is 48.8° This means that all light rays with an angle of incidence greater than this angle will be. | A. Absorbed B. Totally reflected C. Partially reflected and partially transmitted D. Totally transmitted |
| 27 | If a ray of light in glass is incident on an air surface at an angle greater than the critical angle, the ray will | A. Refract only B. Reflect only C. Partially refract and partially reflect D. Diffract only |
| 28 | Image formed by a camera is | A. Real, inverted, and diminished B. Virtual, upright and diminished C. Virtual, upright and magnified D. Real, inverted and magnified |
| 29 | Which type of image is produced by the converging lens of human eye if it views a distant object. | A. Real, erect, same size B. Real, inverted, diminished C. Virtual, erect, diminished D. Virtual, inverted, magnified |
| 30 | What is true of real images formed by a converging lens. | A. they are inverted B. They are on the same side of the lens as the object C. They can never be shown on a screen D. They cannot be seen |

