

FBQ1: A convex lens is called _____.

Answer: converging lens

FBQ2: A positive magnification greater than unity indicates _____.

Answer: virtual image

FBQ3: _____ is formed through actual intersection of light rays and can be captured on a screen.

Answer: Real image

FBQ4: Snell's law states that the sine of the angle of incident and _____ have a constant ratio to each other.

Answer: reflection

FBQ5: _____ is defined as the distance between image and mirror.

Answer: Image distance

FBQ6: When the object is placed at the focal point of a convex lens, the image is formed at _____.

Answer: Infinity

FBQ7: The study of wavelengths of the radiation coming out from a hot body is called _____.

Answer: Spectra

FBQ8: The angular magnification of a microscope in normal use is given by ____.

Answer: $1+(D/F)$

FBQ9: The _____ of a lens is a point through which rays of light pass through without being deviated by the lens.

Answer: Optical center

FBQ10: When light vibrates in a single plane it is said to be ____.

Answer: Polarized

FBQ11: _____ acts as a muscular diaphragm of variable size that controls the size of pupil and also function to regulate the amount of light entering to the eye.

Answer: Iris

FBQ12: The type of spectrum formed by white light produced when a solid material is heated to incandescence is called _____ spectrum.

Answer: continuous

FBQ13: When white light passes through a prism, a spectrum of different colours is formed. The colour that represents the wave with the least frequency of the spectrum is _____.

Answer: Red

FBQ14: Restrictions imposed on the free motion of a particle (or a system of particles) are generally called _____

Answer: Constraint

FBQ15: The path along which light travels is called a _____.

Answer: Ray

FBQ16: The normal is always _____ to the mirror.

Answer: perpendicular

FBQ17: Light travels in _____ lines.

Answer: Straight

FBQ18: _____ are drawn on light rays to show the direction in which light travels.

Answer: Arrows

FBQ19: How many images will be formed in two plane mirrors which are inclined at angle 90° to each other?

Answer: 3

FBQ20: _____ mirrors are used as rear view mirrors in automobiles.

Answer: Convex

FBQ21: The angle of incident equals to the angle of reflection. This statement is referred to as _____ of reflection.

Answer: second law

FBQ22: _____ is the distance between the optical center and the principal focal of the lens.

Answer: Focal length

FBQ23: The _____ of a converging lens is the point to which all rays parallel and close to the principal axis converge after refraction through the lens.

Answer: Principal focus

FBQ24: When light travels from a fast medium to a slower medium, the refracted ray changes phase by _____.

Answer: wavelength/3

FBQ25: Diffraction effect is more for a _____ image.

Answer: sharp

FBQ26: The image formed by an astronomical telescope is _____.

Answer: virtual and diminished

FBQ27: _____ are drawn on light rays to show the direction in which light travels.

Answer: arrows

FBQ28: In regular reflection, parallel light rays remain _____ after falling on a smooth and polished surface.

Answer: parallel

FBQ29: Light travels in _____ lines.

Answer: Straight

FBQ30: What is the refractive index of glass material for which the speed of light in it is m/s?

Answer: 1.56

FBQ31: An image formed by a plane mirror is _____.

Answer: laterally inverted

FBQ32: The central spot of Newton's rings is _____ due to destructive interference.

Answer: Dark

FBQ33: A simple microscope uses _____.

Answer: one convex lens

FBQ34: A compound microscope consists of _____.

Answer: two convex lenses

FBQ35: A triangular glass block, which may be equilateral or isosceles, which can be used for refraction experiment is called the _____.

Answer: Prism

MCQ1: Convex mirror is used in motor vehicle as side mirror because of

_____.
Answer: Has a very wide field of view

MCQ2: The SI unit of image magnification is _____.
Answer: No unit

MCQ3: A beam of light may be _____.
Answer: Parallel

MCQ4: A man has a concave mirror with focal length of 40cm. How far should the mirror be held from his face in order to give an image of two fold magnification?
Answer: 60cm

MCQ5: A diverging mirror of 0.5 m focal length produces a virtual image of 0.25m from the mirror. How far from the mirror should the object be placed?
Answer: 0.5m

MCQ6: Maximum deviation of prism occurs when angle of incidence is _____.
Answer: 90°

MCQ7: The refracting angle of a prism is 62° and the refractive index of the glass for yellow light is 1.65. What is the smallest possible angle of incidence of a ray of this yellow light which is transmitted without total reflection?
Answer: 43.58°

MCQ8: For a small angle prism, the deviation is independent of _____.
Answer: Size of the angle of incidence

MCQ9: One end of a cylindrical glass rod of refractive index 1.5 is a hemispherical surface of radius of curvature 20mm. An object is placed on the axis of the rod at 80mm to the left of the vertex of the angle of the surface. Determine the position of the image.
Answer: 120mm

MCQ10: One end of a cylindrical glass rod of refractive index 1.5 is a hemispherical surface of radius of curvature 20mm. An object is placed on the axis of the rod at 80mm to the left of the vertex of the angle of the surface. Determine the position if the image of the rod is immersed in water of refractive index 1.33.
Answer: 184.6mm

MCQ11: A convex lens is _____.
Answer: A converging lens

MCQ12: The distance between the optical centre and the principal focal of the lens is called _____.
Answer: Focal Length

MCQ13: The line joining the centres of curvature of the two curved surfaces forming the lens is called _____.
Answer: Principal axis

MCQ14: When an object is placed at the principal focus of a convex lens, the image formed is _____.
Answer: at infinity

MCQ15: A beam of light of wavelength 550nm travelling in air is incident on a surface of transparent material. The incident beam makes an angle of 60 degree with the normal and the
Answer: 1.23

MCQ16: When the object distance for a convex lens is greater than $2F$, the image formed is _____.

Answer: Inverted

MCQ17: Image formed by concave lens is _____.

Answer: Virtual

MCQ18: A pin is placed 40cm away from a convex lens of focal length 15cm. Determine the magnification of the pin formed by the lens .

Answer: 1.67

MCQ19: The spreading of white light into the full spectrum is called _____.

Answer: Dispersion

MCQ20: when a ray of light incident at an angle greater than the critical angle, the phenomenon is called _____.

Answer: Total internal reflection

MCQ21: Submarine periscope uses the phenomenon of _____.

Answer: Total internal reflection

MCQ22: The ability of the lens to focus on near and far objects is called _____.

Answer: Accommodation

MCQ23: Appearance of colour in thin films is due to_____.

Answer: interference

MCQ24: The experiment that shows that wavelength of light is smaller than that of sound is called_____.

Answer: Diffraction

MCQ25: Examples of transverse wave are the following except:

Answer: P wave

MCQ26: A compound microscope consists of two _____lenses.

Answer: Convex

MCQ27: The advantage of reflector telescope over the normal telescope is _____.

Answer: Its large angle of magnification

MCQ28: For two waves to superpose the waves must have the same _____.

Answer: Wavelength

MCQ29: Constructive interference occurs, when the intensity of the two interfering waves is _____.

Answer: Maximum

MCQ30: _____ are drawn on light rays to show the direction in which light travels.

Answer: Arrows

MCQ31: A ray of light passing through the _____ retraces its path.

Answer: Centre of curvature

MCQ32: The central spot of Newtons rings is _____ due to destructive interference.

Answer: Dark

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Answer: One convex lens

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Answer: Spectra