

NEET WAVE OPTICS — BREWSTER'S LAW, POLARISATION BY SCATTERING AND REFLECTION — PYQS

Max. Marks: 20

Questions: 5

Section A (MCQ) — 5 questions

Q.1 An unpolarized light beam travelling in air is incident on a medium of refractive index 1.73 at Brewster's angle. Then [NEET (UG) 2025]

- (1) Both reflected and transmitted light are perfectly polarized with angles of reflection and refraction close to 60° and 30° , respectively
- (2) Transmitted light is completely polarized with angle of refraction close to 30°
- (3) Reflected light is completely polarized and the angle of reflection is close to 60°
- (4) Reflected light is partially polarized and the angle of reflection is close to 30°

Scan or tap for the full solution



Q.2 An unpolarised light beam strikes a glass surface at Brewster's angle. Then [NEET (UG) 2024]

- (1) The reflected light will be partially polarised.
- (2) The refracted light will be completely polarised.
- (3) Both the reflected and refracted light will be completely polarised.
- (4) The reflected light will be completely polarised but the refracted light will be partially polarised.

Scan or tap for the full solution



Q.3 A light ray falls on a glass surface of refractive index $\sqrt{3}$, at an angle 60° . The angle between the refracted and reflected rays would be [NEET (UG) 2022]

- (1) 30° (2) 60° (3) 90° (4) 120°

Scan or tap for the full solution



Q.4 The Brewster's angle i_b for an interface should be : [NEET (UG) 2020]

- (1) $30^\circ < i_b < 45^\circ$ (2) $45^\circ < i_b < 90^\circ$
 (3) $i_b = 90^\circ$ (4) $0^\circ < i_b < 30^\circ$

Scan or tap for the full solution



Q.5 Unpolarised light is incident from air on a plane surface of a material of refractive index μ . At a particular angle of incidence i , it is found that the reflected and refracted rays are perpendicular to each other. Which of the following options is correct for this situation? [NEET 2018]

- (1) Reflected light is polarised with its electric vector parallel to the plane of incidence
- (2) Reflected light is polarised with its electric vector perpendicular to the plane of incidence
- (3) $i = \sin^{-1}\left(\frac{1}{\mu}\right)$
- (4) $i = \tan^{-1}\left(\frac{1}{\mu}\right)$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5						
Ans.	3	4	3	2	2						