

JEE MAIN MECHANICAL PROPERTIES OF FLUIDS — ANGLE OF CONTACT, EXCESS PRESSURE IN DROPS AND BUBBLES — PYQS

Max. Marks: 8

Questions: 2

Section A (MCQ) — 1 question

Q.1 Two liquids A and B have θ_A and θ_B as contact angles in a capillary tube. If $K = \cos \theta_A / \cos \theta_B$, then identify the correct statement:

[JEE Main 2025 (Online) 4th April Morning Shift]

- (1) K is negative, then liquid A and liquid B have convex meniscus.
- (2) K is negative, then liquid A and liquid B have concave meniscus.
- (3) K is zero, then liquid A has convex meniscus and liquid B has concave meniscus.
- (4) K is negative, then liquid A has concave meniscus and liquid B has convex meniscus.

Scan or tap for the
full solution



Section B (Numerical) — 1 question

Q.2 The excess pressure inside a soap bubble A in air is half the excess pressure inside another soap bubble B in air. If the volume of the bubble A is n times the volume of the bubble B, then, the value of n is _____. [JEE Main 2025 (Online) 3rd April Evening Shift]

Scan or tap for the
full solution



ANSWER KEY

Section A (MCQ) — 1 question

Ques.	1										
Ans.	4										

Section B (Numerical) — 1 question

Ques.	2										
Ans.	8										