

PHYSICS — SUBJECTIVE

Class 10th · 1st Annual 2025 — Group: I

Time: 1.45 Hours	SUBJECTIVE	Marks: 48
------------------	-------------------	-----------

SECTION - I

Note: Section I is compulsory. Attempt any TWO (2) questions from Section II.

QUESTION NO. 2 Write short answers to any FIVE (5) questions:

10

i	Define time period and frequency.
ii	Define electromagnetic waves and write down the names of its types.
iii	If the length of simple pendulum is doubled, what will be the change in its time period?
iv	Draw symbol of NOT gate and write down its truth table.
v	Write down definition of analogue and digital quantities.
vi	Draw electric field lines between two positive point charges.
vii	Write down any two uses of capacitors.
viii	Define electric field and electric field intensity.

QUESTION NO. 3 Write short answers to any FIVE (5) questions:

10

i	Describe briefly that sound is produced by a vibrating body.
ii	Calculate the frequency of sound wave of speed 340 ms^{-1} and wavelength 0.5 m .
iii	Define Acoustic Protection.
iv	Define Galvanometer. How it is connected in a circuit?
v	Can a current flow in a circuit without potential difference?
vi	Define resistance and its unit.
vii	What is the difference between Compact Disk and Floppy Disk?
viii	What are Browsers? Write down two examples.

QUESTION NO. 4 Write short answers to any FIVE (5) questions:

10

i	Define reflection of light and write down the names of its types.
ii	State Shell's law. Write down its formula.
iii	What is meant by Accommodation?
iv	How can the total force acting on the armature in D.C motor be increased?
v	Define Lenz's Law.
vi	Describe the Right Hand Grip Rule.
vii	The C-14 : C-12 ratio in a fossil bone is found to be $\frac{1}{4}$ th that of the ratio in the bone of a living animal. The half life of C-14 is 5730 years. What is the approximate age of fossil?
viii	What is meant by Nuclear Fusion?

SECTION - II

Q.5 (a)	What is Coulomb's Law? Describe in detail.	4
(b)	A wooden bar vibrating into the water surface in a ripple tank has a frequency of 12 Hz . The resulting wave has a wavelength of 3 cm . What is the speed of the wave?	5
Q.6 (a)	Write down a note on cell phone and its working with network diagram.	4
(b)	A ship sends out ultrasound that returns from the seabed and is detected after 3.42 s . If the speed of ultrasound through seawater is 1531 ms^{-1} , what is the distance of the seabed from the ship?	5
Q.7 (a)	Define and explain total internal reflection, also draw ... <i>[the scan ends here]</i>	—

Notes on this transcription: Incomplete source: only the subjective half of Group-I was supplied, and that scan is cut off part-way through Section-II Q7(a) — the rest of Q7 and any Q8 are missing. Send the full sheet and the objective paper and both can be added. • This paper has no Urdu column; it is the English-medium version. • Transcribed from an "unsolved" guide reprint rather than the original board sheet, so no paper code is printed on the source. • Q4(ii) prints "Shell's law" on the source — a board typo for "Snell's law". Kept as printed. • Typeset by Tayarri from the original board paper; no answer key included.