

NEET THERMAL PROPERTIES OF MATTER — NEWTON'S LAW OF COOLING — PYQS

Max. Marks: 12

Questions: 3

Section A (MCQ) — 3 questions

- Q.1** A cup of coffee cools from 90°C to 80°C in t minutes, when the room temperature is 20°C . The time taken by a similar cup of coffee to cool from 80°C to 60°C at a room temperature same at 20°C is :

[NEET (UG) 2021]

- (1) $\frac{5}{13}t$ (2) $\frac{13}{10}t$ (3) $\frac{13}{5}t$ (4) $\frac{10}{13}t$

Scan or tap for the full solution



- Q.2** A body cools from a temperature $3T$ to $2T$ in 10 minutes. The room temperature is T . Assume that Newton's law of cooling is applicable. The temperature of the body at the end of next 10 minutes will be

[NEET 2016 (Phase 2)]

- (1) $\frac{7}{4}T$ (2) $\frac{3}{2}T$ (3) $\frac{4}{3}T$ (4) T

Scan or tap for the full solution



- Q.3** Certain quantity of water cools from 70°C to 60°C in the first 5 minutes and to 54°C in the next 5 minutes. The temperature of the surroundings is

[AIPMT 2014]

- (1) 45°C (2) 20°C (3) 42°C (4) 10°C

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3								
Ans.	3	2	1								