

## Q. 01

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If an average person jogs, he produces  $14.5 \times 10^3$  cal/min. This is removed by the evaporation of sweat. The amount of sweat evaporated per minute (assuming 1 kg requires  $580 \times 10^3$  cal for evaporation) is

- 1) 0.05 kg
- 2) 2.25 kg
- 3) 0.25 kg
- 4) 0.20 kg

**Sol.** 3) 0.25 kg

Given, calories produced per min =  $14.5 \times 10^3$  cal/min amount of sweat evaporated is equal to the rate of calories burned.

$$\begin{aligned} \text{amount of sweat evaporated/min} &= \frac{\text{sweat produced per minute}}{\text{no.of calories required for evaporation per minute}} \\ &= \frac{14.5 \times 10^3}{580 \times 10^3} = 0.25 \text{kg} \end{aligned}$$

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