

**Department of Physiology
Presidency University
Model MCQ Questions**

1. If “k” is the specific conductance of an electrolyte solution containing 1 gram equivalent weight in “V” litre solution, the equivalent conductivity “A” of the solution is given by the expression:

- (a) $A = \frac{1000k}{V}$ (b) $A = 1000 kV$
(c) $A = \frac{1000V}{k}$ (d) $A = kV$

2. Colour in soap bubbles is due to:

- (a) Polarization of light (b) Interference of light
(c) Reflection of light (d) Refraction of light

3. A 750 kg car moving at $23 \text{ m}\cdot\text{sec}^{-1}$ brakes to a stop. The brakes contain about 15 kg of iron that absorbs the energy. What is the increase in the temperature of the brakes?

- (a) 29.5°C (b) 19.5°C
(c) 24.5°C (d) 11.9°C

4. $\sqrt{-1}$ or “I” is not an identical:

- (a) complex number (b) an imaginary number
(c) rational number (d) (0,1) or $0+1i$

5. The aperture of small intestine into large intestine is guarded by a valve called:

- (a) Caecal valve (b) Semilunar valve
(c) Ileal valve (d) Ileocaecal valve

6. Identical twins are born when:

- (a) Two sperms fertilise two ova
(b) Two sperms fertilise one ovum
(c) One sperm fertilises one ovum
(d) One sperm fertilises one ovum, zygote cleaves into two cells that develop independently.

How to fill the OMR Sheet

1. The sheet should not be folded or crushed
2. Use only black gel pen to fill the circle
3. Use of pencil is strictly prohibited
4. Circle should be darkened completely and properly
5. Cutting or erasing on this sheet is not allowed
6. Do not use any stray marks on the sheet
7. Do not use any marker, white fluid or any other device to hide the shading already done

Please be careful in filling the circle as there will be no rechecking of mid exam marks. If any error occurs due to wrongly filling OMR sheet, it will be the sole responsibility of the candidate. Such changes will not be entertained by the University under any circumstances once the result is declared by the PU.