

PRESIDENCY UNIVERSITY, KOLKATA

DEPARTMENT OF PHYSIOLOGY

UG ADMISSION TEST 2012

MODEL 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 m.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^oC (b) 19.5^oC
(c) 24.5^oC (d) 11.9^oC

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.