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Name

Reg. No.....

FIRST YEAR B.P.E. DEGREE EXAMINATION, AUGUST 2012

Physical Education

Paper II—GENERAL SCIENCE

(2010 Admissions)

Time: Three Hours

Maximum: 75 Marks

Answer any two questions from each part.

Part A (Physics)

I. Define a Projectile. Explain the principles of projectiles.

(12½ marks)

- II. Write short notes on: (Any two)
 - (a) Conductors and Non-conductors.
 - (b) Specific heat and Latent heat.
 - (c) Distance and Displacement.

 $(2 \times 6\frac{1}{4} = 12\frac{1}{2} \text{ marks})$

- III. Write briefly on : (Any five)
 - (a) Total Internal Reflection.
 - (b) Vectors and scalars.
 - (c) Concave and convex mirror.
 - (d) Magnets.
 - (e) Importance of Newton's Laws in sports and games.
 - (f) Volt and Ampere.
 - (g) Electric Cell.
 - (h) Laws of Refraction.

 $(5 \times 2\frac{1}{2} = 12\frac{1}{2} \text{ marks})$

Part B (Chemistry)

IV. With the help of a neat labelled diagram explain the laboratory preparation of chlorine and explain its uses.

(12½ marks)

- V. Explain the following: (Any two)
 - (a) Methods of Removing permanent hardness.
 - (b) Preparation of soap.
 - (c) Amino Acids.

 $(2 \times 6\frac{1}{4} = 12\frac{1}{2} \text{ marks})$

Turn over

VI. Write briefly on : (Any five)

- (a) Allotropes of Carbon.
- (b) Metals and Non-metals.
- (c) Oxidation and Reduction.
- (d) Uses of Ammonia.
- (e) Combustion.
- (f) p_H scale.
- (g) Salts.
- (h) Oxidation Number.

 $(5 \times 2\frac{1}{2} = 12\frac{1}{2} \text{ marks})$

Part C (Biology)

VII. Describe Habitat and explain biomes.

(12½ marks

VIII. Write briefly on: (Any two)

- (a) Noise pollution.
- (b) Nutrients.
- (c) Chemical Environment.

 $(2 \times 6\frac{1}{4} = 12\frac{1}{2} \text{ marks})$

IX. Write short notes on : (Any five)

- (a) Types of blood groups.
- (b) Symbiosis.
- (c) Matter.
- (d) Heredity.
- (e) Safe Environment.
- (f) Nutrients.
- (g) Tundra.
- (h) Scope of biology.

 $(5 \times 2\frac{1}{2} = 12\frac{1}{2} \text{ marks})$