2015 (A) Roll No: _____

INTERMEDIATE PART-I (11th CLASS)

BIOLOGY PAPER-I (OLD SCHEME) TIME ALLOWED: 2.40 Hours

SUBJECTIVE MAXIMUM MARKS: 68

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

2. Attempt any eight parts. **8 × 2 = 16**

(i) Differentiate between Micromolecules and Macromolecules.
(ii) Write the name of major bioelements with their percentage composition.
(iii) Differentiate between Fats and Oils.
(iv) What are Conjugated Molecules? Give one example at least.
(v) Write four characteristics of Enzymes.
(vi) What is induced Fit Model? Who gave it?
(vii) What is Ultracentrifugation?
(viii) What is chemical composition of secondary cell wall?
(ix) What are Ribosomes and Polysomes?
(x) What are Prions and Virons?
(xi) Define Species by giving an example.
(xii) Write the symptoms of AIDS.

3. Attempt any eight parts. **8 × 2 = 16**

(i) What are Plasmids? Write down their significance.
(ii) What are Pili? Write their composition and function.
(iii) Compare chemical composition of shells of foraminifera and Actinopods.
(iv) What are Diatoms? Why they are important?
(v) Differentiate between Septate and Aseptate Hyphae. What is Mycelium?
(vi) Differentiate between Ectomycorrhizae and Endomycorrhizae.
(vii) Define Double Fertilization. Give its significance.
(viii) Define Alternation of generation. Briefly write its significance.
(ix) Differentiate between Microphylls and Megaphylls.
(x) What is Polymorphism? Give an example.
(xi) How asexual reproduction takes place in Sponges? What are Gemmules?
(xii) Write any two characters and any two examples of Phylum Annelida.

4. Attempt any six parts. **6 × 2 = 12**

(i) Write the equations showing Alcoholic and Lactic Acid fermentation.
(ii) Write the formulas of Chlorophyll "a" and "b".
(iii) Give the functions of Erypsin and Gastrin.
(iv) How fatty acids enter the blood stream from Lumen of intestine?
(v) Write the difference between the blood transported by Pulmonary vein and Pulmonary artery.
(vi) What is the difference between Bronchioles and Bronchus?
(vii) Write the flow of sap in palms. Give its rate.
(viii) Give the importance of K^+ in transport of CO_2 in humans and transpiration in plants.
(ix) Write the %age of inorganic ions and water in blood plasma.

SECTION-II

NOTE: - Attempt any three questions.

5.(a) Discuss organ and system level of biological organization. 4

(b) Describe the life cycle of Rhizopus. 4

6.(a) Describe four properties of water that make it an important medium of life. 4

(b) Write a note on digestion in Cockroach. 4

7.(a) Describe various factors affecting the rate of enzyme action. 4

(b) What is Photophosphorylation? Explain cyclic flow of electrons during Photosynthesis. 4

8.(a) Write a note on Chloroplast. 4

(b) Describe the air passage way in Man. 4

9.(a) Write a brief note on respiration in Bacteria with one example of each type. 4

(b) Describe comprehensively double circuit blood circulation in man. 4