

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
B.Sc., Winter 2017-18 Examination

Semester: 1
Subject Code: 11100105
Subject Name: Foundations of Biology -I

Date: 28/12/2017
Time: 10:30am to 1:00pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type/ Brief note. (4x2) (Each of 04 marks) (08)**
(a) Explain Darwin's theory.
(b) Describe Eukaryotic cell and its properties.
- Q.1. B) Answer the following questions. (Any two)**
(a) Short note/ Brief note (04)
1. Evolution
2. Special creation.
(b) Explain plant cell with diagram. (04)
(c) Give difference between plant and animal cell. (04)
- Q.2. A) Answer the following questions.**
(a) Short note/ Brief note (2x2) (Each of 02 marks) (04)
1. Describe functions of Mitochondria.
2. Explain the roll of cytoplasm present in the cell.
(b) Nucleus. (04)
- Q.2. B) Answer the following questions. (Any two)**
(a) Short questions (Each of 01 marks) (03)
1. What is cytoskeleton?
2. What is cell wall made up of?
3. What are proteins?
(b) Describe Plasma membrane. (03)
(c) Explain Lysosomes. (03)
- Q.3. A) Essay type/ Brief note. (4x2) (Each of 04 marks) (08)**
(a) Enlist the mouth parts of cockroach.
(b) Explain modification of leaves.
- Q.3. B) Answer the following questions. (Any two)**
Short note:
(a) Explain the morphological structure of cockroach.
(b) Types of roots. (04)
(c) Modification of stem in plants. (04)
- Q.4. A) Answer the following questions.**
(a) Short note: (04)
1. Explain the basic concept of Genetics.
(b) Theory of origin of life. (04)
- Q.4. B) Answer the following questions. (Any two)**
(a) Short questions (Each of 01 marks) (03)
1. What is the scientific name of cockroach?
2. What is the scientific name of Human?
3. Which organelle of cell is known as "Power house of cell"?
(b) Explain types of blood cells. (03)
(c) Explain evolution of human. (03)