

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

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

Date: 30/05/2018
Time: 10.30 am to 1.00 pm
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)**
What is origin of life? Explain theory of spontaneous evolution with examples.
- Q.1. B) Answer the following questions (Any two)**
- (a) Short note: Nucleus (04)
 - (b) Explain mechanism of evolution- Darwin's theory . (04)
 - (c) Explain transport mechanisms involved in the biological membrane. (04)
- Q.2. A) Answer the following questions.**
- (a) Compare between plant cell and animal cell. (04)
 - (b) Enlist various organelles of cell. (04)
- Q.2. B) Answer the following questions (Any two)**
- (a) Short note/ Multiple choice questions. (Each of 01 marks) (03)
 1. What is lysosome?
 2. What is ribosome?
 3. What is Cell wall made up of?
 - (b) Short note: Golgi Apparatus (03)
 - (c) Describe cell wall (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
Explain evolution of humans
- Q.3. B) Answer the following questions (Any two)**
- (a) Short note: Types of Roots (04)
 - (b) Short note: Chloroplast (04)
 - (c) Short note: Mitochondria (04)
- Q.4. A) Answer the following questions.**
- (a) Short note: Types of blood cells. (04)
 - (b) Explain basics of genetics (04)
- Q.4. B) Answer the following questions (Any two)**
- (a) Explain modifications of roots. (03)
 - (b) Explain morphology of cockroach. (03)
 - (c) Characteristics of Prokaryotic cell. (03)