Seat No:_____ Enrollment No:_____

PARUL UNIVERSITY

FACULTY OF APPLIED SCIENCE

B.Sc./IMSC Summer 2017-18 Examination

Semester: 4 **Date: 12/05/2018**
Subject Code: 11102251 **Time: 10:30am-1:00pm**
Subject Name: Molecular Biology **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 (Each of 04 marks) **(08)**
(a) Discuss Watson Crick model of DNA

(b) Describe nucleotides.

Q.1. B) Answer the following questions (Any two)
(a) Short note on Griffith experiment of transforming principle. **(04)**

(b) Short note on Hershey and chase experiment. **(04)**

(c) Give Difference between DNA and RNA **(04)**

Q.2. A) Answer the following questions.
(a) Brief note (2x2) **(04)**
1. A form of DNA
2. B form of DNA

(b) Short note on initiation process of replication in prokaryotes **(04)**

Q.2. B) Answer the following questions (Any two)
(a) Short note on Structure of tRNA **(03)**

(b) Short note on Central dogma of the cell **(03)**

(c) Short note on Role of DNA Polymerases in Replication **(03)**

Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) **(08)**
(a) Describe initiation in transcription

(b)Describe termination in translation

Q.3. B) Answer the following questions (Any two)
(a) Short note synthesis of amino aceyl tRNA **(04)**

(b) Short note on ubiquitination **(04)**

(c) Short note Wooble hypothesis. **(04)**

Q.4. A) Answer the following questions.
(a) Brief note (Each of 02 marks) **(04)**
1. Define inducible operon
2. Define repressible operon

(b) Short note on codon degeneracy **(04)**

Q.4. B) Answer the following questions (Any two)
(a) Short note Lac operon **(03)**

(b) Short note Trp Operon **(03)**

(c) Short note on protein trafficking **(03)**