PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS) 14* *1 \^^CO '*

BSc DEGREE EXAMINATION MAY 2017
(Third Semester)

Branch- **BIOCHEMSITRY**

MOLECULAR BIOLOGY

Time : Three Hours Maximum : 75 Marks

SECTION-A (20 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (1 0 x 2 = 20)

I Transduction.
2- Replisome enzyme.
3 Universal Codon.
4 , Shine dalgamo sequence.
5 cpDNA. '
6 Aminoacyl tRNA synthase.
7 UV dimerigation.
8 Operon Model.
9 Frame shift mutation.
10 Retroposons.

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

II a Describe Griffith experiment.
OR
b Explain the structure of eukaryotic chromosome.

12 a Describe the dicepherixy of genetic code.
OR
b Explain the Reverse transcription process.

13 a Explain the inhibitors of translation.
OR
b Composition of prokaryotic & Eukaryotic ribosomes.

14 a Explain the mismatch DNA repair system.
OR
b Describe the gene regulation in eukaryotes.

15 a What are different types of point mutation?
OR
b Explain the composite & non-composite transposores.

SECTION - C (30 Marks) **r**
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Describe the Messelson-sthal experiment.

17 Explain the transcription mechanism in prokaryotes.

18 Describe the post translational modifications of proteins.

19 Describe the lac opern operation & its regulation in E.Coli. ,

20 Explain the transposable elements found in eukaryotes & prokaryotes.

Z-Z-Z. END