PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fourth Semester)

Branch - **BIOTECHNOLOGY**

RDNA TECHNOLOGY

Time : Three Hours Maximum : 75 Marks

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

1 Define Competence.
2 What isa gene cloning?
3 What isa linker?
4 What are sticky ends?
5 What isa reporter gene?
6 What is YAC?
7 What isa probe?
8 Define hybridization.
9 What iskinship analysis?
10 What are minisatellites?

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

11 a Give a brief account on the steps involved in gene cloning.
OR
b Give a brief account on the preparation of plasmid DNA.

12 a What is restriction mapping?
OR
b Give a brief note on PFGE.

13 a Explain briefly about pUC 18.
OR
*b Write a short note about M13 Phage.

14 a Give a detailed account on RT PCR.
OR
b Explain briefly about Sangers DNA Sequencing.

15 a What is genetic fingerprinting? Add a note on its applications.
OR
b Explain briefly about the production of recombinant insulin.

SECTION - C 130 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 What are plasmids? Add on account on naturally occurring plasmids.
17 Explain in detail about restriction endonucleases.
18 Explain in detail about lambda phage vectors.
19 Explain in detail about next generation sequencing.
20 Write notes on recombinant vaccines.