PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018 (Third Semester)

Branch - **BIOCHEMISTRY**

BIOINFORMATICS

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks)

Answer ALL questions ALL questions carry EQUAL Marks (5 x

 $(5 \times 6 = 30)$

1 a Write a short note on Commercial Software.

OR

- b Explain different types of variables used in Pearl.
- 2 a Discuss the salient features of 2° structure databases.

OR

- b Write a note on pubmed.
- 3 a Give an account on BLOSUM.

OR

- b How will you detect pattern, motif and transmembrane region in a sequence?
- 4 a Write a note on metabolomics.

OR

- b Discuss the importance of medical informatics.
- 5 a Write a note on Threading.

OR

b How x-ray diffraction and NMR is helpful in structural analysis?

SECTION -B (45 Marks) Answer any THREE questions ALL questions carry EQUAL Marks

 $(3 \times 15 = 45)$

- 6 Explain the concept of search engine.
- 7 Write in detail about HGP.
- 8 Give an overview of various methods to infer phylogenies.
- 9 Explain the steps for discovering a drug.
- 10 Describe the 2° structure prediction.

Z-Z-Z