



HV-M2011125 Seat No. _____

M. Pharm. (Sem. II) (CBCS) Examination

June / July - 2017

Bioinformatics Theory

[Core - VI]

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (i) Answer and tie both the sections separately.
 - (ii) Figures to the right indicate marks.
 - (iii) Answer any three (03) questions from each section.
 - (iv) Question one (01) and question (05) are compulsory.
 - (v) Draw neat and clean diagrams as required.

SECTION - I

- 1 Write a note on following : (any seven) 7×2=14
- (a) Hardware
 - (b) World Wide Web
 - (c) Codons
 - (d) Entrez
 - (e) VecScreen
 - (f) BLASTp
 - (g) Ligand
 - (h) e-journals
 - (i) MEDLINE
 - (j) HGP
- 2 Write a detailed note on "Sequence Homology Software" with 13 examples.
- 3 What do you mean by database ? Write a detailed note on 13 National Centre for Biotechnology Information.

- 4 Answer the following questions :
- (a) Write a note on different operation systems. 7
 - (b) I have 3 sequences, A, B, C. The sequences B and C are both related to A, but I cannot get a good alignment score when I align B and C. What could be a reason ? Draw a diagram if it is easier to explain. 6

SECTION - II

- 5 Answer any two out of three : 7×2=14
- (a) Write a note on www based sequence submission tool.
 - (b) What do you mean by Docking ? Write a note on docking problems.
 - (c) What do you mean by funding agencies ? Name any 4 agencies and briefly describe criteria for applying into grant.
- 6 Write a note on amino acid replacement and its application in peptidomimetics. 13
- 7 Describe Homology modeling. Discuss the concepts and application of homology modeling. 13
- 8 Answer the following questions :
- (a) What is citation index ? Discuss PubMed in detail. 6
 - (b) Enlist different steps involved in CADD process, enlist its applications. 7
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