## January, 2017

## BIOINFORMATICS AND BIOSTATISTICS

Time: Two Hours]

[Maximum Marks: 40

Answer any five questions. The questions are of equal value.

- 1. Write notes on the following:
  - (a) Hardware and Software
  - (b) Linux as Operating System
- What do you understand by Databases? Give an account of some important primary and secondary bioinformatic databases.
- 3. Write notes on the following:
  - (a) Sequence submission to database
  - (b) Application of bioinformatics
- 4. What are retrieval tools? How they work?
- 5. Write notes on the following:
  - (a) Hidden Markov model
  - (b) DNA chip

- 6. Describe the process of DNA sequencing. How sequencing of an organism is useful?
- 7. Write notes on the following:
  - (a) ANOVA
  - (b) Null Hypothesis
- Following is the total number of eggs laid by 7 insects. Calculate its mean and standard deviation.

Number of eggs:	5	10	2	4	6	7	15
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