# M.Sc. 1st Semester Examination, 2012 BOTANY

PAPER-BOT-102

Full Marks: 40

Time: 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Use separate answer script for each Unit

#### UNIT - I

## Answer any two questions

- 1. (a) What do you mean by primary memory and secondary memory?
  - (b) State the difference between RAM and ROM.

- (c) Explain the following terms:
  - (i) PROM
  - (ii) EPROM
  - (iii) EEPROM.

2 + 2 + 6

- 2. (a) Explain FOR-NEXT loop. What is nested FOR-NEXT loop?
  - (b) Write a computer program to find the lowest growth rate of 'n' number of plants.
  - (c) Write the BASIC equivalent of the following expressions:

$$(i) \quad p = a^2 - 4XY$$

(ii) 
$$b = \frac{c^k - d^k}{m^3 + n \times 20}$$
.

(2+1)+5+2

- 3. (a) What are the functions of scroll bars in MS Word Window?
  - (b) How do you employ word count of a page of a MS. Word document?
  - (c) How do you make a table having 5 columns and 4 rows in a MS. Word document? How do you delete a column from an already existing table?
  - (d) What is source program?

2+2+(3+1)+2

4. Write brief notes on the following:

 $2 \times 5$ 

- (i) CDROM
- (ii) Second generation-computer
- (iii) Subscripted variable
- (iv) Scanner
- (v) Punched card.

#### UNIT - II

### Answer any two questions

5. The number of petals counted for 20 flowers of a certain species yields the following observations:

Make the frequency table and draw the frequency polygon. 4+6

**6.** Let *X* be a discrete random variable having the following probability mass function:

Mass points (x) 0 1 2 3 4 5 6 7 P(X=x) 0 k 2k 2k 3k  $k^2$  2 $k^2$  7 $k^2+k$ 

- (i) Determine the constant k,
- (ii) What is  $P(X \ge 6)$ ?

4 + 6

- 7. Distinguish between Arithmetic mean and median. 4+6
- 8. The following table gives the frequency distribution of marks obtained by 30 students of a class in Botany.Calculate the standard deviation.

Marks	30-39	40-49	50-59	60-69
No. of Students	10	7	8	5