* M B A - 0 0 3 - 0 0 1 4 0 6 - 3 3 0 - 4 *

MBA-003-001406

Seat No. _____

B. Sc. (Sem. IV) (CBCS) Examination

March / April - 2018

Botany : B-401

(Applied Botany)

(Old Course)

Faculty Code : 003

Subject Code : 001406

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

Instructions : (1) This question paper contains three questions. All questions are compulsory.

(2) Write answers of all the questions in main answer sheet.

(3) Draw neat and labelled diagram wherever necessary.

(4) Figures to the right side indicated full marks for the questions.

1 Objective type questions : **20**

(1) In C_3 plants..... is the key enzyme, fixes CO_2

(2) What are the parts of periderm?

(3) Endosperm in angiosperm is a Triploid structure : True or false

(4) Who is the father of green revolution in India?

(5) What is the function of nectary gland?

(6) The standard size of the herbarium sheet is .....

(7) Pinus plant possesses Resin duct : True or false

(8) Give the name of plants which show Kranz anatomy?

(9) Which type of soil water is generally important for plants?

(10) Warmth of the surface of the earth is due to .....

(11) Pea is a C_4 plant : True or false

(12) The wall of commercial cork shows ..... deposition.

(13) Why Blue green algae can be used as bio-fertiliser ?

(14) ..... grafting is used to 'bridge' a diseased or damaged area of a plant.

(15) Strawberries is mainly propagated by ....., type of propagation

(16) The term mycorrhiza was coined by .....

(17) ..... plant possesses glandular hairs.

(18) Which physiological process is responsible for the falling of leaves and fruits?

(19) ..... type of bacteria produces Polymixin - B

(20) Biologists celebrate 5th June as ..... Day.

2 (a) Answer in brief : (any **three**) **6**

(1) Write a note on : Plant breeder's knowledge (Any four).

(2) Write the function of Cytokinins on plants.

(3) Draw only labelled diagram of soil profile.

(4) Define : Bonsai.

(5) Write note on : tyloses

(6) Write the causes of air pollutants.

(b) Answer any **three** : **9**

(1) What is the need of plant breeding?

(2) Describe different modes of soil erosion.

(3) Explain bisporic embryo sac.

(4) Write a note on : Layering.

(5) Write the properties of antibiotics.

(6) Give information about the mechanism of translocation in phloem.

(c) Answer in detail : (any **two**) **10**

(1) Write an essay on Auxin.

(2) Explain the process of double fertilization in angiosperms.

(3) Describe any three methods of grafting.

(4) What are bio fertilizers? Explain the types of bio-fertilizers used in agriculture.

(5) Discuss the effects of water pollutants.

3 (a) Answer in brief : (any **three**) **6**

(1) Define humus.

(2) Write the names of equipments, used during herbarium preparation?

(3) What is stinging hair? Give one example.

(4) What is T - budding?

(5) State the importance of Potassium on plants.

(6) What is cutting and give information about the types of cutting.

(b) Answer any **three** : **9**

(1) Write a note on Abscission.

(2) Write a short note on history of green evolution in India.

(3) Give an illustrative account on action mechanism of ethylene.

(4) What is floriculture? Describe the cultivation process of rose varieties.

(5) Explain global warming.

(6) Describe Crassulacean Acid Metabolism (CAM) in plants.

(c) Answer in detail : (any **two**) **10**

(1) Describe the asexual method of plant propagation.

(2) Describe the conventional methods of crop improvement.

(3) What is soil? Explain the process of soil formation.

(4) Describe Calvin cycle.

(5) What is embryo sac? Explain tetrasporic embryo sac.