

NAZ-003-001406 Seat No. _____

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

March / April - 2017 Botany : B - 401 (Applied Botany)

Faculty Code : 003 Subject Code : 001406

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

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

- (2) Draw neat and labelled diagrams wherever necessary.
- (3) Figures to the right indicate marks.
- 1 Write answer in very short:

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- (1) Give full form of RUBISCO and PGA
- (2) Give two genus name for Resin duct
- (3) What is the function of Pollen tube?
- (4) Define word: Mycorrhiza
- (5) Minamata disease caused by?
- (6) Give two genus name for Glandular hairs
- (7) What is diameter of Clay type of soil?
- (8) Who discover C₄ pathway?
- (9) What is the function of Stock and Scion?
- (10) Apical dominance cause by which PGR?
- (11) Give any one importance of Calcium for Plant
- (12) Difference between whip and cleft grafting
- (13) Write down two method name for mode of propagation.
- (14) Give Full form of BOD and COD.

- (15) Give name of India's first satellite
- (16) Which is main pollutant in acid rain?
- (17) Periderm consists of which three layers?
- (18) Who discover antibiotic Penicillin?
- (19) Give the full name of IAA and IBA
- (20) What is the nucleus arrangement in Typical Embryo Sac?
- 2 (a) Answer in brief: (any three out of six)

6

9

- (1) Mention two factors for causing for abscission.
- (2) What are two main functions of cytokinin?
- (3) What are the two main benefits of Digestive gland?
- (4) Explain the two main approaches for conservation of soil.
- (5) Explain notch grafting.
- (6) Point out on Causes of Global warming
- (b) Briefly answer the following questions: (any three out of six)
 - (1) How CO_2 is fixed during C_4 cycle?
 - (2) Discuss the harmful effects of water pollution.
 - (3) Describe the benefits of bio fertilizers.
 - (4) Give the process of water erosion.
 - (5) Discuss the different biotechnological methods for plant improvement.
 - (6) Describe mechanism of ABA
- (c) Answer in detail: (any two out of five)

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- (1) Describe the Munch's theory of transport of organic substances.
- (2) Describe Green Revolution
- (3) Describe in detail Soil profile.
- (4) Write notes on remote sensing as a tool for the study.
- (5) Give the measurable steps to reduce air pollution.

3 Answer in brief: (any three out of six) 6 Give the importance of potassium for plant growth. **(2)** State the importance of Floriculture. (3) Define micronutrients and macronutrients with examples. What is the function of phyto hormones in plant? (4) Give two differences between C₃ & C₄ Cycle **(5)** What are tyloses? (6) (b) Briefly answer the following questions: 9 (any three out of six) Briefly discuss the process of soil erosion by wind. Discuss the action mechanism of Auxin. Green house effect. (3) **(4)** Write in short- Bisporic Embryo Sac **(5)** Write in short - Inarch graft. Write short note on acid rain. (6)(c) Answer in detail: (any two out of five) 10 (1) Herbarium techniques (2) Describe photosynthesis in C_3 plant. Write notes on skill required by plant breeders.

Discuss the types and role of antibiotic for human

(5) Lenticels - describe.

welfare.

(4)