



NAO-003-001613 Seat No. _____

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

March / April - 2017

Botany : Paper - B - 603

*(Inst., Adv. Tech. in Bio., Forest-Forestry,
Med. Plant and Eco. Botany) (New Course)*

Faculty Code : 003

Subject Code : 001613

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Write answers all questions in main answer book.
- (2) Draw neat and labelled diagrams wherever necessary.
- (3) Figures to the right side indicate full marks for the questions.

1 Answer in very short : 20

- (1) Who developed the autoclave ?
- (2) Which type of sterilization occur in oven ?
- (3) Which instrument is used to separate particles ?
- (4) Incubator is use for _____.
- (5) Name the classes of gas chromatography based on the nature of stationary phase.
- (6) In TLC the glass plate functions as _____.
- (7) The movement of molecules in electrophoresis is dependent on _____.

- (8) PCR is technique of _____.
- (9) Which types of forest is occur in regions where annual rainfall is more than 200 cm ?
- (10) What is agroforestry ?
- (11) Write the principal aim of forest policy.
- (12) What is Afforestation ?
- (13) The medicinal knowledge passed from generation to generation in folks is called.
- (14) In the clinical diagnosis in Ayurvedic doctor examines which sign is used _____.
- (15) The maintenance of medicinal plants outside their natural habitats is called_____.
- (16) From where the Homeopathic drugs are prepared ?
- (17) Give the characteristics of Dryland.
- (18) What is Grafting ?
- (19) Name the family of Teak Plant.
- (20) What is Biodiesel ?

2 (a) Answer in short : (any three)

6

- (1) Explain : Components of spectrophotometer.
- (2) Explain the principle of TLC.
- (3) What do you mean by silviculture ?
- (4) Explain : Why conservation of medicinal plant is essential ?
- (5) Write note on state seed corporation.
- (6) What does mean by forest mensuration ?

- (b) Answer in brief : (any three) 9
- (1) Write features of ideal supporting medium in electrophoresis.
 - (2) Write applications of centrifuge.
 - (3) Describe location and main species of tropical thorn forests.
 - (4) Mention six steps for conservation of medicinal plants.
 - (5) Give importance of seed producing organization.
 - (6) Write in short about two vegetative propagation method in horticultural practices.
- (c) Describe in detail : (any two) 10
- (1) Write about design and uses of oven.
 - (2) Write an essay on : Agroforestry.
 - (3) Give scientific name, family and uses of any five important medicinal plants of Gujarat.
 - (4) Explain : Applications of PCR.
 - (5) Write an essay on : Dryland farming.
- 3** (a) Answer in short : (any three) **6**
- (1) Write about design of centrifuge.
 - (2) Write uses of PCR in Biotechnology.
 - (3) Define : Ethnobotany.
 - (4) Write uses of ocimum.
 - (5) Explain : Principle of Incubator.
 - (6) Explain the role of NSC in the setting up of seed standard.

(b) Answer in brief : (any three) 9

- (1) Explain the principal of HPLC.
- (2) Explain any one major forest products of India.
- (3) Explain methods of separation of pigments by TLC.
- (4) Write the methods of extraction of starch.
- (5) Discuss : National Forest Policy.
- (6) Discuss : Climate and soil in Horticulture practices.

(c) Describe in detail : (any two) 10

- (1) Write the principle and design of Autoclave.
- (2) Give brief outline of classification of Indian forests.
- (3) Write methods of performing GC.
- (4) Explain history of traditional medicine in India.
- (5) Explain : Plant growing operations in horticulture.
