



MAO-003-001613

Seat No. _____

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

March / April - 2018

Botany : B-603

*(Instrumentation, Advance Techniques in Biology,
Forest - Forestry, Medicinal Plants & Economic Botany)
(New Course)*

Faculty Code : 003

Subject Code : 001613

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) What is source of biodiesel ?
- (2) Give the full form of NSC.
- (3) Write the name of enzyme that is used to amplify the DNA in a PCR reaction.
- (4) Centrifuge separates their particles based upon their:
- (5) The amount of light absorbed by a material is proportional to the concentration of the absorbing solution is referred as _____.

- (6) Define : Dry land farming.
- (7) Ricinine (alkaloid) is extracted from _____ medicinal plant.
- (8) What is the use of gel electrophoresis buffer ?
- (9) Ultracentrifuge has a speed of :
- (10) Define : Forest menstruation.
- (11) Write any two advantages of agro forestry.
- (12) What is natural regeneration ?
- (13) The state seed certification agency is concerned with _____.
- (14) Write the full form of HPLC.
- (15) In angle type centrifuge, the holders and sample tubes are kept at an angle of _____ from the central axis.
- (16) What is the use of incubator in lab ? (Any two)
- (17) Write any two name of medicinal plant found in Gujarat.
- (18) Write any two type of forest found in India.
- (19) Silica gel is used in the technique :
- (20) Write the principle of centrifuge.

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

6

- (1) Explain : Umbrella Thorn forest.
- (2) Explain 'Mango' as a major fruits of India.
- (3) Write four function of Centrifuge.
- (4) Describe characteristics of Dry land farming.
- (5) Write short note : Agro-forestry.
- (6) Describe : Design of oven.

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

(1) Write the function of National Seeds Corporation (NSC) (Any six)

(2) Write notes on Design of incubator.

(3) Describe horticulture practices.

(4) Write the useful part and medicinal uses of Tulsi.

(5) Explain the function of HPLC.

(6) Write short note : Forest protection.

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

(1) Describe the Conservation of medicinal plants.

(2) Explain bio-diesel extraction.

(3) Explain in detail : PCR.

(4) Explain Afforestation.

(5) Explain Teak as major forest product of Gujarat.

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

(1) Write short note : TLC

(2) Explain : Design of centrifuge.

(3) Explain concept of mensuration.

(4) Write short note : Silviculture

(5) Define ethno-medicines.

(6) Write four function of autoclave.

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

- (1) How 'Ex situ' conservation of medicinal plant is done?
- (2) Write short note : GC
- (3) Explain : Scope of ethno-medicines.
- (4) Write a note on : Preventive measures for forest fire.
- (5) Write the four function of National Forest Policy.
- (6) Write short note : Design of Electrophoresis.

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

- (1) Write about design and applications of spectrophotometer.
- (2) Describe history of traditional medicine in India.
- (3) Explain : Classification of Indian forests.
- (4) Describe two Medicinal plants of Gujarat except Tulsi.
- (5) Describe : Bio-diesel composition and application.
