



**PH-003-001613**

Seat No. \_\_\_\_\_

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

**July - 2018**

**Botany : Paper - 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) Write answers of 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 question.

- 1** Write the correct answers of the following questions in **20** one or two sentence : (Each question is one mark)
- (1) Write the principle of spectrophotometer.
  - (2) Why do we use autoclave ?
  - (3) What is the use of incubator in lab ? (Any two)
  - (4) What are the principles of centrifuge ?
  - (5) What is the name of the enzyme that is used to amplify the DNA in a PCR reaction ?
  - (6) What is the full form of HPLC ?
  - (7) What is the use of gel electrophoresis buffer ?
  - (8) Why thin layer chromatography is used ?
  - (9) What is natural regeneration ?
  - (10) Write any two advantages of agro forestry.

- (11) Write the definition of forest menstruation.
- (12) Write any two names of medicinal plants found in Gujarat.
- (13) In which medicinal plant we obtain Ricinine (Alkaloid) ?
- (14) Write any two names: type of forest found in India.
- (15) Write the common name of Azadirachta indica Plant.
- (16) Write the definition of Dry land farming.
- (17) How Horticulture is related to agriculture ?
- (18) What is the full form of NSC ?
- (19) Write the source of biodiesel.
- (20) Which are the major fruits grown in India ?

- 2** (A) Give the Answers in short : (Any **Three**) **6**
- (1) Write short note : TLC
  - (2) Write short note : Silviculture
  - (3) Write four functions of autoclave.
  - (4) Explain concept of mensuration.
  - (5) Define ethno-medicines.
  - (6) Write the four functions of CSC.
- (B) Give the Answers in brief : (Any **Three**) **9**
- (1) Write short note: design of Electrophoresis.
  - (2) Write the four functions of National Forest Policy.
  - (3) Describe the function of TDC.
  - (4) Explain : Scope of ethno-medicines.
  - (5) Write short note : GC
  - (6) How 'Ex situ' conservation of medicinal plant is done ?
- (C) Describe in detail : (Any **Two**) **10**
- (1) Explain history of traditional medicine in India.
  - (2) Write about design and applications of spectrophotometer.
  - (3) Explain : Bio-diesel composition and application.
  - (4) Describe two Medicinal plants of Gujarat except Tulsi.
  - (5) Explain : Classification of Indian forests.

- 3** (A) Give the Answers in short : (Any **Three**) **6**
- (1) Describe characteristics of Dry land farming.
  - (2) Write four functions of Centrifuge.
  - (3) Explain : Umbrella Thom forest.
  - (4) Describe : Design of oven.
  - (5) Explain 'Mango' as a major fruit of India.
  - (6) Write short note : Agro-forestry.
- (B) Give the Answers : (Any **Three**) **9**
- (1) Write note on design of incubator.
  - (2) Write the useful part and medicinal uses of Tulsi.
  - (3) Explain any one major forest product of Gujarat.
  - (4) Write short note : Forest protection.
  - (5) Explain any two minor fruits of India.
  - (6) Explain the function of HPLC.
- (C) Give the Answers in brief : (Any **Two**) **10**
- (1) Explain in detail : PCR
  - (2) Explain bio-diesel extraction.
  - (3) Describe the conservation of medicinal plants.
  - (4) Explain Afforestation.
  - (5) Describe horticulture practices.
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