



**RZ-003-1016048**

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

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

**March - 2019**

**Botany : Paper - 603**

*(Instrumentation, Adv. Techniques in Biology, Forest and  
Forestry, Medicinal Plants & Economic Botany)*

**Faculty Code : 003**

**Subject Code : 1016048**

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

[Total Marks : 70

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

- 1 (A) Objective type questions : 4  
(1) The speed of Centrifuge is expressed in....  
(2) Which instrument is used for sterilization?  
(3) Principle of Spectrophotometer  
(4) What is the role of Incubator in Microbiology Laboratory?
- (B) Answer in Brief : (Any **One** out of Two) 2  
(1) Give any two functions of Incubator  
(2) Principle of Centrifugation
- (C) Answer in Detail : (Any **One** out of Two) 3  
(1) Draw labeled diagram of spectrophotometer  
(2) Write uses of Autoclave

- (D) Write a note on : (Any **One** out of Two) **5**
- (1) Write about Principle and design of Centrifuge
  - (2) Write a note on design and application of Oven.
- 2** (A) Objective type questions : **4**
- (1) In TLC the silica gel or Alumina powder is function as....
  - (2) What is the full form of PCR?
  - (3) In adsorption chromatography, the stationary phase is....
  - (4) Which biomolecule is separated by Electrophoresis?
- (B) Answer in Brief : (Any **One** out of Two) **2**
- (1) Explain Principle of TLC
  - (2) Write any two applications of HPLC
- (C) Answer in Detail : (Any **One** out of Two) **3**
- (1) Give the Principle of Electrophoresis
  - (2) Write a Principle of GC
- (D) Write a note on : (Any **One** out of Two) **5**
- (1) Explain applications of PCR
  - (2) Short note on TLC
- 3** (A) Objective type questions : **4**
- (1) The technology of combining agriculture forestry is the concept of....
  - (2) Name any one type of forest occur in Gujarat?
  - (3) Define "Social forestry"
  - (4) Name the types of Wood?

- (B) Answer in Brief : (Any **One** out of Two) **2**
- (1) What is wood?
  - (2) Define a Biosphere reserve
- (C) Answer in Detail : (Any **One** out of Two) **3**
- (1) Give any three wildlife sanctuary in India
  - (2) Explain any two wood properties
- (D) Write a note on : (Any **One** out of Two) **5**
- (1) Give classification of Indian Forest
  - (2) Short note on "Social forestry"
- 4 (A) Objective type questions : **4**
- (1) Give the scientific name of Tulsi
  - (2) Vitex negundo is family form...and local name of plant.....
  - (3) Give the scientific name of Ashwagandha
  - (4) Write a local name of Aegle marmelos
- (B) Answer in Brief : (Any **One** out of Two) **2**
- (1) Any two medicinal uses Ashwagandha
  - (2) Write a useful part and medicinal value of vasaka.
- (C) Answer in Detail : (Any **One** out of Two) **3**
- (1) Write scientific name and two medicinal values of Eucalyptus plant
  - (2) Write useful part of Neem plant
- (D) Write a note on : (Any **One** out of Two) **5**
- (1) Write scientific name and Medicinal values of Neem and Nagod
  - (2) Short note on Azardica indica

- 5 (A) Objective type questions : 4
- (1) Write a Scientific name and family name of coffee
  - (2) Write two uses of Cinnamon
  - (3) Write the family name of Zea maize
  - (4) Scientific name of cardamom.....
- (B) Answer in Brief : (Any **One** out of Two) 2
- (1) Write two uses of Clove
  - (2) Give name of family of ground nut and sesame plant
- (C) Answer in Detail : (Any **One** out of Two) 3
- (1) Write down family name and scientific name and two uses of Pea plant
  - (2) Give two three uses of Vigna radiata
- (D) Write a note on : (Any **One** out of Two) 5
- (1) Short note on :- tea plant
  - (2) Describe in detail with family name, its uses and cultivation of Arachis hypogaea
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