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**SARDAR PATEL UNIVERSITY****B.Sc. EXAMINATION SEMESTER - V CODE : US05CBOT03  
SUBJECT: BOTANY (MICROBIOLOGY, MICROTECHNIQUE AND  
FORESTRY)****DATE: 28/12/2020 MONDAY TIME: 2.00 to 4.00 PM TOTAL MARKS: 70****Q. 1 Multiple Choice questions.**

[10]

1. Bacteria were first discovered by A.V. Leeuwenhoekin:  
(a) 1775 (b) 1675 (c) 1575 (d) 1757
2. Adolf Meyer has reported the first time disease in .....  
(a) Plants (b) Animals (c) Bacteria (d) Human
3. The organism capable of destroying bacterial colonies is.....  
(a) Virion (b) Viroid (c) Virus (d) Prion
4. .... is a fair killing and fixing fluid.  
(a) Brazilin (b) Carmine (c) Congo red (d) Absolute Ethyl Alcohol
5. Which one of the following is a Natural dye?  
(a) Safranin (b) Congo red (c) Methylene blue (d) Hematoxylin
6. The gross structure of wood is determined by.....  
(a) Tracheids (b) Sapwood and Heartwood (c) Fibers (d) Tyloses
7. Soft fibers are obtained from:  
(a) Leaf (b) Seed (c) Root (d) Stem
8. Which one of the following is an Oil type preservative?  
(a) Copper-sulphate (b) Creosote (c) Zinc-chloride (d) Ascu
9. A board constituted from wood and lingo-cellulose materials is:  
(a) Ply wood (b) Laminated board (c) Particle board (d) Fiber board
10. The vulcanized rubber was discovered by:  
(a) Charles Goodyear (b) Priestly (c) Mackintosh (d) Christopher

**Q. 2 (A) Fill in the blanks.**

[08]

1. TMV was first isolated in crystalline form by.....
2. Formaldehyde is an example of .....
3. Fibers of commerce are obtained from family.....
4. The most suitable common host of lac insect is .....

**(B) True or False.**

1. Bacteria are resemble with nostoc sps.
2. DPX is a dehydrating fluid.
3. Bombax ceiba is an extremely durable wood.
4. Charcoal is an oxidized wood.

[1]

(P.T.O.)

**Q. 3 Answer in short (Any ten).**

[20]

1. What are the gram negative bacteria?
2. Write the significance of Viruses.
3. Discuss: Economic importance of Actinomycetes.
4. Discuss: The coal-tar dye with suitable example.
5. What is embedding?
6. Discuss: Smear method.
7. Define: Sapwood and Heartwood.
8. Write the common source and uses of Dyes.
9. Write the uses of Resin.
10. What is Cutch and Katha.
11. Write the uses of Lac.
12. Physical properties of Rubber.

**Q. 4 Long answer questions (Attempt any four).**

[32]

- (1) Describe: Transformation in Bacteria.
- (2) Describe the general structure of Virus and its properties.
- (3) Discuss: Maceration of tissue.
- (4) What are fixatives? State any one fixative used in fixation.
- (5) What are wood preservatives? Discuss Water soluble wood preservatives.
- (6) What is oil? Discuss Palmrosa oil in detail.
- (7) Write the process of manufacturing and uses of Plywood.
- (8) Write the suitable source, process of paper making and uses of Paper.

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[2]