

**B. Sc. BOTANY**  
**SIXTH SEMESTER**  
**PLANT RESOURCE UTILIZATION**  
**BSB – 603**

( Use Separate Answer Scripts for Objective & Descriptive )

Duration : 3 hrs.

Full Marks : 70

( PART-A: Objective )

Time: 20 min.

Marks:20

*Choose the correct answer from the following:*

**1X20=20**

1. Nitrogen fixing microalgae
  - a. *Nostoc* sp
  - b. *Closterium* sp
  - c. *Gomphonema* sp
  - d. *Navicula* sp
2. Brown and Red algae rich in
  - a. Nitrogen
  - b. Phosphorus
  - c. Potassium
  - d. Calcium
3. Which of the following have plant growth promoting effect
  - a. *Acetobacter* sp
  - b. *Bacillus* sp
  - c. *Pasteurella* sp
  - d. *Pesudomona* sp
4. Sucrose containing feedstock
  - a. *Saccharum* sp
  - b. *Zoysia* sp
  - c. *Paspalum* sp
  - d. *Axonopus* sp
5. All nitrogen fixing Cyanobacteria are filamentous and contain specialized cells known as
  - a. Chloroplast
  - b. Heterocysts
  - c. Pyrenoid
  - d. Flagella
6. *Prophyra tenera* is used in
  - a. Plain bread
  - b. Youtiao bread
  - c. Nori bread
  - d. None of the above
7. One of the most important legume forages of the world is
  - a. Egyptian clover
  - b. Sorghum
  - c. Alfalfa
  - d. Persian clover
8. One of the rice variety IR8 is
  - a. Low-yielding semi-dwarf rice
  - b. High-yielding semi-dwarf rice
  - c. Low-yielding dwarf rice
  - d. High-yielding dwarf rice
9. Which are the characteristic of renewable resources
  - a. Sustainable in nature
  - b. Replenish quickly
  - c. Low cost and environmentally friendly
  - d. All of the above

10. Bast fibers derived from  
 a. Leaves of monocotyledons  
 c. Seed hair  
 b. Inner bark of tree  
 d. Leaves of dicotyledon
11. Margosa is belong to family  
 a. Meliaceae  
 c. Liliaceae  
 b. Solanaceae  
 d. Moraceae
12. Name the family of Basil plant  
 a. Moraceae  
 c. Verbenaceae  
 b. Theaceae  
 d. Lamiaceae
13. A technique consists of immersing a plant in a liquid (water, oil, alcohol, etc.) inside an airtight container  
 a. Percolation  
 c. Decoction  
 b. Maceration  
 d. Digestion
14. It is formed as oxidation products of various essential oils  
 a. Gum  
 c. Dye  
 b. Resin  
 d. All of above
15. Coloured compounds capable of being fixed to fabrics  
 a. Dye  
 c. Gum  
 b. Resin  
 d. All of above
16. Copal is a  
 a. Hard resin  
 c. Gum resin  
 b. Oleo resin  
 d. None
17. Name the medicinally important part of turmeric  
 a. Bulb  
 c. Rhizome  
 b. Corm  
 d. Offset
18. The general techniques of medicinal plant extraction are  
 a. Maceration  
 c. Decoction  
 b. Digestion  
 d. All of above
19. "Citronellol" is an essential oil constituent of  
 a. Lemon grass  
 c. Jasmine  
 b. Rose  
 d. Tulsi
20. Botanical name of Tea  
 a. *Rosa sinensis*  
 c. *Azadirachta indica*  
 b. *Theasinensis*  
 d. *Pyrus malus*

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**( PART-B : Descriptive )**

Time : 2 hrs. 40 min.

Marks : 50

*[ Answer question no.1 & any four (4) from the rest ]*

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| 1. Write short note on   | 5+5=10       |
| a. Natural resources   |              |
| b. Bioenergy   |              |
| 2. Write short note on   | 5+5=10       |
| a. Ginger  |              |
| b. Turmeric  |              |
| 3. What is Plants fibers? Give the classification of plants fibers according to their source in plant. Explain some common fibers with their uses. | 2+4+4<br>=10 |
| 4. Write short note on   | 5+5= 10      |
| a. Bioprospecting  |              |
| b. Biochemical resources from plants and fungi   |              |
| 5. What are sea weeds? What are the potential resources we can obtained from sea weeds as food and fertilizer applications ?                       | 2+4+4<br>=10 |
| 6. Write about different herbal preparations methods of extraction.  | 10           |
| 7. Write a brief note on timber yielding plant citing two examples.  | 10           |
| 8. Name the scientific name and family of Henna plant. Write its medicinal uses.   | 4+6=10       |

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