

**B.Sc. BOTANY**  
**SIXTH SEMESTER**  
**PLANT RESOURCE UTILIZATION**  
**BSB-603**  
[USE OMR SHEET FOR OBJECTIVE PART]

**SET**  
**B**

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

( Objective )

Choose the correct answer from the following:

1 × 20 = 20

- The general techniques of medicinal plant extraction are:
  - Maceration
  - Digestion
  - Decoction
  - All of the above
- Copal is a:
  - Hard resin
  - Oleo resin
  - Gum resin
  - None
- Margosa belongs to the family:
  - Meliaceae
  - Liliaceae
  - Solanaceae
  - Asteraceae
- Which of the following is timber yielding plant?
  - Neem
  - Jasmine
  - Henna
  - Teak
- "Henna dye" is obtained from:
  - Lawsonia inermis*
  - Lagerstomia speciosa*
  - Lythrum baeticum*
  - Indigofera tinctoria*
- A chemical compound called 'taxol', which is extracted from the bark, needles, twigs and roots of Himalayan yew, is used to treat.....
  - Tuberculosis
  - Diabetes
  - Malaria
  - Cancer
- Which spice is derived from the dried stigma of a flower and is known for its distinct flavor and vibrant color?
  - Cinnamon
  - Turmeric
  - Saffron
  - Paprika
- Which of the following plants is commonly used for the production of cotton fiber?
  - Linum usitatissimum*
  - Gossypium* spp.
  - Corchorus* spp.
  - Cannabis sativa*
- Bioprospecting is the process of:
  - Exploring the potential of biological resources for commercial purposes
  - Discovering new planets in outer space
  - Investigating the impact of climate change on biodiversity
  - Studying the social behavior of animals in their natural habitats

10. Which of the following is not a type of seaweed?
- |          |         |
|----------|---------|
| a. Kelp  | b. Nori |
| c. Dulse | d. Clam |
11. Identify the family of Basil plant.
- |                |              |
|----------------|--------------|
| a. Moraceae    | b. Theaceae  |
| c. Verbenaceae | d. Lamiaceae |
12. Name the medicinally important part of ginger.
- |            |           |
|------------|-----------|
| a. Bulb    | b. Corm   |
| c. Rhizome | d. Offset |
13. Botanical name of Tea:
- |                              |                             |
|------------------------------|-----------------------------|
| a. <i>Rosa sinensis</i>      | b. <i>Camellia sinensis</i> |
| c. <i>Azadirachta indica</i> | d. <i>Pyrus malus</i>       |
14. "Citronellol" is an essential oil constituent of:
- |          |                |
|----------|----------------|
| a. Rose  | b. Jasmine     |
| c. Tulsi | d. Lemon grass |
15. A technique consists of immersing a plant in a liquid (water, oil, alcohol, etc.) inside an airtight container:
- |                |               |
|----------------|---------------|
| a. Percolation | b. Maceration |
| c. Decoction   | d. Digestion  |
16. The Star Anise (*Illicium griffithii*) is a medicinal plant found in the forests of ..... and.....
- |                                    |                               |
|------------------------------------|-------------------------------|
| a. Meghalaya and Arunachal Pradesh | b. Uttarakhand and Ladakh     |
| c. Uttarakhand and Assam           | d. Jammu & Kashmir and Sikkim |
17. Which human activity can contribute to a decrease in the level of atmospheric oxygen?
- |                  |                   |
|------------------|-------------------|
| a. Afforestation | b. Animal hunting |
| c. Mining        | d. Deforestation  |
18. Which of the following is a root vegetable commonly used in cooking?
- |            |                |
|------------|----------------|
| a. Tomato  | b. Carrot      |
| c. Lettuce | d. Bell pepper |
19. Which type of seaweed is commonly known as kelp and forms large underwater forests?
- |                  |                       |
|------------------|-----------------------|
| a. Green seaweed | b. Red seaweed        |
| c. Brown seaweed | d. Blue-green seaweed |
20. Untapped plant resources may have potential applications in:
- |                            |                             |
|----------------------------|-----------------------------|
| a. Food and nutrition      | b. Automotive manufacturing |
| c. Artificial intelligence | d. Aerospace engineering    |

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( Descriptive )

Time : 2 hr. 30 mins.

Marks : 50

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

1. Write about different herbal preparations methods of extraction. 10
2. Write a brief note on gum yielding plants, citing few examples. 10
3. Write short note on: 5+5=10
  - a) Lemon grass
  - b) Amla
4. Mention the scientific name, family, part used and uses of the following: 5+5=10
  - a) Turmeric
  - b) Aloe
5. Discuss the following: 5+5=10
  - a) Key causes of deforestation
  - b) Uses of cotton
6. What are fodder crops? Write origin, botany and uses of oats. 2+2+3+3=10
7. What is bioprospecting, and how does it involve the search for natural resources with potential applications in various fields such as medicine, agriculture, and industry? 2+8=10
8. What are seaweeds, and how can they be harnessed as a promising food resource with diverse applications? 2+8=10

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