

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – BOTANY

HERBAL SCIENCE

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Find out the Siddhar.
(i) Sushrudha (ii) Theraiyar
(iii) Charaka (iv) Dhanvantari
- 2 Indicate the plant part used as medicine in *Rauwolfia serpentina*.
(i) Leaves (ii) Seed (iii) Bark (iv) Root
- 3 Eugenol is extracted from
(i) Geranium (ii) Vettiver (iii) Clove (iv) Thyme
- 4 Identify the secondary metabolites.
(i) Steroids (ii) Carbohydrates (iii) vitamins (iv) Ethanol
- 5 Name an alkaloid, which is rich in *Cinchona* tree?
(i) Brucine (ii) Quinine (iii) Colchicine (iv) Digoxin

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Discuss the *tridoshas* of Ayurvedha.
OR
b. Explain the role of adulterants in natural drugs.
- 7 a. Evaluate the threat status of *Rauwolfia serpentina* as a medicinal plant.
OR
b. Analyse the therapeutic efficacy of *Ashwagandha* in human health.
- 8 a. Write the botanical names of mint, holy basil and oreganum.
OR
b. Explain the distillation process through which aromatic oil is being extracted.
- 9 a. Justify the importance of secondary metabolites in plants.
OR
b. Illustrate a modern technique being used to study secondary metabolites.
- 10 a. State the *pros and cons* of biofungicides.
OR
b. Analyse the objectives of National Medicinal Plants Board of India.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a. Elucidates the ways and means of adulteration and drug evaluation.
OR
b. Analyse the scope of pharmacognosy of Indian medicinal systems.
- 12 a. Enumerate and explain the uses of different plant parts of Neem.
OR
b. Justify the cultivation of Cinchona in India mentioning its medicinal importance.
- 13 a. Categorize the systematics and uses of any three aromatic plant species in India.
OR
b. Evaluate the uses of cinnamon and saffron as medicine and kitchen ingredient.
- 14 a. Analyse the basic defence mechanisms observed in plants.
OR
b. Assess the various factors influencing the production of secondary metabolites.
- 15 a. Elucidate the extraction method of alkaloids.
OR
b. Appraise the importance of women in medicinal plants entrepreneurship.

Z-Z-Z

END