



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)

Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – June / July 2021

II Semester

Class : I PG

Time : 3 Hours

Major : FSMD/ Biochemistry/ Biotechnology / Chemistry

Max. Marks : 100

20MBOI01 IDC- Microbial Technology and Herbal Drugs

Part A

10x1=10

Choose the Correct Answer

1. *Solanum trilobatum* belongs to the family
a. Euphorbiaceae b. Solanaceae c. Dioscoreaceae d. Amaranthaceae CO3K2
2. *Vincristin* is isolated from
a. *Gymnema sp.*, b. *Phyllanthus sp.*, c. *Catharanthus sp.*, d. *Solanum sp.*, CO4K2
3. *Curcuma longa* is a
a. shrub b. herb c. climber d. sub shrub CO5K2
4. Rebaudioside is isolated from
a. *Glycyrrhiza* b. *Saffron* c. *Stevia* d. *Lawsonia* CO6K1
5. *Lawsonia* is used as
a. Sweetner b. emulcifier c. cooling agent d. all the above CO5K2
6. The scientific study of traditional knowledge is termed as
a. anthropology b. ethnobotany c. archeology d. histology CO3K1
7. Which test is used to identify gram negative bacteria
a. urease test b. oxidase test c. nitrate broth d. catalase test CO2K1
8. Which is the nitrogen source in nutrient agar preparation
a. agar b. sucrose c. peptone d. beef extract CO1K1
9. Nichrome loop wire is used in which technique
a. Pour plate b. Streak plate c. Spread plate d. Roll tube technique CO1K1
10. Kirby Bauer test used to identify
a. anti inflammatory activity b. antibiotic sensitivity
c. anti cancer activity d. anti viral activity CO2K2

Part B
Answer the following
Answer should not exceed 200 words or one page

5×6=30

- 11.a. Enlist the pharmacological properties of *Phyllanthus amarus* CO3K1
(or)
- 11.b. Describe the phytochemical components present in *Dioscorea deltoidea* CO4K2
- 12.a. Elucidate the source and colouring principle of Annatto CO5K1
(or)
- 12.b. Enumerate the sources of anthocyanin group of pigments CO5K2
- 13.a. Analyse the forms of drugs in Siddha CO3K3
- 13.b. Describe the principle of siddha CO3K2
(or)
- 14.a. Outline the composition and preparation of media which supports bacterial growth. CO4K2
(or)
- 14.b. List the common broth media used for sugar fermentation assay CO4K1
- 15.a. Explain the principle and types of streak plate method CO5K3
(or)
- 15.b. Describe the methods adopted for maintenance of a culture CO5K2

Part C
Answer the following
Answer should not exceed 800 words or four pages

5×12=60

- 16.a. Evaluate the phytochemical and pharmacological properties of *Gymnema sylvestre* CO2K5
(or)
- 16.b. Explain the anti asthmatic property of *Solanum trilobatum*. CO2K3
(or)
- 17.a. Enumerate production of *Caramel* colour. CO5K2
(or)
- 17.b. Summarize about of nutritive sweeteners. CO6K5
- 18.a. Discuss the steps involved in standardization of drug in Siddha. CO3K5
(or)
- 18.b. Enumerate the parameters in drug evaluation CO3K3
- 19.a. Write an account on selective and differential medias CO1K4
(or)
- 19.b. Establish the procedure and significance of catalase and urease test CO2K3
- 20.a. Describe the isolation of pure culture CO1K3
(or)
- 20.b. Evaluate Minimum Inhibitory Concentration for bacteria and fungi CO2K5
