

(MPG,102 T)

--	--	--	--	--	--	--	--	--	--

**ODD SEMESTER EXAMINATION ,2022-23**

**COURSE NAME :-M.PHARM  
SEMESTER -1 SEM**

**SUBJECT:-ADVANCED PHARMACOGNOSY -I**

Time: 3 Hours

Max.marks:75

Note :- Attempt all parts.

**PART – A**

Note: All questions are compulsory.

20x1=20

1.Which one of the following foods is not the functional, food ?

(a) Dietary fiber (b) Probiotics (c) Omega-3 fatty acids (d) Pills or capsules or sachets of foods as a part of everyday diet.

2. Which one of the following functional ingredients, improves,gastrointestinal health and also calcium absorption ?

(a) Fructo, – oligosaccharides (b) Sterols (c) PUFA (d) Alkaloid

3. Which of the following statement is true about probiotics ?

(a) Probiotics promote efficient functioning of digestion (b) They are beneficial bacteria which colonizes in the intestinal tract (c) They stimulate and maintain natural immunity of body (d) All of the above.

4. Which of the following is NOT a advantage of Herbal NDDS.

(a) Dose reduction (b) Site specific action (c) Enhanced bioactivity (d) Simple method of preparation.

5. Which of the following is the specific Chemical test for Flavonoid.

(a) Keller killani test (b) Lieberman Burchard test (c) Shinoda test (d) Foam test .

6. Pharmacovigilance, continue throughout :-

(a) Post marketing surveillance (b) Pre and post marketing surveillance (c) Pre marketing surveillance (d) None of the above .

7.Website of WHO for Pharmacovigilance is.

(a)Vigimed (b) Viginex (c) Vigimel (d) Viginac

8.The WHO International Drug Monitoring, Programme was established in the year .

(a) 1986 (b) 1990 (c) 1996 (d) 1968

9.Type A adverse reactions are –

(a) Dose dependent (b) Unpredictable (c) Dose independent. (d) Idiosyncratic

10. Ginseng is indigenous to which country ? (a) China (b) Japan (c) Korea (d) United states.

- 11.....is a substance which removes toxic oxidizing agent in a living organism.  
 (a) Antioxidant (b) Vitamins (c) Proteins (d) Fats
- 12.Which of the following are antioxidants ?  
 (a) Copper (b) beta carotene (c) Anthocyanin (d) All of these.
- 13.....vitamins are the sources of antioxidants ?  
 (a) Vitamin C (b) Vitamin E (c) Vitamin K (d) All of these.
- 14.....are the benefits of antioxidants ?  
 (a) Reduce the heart disease (b) Reduce cancer risk (c) Gives protection against ageing (d) All of these
- 15.Which all of the following drug is antibiotic compound of marine drugs except.  
 (a) Cycloeuodesomal (b) Ircinin -1 (c) Laminine (d) Viriabilin
- 16.The term..... was first used to describe an ailment associated with the ingestion of marine snails.  
 (a) Polytoxin (b) Ciguatoxin (c) Red tide toxin (d) Gonyautoxin
17. What are the most common adulterant of Tea.  
 (a) Gypsum (b) Soapstone (c) graphite (d) All of the above .
18. One of the most important functions of botanical garden is that.  
 (a) They provide a beautiful area for recreation (b) One can observe tropical plants there (c) They allow ex-situ conservation of germplasm (d) They provide the natural habitat for wildlife.
19. An enzyme that joins the ends of two strands of nucleic acids is.  
 (a) Polymerase (b) ligase (c) synthetase (d) Helicase
20. Highest water use efficiency is observed in \_\_\_\_\_  
 (a) CAM plants (b) C3 plants (c) C4 plants (d) All of the above.

## PART- B

Note: Attempt any seven questions.

7X5=35

1. Describe the, sources marker compounds and medicinal uses (i) Flax seeds (ii) Broccoli;
2. Name the challenges in safety monitoring of natural medicines?
- 3 .List, in situ and ex-situ conservation of medicinal plants.
4. Summarize, GMP and GLP guidelines for manufacturing of herbal medicines.
5. Distinguish particulars of organization and functions of Indian council of Agricultural Research.
6. Create the short note on herbs as functional foods.
7. illustrate significance of selection of markers in Stability of herbal drugs.
- 8 .Discuss the need of Pharmacovigilance, of drugs of natural origin.
9. Tabulate, occurrence method of isolation ,chemical nature and medicinal uses of Resveratrol.

## PART- C

Note: Attempt Any two questions.

2X10=20

- 1 .Discuss the importance of Pharmacognosy in herbal drug industry.& Principles of good Agricultural Practices.
2. Describe, the challenges and opportunities in research on marine drugs.explain the scope of Nutaceuticals.

3. Differentiate the Bio drug-food interaction ? Apply suitable examples & Describe FSSAI guidelines for Nutraceuticals





## PART – B

### Q.2 Short answer type question. (ANY FIVE)

(7X5=35 marks)

- (i) Define primary and secondary metabolites. Write a note on Shikimic acid pathway **OR** Mevalonate acetate pathway.
- (ii) Discuss amino acid pathway and formation of different secondary metabolites through amino acid pathway.
- (iii) Write a note on modern methods of extraction of crude drugs.
- (iv) Give a detailed note on Tracer technique.
- (v) Discuss general introduction, composition, chemistry, biosource and therapeutic application of Alkaloids **OR** Tannins secondary metabolites.
- (vi) Write a note on basic metabolic pathway. Explain formation of secondary metabolite formation of hyoscyamine **OR** strychnine.
- (vii) Write a note on isolation, identification and analysis of followings; **(Any Two)**
  - (a) Curcumin
  - (b) Rutin
  - (c) Quinine
  - (d) Artemisin
- (viii) Write a note on industrial production, estimation and utilization of followings; **(Any Two)**
  - (a) Forskoline
  - (b) Taxol
  - (c) Vincristine & Vinblastine
  - (d) Sennosoid
- (ix) Write biological source, chemical class, therapeutic and commercial application of followings; **(Any Two)**
  - (a) Lignans
  - (b) Guggul
  - (c) Digitalis
  - (d) Menta

**PART:-C**

**Q.3 Long answer type question. (ANY TWO)**

**(10X2=20 marks)**

- (i) Write a detail note on Industrial production, isolation, identification, estimation and utilization of Podophyllotoxin **OR** Caffeine.
- (ii) Write an explanatory note on modern spectroscopy techniques for application in identification of crude drugs.
- (iii) Write about chromatographic techniques and their application in identification and purification of phytoconstituents.

