



VIDYA SIRI COLLEGE OF PHARMACY

(A Unit of Kasipathi Educational Trust @ 157/2017 -18)

(Recognized by Government of Karnataka, Affiliated to Pharmacy Council of India, New Delhi & Board of Examining Authority, Drugs Control Department, Government of Karnataka)

www.vidyasiricop.edu.in

Babus Mandel,
9836470949

FIRST SESSIONAL EXAM Question Paper (THEORY)

2021-22

Branch: D. Pharm

Year: I. D. Pharm

Subject & Subject Code: Pharmacognosy

Marks: 40

Date: 14/03/2022

Time: 90

min

Instruction to Candidates:

- 1) Attempt All three Sections
- 2) Draw neatly labeled diagrams wherever necessary.

I. Long Answers (Answer any 3 out of 4 questions) 3 X 5 marks=15 Marks.

1. Write a note on the Scope of Pharmacognosy.
2. Write a note on Modern Pharmacognosy.
3. Differentiate between organized and unorganized drugs with examples
4. Differentiate between primary and secondary metabolites with examples

II. Short Answers (Answer any 5 out of 6 questions) 5 X 3 Marks= 15 Marks

5. What are gums and mucilages? give examples
6. Give two chemical tests to identify reducing sugars.
7. Differentiate between fats, oils and waxes with examples
8. What is saponification value, acid value and Iodine value? give its significance
9. List out the major developments in pharmacognosy in the Era before christ.
10. Write a note on the use of carbohydrates ,proteins and lipids as pharmaceutical aids with examples.

III. Objective Answers (Answer all 10 out of 10 questions) 10 X 1 Marks = 10 marks

11. Define Pharmacognosy
12. Define crude drug
13. Who is considered the Father of Pharmacy?
13. Who coined the term Pharmacognosy.
15. What are galenicals?
16. What is de materia medica?
17. Define carbohydrates.
18. What is Molisch's test?
19. What is biuret test?
20. Define lipids.

Babua Mandal, Dubt Pharmacognosy
Contact: 9836470949.

1. Scope of Pharmacognosy:-

Pharmacognosy is the study of medicinal uses of various naturally occurring drug, sources, distributions, method of cultivation, active constituents, Identification test etc. Mainly it has huge scope in ~~for~~ pharmacognosy area.

2. Modern Pharmacognosy:-

Modern Pharmacognosy involves the broad study of natural product of various source including plants, bacteria, fungi and marine organism. Pharmacognosy has always been a translational or multidisciplinary science and during the evolution of the scope of this subject area.

3. Difference between Organise and Un-Organise drug:-

Organised Drug	Un-Organised Drugs
i) This are the organs of plants or animals.	i) They are derived from part of plant or animal.
ii) They are solid in nature. Ex. Bark, Roots, Stem, Fruits.	ii) They are solid, semisolid, or liquid in nature.
iii) They have well define morphological character	iii) They do not have definite morphological character.
iv) They have celluar structure.	iv) They do not have cellular structures.

5. Gums and Mucilages:-

Gums are pathological products of plants containing Ca, K and Mg salt of polyuronic acids. For Example - Acacia, Tragacanth.

Mucilage are physiological products of plant containing polyuronides usually as sulphuric acids. For Example: Agar, Pectin

6. Chemical test to Identify reducing sugar:-

i) Benedict's test \Rightarrow This test perform to find the presence of reducing sugar, in which Benedict's qualitative reagent added to the sugar solution, formation of brick red ppt confirm the presence of reducing sugar.

ii) Barfoed Test \Rightarrow This test also perform to find the reducing sugar in which Barfoed's qualitative reagent added to the sugar solution, formation of red ppt and differentiates the presence of monosaccharide and disaccharides.

7. Difference between fats, Oils, and Waxes:-

The main difference between fats and oil is that fats are composed of high amount of saturated fatty acids which will take a solid form at room temperature where as oil are composed of mainly unsaturated fatty acids which will take a liquid form at room temperature. And Waxes can be ascribed as a usually solid organic compound for cosmetics area.

Pharmacognasy :-
It is define as the scientific and systematic study of crud drugs.

12. Define of Crud Drug :-

Crud drug are drugs obtained from natural sources which are in a new form.

13. Father of Pharmacy :-

William Procter Jr. is a Father of Pharmacy

14. Pharmacognasy was first introduced by
the Australian physician Schmidt in 1811.

15. Galenicals :-

Its mean a medicine prepared by extracting one or more active constituents of a plant.

16. Materia Medica :-

Materia Medica is a Latin term from the history of pharmacy for the body of collected knowledge.

17. Carbohydrate :-

Carbohydrate as define as polyhydroxy aldehydes or polyhydroxy ketons and their derivative or the substance which yields on hydrolysis.

or highest

8. Saponification Value :-

It is the number of milligrams of KOH require to saponify 1gm of a given fat or oil.

Acid value :- It is also number of milligrams of KOH required to neutralize the free fatty acids present in 1gm of fat.

Iodine Value :-

It is the number of grams of iodine absorbed by 100gm of fat. It indicate the degree of un-saturation of fat.

9. Carbohydrates :-

Carbohydrates are defined as polyhydroxy aldehydes or polyhydroxy ketons and their derivatives or the substance which yields these on hydrolysis. Ex - Monosaccharides, Disaccharides, and Polysaccharide.

Proteins :-

Proteins are organic nitrogenous compound occurring in plant comprising of Amino acid unit. Example - Gelatin.

Lipids :-

Lipids are comprising of Fats, Oil and Waxes. Chemically they are esters of glycerol with fatty acids. Fats and oils are triglycerides.

Molisch's test:-

It is alcoholic alpha naphthol forms furfural or furfural derivatives, such as hydroxymethylfurfural by the concentrated sulphuric acid acting on the sugar.

19. Biuret test:-

For proteins positively ~~is~~ identifies the presence of proteins in solution of the deep violet color. Biuret, $H_2NCONHCONH_2$ reacts with copper ions in basic solutions to form a deep violet complex.

20. Lipids:-

Lipids are ~~not~~ comprising fats, oils and waxes

