

INSTITUTE OF TEACHING AND RESEARCH IN AYURVEDA
[INSTITUTE OF NATIONAL IMPORTANCE]

MINISTRY OF AYUSH, GOVERNMENT OF INDIA

B. PHARM. (AYU.) III YEAR

PHARMACEUTICAL TECHNOLOGY I

Question Bank

S.N.	QUESTIONS	MARKS
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SECTION A

1. LIQUIDS

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| Define solution. Explain its advantages and disadvantages. Enumerate methods for enhancing solubility. | 10 |
| Enumerate different types of dosage forms of Ayurvedic formulations. What parameters will you design for the development of dosage forms. | 10 |
| Discuss liquid dosage forms and their advantages ? | 10 |
| Explain the difference between a simple mixture, a suspension and an emulsion. What are the advantages and disadvantages of a liquid dosage form over solid dosage forms ? | 10 |
| Discuss method of preparation, packaging & labeling of liquid preparation ? | 10 |
| What are liquid dosage forms ? Explain the method of preparation, packaging and labeling of the following.
(i) Lotions (ii) Collodion (iii) Tinctures (iv) Liniments | 10 |
| What are syrups ? Explain its formulation and method of preparation in detail. | 5 |
| Describe the preparation and uses of tinctures and aromatic waters. | 5 |
| Write short note on - nasal drops & ear drops | |
| Difference between Syrup & elixir | 5 |
| Differentiate between collodions and colloids. | 5 |

Difference between lotion and liniments	5
Define draught	2
Define liniment	2
Define glycerites	2
Mixtures containing indiffusible solids.	2
Define Elixir.	2
Advantages of liquid dosage forms.	2
What are colloids ?	2

2. SUSPENSION

Define suspension. What are the characteristics of flocculated and deflocculated suspensions?	10
Define suspension and theory of suspension in detail.	10
What is the difference between flocculated and deflocculated suspension ?	10
How to evaluate suspension ?	10
Discuss manufacturing procedures and evaluation parameters for suspension.	10
Write short note on – suspending agents	5
stability of suspension	5
Theory of suspension	5
Zeta potential	2
Surface active agent	2
HLB	2
Flocculating agents	2

Biphasic dosage forms 2

3. EMULSION

What is the emulsion ? discuss their merits and demerits in details ? 10

Describe manufacturing procedure of emulsion and test for identification ? 10

Discuss different types of emulsions. What are emulsifying agents? How will you prepare an emulsion of an edible oil ? 10

Define and classified biphasic dosage forms. Enumerate different types of additives required for the biphasic dosage forms. 10

Write short note on-

Emulsifying agents and HLB 5

Evaluation of emulsion 5

Instability of emulsion 5

Identification tests for emulsion 5

Preservation and packaging of emulsion. 5

Types of emulsion 5

What do you understand by an oil in water type of emulsion ? How will you prepare an emulsion of an edible oil ? 5

Define HLB values. 2

Biphasic dosage forms 2

External and internal phase 2

Biphasic systems 2

4. POWDERS

What are different powder dosage forms in Ayurveda ? Explain problems arising during the preparation of powders. 10

What are granules ? Explain granulation techniques. Give its advantages and disadvantages over powders.	10
What are solid dosage forms ? What are their advantages ? Which problems are encountered while manufacturing powder ?	10
Define powder drugs. How will you classify them ! What are the problems encountered while preparing powder formulations ?	10
Classify powders and discuss their advantages & limitations ?	10
Discuss processing of powders and packaging ?	10
Write short note on -	
Effervescent granules	5
Problems in powder formulation	5
Discuss granulation techniques for preparation of powders. Explain the problems involved during preparations of powder.	5
Eutactic mixture	2
Minimum ingredients required for preparing effervescent granules.	2
Granules.	2
How will you classify powder ?	2

5. DOSAGE FORM NECESSITIES & ADDITIVES

Define with examples, Preservatives, Antioxidants and Disinfectants. Discuss the mechanisms with examples of different types of preservatives used in Pharmaceutical preparations.	10
How will you differentiate between an additives and a contaminant ? Explain How additives are useful in preparing Ayurvedic formulation.	10
What are additives? Discuss the importance and types of preservatives.	10
Explain various additives used in pharmaceutical formulation ?	10
What are the additives? How will you classify them ? Discuss the role of stabilisers and disintegrators in different dosage forms ?	10
Write short note on - emulsifying agents	5
antioxidants	5

SECTION B

7. SEMISOLID PRODUCTS

Define ointment. Describe method of preparation. Enlist ointment bases and explain any one of them.	10
What are semi solid dosage forms ? Describe with example the use of hydro carbon base in the preparation of an ointment.	10
Discuss general formulation and bases for semisolid preparations ?	10
Define creams. Give a general method of preparing cream and explain its evaluation techniques.	10
What are skin creams ? Describe one method of preparing cold cream.	10
Various types of ointment basis.	5
Write short note on -	
ointments	5
creams	5
Vanishing cream	5
Difference between Gels & jellies	5
Explain the method of preparation and uses of lotions with examples.	5
Evaluation methods for semi solid preparation.	5
poultice	2
Polymorphism of Cocoa butter	2
electuries	2
Difference between a cream and an ointment.	2
Cold cream and vanishing cream.	2

8. SUPPOSITORIES

What are suppositories ? What are different types of bases used for preparing suppositories ? What are the characteristics of an ideal suppository base ?	10
Define suppositories and discuss ideal requirements for suppositories ?	10
Explain suppositories bases in detail ?	10
Write short note on -	
Evaluation of suppositories	5
Method of preparation of suppositories	5
suppository base	5
Ideal requirements for suppositories.	5
Discuss the evaluation techniques for suppositories. What is cocoa butter? Explain its characteristics ?	5
What are the newer types of suppositories ? Explain different methods of preparing suppositories with evaluation techniques for same.	5
Define Bougies.	2

9. AEROSOLS

Define aerosols and explain its uses. What are the different methods of preparing aerosols ? Explain any one in detail.	10
Define aerosols : Describe different components of an aerosol container. How will classify aerosols ?	10
Discuss in detail about the requirements for the design of aerosol packaging system ?	10
Discuss packaging methods of aerosols ?	10
Describe the importance of propellants in aerosols. Discuss advantages and disadvantages of using aerosols.	5
Write short note on -	
propellants	5
Pharmaceutical application of aerosol	5

lipstic	5
Shaving preparations	5
What are cosmetics ? Are they beneficial or hazardeous to our body ? How will you prepare herbal shampoo ?	5
Lipsticks - advantages and disadvantages.	2
What is an Ayurvedic shampoo?	2
After shave lotion	2
Compact face powder	2