

M.Sc.(Chem.) Semester - 4 (CBCS) Examination
April/May-2022 (NEW COURSE)
Pharmaceutical Technology (Core)

Time: 2:30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

Q.1 (a)	Answer the following question	4 Marks
(1)	Draw following methods for determination of particle diameter: Feret's diameter, Martin's diameter, Perimeter and Projected area diameter	4
Q.1 (b)	Answer any two questions out of three	10 Marks
(1)	Discuss step to step process to determine bulk density of powder, list the factors that affect the bulk density of powder.	5
(2)	Write a note on spray drying method for powder preparation.	5
(3)	Discuss preparation of powders by molecular aggregation.	5
Q.2 (a)	Answer the following questions	4 Marks
(1)	Give an account of w/o, w/o/w emulsion with figure.	2
(2)	List out few examples and ideal properties of vehicles used in LDFs	2
Q.2 (b)	Answer any two questions out of three	10 Marks
(1)	What are clear liquids? Give brief account with examples.	5
(2)	Give introduction, characteristics, advantages and disadvantages of suspension.	5
(3)	Discuss physical instability of emulsions in detail.	5
Q.3 (a)	Answer the following question	4 Marks
(1)	Give merits and demerits of oral solid dosage forms.	4
Q.3 (b)	Answer any two questions out of three	10 Marks
(1)	Discuss dry granulation method with diagram.	5
(2)	Write a note on types of tablets with brief details.	5
(3)	List out the evaluation parameters of tablets and explain any one in detail.	5
Q.4 (a)	Answer the following question	4 Marks
(1)	Write preparation of gelatin solution for capsule manufacturing.	2
(2)	What are soft gels? How they differ from HGCs?	2
Q.4 (b)	Answer any two questions out of three	10 Marks
(1)	Give an account of evaluation of capsule raw material (gelatin).	5
(2)	Write a note on manufacturing hard gelatin capsules.	5
(3)	Give brief introduction, advantages and disadvantages of HGCs	5
Q.5 (a)	Answer the following questions	4 Marks
(1)	Define excipient and write name and examples for following a) Excipients for capsule b) Excipients for syrup	4
Q.5 (b)	Answer any two questions out of three	10 Marks
(1)	Write Short introduction and role of excipients	5
(2)	Discuss the role of binders and fillers and coating agents in compressed tablets.	5
(3)	Briefly explain following with example a) Disintegrants, b) Glidants	5
