

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: B.PHARM
BRANCH: PHARMACY

SEMESTER :VI
SESSION : SP/19

SUBJECT: PS6401 INDUSTRIAL PHARMACY -I

TIME: 3.00 Hrs.

FULL MARKS: 60

INSTRUCTIONS:

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
 2. Candidates may attempt any 5 questions maximum of 60 marks.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Give the significance of 'preformulation study'. [2]
Q.1(b) Discuss the effect of 'particle size' and 'polymorphism' in formulation with examples. [4]
Q.1(c) Describe the method of stability studies to determine the route of degradation of a new moiety. [6]
- Q.2(a) What is the significance of granulation? [2]
Q.2(b) What is the difference between 'Tapped density', 'Bulk density' and 'True density'? What are their role in formulation? Give examples. [4]
Q.2(c) What are directly compressible vehicles? Discuss the characteristic properties of any two such ingredients. [6]
- Q.3(a) Differentiate between aqueous and non aqueous wet granulation method. [2]
Q.3(b) Discuss any three tablet defects that may be observed during manufacturing with cause and solution to overcome them. [4]
Q.3(c) What is the use of following equipments in tablet manufacturing? [6]
1. Planetary mixer 3. Merumerizer
2. Fluidized air bed drier. 4. V shaped blender
- Q.4(a) What do you understand by 'Enteric' coating? Why it is carried out? Explain with examples. [2]
Q.4(b) Differentiate between hard gelatin capsule and soft gelatin capsule on the basis of 1. Size and shape 2. Ingredients used in preparing capsule shell. 3. Formulation of content. 4. Method of manufacturing. [4]
Q.4(c) Discuss the manufacturing and filling of soft gelatin capsules. [6]
- Q.5(a) Why is it essential for the tablets to pass pharmacopoeial test? [2]
Q.5(b) Describe the weight variation test for tablets and hard gelatin capsules according to IP. [4]
Q.5(c) Discuss in detail the formulation and method of manufacturing chewable tablet. [6]
- Q.6(a) Differentiate between capsulation and micro encapsulation. [2]
Q.6(b) What is micro encapsulation? Enlist the applications of the process. [4]
Q.6(c) Describe any two methods of micro encapsulation. [6]
- Q.7(a) What is the significance of coating? [2]
Q.7(b) Discuss any three problems observed during film coating. [4]
Q.7(c) Discuss sugar coating of tablets. [6]

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