

Roll No.

Total No. of Pages : 02

Total No. of Questions : 06

M. Pharm. (Industrial Pharmacy) (Sem.-2)

**ADVANCED PRODUCT DEVELOPMENT &  
FORMULATION**

Subject Code : MPIP-514 (2012 Batch)

Paper ID : [E1231]

Time : 3 Hrs.

Max. Marks : 80

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of SIX questions.
2. Each question carry SIXTEEN marks.

1. (A) What is compression coating? Mention the applications of this process. Give a brief account of the materials and machinery used in this process. (8)

(B) Enlist the product considerations for filling into hard gelatin capsule shells. Comment on self-locking and sealing of hard gelatin capsules. (8)

2. (A) Mention the ingredients of an emulsion dosage form and highlight the use of each ingredient. Enumerate the quality control tests conducted on emulsions. (8)

(B) Describe the tests conducted on aerosols for ensuring their quality. (8)

3. (A) Enumerate the factors affecting release of drugs from semi solid dosage forms. Briefly discuss the machinery used for large scale production of semisolids. (8)

(B) Comment on the facilities required for manufacturing SVPs. Mention the quality control tests conducted on SVPs. (8)

4. (A) Discuss the protocol for film coating conducted on film coated tablets.

(B) How are suspensions stabilized? Discuss.

5. (A) What is lyophilization and mention the steps of lyophilization process and mention the factors affecting it.

(B) Enlist different types of aerosol fillers and the gases used for this purpose.

6. Describe the pelletization process. Mention the factors affecting the process and describe the tests conducted on pellets.

