

**QP Code: 107327**

**Reg No: .....**

**First Year M.Pharm Degree Supplementary Examinations– March 2014**

**(2011 Scheme)**

**(Pharmaceutics)**

**Paper III – Industrial Pharmacy**

**Time: 3 hrs**

**Maximum Marks: 100**

- *Answer all questions*
- *Draw diagrams wherever necessary*

**Essays:**

**(2x20 =40)**

1. Explain the design of an industrial fermentor. What is batch culture and continuous culture
2. What is the significance of pilot plant scale up techniques. What are master formula and batch formula records.

**Short Essays:**

**(6x10=60)**

3. Explain protection against fire and electrical hazards.
4. Explain the effect of temperature and humidity on shelf life of drugs
5. Explain the significance of total quality management (TQM) and productivity in pharmaceutical industry
6. What are polymers. Classify polymers and give their applications.
7. Explain the significance of good manufacturing practices in manufacture of drugs
8. Explain treatise on pharmaceutical process validation of solid dosage forms

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