BACHELOR OF PHARMACY (B.PHARM THIRD YEAR) SIXTH SEMESTER

BP601 - PHARMACEUTICAL ENGINEERING-II

P. Pages : 1 **GUG/W/18/1176**

Time : Three Hours * 0 8 8 9 * Max. Marks : 80

Notes : 1. All questions carry equal marks.
2. Question No. **1** is compulsory.
3. Diagrams should be given wherever necessary.
4. Illustrate your answers wherever necessary with the help of neat sketches.
5. Solve **any four** from remaining.

1.		Define crystallization. Explain its applications, characteristics of crystals and theory of crystallization?	**16**
2.	a)	Classify evaporators. Describe construction and working of a film evaporator.	**10**
	b)	Elaborate the concept of multiple effect evaporation what specific advantages does it offer?	**6**
3.		Describe the concept of spray drying Describe the specific advantages of spray dried product over drum dried material. Also list the pharmaceutical applications.	**16**
4.	a)	Define humidification and dehumidification and explain its mechanism?	**8**
	b)	Define an equation for heat transmission through a circular pipe, from Fourier's Law.	**8**
5.	a)	Explain factor affecting corrosion process?	**8**
	b)	Explain theory of corrosion and factors influencing corrosion?	**8**
6.	a)	Describe the construction, Operation of climbing film evaporator.	**8**
	b)	Write a note on prevention & control of corrosion.	**8**
7.		Write a short note on **any two.**	**16**

a) Krystal crystallizer.

b) Theory of drying.

c) Caking of crystals.

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