

Name of the Examination: M. PHARM. FIRST YEAR, 2nd SEMESTER, 2019

Subject: PHARMACEUTICS –III Time: three hours Full Marks: 100

Answer any *five* questions. All questions carry equal marks

- Q.1. i. As an F& D scientist what are the critical manufacturing and quality control steps to be monitored in order to yield a better tablet formulation?
ii. Describe briefly the various problems related to manufacturing of tablet formulation and solutions to overcome them?
- Q.2. i. How multiple emulsions may act as controlled release formulations?
ii. Describe the procedure for preparation & stabilization of w/o/w emulsion?
- Q.3. i. What do you mean by microencapsulation?
ii. What are the limitations and advantage of microencapsulation process?
iii. Describe briefly the various techniques of microencapsulation?
- Q.4. i. What do you mean by Nutraceuticals?
ii. Classify Nutraceuticals?
iii. What do you mean by prebiotics and probiotics?
- Q.5 Write shot notes on any ten
- i. Body Mass Index (BMI)
 - ii. Energy balance
 - iii. Antioxidants of natural origin & their health benefits
 - iv. Essential fatty acids
 - v. Beneficial phytofactor plant compounds
 - vi. Dietary fibres
 - vii. Importance of maintaining omega 6 and omega 3 ratio in our diet?
 - viii. Importance of organic farming?
 - ix. Health benefits of flavonoids and polyphenols
 - x. Synthetic vitamins verses vitamins of natural origin?
 - xi. well balanced diet
 - xii. Ideal protein supplement
 - xiii. Calcium & bone health
- Q.6 i. What are lysosomes?
ii. Briefly explain why in the favourable condition surfactant molecules form micelles whereas phosphatidic acid derivatives form liposomes?
iii. How can you scale up ointment formulation in bulk quantities?