**Printing Page(s): 1** Paper Code: DMS-221 Roll No. **MBA-14(Pharmaceutical Marketing)** 2<sup>nd</sup> Year Examination, Calendar Batch 2016 Pharmaceutical Formulation Design and Development Time: 3 Hours 1 [ Max. Marks : 100 *Note*. Attempt any *Five* questions. All questions carry equal marks. What is IVIVC? Explain factors affecting IVIVC. 0.1 Describe various packaging materials used in pharmaceutical industry. **Q.2** Discuss the crystalline states and structural assessment of drugs in solid state? 0.3 Explain various mechanisms of drug absorption across Biomembranes. **Q.4** Define Preformulation Studies? Explain the effect of pH and pKa on the solubility of Q.5 a drug. Explain various Excipients (Additives) used in formulation of Tablets. **Q.6** Define and classify polymers? Write down the synthesis and pharmaceutical **Q.7** application of different types of polymers. Write a note on Microbiological Preservation of drug formulations. **Q.8**