

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Ph. - SEMESTER- VIII • EXAMINATION – WINTER-2022****Subject Code: 2280002****Date: 23/12/2022****Subject Name: Pharmaceutical Technology II****Time: 02:30pm to 05:30pm****Total Marks: 80****Instructions:**

- 1. Attempt any five questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

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|------------|---|-----------|
| <b>Q.1</b> | <b>(a)</b> Enlists various evaluation parameters of tablet. Explain weight variation and content uniformity as per USP. | <b>06</b> |
|            | <b>(b)</b> Discuss in details about directly compressible diluents.   | <b>05</b> |
|            | <b>(c)</b> Write a note on binders and disintegrants used in tablets.   | <b>05</b> |
| <b>Q.2</b> | <b>(a)</b> Write an explanatory note on floating tablets.   | <b>06</b> |
|            | <b>(b)</b> Describe the need of enteric coating and name the polymer used for it.                                       | <b>05</b> |
|            | <b>(c)</b> Write a note on tablet tooling.  | <b>05</b> |
| <b>Q.3</b> | <b>(a)</b> Explain the formulation and types of filling operation in hard gelatin capsules.                             | <b>06</b> |
|            | <b>(b)</b> Write a note on Coacervation- Phase separation technique for microencapsulation.                             | <b>05</b> |
|            | <b>(c)</b> Write a short note on characterization of microspheres.  | <b>05</b> |
| <b>Q.4</b> | <b>(a)</b> Write a note on Melt Extrusion technology.   | <b>06</b> |
|            | <b>(b)</b> Write a note on excipients used in pellets.  | <b>05</b> |
|            | <b>(c)</b> What is Pelletization? Discuss factors affecting pellet properties.  | <b>05</b> |
| <b>Q.5</b> | <b>(a)</b> Write a note on preparation of solid dispersions by supercritical fluid processing.                          | <b>06</b> |
|            | <b>(b)</b> Give pharmaceutical applications of supercritical fluids in extraction.                                      | <b>05</b> |
|            | <b>(c)</b> Discuss in detail about Rotary die process of soft gelatin capsules with diagram.                            | <b>05</b> |
| <b>Q.6</b> | <b>(a)</b> Explain tamper proof packaging.  | <b>06</b> |
|            | <b>(b)</b> Discuss different methods for evaluation of packaging  | <b>05</b> |
|            | <b>(c)</b> Write a note on influence of packaging components on dosage form stability.                                  | <b>05</b> |
| <b>Q.7</b> | <b>(a)</b> Explain quality control tests of soft gelatin capsules   | <b>06</b> |
|            | <b>(b)</b> Write in details about buccal tablets and its evaluation   | <b>05</b> |
|            | <b>(c)</b> Discuss different film coating defects.  | <b>05</b> |

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