

**MALIBA PHARMACY COLLEGE**  
**MID SEMESTER EXAMINATION APRIL 2014**  
**SECOND SEMESTER M.PHARM. – QUALITY ASSURANCE**  
**040030202 MODERN PHARMACEUTICAL ANALYSIS**

**DATE: 07/04/2014**

**MAXIMUM MARKS: 70**

**Instructions:**

- 1] Attempt any five questions**
- 2] Figures to the right indicate full marks**

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|-----|---|--|---|
| Q.1 | a | What is tryptic mapping? Write its uses and limitations.   | 6 |
|     | b | Discuss the compendial testing of formulated products.   | 6 |
|     | c | What is the significance of harmonizing the testing, validation, and validation requirements associated with pharmaceutical materials?   | 2 |
| Q.2 | a | Explain the principle for proteins and peptide sequence analysis by (i) Sanger degradation and (ii) Edman degradation  | 6 |
|     | b | Describe the factors affecting retention in ion exchange chromatography. Explain how IEC aid in proteins and peptide analysis.   | 6 |
|     | c | Enlist the different tests for evaluation of solid dosage forms.   | 2 |
| Q.3 | a | What are impurities? Discuss their different types giving examples.  | 8 |
|     | b | Explain the principle of isoelectric focusing. State its applications.   | 6 |
| Q.4 | a | Classify cosmetics. Describe the physical and chemical methods for evaluation of shampoos and powders.   | 8 |
|     | b | What are radiopharmaceuticals? Describe the quality control tests performed for their evaluation.  | 6 |
| Q.5 | a | Enlist the quality control methods for medicinal plant materials as per WHO. Describe the determination of following (i) pesticides residue in plant material (ii) extractable matter (iii) ash value. | 8 |
|     | b | Discuss the determination of powder characteristics at preformulation stage.   | 6 |
| Q.6 | a | Explain the term partition coefficient and solubility. Describe the methods for determination of solubility.   | 8 |
|     | b | Describe any one radiochemical method of analysis.   | 6 |
| Q.7 | a | Discuss briefly the analytical techniques available for preformulation study.  | 8 |
|     | b | Explain excipient compatibility studies.   | 6 |

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