

Seat No.:-----

Enrolment No.:-----

UKA TARSADIA UNIVERSITY
Maliba Pharmacy College
M.Pharm. Sem 2-Internal Examination 2012
040030202 Modern Pharmaceutical Analysis

Time: 1:30 to 4:30 p.m.

Max. Marks: **70**

Date: 21/04/2012

Instructions:

- Question no. **1 is compulsory.**
- From Q.2 to Q.7 attempt any **four** questions.
- Figures to the right indicate full marks.

- Q.1** (a) Answer the following: (any six) **06**
- 1 Define compendia.
 - 2 What are cosmetics?
 - 3 What is meant by organoleptic evaluation of herbal drugs?
 - 4 Define dissociation constant.
 - 5 What are radiopharmaceuticals?
 - 6 What does ICH stand for?
 - 7 Define partition coefficient.
 - 8 What are endotoxins?
- (b) Describe in brief: (any four) **08**
- 1 Differentiate between specified and unspecified degradation product.
 - 2 Write the procedure for determination of ash in herbal drugs.
 - 3 Name the different types of isomeric impurities in drugs.
 - 4 What are residual solvents?
 - 5 Enlist the various compendial tests for solid oral dosage forms.
 - 6 What are admixture studies?
- Q.2** (a) How is particulate matter determined in parenteral products? **04**
- (b) Discuss the objectives and significance of preformulation studies. **05**
- (c) Enlist the radiochemical methods of analysis and explain any one in detail. **05**
- Q.3** (a) Describe in brief the membrane filtration method for sterility testing. **04**
- (b) Enlist the different physical, chemical and biological tests for analysis of cosmetics **05**
- (c) Discuss the applications of NIR technique in solid oral dosage form analysis. **05**
- Q.4** (a) Enlist the records to be maintained for radiopharmaceuticals as per cGMP. **04**
- (b) Describe the principle behind isoelectric focusing technique. **05**
- (c) What is polymorphism? Explain its significance in formulation development. **05**
- Q.5** (a) Describe any one method for determination of solubility of drugs. **04**
- (b) Write a short note on flow injection analyzer. **05**
- (c) Discuss with examples the types of inorganic impurities in drug substance. **05**
- Q. 6** (a) Write the significance of bioburden determination in parenterals. **04**
- (b) Discuss the principle and applications of DSC in analysis of drugs. **05**
- (c) Write the procedure and significance of determining bulk density and angle of repose for powders. **05**
- Q.7** (a) Discuss with examples the analytical techniques for identification of drugs. **04**
- (b) Write a note on the ion exchange technique for amino acid analysis. **05**
- (c) Explain briefly the different ICH Quality guidelines for analysis of pharmaceuticals. **05**
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