

Please check whether you have got the right question paper.

- N.B: 1. All Questions are compulsory.
2. Use of log tables or Non-programmable calculator is allowed.

- Q.1 A. Attempt any two of the following 08
 i. Define the term drug. Explain the terms therapeutic and prophylactic dosage.
 ii. Explain the use of pharmacopeia in analysis of finished products.
 iii. Write a note on drug dosage forms.
 iv. Discuss the classification of drugs based on the pharmacological action.
 B. What are various sources of impurities in pharmaceutical raw materials? 04
 OR
 B. With the help of proper examples, explain different types of excipients present in syrups. 04
- Q.2 A. Attempt any two of the following 08
 i. How is U.V. Spectroscopy useful for analysis of drugs?
 ii. What are limit tests? Discuss in detail limit test for lead.
 iii. Explain various parameters of proximate analysis.
 iv. Describe different methods for disintegration studies of pharmaceutical products.
 B. What is bio – availability? Explain the need of determination of it. 04
 OR
 B. Explain various factors causing the deterioration of drug. 04
- Q.3 A. Attempt any two of the following 08
 i. Explain the following terms with two examples of each:
 Narcotics, Depressants.
 ii. Describe the test for detecting the presence of blood stains in forensic samples.
 iii. How are pesticides identified and detected in post mortem samples?
 iv. Explain the isolation of LSD from body fluids. Add a note on identification of it. 04
 B. Give the properties of arsenic as a poisoning substance. Explain any two methods of identification of arsenic. 04
 OR
 B. "Analytical chemistry is an important tool to identify drug abuse" justify the statement. 04
- Q.4 A. Attempt any two of the following 08
 i. Describe the method for determination of water in cosmetic samples.
 ii. Explain the method for estimation of free fatty acids in face powder.
 iii. How is non – volatile matter in creams and lotion analyzed by using I.R Spectroscopy?
 iv. Explain the method for estimation of glycerol in vanishing cream.
 B. What are deodorants and anti – perspirants? Add a note on mechanism of action of them. 04
 OR
 B. List components of lipstick. Explain the significance of ash analysis in lipstick. 04
- Q.5 A. Attempt any four of the following 12
 i. What is parenteral route of drug administration? When is it preferred?
 ii. Write a short note on pharmaceutical formulations.
 iii. Explain tube dilution method for analysis of anti biotics.
 iv. How is HPLC useful in the analysis of drugs?
 v. What are hallucinogens? Explain with examples.

- vi. Explain the analytical methods to identify traces of drug metabolites in the blood sample of addicts.
- vii. State the components of hair tonic. How is dithioglycollic acid estimated from hair tonic?
- viii. What are cosmetics? Explain the functions of it.
