

Duration : 2½ Hours

Max Marks : 60

- N.B:** 1. All question carry equal marks.
 2. Figures to the right indicate full marks.
 3. Use of non-programmable calculator is allowed.

- Q.1** **A.** Attempt any TWO of the following: **08**
- i. Write a short note on FDA
 - ii. Define drug. Explain the classification of drugs based on mode of action
 - iii. What is a pharmaceutical formulation? Describe any one type of formulation
 - iv. How are impurities introduced in raw materials?
- B.** Attempt any ONE of the following: **04**
- i. What are Pharmacopeia? Give its importance.
 - ii. State the advantages and disadvantages of topical dosage forms.
- Q.2** **A.** Attempt any TWO of the following: **08**
- i. Write a short note on Impurity profiling of drugs
 - ii. Explain the term novel drug delivery. Give any four examples of same.
 - iii. Describe the use of IR in analysis of drugs and finished products
 - iv. Explain the principle and procedure for limit test for chloride
- B.** Attempt any ONE of the following: **04**
- i. What are disintegration test? Give its significance.
 - ii. Explain the term bioequivalence and give its importance.
- Q.3** **A.** Attempt any TWO of the following: **08**
- i. Describe the method for detection of blood stains in forensics
 - ii. Explain the statement: DNA profiling is a very important part of forensic studies
 - iii. How is presence of Arsenic detected in post mortem sample?
 - iv. What are stimulants ? Explain the test for identification of Amphetamine.
- B.** Attempt any ONE of the following: **04**
- i. Write a short note on analytical toxicology.
 - ii. How are traces of abused drugs detected in urine of addicts?

