

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?

- Q.4**    **A.**    Attempt any **TWO** of the following: **08**
- i.**    Define deodorants. Describe the estimation of Aluminium in deodorants.
  - ii.**   Explain the composition of hair tonic. Describe the estimation of pyrogallol in hair tonic
  - iii.**   Write a short note on estimation of Boric acid in face powder
  - iv.**   What are creams? Give the main differences between creams and lotions.
- B**    Attempt any **ONE** of the following: **04**
- i.**    Explain the method for estimation of dithioglycollic acid in hair tonics.
  - ii.**   Which are the different additives used in cosmetics? Explain the role of any two.
- Q.5**    Attempt **ANY FOUR** of the following **12**
- a.**    What are excipients? Give examples.
  - b.**    Explain the term parenteral dosage .Give the advantages of this dosage form
  - c.**    What is proximate analysis? Give any two examples.
  - d.**    Explain how solubility tests are important for characterisation of a pharmaceutical product.
  - e.**    Describe the test for detection of Insecticides and pesticides in stomach wash
  - f.**    Explain the role of analytical Chemistry in Forensics
  - g.**    What are cosmetics? Explain the role of cosmetics.
  - h.**    Give the composition of lipstick. Add a note of role of any two components
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