

- Q-3** **Answer the following questions**
- a. Write the classification of alkaloids and write the synthesis of testosterone. (5)
 - b. Prove the constitution of starch by various chemical reactions. (5)
 - c. Write a note on structure of nucleosides. (4)

SECTION – II

- Q-4** **Attempt the Following questions** (07)
- a. Draw the structure of chlorophyll-a. (1)
 - b. Write the Fisher's synthesis of porphyrin. (1)
 - c. Define: Vitamins (1)
 - d. Define the term nucleic acid. (1)
 - e. Write the Trans form structure of squalene. (1)
 - f. Define the term isoprene unit for terpenoids. (1)
 - g. Draw the structure of α -tocopherols. (1)

- Q-5** **Answer the following questions** (14)
- a. Write the synthesis of heamin. (7)
 - b. Prove the constitution of vitamin-B. (7)

OR

- Q-5** **Answer the following questions**
- a. Discuss the chemistry of chlorophyll. (7)
 - b. Write the synthesis of biotin. (7)

- Q-6** **Answer the following questions** (14)
- a. Write a note on farnesol. (7)
 - b. Explain the general method for determining the structure of terpenoids. (7)

OR

- Q-6** **Answer the following questions**
- a. Write a note on gibberellic acid. (7)
 - b. Write notes on (7)
 - 1. Zingiberene
 - 2. Abietic acid

