

SECTION – II

- Q-4** **Attempt the following questions** **(07)**
- a. Give any two advantages of the ICP-MS above AAS or ICP-OES. **01**
 - b. What do you mean by nondestructive technique? **01**
 - c. Write the function of interface in ICP-MS. **01**
 - d. Give the name of common dissolution agents used in ICP-MS. **01**
 - e. Define hyphenated techniques **01**
 - f. Define ICP-MS **01**
 - g. How the plasma is formed in ICP-MS? **01**
- Q-5** **Attempt all questions** **(14)**
- a. Compare the some important features of HPLC-UV/DAD, LC-MS and LC-NMR. **08**
 - b. Discuss the spectral interferences and its removal method for ICP-MS. **06**
- OR**
- Q-5** **Attempt all questions** **(14)**
- a. Discuss the possible way of improving the sensitivity of HPLC/NMR Techniques. **08**
 - b. Explain the Instrumentation of ICP-MS. **06**
- Q-6** **Attempt all questions** **(14)**
- a. Discuss the available modes of efficient transport of components from HPLC to NMR. **05**
 - b. Explain the fundamental aspects of interface in IC-MS. **05**
 - c. Give the applications of ICP-MS. **04**
- OR**
- Q-6** **Attempt all questions** **(14)**
- a. Discuss the role of LC-NMR and LC-MS in identifying impurities in drug samples. **08**
 - b. Explain quadrupole mass analyzer. **04**
 - c. Draw labeled diagram of peristaltic pump. **02**

