

Day : Thursday
Date : 02-12-2021

Time : 02:00 PM-05:00 PM
Max. Marks : 75

W-20794-2021

N.B.

- 1) **Q.No. 1 and Q.No. 5** are **COMPULSORY**. Out of the remaining attempt **ANY TWO** questions from **each** section.
- 2) Answers to both the sections should be written in **SEPARATE** answer book.
- 3) Figures to the **RIGHT** indicate **FULL** marks.

SECTION – I

- Q.1** How will you determine the antimicrobial potential of a new formulation against ampicillin resistant bacteria? (08)
- Q.2** Describe the three official pyrogen tests for parenteral formulation and importance of pyrogens testing. (15)
- Q.3** How will you determine the antimicrobial potential of a new formulation against penicillin resistant bacteria? Describe the method to isolate ampicillin resistant bacteria. (15)
- Q.4** Write notes on **ANY TWO** of the following : (15)
- a) Graded bioassays
 - b) Biologic medicine in autoimmune disorder
 - c) Toxicity studies

SECTION – II

- Q.5** Justify the statement, 'Antisense therapy and RNA interference are potential therapeutics'. (07)
- Q.6** If you have developed a novel formulation for treatment of COVID 19. What are the documents to be submitted to regulatory agency for approval of formulation? (15)
- Q.7** Describe the importance and mechanisms involved in antisense therapy and RNA interference as potential therapeutics. (15)
- Q.8** Write notes on **ANY TWO** of the following : (15)
- a) Factors influencing drug bioavailability
 - b) Vaccines
 - c) Gene therapy
