Roll No.	Total No. of Pages : 02
Total No. of Questions : 10	
Master of Science (Clinical Researc	:h) (Sem1)
FOUNDATION COURS	SE
Subject Code : UC-MSCR-1	01-19
M.Code: 77290	
Date of Examination : 19-0	1-23
Time : 3 Hrs.	Max. Marks:70

INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

SECTION-A

- 1. Write briefly :
 - a. What is molarity and normality
 - b. What is chromatography
 - c. What are prokaryotes and draw prokaryotic cells
 - d. What is a gene? Who is considered the father of genetics
 - e. Define bioremediation
 - f. What are monoclonal and polyclonal antibodies
 - g. Define Buffer and pH
 - h. Write the name of key biomolecules of the human body
 - i. Name the immunity cells
 - j. Expand DNA and RNA

1 M-77290

SECTION-B

- 2. What are innate immunity and acquired immunity? Differentiate between innate immunity and acquired immunity
- 3. Write the name, principle, and significance of any two common biochemical tests for liver and kidneys
- 4. Write a short note on the concept, levels, and conservation of Biodiversity.
- 5. Write a short note on the essentials of genetic engineering
- 6. Write the theoretical principle of Stem Cells and how stem cells can bring revolution in medicine industry

SECTION-C

- 7. Classify the factors influencing the growth of bacteria. Discuss the phase and features of the growth curve
- 8. Discuss the basic principle of chromatography. Write the principle, instrumentation, and applications of Column Chromatography.
- 9. What is genetic engineering? Write a note on the vectors & enzymes used in recombinant technology
- 10. Discuss the phases of the DNA replication process. Write the role of various enzymes and conditions involved in the different phases.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.