

MASTER OF PHARMACY (M. PHARM.) (CBCS-2019 COURSE)
M.Pharm. Sem-I Pharmacology : MARCH : 2022
SUBJECT: CELLULAR & MOLECULAR PHARMACOLOGY

Day : Monday
Date 28-03-2022

M-20741-2022

Time : 10:00 AM-01:00 PM
Max. Marks: 75

N.B.

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

- Q.1** Describe the structure and function of : **(08)**
- a) Mitochondria
 - b) Endoplasmic reticulum
 - c) Cell membrane
 - d) Golgi body
- Q.2** What is DNA sequencing? What are the applications of DNA sequencing technologies? **(15)**
- Q.3** Explain the principles and applications of gene therapy. **(15)**
- Q.4** Write notes on **ANY TWO** of the following: **(15)**
- a) Cell cycle.
 - b) JAK – STAT signaling pathway.
 - c) Western blotting technique.

SECTION - II

- Q.5** Discuss the concept of gene therapy. **(07)**
- Q.6** What is genomics? Explain its applications. **(15)**
- Q.7** Explain the gene sequencing process. **(15)**
- Q.8** Write notes on **ANY TWO** of the following: **(15)**
- a) Concept of cloning of disease gene.
 - b) Role of genetic variation in health.
 - c) Equipment's used in cell culture lab.

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