Registration No : | | | | | | | | | | |

Total Number of Pages : 01 **B.Tech**
PBT7J002

7th Semester Regular Examination 2019-20
MEDICAL & PHARMACEUTICAL BIOTECHNOLOGY
BRANCH : BIOTECH
Max Marks : 100
Time : 3 Hours
Q.CODE : HR104

Answer Question No.1 (Part-1) which is compulsory, any EIGHT from Part-II and any TWO from Part-III.
The figures in the right hand margin indicate marks.

Part- I

Q1 **Only Short Answer Type Questions (Answer All-10)** **(2 x 10)**

a) Name two gentically engineered hormones?
b) What is antibody array?
c) How microanalysis helps in disease diagnosis?
d) What do you mean about 2D electrophoresis?
e) Define MALDI-TOF?
f) What is Toxicogenomics?
g) What is interferon?
h) Write two applications of MAb?
i) Define Hybridoma Technology?
j) What is a biomarker?

Part- II

Q2 **Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)** **(6 x 8)**

a) Write a notes on genetic diseases and DNA based diagnosis.
b) What is ribozyme? Write its importance.
c) Write different methods of protein engineering in relation to drug development.
d) Write the role of enzymes in clinical diagnosis.
e) What are antibiotics? Explain the various techniques for development of new generation antibiotics.
f) Schimatically represents the production of any one hormones by genetically engineered microbes?
g) Write a note on use of biosensors for rapid clinical analysis.
h) Discuss the construction and mechanism of action of DNA vaccine.
i) Explain the processes of drug targeting.
j) How proteomics has advantages over genomics in disease diagnosis? Justify.
k) What are the different separation and identification techniques used for protein analysis?
l) Write the use of enzymes in clinical diagnosis.

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 Discuss the different types of diagnostic kits used for detection of diseases with examples. **(16)**

Q4 What are the different types of gene therapy? Elaborate the in-vivo gene therapy with suitable example. **(16)**

Q5 Define microbial transformation? Give four example of industrially application of microbe used in biotransformation? **(16)**

Q6 Explain the principle and procedure of different types of ELISA. **(16)**