

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LQ 0121]

JANUARY 2021

Sub. Code: 2963

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-I (PCI New regulations 2016)

PHARMACEUTICAL BIOTECHNOLOGY – MPB

PAPER III – BIOPROCESS ENGINEERING AND TECHNOLOGY

Q.P. Code : 262963

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What are the various factors which followed while scaling up process in the bioreactor?
2. Write in detail about alcohol produced by fermentation process.

II. Write notes on:

(7 x 5 = 35)

1. Explain the bioprocess of anyone organic acid.
2. Types of impeller used in bioreactors.
3. Write about super critical fluid extraction.
4. Purification of fermentation products by ion exchange chromatography.
5. Explain in detail about air lift fermenter.
6. Screening for fermentation media.
7. Application of immobilized enzyme.
