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# PRESIDENCY UNIVERSITY BENGALURU

# **Department of Research & Development**

Mid - Term Examinations - AUGUST 2024

Odd Semester: Ph.D. Course Work

Course Code: CHE815

Course Name: BIOTECHNOLOGY

**Department: CHEMISTRY** 

Date: 12-08-2024

Time: 02.00pm to 03.30pm

Max Marks: 50

Weightage: 25%

## Instructions:

(i) Read all the questions carefully and answer accordingly.

(ii) Do not write any matter on the question paper other than roll number.

### Part A

Answer **ALL** the Questions. **Each** question carries **4** marks.

 $(4Q \times 5M = 20M)$ 

- 1. List out different types of Bioreactors
- 2. Describe Batch Fermentation Process
- 3. Discuss Role of Variables in Fermentation process.
- 4. Differentiate between Natural and Synthetic media

#### Part B

Answer **ALL** Questions. **Each** question carries **15** marks. (2

 $(2Q \times 15=30M)$ 

- 5. Describe in detail about Bioreactor- definition, Design, Principle, Parts, types, Applications and Limitations
- 6. What is downstream processing in respect of biotechnology? Discuss.