

**Parvatibai Chowgule College of Arts and Science  
Autonomous  
Department Of Biotechnology  
(2018-2019)**

**COMPETENCY TEST**

ROLL NO:

**Subject: Biotechnology Course: Industrial Biotechnology (Advanced) Semester: VI  
Date & Time: Marks: 10 mks**

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*Instructions if any: 1) All the questions are compulsory.*

*2) Figures to the right indicate the highest marks to the questions.*

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**Q.1** Answer the following.

1. What is fermentation? (1mk)

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2. Name the important parts of a fermentor. (1mk)

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3. Name the different type of fermentors. (1mk)

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4. What is upstream processing? (1mk)

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5. What is downstream processing? (1mk)

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6. If you were to design an ideal fermentor, what would be the characteristics you would consider? (1mk)

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7. What is screening? What is its importance? **(1mk)**

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8. Mention a few fermented products and also name the micro-organism that ferments them. **(1mk)**

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9. Dr. Rahim has successfully managed to improve a strain of *E.coli* for enhanced insulin production. However the strain is highly unstable. Dr. Rahim wants to store the strain for long term use and preserve it over 15 years at his research institute.

If you were his colleague what methods would you recommend him for long term storage, keeping in mind that the cultures remain Stable. **(1mk)**

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10. What is an Inoculum? **(1mk)**

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