

Enrolment No. _____

PARUL UNIVERSITY

PARUL INSTITUTE OF PHARMACY

B.PHARMSIXTH SEMESTER

SECONDIRNTERNAL THEORY EXAMINATION: 2020-21

Subject Name: Pharmaceutical Biotechnology

Subject Code: BP605T

Date: 12-03-2021

Time: Total Marks: 10

Instructions:

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions: [10]

- (1) Batch sterilization cycle consists of 01
(a) Two Phases (b) Three Phases
(c) Four Phases (d) Five Phases
- (2) A period during which the growth rate of cells gradually increases 01
is known as ____
(a) Lag Phase (b) Log Phase
(c) Stationary Phase (d) Deceleration Phase
- (3) Which of the following is not required in surface fermentation? 01
(a) Aeration (b) Baffles
(c) Agitation (d) Stirrer
- (4) Which of the following requires a substrate as support? 01
(a) Submerged fermentation (b) Surface fermentation
(c) Solid state fermentation (d) Batch fermentation
- (5) Which one is not true for submerged liquid fermentation? 01
(a) The concentration of media is lower (b) Small-size bioreactors
(c) Easy Sampling. (d) Expensive downstream processing
- (6) The predominant hypersensitivity reaction involving IgE is 01
(a) Type I (b) Type II (c) Type III (d) Type IV
- (7) The chemical used for conversion of toxin into toxoid is 01
(a) Ethanol (b) Chloroform (c) Formaldehyde (d) Hydrochloric acid
- (8) The protein toxins that have been modified to reduce the toxicity without 01
altering the immunogenicity are known as
(a) Toxoids (b) Sera (c) Vaccines. (d) Antisera
- (9) DNA molecule to which the gene of interest is integrated for cloning is called 01
(a) Carrier (b) Transformer (c) Vector (d) None
- (10) The refrigerated temperature of official vaccine is 01
(a) 2 °C to 8°C (b) 2 °C to 6°C (c) -2 °C to -8°C (d) Below 10°C

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PARUL INSTITUTE OF PHARMACY

B.PHARM SIXTH SEMESTER

SECOND INTERNAL THEORY EXAMINATION: 2020-21

Subject Name: Pharmaceutical Biotechnology

Subject Code: BP605T

Date: 12-03-2021

Time: Total Marks: 20

Instructions:

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.2 Long Answers:(Any One)

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|-----|--|----|
| (1) | Define fermentation and different methods of fermentation. Explain the production of penicillin using large scale fermenter. | 10 |
| (2) | Define toxoids and explain method of preparation of any one toxoid vaccine. | 10 |

Q.3 Short Answers: (Any Two)

- | | | |
|-----|---|----|
| (1) | Define mutation and explain the types of mutations. | 05 |
| (2) | Explain the production of monoclonal antibodies by Hybridoma technology | 05 |
| (3) | Define and explain different types of immunities with examples. | 05 |
