Printed pages:1 Roll No. | | | | | | | | | | Sub Code: BOP- 482

Paper ID:150802

B. PHARM
(SEM 8th) THEORY EXAMINATION 2017-18
PHARMACEUTICAL BIOTECHNOLOGY

Time: 3 Hours *Total Marks: 100*

Note: 1. Attempt all Sections. If you require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **2 x10 = 20**

a. Define Antigens.
b. What are Haptens?
c. What are Natural killer cells?
d. Define antibody mediated immunity.
e. Define Antibody with examples.
f. Differentiate between active and passive immunity.
g. What is Mutation?
h. What is Immunological Tolerance?
i. What is Cell Immobilization?
j. What is Monoclonal Antibody?

SECTION B

2. Attempt any *three* of the following: **10 x 3 = 30**

a. Write a note on Antigen and antibody reaction with their applications.
b. Write a short note on historical development of antibodies.
c. Classify immunity and differentiate active and passive immunity.
d. Write a pharmaceutical application of enzyme immobilization
e. Explain Humoral or Antibody mediated immunity.

SECTION C

3. Attempt any *one* part of the following: **10 x1=10**

a. Discuss various process involved in isolation mutants.
b. What is Penicillinase enzyme? Give their pharmaceutical application.

4. Attempt any *one* part of the following: **10 x1 =10**

a. Discuss enzyme immobilization with their methods.
b. Write briefly biotransformation process with special reference to steroid.

5. Attempt any *one* part of the following: **10 x1 =10**

a. Discuss the characteristic of a typical Fermentor.
b. Write a note on protoplast fusion.

6. Attempt any *one* part of the following: **10 x1 =10**

a. Write a note on standardization and storage of BCG vaccine.
b. Discuss complete process of development of hybridoma for monoclonal antibodies.

7. Attempt any *one* part of the following: **10 x1=10**

a. Write a note on Amylase enzyme with their pharmaceutical application.
b. Enlist various steps involved in screening of soil for organism producing antibiotics.

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