



ADITYA DEGREE COLLEGES

ANDHRA PRADESH

VI SEMESTER - PREFINAL EXAMINATIONS

III B.Sc - MICROBIOLOGY VII

MICROBIAL BIOTECHNOLOGY

Date: 20.03.2020

Max. Marks : 75

Time : 3 Hours

SECTION - A

ANSWER ANY FIVE OF THE FOLLOWING

5 x 10 = 50

1.a) Discuss applications of microbial biotechnology in the field of environment.

(or)

b) Industrial applications of genetically engineered microbes?

2 a) Write production process of recombinant Hepatitis B vaccine?

(or)

b) Explain production process and applications of microbial polysaccharides and

3. a) Describe immobilization methods and applications?

(or)

b) Explain microbial based transformation of steroids?

4. a) Explain in bio-diesel production ?

(or)

b) Bioremediation of toxic substances?

5. a) Out lines of intellectual property rights for patenting?

(or)

b) Out lines of intellectual property rights for copyrights and trademarks?

Section B

5x5=25

Answer any five of the following

2. Biofertilizer

3. Streptokinase

4. Biosensors

5. Whole cell immobilization

6. Xenobiotics

7. Patents

8. Bio ethanol

9. Bioplastics

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