

Exam Date &amp; Time: 26-Sep-2020 (10:00 AM - 01:30 PM)

**PSG COLLEGE OF ARTS AND SCIENCE**

Note: Writing 3hrs: Checking &amp; Inserting Image : 30mins

**BSc DEGREE EXAMINATION MAY 2020  
(Sixth Semester)****Branch - MICROBIOLOGY  
APPLIED BIOTECHNOLOGY [14MBU24]**

Marks: 75

Duration: 210 mins.

**SECTION A**

Answer all the questions.

- 1) Cloning. (2)
- 2) Ri plasmid. (2)
- 3) Cell Culture. (2)
- 4) Embryonic stem cell. (2)
- 5) HGH. (2)
- 6) Interferon. (2)
- 7) RFLP. (2)
- 8) OLA. (2)
- 9) Monoclonal Antibody. (2)
- 10) Gene Therapy. (2)

**SECTION B**

Answer all the questions.

- 11) Write short notes on Ti Plasmid. (5)
  - a) [OR] Give an account on Plant Tissue Culture. (5)
  - b)
- 12) Outline the steps involved in development of Transgenic cattles. (5)



- a)  
[OR] How will you establish transgenic mice by DNA microinjection method? (5)  
b)
- 13) Outline the production of recombinant Human Growth hormones? (5)
- a)  
[OR] Give a short notes on isolation of interferons. (5)  
b)
- 14) Write about Aso test and its principle. (5)
- a)  
[OR] Write a short note on FISH. (5)  
b)
- 15) What are subunit vaccine? Explain. (5)
- a)  
[OR] Give a brief account on the concepts of gene therapy. (5)  
b)

### SECTION C

Answer 3.out of 5 questions.

- 16) How are insect resistance plants engineered? (10)
- 17) Illustrate the development of Embryonic stem cell method. (10)
- 18) Comment on the ethical issued on patenting of biotechnology inventions and add a note on IPR. (10)
- 19) Discuss in detail about RFLP and its used of analysis. (10)
- 20) Explain in detail about the production of monoclonal antibodies and its applications. (10)

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