PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024

(Fourth Semester)

Branch - APPLIED MICROBIOLOGY

MAJOR ELECTIVE COURSE - II:

ENTREPRENEURSHIP IN BIOSCIENCES Maximum: 50 Marks Time: Three Hours SECTION-A (5 Marks) Answer ALL questions ALL questions carry EQUAL marks $(5 \times 1 = 5)$ An enterprises based on utilization of biological knowledge. 1 (ii) Bio-business (i) Bio-Research (iv) Biosensor (iii) Biotechnology Which crop have been called orphan crop? 2 (ii) Sweet potato (i) Cassava (iii) Tomato (iv) Carrot 3 All are biopesticides except (i) Trichoderma viride (ii) Bacillus thuringiensis (iii) Nuclear polyheadrosis Virus (iv) Agrobactrium Sp 4 The optimum temperature for the rapid feeding of *Lumbricus rubellus*. (i) 10-20 °C (ii) 20-35 °C (iii) 15-25 °C (iv) 25 -45 °C India's First Biotech Park at 5 (i) Delhi (ii) Ghatti (iii) Bangalore (iv) Bombay SECTION - B (15 Marks) Answer ALL Questions ALL Questions Carry EQUAL Marks $(5 \times 3 = 15)$ Illustrate the SWOT of Biobusiness.

- List out stages in Entrepreneurial process.
- a Write short note on polyhouse culture and uses.

OR

- b Define biosensor. Explain their application in agricultural management.
- a Concise the challenges and scope in industrial biotechnology for biobusiness. 8
 - b Summarize the merits and demerits of biofertilizers their impact on marketing.

Cont...

9 a What is probiotics and prebiotics? Explain with suitable example.

OR

- b Briefly explain about biogas production and marketing.
- 10 a Write about the activity of Biotech park in India.

OR

b What are main points consider when you writing a project proposal?

SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$

11 a Discuss about the Govt., Scheme and funding support availability for bioentrepreneurship.

OR

- b Confer the characteristics, need and rationale of small scale Industries.
- 12 a Discuss about value added herbal products.

OR

- b Write in detail about bioethanol production process from algae.
- 13 a Elaborate the mass production of a bacterial biopesticide and its advantages.

OR

- b Explain the process of single cell protein production with suitable example.
- 14 a Describe the detail of vermicompost production, formulation and its marketing strategies.

OR

- b Elaborate the mass production of a carrier based biofertilizer and advantages in handling.
- 15 a What to you Know about BIRAC? How it helpful for entrepreneurial process.

OR

b Discuss about Indian company act for biobusiness.

Z-Z-Z

END