(For the candidates admitted from 2012-2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Sixth Semester

Microbiology

SBEC - MICROBIAL BIOTECHNOLOGY

Time: Three hours

Maximum: 75 marks

SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Fermentation process.
- 2. Antifoams.
- 3. Methanogens.
- 4. Chlonella.
- 5. Centrifuge.
- 6. Buttons.
- 7. Spawning.

- 8. Microbial fertilizer.
- 9. Immobilization.
- 10. Xanthan.

SECTION B — $(5 \times 5 = 25 \text{ marks})$ Answer ALL questions.

11. (a) Give an account on bioreactors.

Or

- (b) Comment on Batch culture.
- 12. (a) Write short note on application of recombinat DNA.

Or

- (b) Give an account on stages of fermentation.
- 13. (a) Write short note on biopolymer.

Or

- (b) Give an account on isolation of microbial enzymes.
- 14. (a) Give short note on cultivation of white buttons mushroom.

Or

(b) Give an account on uses of steroid hormones.

15. (a) Explain liposomal entrapment.

Or

(b) Give an account on Insulin.

SECTION C — $(3 \times 10 = 30 \text{ marks})$ Answer any THREE out of Five.

- 16. Briefly explain the scope of biotechnology.
- 17. Give brief note on stages of Downstream process.
- 18. Explain about the mass production of VAM.
- 19. Briefly explain the nutritive value of Edible mushrooms.

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20. Give brief note on interferon.