

M. Sc. DEGREE EXAMINATION, APRIL 2018
BIOTECHNOLOGY
FOURTH SEMESTER

COURSE : CORE
PAPER : FOOD AND PHARMACEUTICAL BIOTECHNOLOGY
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

ANSWER ALL THE QUESTIONS. (20 x 1 = 20)

1. What is the E number of sodium benzoate?
a. E214 b.E211 c. E212 d. E213
2. What is Diuretics?
3. Abbreviate BBB.
4. The concept of Pasteurization was postulated by _____ in _____.
5. _____ causes the disease known as botulism.
a. *Clostridium botulinum* b. *Clostridium difficile*
b. *Clostridium perfringens* d. *Clostridium tetani*
6. Difference between pasteurization and sterilization.
7. Abbreviate ADME.
8. *Aspergillus sp.* produces _____.
9. What type of radiations are used in food preservations?
a. alpha, b. beta, c. gamma, d. ionizing
10. Abbreviate GMO.
11. Lipinski Rule of 5 was postulated in the year _____.
12. Boiling point of milk (express in degrees Fahrenheit)?
a. 212.5 b. 212.6 c. 212.3 d. 212.4
13. What does Ames test detect?
14. Stn is a/an _____ from salmonella
a. Endotoxin b. Enterotoxin c. Exotoxin d. Hemotoxin
15. Abbreviate FDA.
16. During CANNING process, the food is heated is heated to a temperature of at least _____.
17. Abbreviate FSMA.
18. What is the difference between antiseptic and antibiotic?
19. Listeriolysin O is produced by _____ gene.
20. Patulin is produced by _____.

SECTION – B**ANSWER ANY 4 QUESTIONS IN ABOUT 600 WORDS****(4 x 10 = 40)**

21. What are the different types of drug delivery system? Write notes on any two types of delivery system.
22. Explain the application of Biosensors used in food.
23. What is microbial fermentation? Mention the factors that affect the growth of these organisms.
24. Write a note on personalized medicine.
25. A. What is Lipinski rule of 5?
B. Write a note of pharmacokinetics and pharmacodynamics of the drug?
26. Why is processing of food a necessity? Mention the steps involved in food processing.
27. What is pharmacogenomics? Mention the applications of the same.

SECTION – C**ANSWER ANY TWO QUESTIONS IN ABOUT 1500 WORDS****(2 x 20 = 40)**

28. Give an account on different classification of drugs. Explain each type with appropriate Examples.
29. What is food spoilage? Mention the different microorganisms that pose threat to the food industry along with the diseases associated.
30. Make a detailed note on the various process involved in extraction of edible oil.
31. What is ADME of a drug? What are the various properties/tests made to test each of these property?
