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**DHANALAKSHMI SRINIVASAN COLLEGE
OF ARTS & SCIENCE FOR WOMEN
(AUTONOMOUS)**
(For Candidates admitted from 2018-2019 onwards)
UG DEGREE EXAMINATIONS APRIL - 2021



**B.Sc., - BIOTECHNOLOGY
PHARMACEUTICAL BIOTECHNOLOGY**

Time: 3 Hrs

Max.Marks: 75

PART - A

CHOOSE THE CORRECT ANSWER

(10X1=10)

- Which of the following provides the best definition of pharmaceuticals?
 - it is the study of dosage form design including associated manufacturing techniques
 - it is the study of effect that drugs have on the body
 - it is the study of the effect that the body has on drugs
 - it is the study of how drugs can be chemically synthesised
- which of the following terms used to describe a drug that has the same effect on a receptor as the Endogenous chemical messenger?
 - Agonist
 - Antagonist
 - partial agonist
 - inverse agonist
- Which of the following are not responsible for the denaturation of proteins?
 - heat
 - Charge
 - pH charge
 - organic solvents
- _____ is not a classified form of conjugated proteins
 - Lipoproteins
 - Glycoproteins
 - Metalloproteins
 - Complete proteins
- Which of the following statements is true concerning human blood?
 - The blood of all normal humans contains red and white cells, platelets, and plasma
 - some human populations normally lack the ability to produce plasma
 - proteins are not normal components of human blood
 - none of the above
- Erythrocyte is another name for a _____
 - red cell
 - white cell
 - platelet
 - protein
- Nucleoside contains _____
 - Base-sugar
 - base – phosphate
 - base – sugar – phosphate
 - sugar - phosphate
- Purine base found in RNA is _____
 - Cytosine
 - Thymine
 - Guanine
 - Uracil
- When proteins are completely broken down the end products are _____
 - glucose molecules
 - glycerol molecules
 - amino acids
 - vitamins

10. A virus is made up of _____

a) Protein coat and nucleic acid

b) Protein coat and mitochondria

c) nucleic acid and cell membrane

d) nucleic acid cell wall and cell membrane

PART - B

ANSWER ALL THE QUESTIONS

(5X7=35)

11. a) Explain in brief about history of Pharmaceutical industry.

(OR)

b) Write a short notes on Drug development in recent years.

12. a) Explain about secretion of Recombinant proteins.

(OR)

b) Give a short notes on Xenotransplantation

13. a) write a short notes on blood-clotting.

(OR)

b) What is tissue plasminogen activator?

14. a) Explain the gene therapy.

(OR)

b) Discuss about Gene based Vaccines.

15. a) Discuss about product Potency.

(OR)

b) How will you detect the protein based impurities.

PART - C

ANSWER ANY THREE QUESTIONS

(3X10=30)

16. Discuss in detail about the pharmaceuticals of animal and plants

17. Discuss in brief about the Development of Recombinant Humane insulin.

18. Explain about polyclonal and monoclonal antibodies

19. Discuss in brief about the cell and tissue based therapies

20. Explain about Pyrogenic Contaminants