

Time: 3 Hours

Max Marks: 75

Note: Answer part **A** and **B** questions in two separate answer books

Question in part “**A**” should not be answered in part “**B**” and vice versa. Otherwise they will not be valued

Part-A (BIOCHEMISTRY) = 38 Marks

Write an essay on any ONE of the following: **1 X 13 = 13**

1. Classify Proteins and Describe protein biosynthesis.
2. Name the Ketone bodies. Discuss Ketogenesis and Ketolysis.

Write short note on any THREE of the following: **3 X 5 = 15**

3. Digestion of Fats.
4. Explain briefly about various types of enzymes inhibition with examples.
5. Difference between RNA and DNA.
6. Glycosuria.
7. Urea Cycle.

Write briefly on the following: **5 X 2 = 10**

8. Define Neoglucogenesis.
9. Normal levels for cholesterol and uric acid.
10. Mitochondria.
11. Malabsorption Syndrome.
12. Name Bile acids and write their role in digestion.

Part-B (BIOPHYSICS) = 37 Marks

Write an essay on any ONE of the following: **1 X 12 = 12**

13. Explain biological effects of light and use of light in therapy.
14. What is the normal audio frequency range of normal human ear? Explain the relation between frequency, velocity and wavelength. Write a note on audiometry.

Write short note on any THREE of the following: **3 X 5 = 15**

15. Explain short wave diathermy.
16. Principles of gravity.
17. What are fundamental and derived units?
18. Explain the use of heat for sterilization.
19. Name the defects of vision. How they are corrected?

Write briefly on the following: **5 X 2 = 10**

20. Why white clothes are preferred in summer?
21. Convert 1.5 Ton to kilogram.
22. Ohm's law.
23. Laws of reflection.
24. Inclined plane.