

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

**B.Sc. Allied Health Sciences Second Year Semester-III
July/August 2019 Examination**

B.Sc. Medical Laboratory Technology

Time : 2.30 Hrs.

[Max. Marks : 80]

SUBJECT : BIOCHEMISTRY - II

Q.P Code : J3032

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Long Essay

2 X 10 = 20 Marks

1. Define Glycogenolysis. Describe the reactions of Glycogenolysis. Add a note on its regulation. (1+7+2)
2. Define β -oxidation. Explain the β - oxidation of Palmitic acid. Add a note on its energetics. (1+7+2)

Short Essay (Answer Any Six)

6 X 5 = 30 Marks

3. PDH complex & significance. (4+1)
4. What is meant by detoxification? Give an account of various detoxification processes. (1+4)
5. Define Fatty Liver. Mention the causes of fatty liver. Add a note on lipotropic factors. (1+2+2)
6. Describe Rappaport Leuberger pathway. Add a note on its Biomedical importance. (4+1)
7. Describe the transport, storage and functions of iron. (2+1+2)
8. What are Porphyrins? How are they classified? Name the enzyme defect and biochemical findings in any one of the porphyrias. (1+2+2)
9. What are high energy compounds? Give four examples and mention their biomedical importance. (1+4)
10. Name the Bile salts. Explain their role in lipid digestion and absorption. (2+3)

Short Answers (Answer Any Ten)

10 X 3 = 30 Marks

11. What is Lesch Nyhan syndrome? Mention its clinical features.
12. Define clearance test. List the various clearance test.
13. What is ketosis? Give two causes for ketoacidosis.
14. Define Gluconeogenesis. List the substrates for Gluconeogenesis.
15. Mention the sources and any two functions of Selenium.
16. List the types of jaundice and mention one cause for each type.
17. Write the reference range for: (1) serum Calcium (2) serum Magnesium (3) serum Phosphorous.
18. Write the reference values for Fasting and Post Prandial blood glucose. List the hormones regulating blood sugar.
19. Mention normal levels of serum calcium. List any two factors affecting the absorption of calcium.
20. Write any two functions and disorders of copper metabolism.
21. What are lipotropic factors? Give four examples.
22. Write the enzyme defect and any 2 clinical features of Phenylketonuria.

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