Question Paper Code:RS 205

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-I Degree Examination – SEPTEMBER 2018

Time:3 hours Max Marks:100

BIOCHEMISTRY- PAPER 1

Your answer should be specific to the question asked Draw neat and labeled diagrams wherever necessary

LONG ESSAY ***2 X 10 = 20 Marks***

1. Mention sources,Recommended Daily Allowance,biochemical functions and deficiency manifestations of Folic acid. Add a note on folate antagonists. (1+1+4+2+2)
2. Describe various types of enzyme inhibition with graphs. Add a note on biomedical importance of enzyme inhibition. (7+3)

SHORT ESSAY ***10 X 5 = 50 Marks***

3. What is meant by denaturation and renaturation? How do you demonstrate these effects?
4. Describe briefly the digestion and absorption of lipids.(2+3)
5. Name hormones of adrenal Medulla. Write their synthesis and functions. (1+2+2)
6. What are fatty acids? How are they classified? Give suitable examples. (1+2+2)
7. Compare and contrast Lactose and sucrose with reference to Source,composition and structure.
8. List 5 major functions of Carbohydrates. Explain the protein sparing action of carbohydrates in the body. (2.5+ 2.5)
9. Describe the structure,function and clinical significance of Endoplasmic reticulum. (2+2+1)
10. Define Mutarotation. Mention the cause and clinical significance of Mutarotation. (1+1+3)
11. What are Amphipathic lipids? Give examples & biomedical importance of amphipathic lipids. (1+4)
12. Name hormones of pancreas. Write their actions.

SHORT ANSWERS ***10 X 3 = 30 Marks***

13. What are plasmalogens? Mention their functions.
14. Define proenzyme. Name 2 proteolytic proenzymes of pancreatic juice and their activation.
15. What is hematuria? Mention two conditions causing Hematuria.
16. What are the different health hazards caused due to improper handling of biomedical waste?
17. What are negative acute phase proteins? Give examples
18. Name three biologically important nucleotides with one function.
19. Mention the Biological effects of radiation on tissues.
20. What are reactive oxygen species? Name four disease states associated with excess production of reactive oxygen species.(1+2)
21. Mention the different types of DNA and list any three differences among them.
22. List any three functions of Albumin

Question Paper Code: RS 206

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase I Degree Examination – SEPTEMBER 2018

Time:3 hours Max Marks:100

BIOCHEMISTRY PAPER 2

Your answer should be specific to the question asked Draw neat and labeled diagrams wherever necessary

LONG ESSAY *2 X 10 = 20 Marks*

1. Describe the dynamics of blood glucose regulation. Explain the role of hormones in achieving this
2. Define transcription. Describe in detail the steps involved in transcription. Add a note on inhibitors of transcription. (1+7+2)

'HORT ESSAY *10 X 5 = 50 Marks*

3. What is Gout? Mention the clinical manifestations, biochemical alterations and add a note on treatment. (1+1+2+1)
4. Name Ketone bodies. Explain the synthesis & utilization of ketone bodies (1+2+2)
5. Define & describe transamination of Aminoacids with examples. Add a note on biomedical importance of transaminases.(1+3+1)
6. Mention causes and biochemical findings in metabolic and respiratory alkalosis
7. What is the normal reference range for serum calcium? Describe the biochemimcal fucntions of calcium. (1+4)
8. Define Atherosclerosis. Explain the risk factors and biochemical diagnosis of atherosclerosis
9. What is meant by detoxification? Give an account of various detoxification processes.
10. Define Fatty Liver. Mention the causes of fatty liver. Add a note on lipotropic factors. (1+2+2)
11. Explain the various factors involved in causation of cancer
12. Write the role of liver in integration metabolism

SHORT ANSWERS *10 X 3 = 30 Marks*

13. How inosine monophosphate is synthesized?
14. What are high energy compounds? Give four examples
15. Mention the derivatives of cholesterol and write their biomedical importance.
16. What is Albinism? Mention the enzyme defect and clinical features of Albinism.
17. Mention the inherited disease of fructose metabolism. Write their enzyme defect.
18. Give 3 examples of hemoproteins with their functions
19. List any 3 glycogen storage disorders with their enzyme deficiency
20. What is short term and prolonged starvation.
21. Hypotonic concentration of ECF
22. List the types of jaundice and mention one cause for each type.