First Year M.Sc Medical Physiology Degree Supplementary Examinations March 2021

(FOUNDATION COURSE)

Paper II – Biochemistry

Time: 3 hrs

- Answer all questions to the point neatly and legibly Do not leave any blank pages • between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essay:

- Define gluconeogenesis. write in detail steps involved in conversion of lactate to pyruvate. Add a note on energetics (1+7+2)
- Explain normal plasma pH. Describe respiratory and renal mechanisms involved in pH regulation. Add a note on metabolic acidosis (1+3+4+2)

Short Notes:

- 3. Phospholipids
- 4. Enzyme inhibition
- 5. Compounds formed from glycine
- 6. Biochemical functions of vitamin A
- 7. Genetic code
- 8. Post translational modifications

Answer briefly:

- 9. Anapleurotic role of TCA cycle
- 10. Classification of amino acids depending on metabolic fate
- 11. Acute intermittent porphyria
- 12.2 inhibitors of electron transport chain with specific site of action
- 13. Carnitine
- 14. Mutagens
- 15. Biochemical role of copper
- 16. Albumin: Globulin ratio
- 17. Restriction endonucleases
- 18. Gene therapy

Max. Marks: 70

(2x10=20)

(6x5=30)

(10x2=20)
