SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year (Semester-IV)

February / March -2018 Examination

B.Sc. Medical Laboratory Technology (MLT)

Time : 2.30 Hrs.

[Max. Marks : 80]

BIOCHEMISTRY

Q.P Code : AHS-105

Your answers should be specific to the questions asked. Draw neat labelled diagrams wherever necessary.

LONG ESSAY

- 1. Describe the reactions of TCA cycle. Add a note on its energetics.
- 2. Explain chemistry, sources, RDA, function and deficiency manifestations of vitamin A.

SHORT ESSAY (Answer any Six)

- 3. Describe competitive enzyme inhibition with suitable examples.
- 4. Mention the enzyme defective in
 - a. Phenyl ketonuria b. Albinism c. Alkaptonuria d. Homocystinuria
 - e. Maple syrup urine disease
- 5. Lipoproteins types, functions and reference ranges.
- 6. Enumerate the steps of Uric acid formation.
- 7. Functions and deficiency manifestations of vitamin C.
- 8. Explain DAM method of estimation of blood urea.
- 9. What are ketone Bodies? Describe the synthesis of ketone bodies.
- 10. Diagnostic importance of enzymes.

SHORT ANSWERS (Answer any Ten)

- 11. Vongiereke's disease.
- 12. Parts of Colorimeter.
- 13. Fatty Liver.
- 14. Compunds synthesized from cholesterol.
- 15. Phenylketonuria.
- 16. HMP shunt pathway and its significance.
- 17. Mention any three biochemical function of vitamin D.
- 18. Name any three Hyperglycemic hormones.
- 19. Normal ranges of the following 1. Urea 2. Creatinine 3. Cholesterol
- 20. Beri-beri.
- 21. Co-enzymes of 1. Niacin 2. Thiamine 3. Riboflavin
- 22. Creatinine clearance and its Significance.

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6 X 5 = 30 Marks

2 X 10 = 20 Marks

10 X 3 = 30 Marks

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MICROBIOLOGY

Q.P Code : AHS-109

Your answers should be specific to the questions asked. Draw neat labelled diagrams wherever necessary.

LONG ESSAY

- 1. Enumerate agents causing watery diarrhea. Describe the laboratory diagnosis of cholera.
- 2. Name spirochetes of medical importance. Describe laboratory diagnosis of syphilis.

<u>SHORT ESSAY</u> (Answer any Six)

- 3. Enteropathogenice Coli.
- 4. Laboratory diagnosis of enteric fever.
- 5. Significant bacteruria.
- 6. Laboratory diagnosis of bacillary dysentery.
- 7. Infections caused by Escherichia.
- 8. Infections caused by Escherichia coli.
- 9. EL TOR vibrios.
- 10. Weil's disease.

SHORT ANSWERS (Answer any Ten)

- 11. Pigments produced by pseudomonas aeruginosa
- 12. Two rapid tests for diagnosis of Cholera.
- 13. Nichols strain of Treponema pallidum.
- 14. Name four organisms causing urinary tract infection.
- 15. Mention three characteristics of Shigella.
- 16. Name three diseases caused by klebsiella.
- 17. Name four nonlactose fermenting organisms.
- 18. Name four culture media used for salmonella.
- 19. Name diarrheagenic coli.
- 20. Name four serological tests used in diagnosis of leptospirosis.
- 21. Name three lactose fermenting organisms.
- 22. Cholera red reaction.

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10 X 3 = 30 Marks