SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH (A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences First Year Semester-II July/August 2019 Examination

Time: 2.30 Hrs. [Max. Marks: 80]

SUBJECT: BIOCHEMISTRY

O.P Code: J2030

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

LONG ESSAY

1. Define pH. Indicate with a diagram the different parts of pH meter. Add a note on preparation of buffer solutions

2. What is waste? Describe the segregation and disposal of biomedical waste from the laboratory.

SHORT ESSAY (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

2 X 10 = 20 Marks

- 3. Write a note on collection and transport of specimens.
- 4. Describe the ethical conduct of laboratory personnel.
- 5. Discuss the common laboratory accidents and ways for its prevention.
- 6. External Quality Assurance Programme.
- 7. Write the Henderson Hasselbach's equation. Add a note on its significance.
- 8. Discuss uses, care and maintenance of water distillation plant.
- 9. Write the importance of reagent bottles, wash bottles and specimen bottles in laboratory.
- 10. Explain the maintenance of glassware apparatus.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. What is Standard solution?
- 12. What is precision and accuracy?
- 13. What is Atomic weight and equivalent weight?
- 14. List any three Post analytical errors.
- 15. Write preparation of Normal Saline.
- 16. Write the procedure for storage of samples.
- 17. Ideal pH indicator.
- 18. What are acids and bases? Give examples.
- 19. Explain solute, solvent and solution with examples.
- 20. What are the precautions to be taken for Arterial blood collection?
- 21. Write the calculation of mean and standard deviation.
- 22. Define Normality and Molarity of solutions.

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B.Sc. Allied Health Sciences First Year Semester-II July / August 2019 Examination

Time: 2.30 Hrs. [Max. Marks: 80]

SUBJECT: MICROBIOLOGY

Q.P Code: J2040

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

LONG ESSAY $2 \times 10 = 20 \text{ Marks}$

1. Draw a neat labeled diagram of Bacterial Cell. Describe the Structure, type, functions, methods of detection, clinical significance of Cell wall

2. Describe the mode of transmission, clinical manifestations and samples to be collected in pulmonary tuberculosis.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

- 3. Map the lesions of Pseudomonas aeruginosa on Human body
- 4. Map the lesions of Candida albicans on Human body
- 5. Different modes of transmission of Infections with examples
- 6. Target sites for Antibiotics with examples
- 7. IgM: Structure, properties & clinical significance
- 8. List the opportunistic infections in HIV
- 9. Hot Air Oven: Principle, holding time and uses.
- 10. Kochs postulates

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. List 3 enriched media
- 12. Enumerate three staining techniques used for bacterial infections
- 13. Enumerate 3 diseases transmitted by Ingestion
- 14. Enumerate the Infections caused by Pneumococcus
- 15. Enumerate three infections caused by Rhizopus
- 16. Enumerate any 3 skin antiseptics
- 17. Define Sterilization and Disinfection
- 18. Name three clinical features of Syphilis
- 19. Name three infections caused by E.coli
- 20. Preventive measures for nosocomial infection
- 21. Enumerate three articles sterilized by Autoclave
- 22. List three sexually transmitted diseases

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B.Sc. Allied Health Sciences First Year Semester-II July / August 2019 Examination

Time: 2.30 Hrs. [Max. Marks:80]

SUBJECT: PATHOLOGY

Q.P Code: J2050

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

LONG ESSAY $2 \times 10 = 20 \text{ Marks}$

- 1. Define Neoplasia. Discuss the differences between benign and malignant tumors with neat labeled diagram.
- 2. Describe cellular and vascular events in acute inflammation. Mention various tests in inflammation

SHORT ESSAY (Answer any Six)

6X 5 = 30 Marks

- 3. Discuss pathogenesis and types of urinary stones
- 4. Discuss various agents causing cell injury. Give few examples for irreversible cell injury.
- 5. Describe pathogenesis and complications of myocardial infarction
- 6. Discuss various cellular adaptations
- 7. Describe pathogenesis and stages of pneumonia
- 8. Describe pathogenesis and types of hepatitis.
- 9. Discuss physical examination of urine. Brief note on Benedict test
- 10. Discuss the CSF findings in Tuberculous meningitis

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. List 3 methods of urine sample collections
- 12. Mention any 3 steps of tissue processing
- 13. List 3 disadvantages of FNAC
- 14. Mention 3 causes of iron deficiency anemia
- 15. Mention 3 stages of shock
- 16. List 6 causes for leucopenia
- 17. Draw the diagram of peptic ulcer
- 18. List 3 infectious diseases
- 19. List 3 blood grouping systems
- 20. Mention any 3 stains used in Laboratory
- 21. What is thromboembolism
- 22. Define metaplasia
