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

B.Sc. Allied Health Sciences First Year (Semester-II)

November 2020 Examination

Time: 2 Hrs. [Max. Marks: 60]

SUBJECT: BIOCHEMISTRY

Q.P Code: J2030

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

 $\underline{\text{LONG ESSAY}} \qquad \qquad 1 \text{ X } 10 = 10 \text{ Marks}$

1. What is a Buffer? Give three examples. Explain the preparation of a Buffer using pH meter.

 $\frac{\text{SHORT ESSAY}}{7 \text{ X 5}} = 35 \text{ Marks}$

- 2. Define percentage solutions. What is the mass% (m/m) of a solution prepared by dissolving 30.0g of NaOH in 120.0 g of water?
- 3. Define stock solutions. Explain the preparation of working standard and limitations.
- 4. Explain sample collection, preservation and transportation of blood.
- 5. Write the types, principle, procedure, maintenance and limitations of centrifuge.
- 6. Explain the laboratory accidents and ways for its prevention.
- 7. Describe various grades of chemicals, reagents and water used in the laboratory.
- 8. Explain biomedical waste disposal in the laboratory.

SHORT ANSWERS 5 X 3 = 15 Marks

- 9. Write Henderson-Hesselbach's equation and its uses.
- 10. Define acids and bases with examples.
- 11. What are the precautions to be taken for Arterial blood collection?
- 12. Name 3 anticoagulants used for blood collection
- 13. Define buffer and pH

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B.Sc. Allied Health Sciences First Year (Semester-II)

November 2020 Examination

Time: 2 Hrs. [Max. Marks: 60]

SUBJECT: MICROBIOLOGY

Q.P Code: J2040

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

LONG ESSAY $1 \times 10 = 10 \text{ Marks}$

1. Define and Classify Sterilization. Draw a neat labeled diagram of the Hot air oven and describe its Principle, holding time, uses, controls used.

SHORT ESSAY 7 X 5 = 35 Marks

- 2. Map the lesions of *Mycobacterium tuberculosis* on Human body
- 3. Autoclave: Principle, holding time, uses & controls used
- 4. Map the lesions of *Candida* on Human body
- 5. Nosocomial Infections: Types & Prevention
- 6. Contributions of Robert Koch
- 7. Map the lesions of Salmonella typhi on Human body
- 8. Different modes of transmission of Infections with examples

$\underline{SHORT\ ANSWERS} \qquad \qquad 5\ X\ 3 = 15\ Marks$

- 9. Name three sexually transmitted diseases
- 10. Enumerate 3 bacterial vaccines
- 11. Name three skin disinfectants
- 12. Standard precautions
- 13. List three clinical manifestations of Candidiasis

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B.Sc. Allied Health Sciences First Year (Semester-II)

November 2020 Examination

Time: 2 Hrs. [Max. Marks: 60]

SUBJECT: PATHOLOGY

Q.P Code : J2050

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

LONG ESSAY $1 \times 10 = 10 \text{ Marks}$

1. Describe cellular and vascular events in acute inflammation. Mention various tests in inflammation

SHORT ESSAY 7 X 5 = 35 Marks

- 2. What are the different methods of blood collection modes
- 3. Pathogenesis and laboratory investigations of Iron deficiency anemia
- 4. Discuss physical examination of urine. Brief note on Benedict test
- 5. Discuss various cellular adaptations
- 6. Discuss steps in tissue processing
- 7. Write the uses of Fine Needle Aspiration cytology
- 8. Describe pathogenesis and complications of atherosclerosis.

SHORT ANSWERS 5 X 3 = 15 Marks

- 9. Draw the diagram of peptic ulcer
- 10. List 6 causes for leucocytosis
- 11. List 3 complications of myocardial infarction
- 12. Mentions stages of ESR
- 13. List 3 blood grouping systems

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