## SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

## B.Sc. Allied Health Sciences Third Year (Semester-VI) July-2019 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.

 $\underline{LONG ESSAY}$  2 X 10 = 20 Marks

1. Describe in detail about Western blotting Technique. Add a note on its applications.

2. What is the pH of the blood? Explain in detail about different types of Acid-base disturbances.

## **SHORT ESSAY** (Answer any Six)

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

- 3. Explain the process of Transcription.
- 4. Write a note on Restriction Endonucleases.
- 5. What are Radioisotopes? Explain their applications in medicine.
- 6. Explain replication of DNA in eukaryotes.
- 7. Define the following:- a) Mean b) Median c) Mode
- 8. Describe Renal Function Tests.
- 9. Explain the principle procedure and applications of flame photometry.
- 10 Explain briefly the different techniques used to purify proteins.

## **SHORT ANSWERS** (Answer any Ten)

10 X 3 = 30 Marks

- 11. Mention the post translational modifications.
- 12. Silent Mutation.
- 13. Mention the various Blood Buffers.
- 14. What is meant by Therapeutic Drug Monitoring (TDM)?
- 15. t-test
- 16. Enzyme profile for Liver diseases.
- 17. Write the principle of Elisa.
- 18. Write the principle of thin layer chromatography.
- 19. Write the principle of colorimeter.
- 20. Isoelectric Precipitation.
- 21. What are Vectors? Give examples.
- 22. What is Insulin? Mention its biological role.

## SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

# B.Sc. Allied Health Sciences Third Year (Semester-VI) July/August-2019 Examination B.Sc. Medical Laboratory Technology (MLT)

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

## **PATHOLOGY**

Q.P Code: AHS-107

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

## **LONG ESSAY**

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

- 1. Describe the FNAC of breast lump in 55 years old female. Describe the cytologic features of smear in case of Carcinoma breast
- 2. Who is an ideal donor? Mention the infections you screen for in an ideal donor.

## **SHORT ESSAY** (Answer any Six)

6 X 5 = 30 Marks

- 3. Sex chromatin.
- 4. Presentation of immortalized cell lines.
- 5. Coomb's test and its significance.
- 6. Fixing the FNAC smears.
- 7. Philadelphia Chromosome.
- 8. Bombay blood group.
- 9. Fite-Faraco stain.
- 10 Inverted microscope.

#### SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

- 11. Anticoagulant used in blood bags.
- 12. Who is voluntary donor?
- 13. Red cell antigens.
- 14. Laminar flow instrument-importance.
- 15. Oncogenes.
- 16. Life of granulocyte in blood bag stored at 4° C.
- 17. Malignant cell morphology in cytology smear.
- 18. Three broad major indications for blood transfusion.
- 19. What is IHC and mention two uses in diagnosis.
- 20. Three equipments essential for tissue culture.
- 21. Mention media for plating tissue culture.
- 22. How much blood can be donated at a time.

#### SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

# B.Sc. Allied Health Sciences Third Year (Semester-VI) July/August-2019 Examination B.Sc. Medical Laboratory Technology (MLT)

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

## **MICROBIOLOGY**

Q.P Code: AHS-109

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

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

- 1. Enumerate dermatophytes. Describe in detail about infections and laboratory diagnosis of dermatophytosis.
- 2. Draw neat labeled diagram of HIV. Describe pathogenesis and lab diagnosis of HIV infection.

#### **SHORT ESSAY (Answer any Six)**

6 X 5 = 30 Marks

- 3. Laboratory diagnosis of fungal infections.
- 4. Candida albicans.
- 5. Cryptococcosis.
- 6. Sporotrichosis.
- 7. Laboratory diagnosis and prophylaxis of Hepatitis B infection.
- 8. Prophylaxis of polio.
- 9. Viral replication.
- 10 Pathogenesis and laboratory diagnosis of rabies.

## **SHORT ANSWERS** (Answer any Ten)

10 X 3 = 30 Marks

- 11. Classification of fungi.
- 12. Name the genera of dermatophytes with examples.
- 13. Name the opportunistic fungi.
- 14. Reynolds braude phenomenon.
- 15. Name three species of Aspergillus.
- 16. Viral interference.
- 17. Name three viruses causing diarrhea.
- 18. Classification of herpes viruses.
- 19. Name three viruses causing encephalitis.
- 20. Antigenic shift and drift.
- 21. MMR vaccine.
- 22. Name three oncogenic viruses.