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

(A DEEMED TO BE UNIVERSITY)

# B.Sc. Medical Laboratory Technology Second Year Semester-IV February 2020 Examination

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

# SUBJECT : MICROBIOLOGY-I Q.P Code : J4041

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

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

- 1. Enumerate the agents causing Sexually Transmitted infections. Describe the laboratory diagnosis of syphilis.
- 2. Enumerate Gram positive bacilli. Describe the source, mode of transmission, clinical manifestations, complications and laboratory diagnosis of Corynebacterium diphtheriae.

#### SHORT ESSAYS (ANSWER ANY SIX)

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

- 3. Laboratory diagnosis of meningococcal meningitis.
- 4. Antibiotic Sensitivity Testing methods.
- 5. Anaerobic culture methods.
- 6. Mantoux test: procedure, principle & interpretation.
- 7. Polymerase chain reaction : principle, types, applications.
- 8. Laboratory diagnosis of Tuberculosis.
- 9. Laboratory diagnosis of urinary tract infections.
- 10. Widal test: principle, interpretation.

#### SHORT ANSWERS (ANSWER ANY TEN)

10 X 3 = 30 Marks

- 11. Draw a neat labelled diagram of Albert stain of throat swab smear from patient with diphtheria.
- 12. Enumerate 3 bacterial vaccines.
- 13. CAMP test.
- 14. Selective media with examples.
- 15. Enumerate 3 zoonotic bacterial infections.
- 16. CRP test: Principle & clinical significance.
- 17. Naegler reaction.
- 18. Coagulase test.
- 19. Differences between Pneumococci & Streptococcus viridians.
- 20. Pigments produced by Pseudomonas aeruginosa.
- 21. Satellitism.
- 22. Enumerate 3 non sporing anaerobic bacteria.

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# **B.Sc. Medical Laboratory Technology Second Year Semester-IV February 2020 Examination**

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

### **SUBJECT: MICROBIOLOGY-II**

**Q.P Code: J4042** 

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

Long essay: 2x10=20 Marks

- 1. Describe the life cycle and laboratory diagnosis of Ascaris lumbricoides.
- 2. Enumerate the species of Plasmodium. Describe the lifecycle and laboratory diagnosis of Plasmodium vivax.

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

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

- 3. NIH swab.
- 4. Life cycle of Giardia lamblia.
- 5. Pathogenesis and Laboratory diagnosis of intestinal amoebiasis.
- 6. Larva migrans: Types, Causative agents and features.
- 7. Laboratory diagnosis of Kala-azar.
- 8. Trichomonas vaginalis.
- 9. Hydatid cyst.
- 10. Life cycle of Balantidium coli.

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

10 X 3 = 30 Marks

- 11. Name three bile stained eggs.
- 12. Draw a labelled diagram of egg of Hymenolepis nana.
- 13. Name three free living amoebae.
- 14. Explain the term viviparous with examples.
- 15. Name three opportunistic parasites in AIDS patients.
- 16. Enumerate three stool concentration techniques.
- 17. Draw a neat labelled diagram of egg of Hookworm.
- 18. Name three arthropod vectors in Parasitic infections.
- 19. Name three haemoflagellates.
- 20. Name three Tapeworms.
- 21. Name three source of infections of Parasites with examples.
- 22. Explain Intermediate host with example.

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# B.Sc. Medical Laboratory Technology Second Year Semester-IV February 2020 Examination

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

# SUBJECT : MICROBIOLOGY-III O.P Code : J4043

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

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

1. Classify fungal infection. Describe the morphological characteristics, cultural characteristics and laboratory diagnosis of agents causing dermatophytosis.

2. List the types of Hepato viruses. Describe the morphology, modes of transmission and laboratory diagnosis of hepatitis-B infection.

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

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

- 3. Lab diagnosis of Dengue.
- 4. Describe the morphology and cultural characteristics of Candida albicans.
- 5. Laboratory diagnosis of Rabies.
- 6. Describe the steps of viral replication.
- 7. Laboratory diagnosis of agents causing mycetoma.
- 8. Polio vaccines.
- 9. Describe the clinical features, laboratory diagnosis and prevention of mumps.
- 10. Describe the Slide culture technique for fungal culture.

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

 $10 \times 3 = 30 \text{ Marks}$ 

- 11. Explain the term Antigenic shift.
- 12. Draw a diagram of embryonated hens egg showing the various routes of inoculation.
- 13. List three infections caused by cytomegalo virus.
- 14. List three viruses causing malignancy.
- 15. List three fungi causing systemic infections.
- 16. Draw a labelled diagram of Influenzae virus.
- 17. List three Arboviral disease.
- 18. List three viruses causing diarrhea.
- 19. Name three complications of Varicella zoster infection.
- 20. Name three cell lines used for cultivation of viruses.
- 21. List three genera of Dermatophytes.
- 22. List three infections caused by Cryptococcus neoformans.

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