



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year Semester-V

April 2024 Examination

B.Sc. Medical Laboratory Technology (MLT)

Time : 2.30 Hrs.

[Max. Marks : 80]

SUBJECT: PATHOLOGY - I

Q.P Code : J5051

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2X10=20Marks

1. What are the different types of classification of fixatives. What is the principle and advantages and disadvantages of formaldehyde fixation?
2. What is decalcification? Describe any one method of decalcification and the factors affecting decalcification.

SHORT ESSAY

(Answer any six)

6X5=30Marks

3. What are the different types of microtome & mention different angles of steel knives.
4. What is microphotography and give five application of it in laboratories.
5. What is the principle and uses of scanning electron microscope?
6. List the steps in reticulin staining and describe each step briefly
7. What is embedding? Discuss the technique of embedding.
8. Write the principle of cryostat. List the advantages and disadvantages of cryostat
9. Describe in detail alum hematoxylins.
10. Describe the schedule of processing in an automatic tissue processor.

SHORT ANSWERS

(Answer any Ten)

10X3=30Marks

11. What is mordant? Give examples.
12. Name one special stain for a) Amyloid b) Fungi c) Fat.
13. List three uses of electron microscope.
14. Name three mounting medias used in museum.
15. Name three methods of removal of formalin pigment.
16. Maintenance of records in histopathology.
17. Composition of Bouin's fixative.
18. Give 2 examples for tissues which are easy to cut sections and difficult to cut sections.
19. What is regressive staining? Give example.
20. List three mountants after staining.
21. Filing of slides
22. List three types of hones.

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Time : 2.30 Hrs.

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SUBJECT: PATHOLOGY - II

Q.P Code : J5052

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2X10=20Marks

1. Mention the source of cerebrospinal fluid (CSF) sample, indications and contraindications of Lumbar puncture. Discuss difference between various inflammatory lesions in Central nervous system.
2. What is a cell? Describe the normal structure and functions of its components. What are the cytologic criteria of malignant cell?

SHORT ESSAY (Answer any six)

6X5=30Marks

3. Discuss different methods of cell block preparation
4. Describe collection, preparation and staining of sputum for cytology.
5. What is Xanthochromia? List the causes
6. Principle and preparation of PAP stain.
7. Write the uses of Fine Needle Aspiration cytology
8. Discuss in detail the cytology of Endometrium and Ovary.
9. Cytology of CSF in Tuberculous meningitis
10. Describe collection, preparation and staining of Body Fluid for cytology

SHORT ANSWERS (Answer any Ten)

10X3=30Marks

11. Cytology of normal endometrium
12. Mention three body fluids
13. What is Cytospray
14. Name the parts of gastrointestinal system.
15. Name three benign conditions of Female genital tract
16. Draw neat labeled diagram of cervical histology
17. Name three organisms seen in cervical pap smear.
18. What is the utility of Shorr stain
19. Name three cytological stains.
20. Name three Radiation changes seen in Pap smear
21. Name three Hormonal Indices
22. Name three techniques of collection of specimen for cervical cytology study.

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B.Sc. Medical Laboratory Technology (MLT)

Time: 2.30 Hrs.

[Max. Marks: 80]

Subject: Pathology - Paper II

Q.P Code: K5052

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

Long essay

2X10=20 Marks

1. Methods of collection of samples and preparation of cell block
2. Describe preparation, principle and staining technique of Papanicolaou stain.

Short essay

6X5=30 Marks

3. Discuss the significance of Hormonal cytology.
4. Describe cytological features of Radiation induced changes on PAP smears.
5. Cytology of CSF in Tuberculous meningitis
6. Fixatives used in cytology
7. Principle and preparation of May Grunwald Giemsa stain
8. Describe collection, preparation and staining of sputum for cytology

Short answer

10X3=30 Marks

9. Name three organisms seen in Pap smear
10. Name three special stains used in FNAC
11. List three differences between transudate and exudates.
12. Mention three body fluids
13. Name the parts of gastrointestinal system.
14. Name three benign conditions of Female genital tract.
15. Name three methods of sample collection in respiratory tract lesions
16. Draw a neat labeled diagram of malignant cell.
17. What is Shorr's stain
18. Name 3 crystals seen in urine

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Time: 2.30 Hrs.

[Max. Marks: 80]

SUBJECT : PATHOLOGY - III

Q.P Code: K5053

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2x10=20Marks

1. Describe the steps of culture of bone marrow for genetic analysis. Mention 6 uses of genetic analysis
2. Describe normal histology of lymph node. Write steps involved in fine needle aspiration of breast lump

SHORT ESSAY

6x5=30Marks

3. Describe the steps of coombs test
4. Describe various screening methods for infective material in donated blood
5. Cytological stains
6. Role of HLA typing in transfusion
7. Platelet concentrates
8. Classify chromosomes

SHORT ANSWERS

10x3=30Marks

9. What is barr body? how is it identified
10. What is Du test? what is its significance
11. List the four common sites of FNAC
12. List four complications of transfusion
13. List three blood components
14. If patient blood group is 'A' positive, list the antigen and antibody in his blood
15. Name three chromosomal genetic disorders
16. What is karyotyping
17. Mention three types of transfusion reaction
18. Name three benign breast lesion

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