(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

BRANCH VI – ORAL PATHOLOGY, MICROBIOLOGY AND FORENSIC ODONTOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

Q.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

- 1. Describe the properties of light and write in detail about Polarized light microscopy.
- 2. Discuss the demonstration of carbohydrates in tissue section.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Van der Walls' forces.
- 2. Ziehl-Neelsen staining.
- 3. Demonstration of melanin in tissue sections.
- 4. Antigen retrieval.
- 5. Immunofluorescent techniques.
- 6. In situ hybridization.
- 7. Microtomes.

(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

BRANCH VI – ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

O.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

1. Discuss the Immunofluorescent techniques and their use in the diagnosis of oral lesions.

2. Discuss the TNM Staging and different types of Grading systems in assessment of oral squamous cell carcinoma.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Feulgen Reaction.
- 2. Xylene substitutes.
- 3. Phase Contrast Microscopy.
- 4. Antigen retrieval methods in Immunocytochemistry.
- 5. Poymerase Chain Reaction.
- 6. Cryostat.
- 7. Immunohistochemical markers for Myoepithelial cell.

(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

BRANCH VI – ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

O.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

- 1. Describe the mechanisms and principles of fixatives. Write in detail about types of fixation.
- 2. Describe the principle and types of polymerase chain reaction.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Rossman's solution.
- 2. Scanning Electron Microscopy (SEM).
- 3. Von Kossa silver method.
- 4. Hematoxylin and Eosin stain.
- 5. Decalcification methods.
- 6. Epitope retrieval in Immunohistochemistry.
- 7. Safety in the laboratory.

(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

BRANCH VI – ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

Q.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

1. Saliva as a Diagnostic tool – discuss.

2. Different types of microscopes and discuss about Phase contrast microscope.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Diagnosis of Tuberculosis.
- 2. Periodic Acid Schiff (PAS) technique.
- 3. Metachromatic dyes.
- 4. Micronuclei.
- 5. Cell cycle markers.
- 6. Principles of microtomy.
- 7. Diagnostic procedures in pulpal pathology.

(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

BRANCH VI – ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

Q.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

- 1. Classify viral infections and discuss the laboratory diagnosis of viral infections.
- 2. Immunofluorescence laboratory procedure and its role in oral lesions.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Applications of Electron Microscopy.
- 2. Tissue markers in Oral Squamous Cell Carcinoma.
- 3. Frozen sections.
- 4. Decalcifying agents.
- 5. Regressive and progressive staining.
- 6. Slide adhesives.
- 7. Laboratory investigations of anemia.

NOVEMBER 2020 (MAY 2020 SESSION)

Sub. Code: 2473

M.D.S DEGREE EXAMINATION

(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

BRANCH VI – ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

Q.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

1. Discuss the laboratory diagnosis of Viral lesions affecting the Oral Cavity.

2. Discuss the role of Saliva as a diagnostic tool.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Microwave processing.
- 2. PAS stain.
- 3. Dark Field Microscopy.
- 4. Sectioning Artefacts.
- 5. Tissue Microarray.
- 6. Laboratory diagnosis of Pemphigus.
- 7. Immunohistochemical markers for Apoptosis and anti Apoptosis.

[MDS 0321]

MARCH 2021 (OCTOBER 2020 SESSION)

Sub. Code: 2473

M.D.S DEGREE EXAMINATION

(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

BRANCH VI – ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

Q.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

1. What is Electron Microscope? Write in detail about the parts of Electron Microscope and its principles, Merits and Demerits.

2. Write in detail about the Laboratory Diagnosis of Vesiculo Bullous Lesions.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Papanicolau (PAP) Staining in Exfoliative Cytology.
- 2. Western Blot Technique.
- 3. Automatic Tissue Processing.
- 4. Antigen Retrieval in Immunohistochemistry (IHC).
- 5. Dark Field Microscopy.
- 6. Trichrome Stains for Identification of Connective Tissue Pathologies.
- 7. Mounting Media.

JULY 2021 (MAY 2021 SESSION)

Sub. Code: 2473

M.D.S DEGREE EXAMINATION

(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

BRANCH VI - ORAL PATHOLOGY AND MICROBIOLOGY

PAPER III – LABORATORY TECHNIQUES AND DIAGNOSIS

Q.P. Code: 242473

Time: 3 Hours Maximum: 75 Marks

I. Essays: $(2 \times 20 = 40)$

1. Steps in Tissue processing.

2. Laboratory diagnosis of Bacterial infections.

II. Short Notes: $(7 \times 5 = 35)$

- 1. Direct Immunoflouroscence.
- 2. Real time PCR.
- 3. Mounting Media.
- 4. Staining of Carbohydrates.
- 5. Frozen sections and their uses.
- 6. Tissue markers in OSCC.
- 7. Vital Staining.