

**APRIL 2001**

**[KD 366]**

M.D.S. DEGREE EXAMINATION.

Branch IV — Oral Pathology

Part II

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours

Maximum 100 marks

Answer ALL questions

1. Discuss in detail the histochemistry, technique and applications of periodic acid schiff procedure. (25)
  2. Discuss on the reagents employed as fixatives. Comment on the mechanics of fixation. (25)
  3. Discuss on light optics. Describe the component parts of a compound microscope. (25)
  4. Write briefly on : (25)
    - (a) Microtome knives
    - (b) Decalcification.
    - (c) Cryostat.
    - (d) Haematoxylin.
    - (e) Oral smear.
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**NOVEMBER 2001**

**[KE 366]**

**M.D.S. DEGREE EXAMINATION**

(Revised Regulations)

**Branch IV — Oral Pathology**

**Part II**

**Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

1. Discuss Gram stain reactivity. Describe in detail the reagents and staining procedure. (25)
2. Discuss Decalcification. Describe in detail the techniques and reagents used in Decalcification. (25)
3. Discuss Electron 'Optics'. Describe the component parts of Transmission Electron Microscope. (25)
4. Write short notes on : (25)
  - (a) Micrometry
  - (b) Metachromasia
  - (c) Vital staining
  - (d) Karyotyping
  - (e) Acid Fast staining.

**MARCH 2002**

**[KG 366]**

**M.D.S. DEGREE EXAMINATION.**

(Revised Regulations)

Branch IV — Oral Pathology

Part II

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss about the different types of microscopic objectives. (25)
  2. Describe the various demonstration methods for collagen. (25)
  3. Classify fixatives. Describe any one microanatomical fixative. (25)
  4. Write briefly about : (25)
    - (a) Reprocessing.
    - (b) PAS stain.
    - (c) Embedding agents.
    - (d) Acid fast stain.
    - (e) Electron microscopy.
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**[KH 366] SEPTEMBER 2002**

**M.D.S. DEGREE EXAMINATION.**

(Revised Regulations)

Branch IV — Oral Pathology

Part II

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Discuss about different methods of studying hard tissues. (25)
2. Describe the use of darkfield, differential interference contrast and polarizing microscopy in study of oral tissues. (25)
3. Classify and describe various microtomes (25)

4 Write briefly about (25)

- (a) Kohler illumination
- (b) Formalin
- (c) Celloidin
- (d) PAP stain
- (e) Selective media.

**APRIL 2003**

**[KI 366]**

**Sub. Code : 2333**

**M.D.S. DEGREE EXAMINATION,**

**(Revised Regulations)**

**Branch IV — Oral Pathology**

**Part II**

**Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

1. Discuss in detail the theory, principle, technique and applications of gram staining. (25)
2. Discuss the rationale and implications of immuno staining. Describe the tissue preparation and immuno staining techniques for light microscopy. (25)
3. Discuss the principle of phase contrast microscopy. Describe the component parts of a phase contrast microscope. (25)

4. Write briefly on :

- (a) Exfoliative cytology
- (b) Formalin pigment
- (c) Bouin's fluid
- (d) Ag NOR
- (e) CON-A.

(25)



[KK 366]

Sub. Code : 2333

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — Oral Pathology

Part II

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

A. Essay : (2 × 15 = 30)

(1) Describe in detail the laboratory investigations of oral ulcers.

(2) Discuss the laboratory investigations for candida albicans.

B. Short notes : (10 × 5 = 50)

(1) Examination of contents of cystic lesion.

(2) Periodic acid schiff.

(3) End point determination in decalcification procedure.

(4) Reprocessing.

(5) Discuss the role of immunofluorescence in the diagnosis of oral dermatological disease.

(6) Snyder's test.

(7) Write basic steps in immunohistochemical staining.

(8) Artefacts due to faulty sections.

(9) Vibrating microtome.

(10) Scanning electron microscopy.



**FEBRUARY 2005**  
**[KM 366]** Sub. Code : 2333

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — ORAL PATHOLOGY

Part II

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks  
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

(1) Discuss the role of blood examination in oral diseases. (15)

(2) Discuss saliva as a diagnostic tool in oral lesions. (15)

II. Write short notes on : (10 × 5 = 50)

(a) Microtomes.

(b) Fluorescent microscope.

(c) Laboratory tests in the diagnosis of AIDS.

(d) Fixatives.

(e) Connective Tissue Stains.

(f) Adhesives.

(g) Peripheral Smear.

(h) Photography in Oral Pathology.

(i) Haematoxyline.

(j) PAS.

SEPTEMBER 2006

[KP 366]

Sub. Code : 2333

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — Oral Pathology

Part II

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours                      Maximum : 100 marks

Theory : Two hours and                      Theory : 80 marks  
forty minutes

M.C.Q. : Twenty minutes                      M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Discuss the transmitted and incident  
fluorescence microscopy. (20)

(2) Discuss the various laboratory investigations  
that can be employed for the diagnosis of fungal  
infections affecting the oral mucosa. (15)

(3) Discuss on the histochemical stains for  
identification of pigments in the tissue sections. (15)

II. Write short notes : (6 × 5 = 30)

(a) Study of enamel caries under phase contrast  
microscope.

(b) Cutting edge profile of microtome knives.

(c) Slide adhesives.

(d) Stains for mucin.

(e) Double embedding technique.

(f) Tzanck test.

MARCH 2007

[KQ 366]

Sub. Code : 2333

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — ORAL PATHOLOGY

(For candidates admitted from the academic year  
1993-94 onwards)

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

(Draw suitable diagrams wherever necessary)

(Write brief and legible answers)

Answer ALL questions.

I. Essay Questions :

(1) Discuss the methods of biopsy and its precautions. (20)

(2) Discuss the principles of staining. (15)

(3) Discuss in detail the diagnosis of viral infections. (15)

II. Write short notes on :

(6 × 5 = 30)

(a) Cytology

(b) Ground Sections

(c) Laboratory tests in Pemphigus

(d) Formalin

(e) Insitu Hybridization

(f) Staining procedure for bone tissue.

SEPTEMBER 2007

[KR 366]

Sub. Code : 2333

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch IV — ORAL PATHOLOGY

(For candidates admitted upto 2003–04)

Paper III — LABORATORY AND  
HISTOPATHOLOGICAL TECHNIQUES

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Draw suitable diagrams wherever necessary.

(Write brief and legible answers)

Answer ALL questions.

I. Essays :

(1) Discuss the principles of sample acquisition and handling. Describe in detail the various immunological-based techniques of use in oral diagnosis. (20)

(2) Discuss the mechanism of stain–tissue interactions. What are the effects of paraffin and resin embedding on staining. (15)

(3) Describe the principle of immuno–histochemistry. Outline the various visualisation processes used in immuno labelling. (15)

II. Write short notes on : (6 × 5 = 30)

(a) “Sandwich” Elisa.

(b) Chromosome banding.

(c) DNA Micro arrays.

(d) Proteomics.

(e) “Fish”.

(f) Freeze Drying.

**MARCH 2008**

**[KS 374]**

**Sub. Code : 2333**

M.D.S. DEGREE EXAMINATION.

Branch IV — Oral Pathology

Paper III — LABORATORY AND HISTOPATHOLOGICAL  
TECHNIQUES

**Q.P.Code : 242333**

Time : Three hours

Maximum : 100 marks

Answer ALL the questions.

Draw suitable diagrams wherever necessary.

- I. Long Essay questions : (2 × 20 = 40)
1. Discuss in detail about Electron Microscopy.
  2. Role of brush biopsy in oral lesions.
- II. Write Short notes : (6 × 10 = 60)
1. Mounting of Museum specimens.
  2. Lab diagnosis of viral lesions.
  3. Stains for nucleic acids.
  4. Auto fluorescence.
  5. Antigen retrieval.
  6. Stem cell cultures.
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