

[KM 116]

Sub. Code : 2014

II. Write short notes on :

(10 × 5 = 50)

**M.D. DEGREE EXAMINATION.**

(Revised Regulations)

Branch III — Pathology

**Paper IV — IMMUNOPATHOLOGY, HAEMATOLOGY,  
PRINCIPLES AND APPLICATION OF  
TECHNOLOGICAL ADVANCES IN LABORATORY  
SERVICES**

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.

I. Essay :    (2 × 15 = 30)

(1) A male patient of sixty years admitted with severe anaemia and mild icterus. Tongue is beefy red. Discuss the probable diagnosis, etio-pathogenesis, pathology and laboratory diagnosis.

(2) A child of 3 years old attended hospital with history of fever, jaundice and splenomegaly. Discuss differential diagnosis and various laboratory investigations to clinch the diagnosis.

- (a) Micro satellite instability
- (b) Enzymes in tumor diagnosis
- (c) WHO classification of AML
- (d) Sideroblastic Anaemia
- (e) Flow Cytometry in Diagnosis
- (f) Fnae of Salivary gland lesions
- (g) Mucosal Biopsies in large intestine
- (h) Insanity in Leprosy
- (i) CT Guided Aspirations in Abdominal lumps of a child
- (j) Bone marrow trephine biopsy.

**[KO 116]**

**Sub. Code : 2013**

**M.D. DEGREE EXAMINATION.**

**Branch III — Pathology**

**Paper IV — IMMUNOPATHOLOGY, HAEMATOLOGY,  
PRINCIPLES AND APPLICATIONS OF  
TECHNOLOGICAL ADVANCES IN LABORATORY  
SERVICES.**

**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 etiopathogenesis, classification  
and laboratory diagnosis of myelodysplastic syndromes.**

**(2) Discuss the laboratory diagnosis of bleeding  
disorders.**

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

- (a) Bone marrow transplant**
- (b) Blood component therapy.**
- (c) Recent advances in lab diagnosis of Malaria**
- (d) Cytobrush**
- (e) Sediments in urine**
- (f) Immunotherapy**
- (g) Semen Analysis**
- (h) Proteolytic pretreatment of tissue sections**
- (i) Harry cell Leukemia**
- (j) Processing of Bone Marrow trephine biopsy.**

[KP 116]

Sub. Code : 2013

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

M.D. DEGREE EXAMINATION.

Branch III — Pathology

Paper IV — IMMUNOPATHOLOGY, HAEMATOLOGY,  
PRINCIPLES AND APPLICATIONS OF  
TECHNOLOGICAL ADVANCES IN LABORATORY  
SERVICES

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 diagnostic interpretation and clinical significance of serum enzymes and isoenzymes in disease. (20)

(2) What is the method of preparation of blood components and discuss its importance in blood transfusion? (15)

(3) Write in detail the role of immuno histochemistry in histological diagnosis. (15)

(a) Disseminated intravascular coagulation.

(b) Silver impregnation techniques in histopathology.

(c) Cell block preparation and diagnostic use.

(d) Broncho alveolar lavage in detection of occupational lung disease.

(e) Human leucocyte antigen (HLA), detection and its application.

(f) Usefulness of Karyotyping in the diagnosis and management of leukaemia.

[KQ 114]

Sub. Code : 2013

M.D. DEGREE EXAMINATION.

Branch III — Pathology

IMMUNOPATHOLOGY, HAEMATOLOGY  
PRINCIPLES AND APPLICATIONS TO  
TECHNOLOGICAL ADVANCES IN LABORATORY  
SERVICES

Common to — Paper IV — (Old/New/Revised Regulations)  
(Candidates admitted from 1988–89 onwards) and  
Paper V — (For candidates admitted from 2004–2005  
onwards)

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.

Draw suitable diagrams wherever necessary.

I. Essay questions :

(1) Classify haemorrhagic disorders and discuss  
the laboratory diagnosis of Von Willebrands disease.

(20)

(2) Give an account of F.A.B. classification of  
leukemias and discuss childhood leukemias.

(15)

(3) Describe the pathology and pathogenesis of  
acquired immunodeficiency.

(15)

II. Write short notes :

(6 × 5 = 30)

(a) Role of colposcopy in gynecological pathology.

(b) Glycosylated haemoglobin.

(c) Autologous blood transfusion.

(d) Liquid base cytology.

(e) Advantages of diagnostic molecular  
pathology.

(f) Clinical application of flow cytometry.

[KR 116]

Sub. Code : 2013

M.D. DEGREE EXAMINATION,

Branch III — Pathology

IMMUNOPATHOLOGY, HAEMATOLOGY  
PRINCIPLES AND APPLICATIONS TO  
TECHNOLOGICAL ADVANCES IN LABORATORY  
SERVICES

Common to – Paper IV — (Old/New/Revised  
Regulations)

(Candidates admitted upto 2003–04) and

Paper IV — (For candidates admitted from 2004 – 2005  
onwards)

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 role of Bone Marrow biopsy in  
the diagnosis of Myeloproliferative disorders. (20)

(2) Discuss the techniques in cytological  
preparation and diagnostic value of body fluids. (15)

(3) Discuss the screening and specific tests used  
in the diagnosis of bleeding disorders. (15)

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

(a) Cytokeratin expression in various  
neoplasms.

(b) Hormone receptor status in Breast  
Carcinoma.

(c) Stem cell diseases.

(d) Tissue arrays – application.

(e) Leucoerythroblastic blood picture.

(f) Applications of cytocentrifuge.

**MARCH 2008**

**[KS 116]**

**Sub. Code : 2013**

M.D. DEGREE EXAMINATION.

Branch III — Pathology

IMMUNOPATHOLOGY, HAEMATOLOGY PRINCIPLES AND  
APPLICATIONS TO TECHNOLOGICAL ADVANCES IN  
LABORATORY SERVICES

(Common to all candidates)

**Q.P. Code : 202013**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Long Essay : ( 2 × 20 = 40)
1. Discuss the laboratory diagnosis of haemolytic anemias.
  2. Discuss the blood transfusion reactions.
- II. Write Short notes on : (10 × 6 = 60)
1. Cytospin.
  2. Aplastic anemia.
  3. Immunethrombo cytopenic purpuras.
  4. Natural killer cells.
  5. Multiple myeloma.
  6. Flow cytometry.
  7. Nucleolar organizing regions.
  8. Pure red cell aplasia.
  9. Urinary sediments.
  10. Automatted cell counters.
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September 2008

[KT 116]

Sub. Code: 2013

**M.D. DEGREE EXAMINATION**

**Branch III – Pathology**

**Paper IV – IMMUNOPATHOLOGY, HAEMATOLOGY  
PRINCIPLES AND APPLICATIONS TO  
TECHNOLOGICAL ADVANCES IN  
LABORATORY SERVICES**

(Common to all candidates)

*Q.P. Code : 202013*

**Time : Three hours**

**Maximum : 100 marks**

**Draw suitable diagram wherever necessary.**

**Answer ALL questions.**

**I. Essay questions :**

**(2 X 20 = 40)**

1. Classify anemias. Discuss the etiopathogenesis, morphology and lab diagnosis of pernicious anemia.
2. Discuss the available immune markers in diagnostic pathology. Mention the recent advances in identification of tumors by immuno-histochemistry.

**II. Write short notes on :**

**(10 X 6 = 60)**

1. Utility and accuracy of zeta sedimentation.
  2. Tropical sprue.
  3. Recent advances in stem cell therapy.
  4. Discuss pulmonary cytopathology -- routine and ancillary treatment.
  5. Diseases of red cell membrane.
  6. Complications of plasmacytoma.
  7. Automation in urine analysis.
  8. Von-willebrand's disease.
  9. Recent advances in organ transplantation protocols.
  10. Antibody – dependent cell mediated cytotoxicity (ADCC).
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