

April-2001

[KD 116]

Sub. Code : 2014

M.D. DEGREE EXAMINATION.

Branch III — Pathology

(Revised Regulations)

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

Time : Three hours

Maximum : 100 marks

1. Discuss the scope of peripheral smear examination in Haematology. (25)
2. Discuss the scope of automation in Haematology. (25)

Write briefly on :

(5 × 10 = 50)

- (a) Fluid cytology.
 - (b) Plasma cell dyscrasias
 - (c) Hypersplenism.
 - (d) Paroxysmal Nocturnal Haemoglobinuria
 - (e) Hb-F
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November-2001

[KE 116]

Sub. Code : 2014

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

Answer ALL questions.

1. Discuss in detail about the causes, differential diagnosis and investigations of patients with pancytopenia. (25)
2. Discuss pathogenesis, pathology and laboratory tests in haemolytic anaemias. (25)
3. Write briefly on : (5 × 10 = 50)
 - (a) Porphyrias.
 - (b) Monoclonal Gammopathies.
 - (c) Abnormalities of immune function in AIDS.
 - (d) Hyperviscosity Syndrome.
 - (e) Von Willebrand's disease.

March-2002

[KG 116]

Sub. Code : 2014

M.D. DEGREE EXAMINATION

(Revised Regulations)

Branch III — Pathology

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

Time : Three hours , Maximum 100 marks

Answer ALL questions.

1. Discuss the laboratory diagnosis of haemoglobinopathies (25)
 2. Describe the preparations and uses of blood components in a modern blood bank. (25)
 - 3 Write briefly on : (5 × 10 = 50)
 - (a) p 53 gene.
 - (b) Chorionic villus sampling
 - (c) Hybridoma.
 - (d) Selectins and integrins.
 - (e) F.A.B classifications.
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[KH 116]

Sub. Code : 2014

M.D. DEGREE EXAMINATION.

(Revised Regulations)

Branch III — Pathology

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

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the pathogenesis, classification, cytogenetics and morphology of Myelodysplastic syndromes. (25)
 2. Discuss the various laboratory procedures in the investigation of Hemolytic anemia. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Bone marrow transplantation
 - (b) Glucose-6-phosphatedehydrogenase deficiency
 - (c) Hemoglobin electrophoresis
 - (d) Polymerase chain reaction
 - (e) Auto transfusion.
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[KI 116]

April-2003

Sub. Code : 2015

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

1. What are prions? Discuss the molecular pathogenesis of prion diseases and human prion diseases. (25)
 2. Discuss the role of electron microscopy in the diagnosis of tumours with suitable examples. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Classification of acute leukemia
 - (b) Plasma cell dyscrasias
 - (c) Insitu Hybridization
 - (d) The Bethesda system
 - (e) Coombs test.
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[KJ 116]

Sub. Code : 2014

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

M.C.Q. must be answered **SEPARATELY** on the
answer sheet provided as per the instructions
on the first page of the M.C.Q. Booklet.

Answer ALL questions.

Draw suitable diagrams wherever necessary.

1. Define and classify myelodysplastic syndrome.
Discuss pathogenesis, laboratory diagnosis and
cytogenetics of myelodysplastic syndrome. (15)

2. Define and classify bleeding disorder. Discuss the
role of platelet and its abnormalities in hemostasis. (15)

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

- (a) Cytomorphometry in diagnosis of cancer.
- (b) Acquired qualitative disorders of lymphocytes.
- (c) Cytogenetic abnormalities in myeloproliferative disorders other than C.M.L.
- (d) Diagnostic pitfalls of F N A C.
- (e) Analysis and importance of analysis of urinary calculi.
- (f) Instrumentation in urine analysis and its principle.
- (g) Levey – Jennings's chart.
- (h) P C R in early detection of tumour.
- (i) Glycosylated haemoglobin and its role in the management of diabetes mellitus.
- (j) Principles involved in enzyme activity determination.

M.D. DEGREE EXAMINATION.

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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
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (3 × 15 = 45)

(1) Mention the different plasma cell dyscrasias and discuss the laboratory diagnosis of multiple myeloma.

(2) Discuss Polymerase Chain Reaction (PCR) and its application in diagnostic pathology.

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

(a) Haemoglobinuria.

(b) Pathogenesis of Disseminated Intravascular Coagulation (DIC).

- (c) Hormonal cytology and its clinical utility.
- (d) Sideroblastic anaemia.
- (e) Hairy cell leukaemia.
- (f) Structure of platelet.
- (g) Newer techniques in cytopathology.
- (h) Cytochemical stains in Acute Leukaemia.
- (i) Cryostat.
- (j) Von Willebrand's disease.
