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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (PATHOLOGY) DEGREE EXAMINATION – NOVEMBER 2025

PAPER I (NEW SCHEME)

Monday, November 10, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Illustrate your answers with diagrams wherever necessary.**

1. Describe the pathogenesis of autoimmune diseases.
2. Discuss the pathogenesis of amyloidosis.
3. Describe the pathophysiology of septic shock.
4. Discuss the pathogenesis of chemical carcinogenesis.
5. Discuss the role of adhesion molecules in inflammation.
6. Discuss the anti-thrombotic properties of endothelium.
7. Describe the various mechanisms of apoptosis.
8. Discuss role of growth factors in cutaneous wound healing.
9. Describe the role of p53 in tumorigenesis.
10. Discuss Cytomegalovirus infection in humans.

(10 marks × 10 = 100 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
MD (PATHOLOGY) DEGREE EXAMINATION – NOVEMBER 2025
PAPER II (NEW SCHEME)

Tuesday, November 11, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Illustrate your answers with diagrams wherever necessary.**

1. Explain the role of Immunohistochemistry in the diagnosis of myxoid neoplasms of soft tissue.
2. Discuss IgG4RD. Explain the criteria for various sites.
3. Discuss the molecular biology of gliomas.
4. Discuss the vesiculobullous skin lesions.
5. Discuss the Bethesda System for reporting Thyroid Cytopathology.
6. Discuss Papillary lesions of the breast.
7. Describe the molecular classification of urinary bladder tumours.
8. Discuss Giant cell rich lesions of bone.
9. Discuss the “ASC and AGC” categories in The Bethesda System for reporting cervico-vaginal cytology.
10. Discuss the approach to granulomatous colitis in colon biopsies.

(10 marks × 10 = 100 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (PATHOLOGY) DEGREE EXAMINATION – NOVEMBER 2025
PAPER III (NEW SCHEME)

Wednesday, November 12, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL the questions.**
✍ **Illustrate your answers with diagrams wherever necessary**

1. Discuss the molecular pathogenesis of thalassemia.
2. Discuss the approach to male infertility.
3. Discuss the prognostic factors in acute leukemia.
4. Describe the detection of Microalbuminuria and its role in kidney disease.
5. Discuss allogenic stem cell transplantation.
6. Discuss the laboratory tests in case of bleeding disorders.
7. Discuss the detection and differential diagnosis of Hematogones.
8. Discuss peripheral T cell and NK cell neoplasms.
9. Discuss the role of Fibrin degradation products in bleeding disorders.
10. Discuss blood substitutes and its uses.

(10 marks × 10 = 100 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MD (PATHOLOGY) DEGREE EXAMINATION – NOVEMBER 2025
PAPER IV (NEW SCHEME)

Thursday, November 13, 2025

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Illustrate your answers with diagrams wherever necessary.**

1. Discuss recent advances in the pathophysiology of Obesity and its consequences.
2. Discuss the recent advances in molecular diagnosis of pediatric soft tissue sarcomas.
3. Describe the various quality indicators in histopathology.
4. Discuss the diagnostic challenges in endocervical adenocarcinoma.
5. Describe Molecularly defined renal cell carcinomas.
6. Discuss the indications, procedure and complications of Hematopoietic stem cell transplant.
7. Discuss the role of Tumor microenvironment (TME) in cancers.
8. Discuss SMARCB1 deficient cancers.
9. Describe the International system for reporting serous fluid cytology.
10. Describe the molecular profiling of breast cancer and associated prognosis.

(10 marks × 10 = 100 marks)

