

## Question Paper

Exam Date & Time: 05-Sep-2019 (10:00 AM - 12:30 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS)  
MBBS PHASE - I STAGE - II DEGREE EXAMINATION - SEPTEMBER 2019

Thursday, September 05, 2019

Pathology [M2PAT]

#### PATHOLOGY - PART - II (ESSAY)

Section Duration: 120 mins

Max. Marks: 60

Answer all the questions

Draw diagrams wherever appropriate

1. Define apoptosis. Describe the mechanism of apoptosis.  
(1+4=5 marks)
2. A 10 year old boy came to the casualty with severe pain abdomen, vomiting and fever. He was diagnosed to have acute appendicitis. Describe the cellular events occurring in the boy's diseased appendix.  
(5 marks)
3. Define carcinoma in situ and metastasis. Describe the routes of metastasis with examples for each.  
(2+3 = 5 marks)
4. Compare the clinical features and blood findings in acute and chronic myeloid leukemias.  
(2+3 = 5 marks)
5. Define and classify amyloidosis. Describe the laboratory diagnosis of amyloidosis.  
(3+2 = 5 marks)
6. List four lung carcinomas. Describe the morphology of the lung in a common carcinoma associated with smoking.  
(2+3 = 5 marks)
7. Juhi, a 34 year old secretary complained of pain and early morning stiffness in her fingers since 1 year. She was unable to carry out her office tasks, which included typing long mails. She also developed nodules on the extensor surface of the forearm.
  - 7A. What is the pathogenesis of her small joint pain?
  - 7B. What would be the laboratory findings in this case?  
(3+2 = 5 marks)

8. Describe the morphology and prognostic factors of invasive ductal carcinoma of breast.  
(3+2 = 5 marks)
9. A 20 year old boy presented with abdominal pain, per rectal bleeding and altered bowel habits. On colonoscopy, multiple polyps were seen in the descending colon. His father and grandfather had similar complaints. His father also underwent right hemicolectomy for a growth in the ascending colon.
- 9A. Name the condition in the family and the associated gene. Mention its clinical significance.
- 9B. Describe the adenoma carcinoma sequence.  
(2+3 = 5 marks)
10. Describe the morphology of atherosclerosis with the help of a suitable diagram and enumerate its complications.  
(3+2 = 5 marks)
11. Differentiate between autosomal dominant polycystic kidney disease (ADPKD) and autosomal recessive polycystic kidney disease (ARPKD) on the basis of
- 11A. Clinical presentation
- 11B. Morphologic features
- 11C. Clinical course
- 11D. Consequence  
(1+2+1+1 = 5 marks)
12. Describe the aetiopathogenesis and morphology of seminoma. List two testicular tumor markers.  
(4+1 = 5 marks)

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