

MANIPAL UNIVERSITY**MBBS PHASE I STAGE II DEGREE EXAMINATION – AUGUST 2015****SUBJECT: PATHOLOGY – I (ESSAY)**

Monday, August 17, 2015

Time: 09:00 – 11:00 Hrs.

Max. Marks: 60

1. Differentiate granulation tissue from a granuloma using illustrations. Mention the factors affecting wound healing.
(5 marks)
2. Describe the sequelae (consequences) of acute inflammation with the help of a flow chart.
(5 marks)
3. Define anemia. Compare the blood smear findings of iron deficiency anemia and megaloblastic anemia with diagrammatic representations.
(1+4 = 5 marks)
4. Discuss the role of oncogenic viruses in carcinogenesis with suitable examples.
(1+4 = 5 marks)
5. "A peptic ulcer represents the adverse outcome of a conflict between the aggressive forces in the stomach and duodenum and the defence mechanisms". Describe the aggressive forces and the defence mechanisms. Also describe the morphologic features of a peptic ulcer.
(3+2 = 5 marks)
6. A 60 year old chronic alcoholic dies due to end stage liver disease. Autopsy revealed a distorted architecture of the liver with nodularity. Explain the pathogenesis, morphology and complications of this condition.
(2+2+1= 5 marks)
7. Classify bone tumors. Compare the clinicopathological features of osteoclastoma and osteosarcoma.
(2+3 = 5 marks)
8. Enumerate the types of emboli. Describe the pathogenesis and clinical consequences of pulmonary thromboembolism.
(1+2+2 = 5 marks)
9. Describe the aetiopathogenesis and complications of infective endocarditis.
(2+3 = 5 marks)
10. Describe the pathologic findings seen in the various stages of lobar pneumonia.
(5 marks)
11. A 45 year old female presents with a palpable hard fixed breast lump. Describe the aetiopathogenesis and prognostic indices of this condition.
(3+2 = 5 marks)
12. Compare acute nephritis and nephrotic syndrome on the basis of definition, clinical presentation and important causes.
(1+2+2 = 5 marks)



Reg. No.

MANIPAL UNIVERSITY

MBBS PHASE I STAGE II DEGREE EXAMINATION – AUGUST 2015

SUBJECT: PATHOLOGY – II (MCQs)

Monday, August 17, 2015

Time: 11:30 – 12:30 Hrs.

Max. Marks: 120

INSTRUCTIONS

1. For each statement, select **T** (True) or **F** (False) as your choice.
2. Indicate your choice by darkening the appropriate circle in the answer sheet provided.
3. Use only HB or 2B pencils to darken the circle.
4. Leave blank for Don't Know response.
5. Scoring systems is as follows:

For every Correct response	1 mark is awarded
For every Wrong response	0.5 mark is deducted
For every Don't Know response	No mark is deducted

6. Indicate your roll number (Registration Number) clearly and correctly.
7. Do not write anything in the question paper.
8. The true/false statements are numbered 101 to 160 and 201 to 260 (Total 120 statements).
9. This question paper contains **04 pages**. Please make sure that the question paper provided to you has all the pages.

Cytopathology

101. Is used in cancer screening
102. Refers to diagnostic interpretation of tissue sections
103. Specimen consists of single cells or clumps of cells which are dissociated from their surrounding tissues

The following diseases and their chromosomal abnormalities are correctly matched

104. Down's syndrome : Trisomy 21
105. Klinefelter's syndrome : 45 XO
106. Turner's syndrome : 47, XXY

Necrosis

107. With putrefaction is called liquefactive necrosis
108. With caseation is seen in sarcoidosis
109. With fibrinoid change of arterial wall occurs in malignant hypertension
110. Of fat occurs in acute pancreatitis

Neutrophil emigration

111. Causes no damage to endothelial cells
112. Is by active amoeboid movement
113. Is also known as diapedesis

Components of a granuloma include

114. Giant cells
115. Epithelial cells
116. Histiocytes
117. Neutrophils

The following chemical mediators and their functions are correctly matched

118. Histamine : Vasoconstriction
119. Bradykinin : Increased vascular permeability
120. Interleukin : Neutrophil chemotaxis

Regarding acute leukaemias

121. Acute myeloid leukaemia is a childhood leukaemia
122. Acute lymphoblastic leukaemia is associated with generalized lymphadenopathy
123. Hypertrophied gums is a presenting feature of AML-M5
124. Less than 20% blasts in the bone marrow is diagnostic

Haemophilia A

125. Is due to deficiency of factor IX
126. Shows prolonged prothrombin time

127. Occurs in males with females being the carriers of the disease
128. Usually presents with haemarthrosis

Hydrops fetalis

129. Results from deletion of two alpha chains
130. Shows massive hepatosplenomegaly

With regard to tumours

131. Neoplastic cells are incapable of secreting/synthesising cell products
132. Desmoplastic reaction shows excessive formation of stroma
133. Lymphocytes in the stroma suggest poor prognosis

When compared to a normal cell, a malignant cell is more likely to have

134. Enlarged nucleus
135. Hypochromatic nucleus
136. More cytoplasm

The tumour markers are correctly matched with the tumours

137. Alpha fetoprotein : Multiple myeloma
138. Carcinoembryonic antigen : Choriocarcinoma
139. Monoclonal immunoglobulin : Phaeochromocytoma
140. 5 hydroxyindole acetic acid: Malignant teratoma

Barrett's oesophagus

141. Is usually the result of long standing reflux oesophagitis
142. Is typically seen in the upper one third of the oesophagus
143. Predisposes to adenocarcinoma

In ulcerative colitis

144. Crypt abscesses are seen
145. Granulomas are characteristic
146. Skip lesions occur

Colonic carcinoma

147. Is typically a squamous cell carcinoma
148. Affecting the ascending colon is more often stenosing than polypoid
149. Is staged using Duke's method
150. Is more likely to occur in individuals on low fibre and high fat diet

Regarding acute pancreatitis

- 151. Alcohol is an aetiological factor
- 152. Hemolytic anaemia is a complication
- 153. Hypoxic injury affects the periphery of the pancreatic lobules
- 154. Liquefactive necrosis is a common feature

Haemochromatosis

- 155. Shows excessive accumulation of copper in the liver
- 156. Leads to cirrhosis
- 157. Causes hepatolenticular degeneration
- 158. Of the primary type shows increased absorption of iron from the GIT

The symptom and the pathophysiologic basis is correctly matched

- 159. Haematemesis : Due to ulcers in the stomach
- 160. Gynaecomastia : Hyperoestrogenism

Rheumatoid arthritis

- 201. Affects the sacro-iliac joint early in the course of the disease
- 202. Leads to osteophyte formation in the joints
- 203. Is associated with pannus formation
- 204. Has an autoimmune aetiology

Malignant melanoma of skin

- 205. Does not metastasise
- 206. Histologically shows peripheral palisading of cells
- 207. Arises from the basal cells

Paget's disease of bone

- 208. Is associated with increased serum calcium
- 209. Histologically shows a 'mosaic pattern'
- 210. Is complicated by occurrence of osteosarcoma

Infarction

- 211. Elicits an inflammatory response
- 212. Is a type of necrosis
- 213. Can occur due to low blood flow in states of shock

Tuberculous meningitis

- 214. Results from a primary focus in the brain
- 215. Is characterised by increased glucose in the CSF
- 216. Presents with isolated cranial nerve palsies

Metastatic calcification

- 217. Is also known as dystrophic calcification
- 218. Occurs in dead or degenerating tissue
- 219. Is associated with hyperparathyroidism
- 220. In breast lesions is helpful for breast cancer screening

Left ventricular failure

- 221. Results in congestion of the lungs
- 222. Is caused by systemic hypertension
- 223. Due to chronic obstructive lung disease is called cor pulmonale

Rheumatic carditis is associated with

- 224. Osler's nodes
- 225. Aschoff bodies
- 226. Fibrinoid necrosis

Regarding aneurysms

- 227. Mycotic aneurysm is of infective aetiology
- 228. Atherosclerotic aneurysm results in "double-barelled" aorta
- 229. Berry aneurysm is associated with Marfan's syndrome
- 230. Atherosclerotic aneurysm develops most often in the abdominal aorta

Emphysema of

- 231. The bullous type is associated with paraseptal emphysema
- 232. Senile type shows increase in alveolar ductular size without destruction of alveolar wall
- 233. The panlobular type is associated with alpha-1-antitrypsin deficiency

Chronic bronchitis

- 234. Is cough with sputum for 2 months in 3 consecutive years
- 235. Is associated with mucous gland hypertrophy
- 236. Is caused by smoking
- 237. Leads to cor pulmonale

Squamous cell carcinoma of lung

- 238. Is capable of secreting parathormone
- 239. Is associated with cigarette smoking
- 240. Has a peripheral location in the lung

Prostatic carcinoma

- 241. Shows elevated alpha feto protein
- 242. With bony metastasis is associated with increased alkaline phosphatase
- 243. Is characterized by osteoblastic bony metastasis
- 244. Is most often located in the peri-urethral zone of the prostate

Psammoma bodies are characteristic of

- 245. Serous cystadenoma of the ovary
- 246. Papillary carcinoma of the thyroid
- 247. Benign prostatic hyperplasia

Grave's disease

- 248. Leads to hyperplasia of the thyroid epithelium
- 249. Can lead to hypothyroidism
- 250. Can be caused by deficiency of iodine

Pathologic features of chronic pyelonephritis include

- 251. Thyroidisation of the renal tubules
- 252. Abscesses in the cortex and medulla
- 253. Deep irregular scars at the poles of the kidney

With reference to T – cell mediated rejection of the transplanted kidney

- 254. Type 1 shows glomerular infiltration by T cells
- 255. Type 2 is characterized by intimal arteritis
- 256. It is more resistant to therapy

Anaemia in chronic renal failure results from

- 257. Chronic blood loss
- 258. Haemolysis
- 259. Bone marrow suppression
- 260. Failure to produce erythropoietin by the damaged kidney

