

(LD 114)

OCTOBER 2013

Sub. Code: 2011

**M.D. DEGREE EXAMINATION  
BRANCH III – PATHOLOGY**

**GENERAL PATHOLOGY**

*Q.P. Code : 202011*

**Time: Three Hours**

**Maximum: 100 marks**

**I. Essay:**

**(2X10=20)**

1. Describe the pathology of acute myocardial infarction.
2. Discuss the pathology of syphilis.

**II. Short Questions:**

**(8X5=40)**

1. Acute inflammatory response
2. Pathogenesis of oedema
3. Atheroma
4. Asbestosis
5. Gatekeeper genes
6. Primary tuberculosis
7. Risk factors for carcinoma of the urinary bladder
8. Transforming infections

**III. Reasoning Out:**

**(4X5=20)**

1. A 25 year-old-woman seeks consultation as she is concerned that several members of her family have been affected by the onset of progressive loss of mental function and motor coordination and choreoathetosis when they reach middle age. Genetic studies have shown that some of these individuals have CAG trinucleotide repeat mutations. Which of the following sites are likely to be grossly abnormal in these affected persons?
  - a. Caudate nucleus
  - b. Basal ganglia
  - c. Amygdala
  - d. Hippocampus

(PTO)

2. A 19-year-old girl with a height of 135 cm, webbed neck and poorly developed secondary sexual characteristics has a continuous murmur heard over both the front of and back of the chest. She had claudication pain and coldness of her extremities. Which of the following cardiovascular abnormalities is she most likely to have?

- a. Mitral stenosis
- b. Coarctation of the aorta
- c. Patent ductus arteriosus
- d. Atrial septal defect

3. The following findings were noted at autopsy in a 49-year-old woman with a history of atrial fibrillation. The heart was enlarged with vegetations along the line of closure of the mitral valve with partial fusion of the leaflets and thickened, shortened chordae tendineae. The left atrium was enlarged and contained a mural thrombus. Which of the following conditions could she have had?

- a. Marantic endocarditis
- b. Rheumatic carditis
- c. Infective endocarditis
- d. Systemic lupus erythematosus

4. A 23-year-old man football player falls and hits the right side of his head against a bench. He gets up and resumes play. He collapses about 40 minutes later. Radiology reveals a convex area of hemorrhage centered in the right parietal region. His condition is most probably due to damage to which of the following vessels?

- a. Cavernous sinus
- b. Carotid artery
- c. Middle meningeal artery
- d. Anterior cerebral artery

**IV. Very Short Answers:**

**(10X2=20)**

1. Neonatal hyaline membrane disease
2. Knudson's two-hit hypothesis
3. Two paraneoplastic syndromes and the tumours associated with them
4. Haemorrhagic infarcts
5. Gas gangrene
6. Severe acute respiratory syndrome
7. Hyaline change
8. Radiation pneumonitis
9. Diseases with multifactorial inheritance
10. Healing by second intention

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