



Sohag University Faculty of Medicine <u>Pathology Department</u>

21/10/2017; Pathology 1st part of Master degree in Pathology <u>Time allowed: Three Hours</u>

I. Answer the following question: (25 marks)

1. Describe types and mode of action of chemical carcinogenes.

II. Answer the following questions: (10 marks each)

- 2. Describe mechanisms of Type II hypersensitivity reaction.
- 3. Outline the process of angiogenesis and its role in repair.
- 4. Define hyperplasia; illustrate its types, sites and effects.
- 5. Define thrombosis, illustrate its causes and mode of formation.

III. Read the following case scenario and answer the questions below: (20 marks)

- 6. An adult patient complains of cough with expectoration. Chest X ray shows multiple scattered patches in relation to the bronchi. Sputum examination reveals tubercle bacilli.
 - A. What is the most likely diagnosis?
 - B. Explain the pathogenesis of this disease.
 - C. Describe the microscopic picture of the lung lesion.
 - D. Mention the special stain used for demonstration of the organism.

IV. Choose the best correct answer: (One mark each)

1. The most important change in acute inflammation is:

A. Metabolic changes

D. All of the above

B. Vascular changes

E. None of the above

C. Environmental changes

2. The following are examples of non-suppurative inflammation EXCEPT:

- A. Catarrhal inflammation
- B. Serous inflammation

- D. Membranous inflammation E. Allergic inflammation
- lammation
- C. Carbuncle

3. Examples of stable cells include all EXCEPT:

A. Hematopoietic cells

D. Vascular endothelial cells

- B. Parenchymal cells
- C. Mesenchymal cells

E. Endocrine glands

4. Abnormalities of hemoglobin metabolism occur in:

A. Jaundice

D. Hemosiderosis E. All of the above

B. PorphyriaC. Hemochromatosis

5. Fibroblasts secrete:

- A. Cytokines
- B. Prostaglandins

D. Proteolytic enzymes

E. Growth factors

C. Procollagen

6. Phagocytosis means:

- A. Ingestion of foreign material by the red blood cells
- B. Production of phagocytic cells
- C. Ingestion of foreign material by pus cells
- D. None of the above

7. Toxemia means:

- A. Presence of bacterial toxins in the blood
- B. Presence of chemical toxins in the blood
- C. Presence of bacteria and their toxins in the blood
- D. Presence of bacterial toxins in the internal organs

8. Healing by second intention is characterized by all EXCEPT:

- A. Wound contraction
- B. Abundant granulation tissue
- C. Thin scar
- D. More common complications

9. The commonest cause of death in patients with amyloidosis is:

- A. Cardiac amyloidosis
- B. Hepatic amyloidosis
- C. Renal amyloidosis

10. Lepra bacilli can be demonstrated in tissue sections by using:

- A. Congo red stain
- B. PAS stain
- C. Silver impregntation technique
- D. Modified Ziehl-Nelson stain
- E. Giemsa stain

11. The characteristic histological features of actinomycosis include all **EXCEPT:**

- A. Mononuclear cells
- D. Giant cells B. Polymorphonuclear cells
- C. Pus cells

E. Epithelioid cells

D. Splenic amyloidosis

E. Intestinal amyloidosis

12. Schistosomiasis is a dangerous disease because it leads to:

- A. Formation of intestinal polypi
- B. Formation of sandy patches
- C. Hepatic fibrosis and portal hypertension
- D. Formation of schistosomal antibodies
- E. Schistosomal splenomegaly

13. The characteristic epithelial changes in schistosomiasis of the urinary bladder include all EXCEPT;

- A. Brunn's nests
- B. Cell nests
- C. Cystitis cystica
- D. Cystitis glandularis
- E. Squamous metaplasia

14. Necrosis of the infarct is coagulative in all organs EXCEPT:

A. Heart B. Kidney C. Lung D. Brain E. Spleen

15. Fibroblasts secrete:

A. CytokinesB. ProstaglandinsC. Procollagen

D. Proteolytic enzymes E. Growth factors

Good Luck