



Sohag University
Faculty of Medicine
Pathology Department



16/8/2015
Final Exam
Time allowed: Three Hour

A. Answer the following questions: (12 marks each)

1. Define hypertrophy, and describe its etiology and types.
2. Describe the stages of healing of bone fracture, and illustrate causes of failure of bony union.
3. Enumerate types, causes and pathological feature of general venous congestion.

B. Read the following case scenarios and answer the questions below: (8 marks each)

- 4. A male patient complained of fever and loss of weight. Clinical examination showed enlargement of cervical lymph nodes. Biopsy examination revealed infiltration of the lymph nodes by small lymphocytes, eosinophils, plasma cells and giant cells which have bilobed nucleus with large prominent nucleoli.**
 - A. What is the diagnosis?
 - B. What is the name of the giant cells? Describe the variants of these cells?
 - C. Which cells of the mentioned above are neoplastic?
 - D. Mention the microscopic types of this disease.
- 5. A patient presented with markedly enlarged thyroid which is multinodular. Clinical and radiologic examinations gave the diagnosis of endemic goiter.**
 - A. Explain the pathogenesis of this disease.
 - B. Describe the histological picture of this disease.
 - C. What is the expected picture of the thyroid function tests (T3, T4, and TSH) in this disease?
 - D. Mention the effects of this disease.

6. A man presented with a space occupying lesion in the temporal lobe. Biopsy examination showed highly anaplastic tumor cells with mitotic figures and areas of necrosis.

- A. What is the diagnosis?
- B. What is the grade of the tumor in this case?
- C. Mention the other grades of the tumor.
- D. What is the most common malignant tumor of the brain?

C. Compare between (5 marks each):

- 5. Rheumatoid arthritis and osteoarthritis.
- 6. Nephroblastoma (Wilm's tumor) and hypernephroma (renal cell carcinoma).

D. Answer 6 of the 8 questions below: (5 marks each)

Outline the:

- 7. Types of gall stones
- 8. Complications of myocardial infarction
- 9. Pathological features of Paget's disease of the breast
- 10. Pathogenesis of pulmonary emphysema
- 11. Complications of mucinous ovarian tumors
- 12. Pathological features of prostatic carcinoma
- 13. Types of aneurysms
- 14. Staging of large intestinal carcinoma

E. Match each item in column (A) with the most related item in column (B) (Half mark for each):

- | | |
|----------------------------------|---|
| 1. Benign essential hypertension | a- focal embolic glomerulonephritis |
| 2. Malignant hypertension | b- left sided heart failure |
| 3. Atherosclerosis | c- hemopericardium |
| 4. Aortic aneurysm | d- thrombosis |
| 5. Subacute endocarditis | e- renal failure |
| 6. Squamous cell carcinoma | a. most aggressive tumor of the lung |
| 7. Adenocarcinoma | b. most common primary tumor of the lung |
| 8. Small cell carcinoma | c. commonly related to scars of the lung |
| 9. Large cell carcinoma | d. locally malignant tumor of the lung |
| 10. Bronchial carcinoid | e. undifferentiated carcinoma of the lung |

F. Select A single best answer (half mark for each):

11. Esophageal varices result from:

- A. Diverticula of the esophagus
- B. Congenital malformation
- C. Portal hypertension
- D. Tumors
- E. Mucosal atrophy

12. The esophageal varices may be fatal due to:

- A. Malignant transformation
- B. Severe hematemesis
- C. Severe hemoptysis
- D. Fistula formation
- E. None of the above

13. The commonest type of esophagitis is:

- A. Fungal esophagitis
- B. Bacterial esophagitis
- C. Viral esophagitis
- D. Reflux esophagitis
- E. Chemical esophagitis

14. Barrett's esophagus is a:

- A. Hyperplastic lesion
- B. Metaplastic lesion
- C. Dysplastic lesion
- D. Neoplastic lesion
- E. None of the above

15. Barrett's esophagus may predispose to:

- A. Esophagitis
- B. Acid reflux
- C. Adenocarcinoma
- D. Squamous cell carcinoma
- E. Esophageal varices

16. Horse-shoe kidney is a:

- A. Senile kidney
- B. Congenitally malformed kidney
- C. Hypertensive kidney
- D. Atherosclerotic kidney
- E. Ectopic kidney

17. Acute diffuse proliferative glomerulonephritis follows infection by:

- A. Streptococcus viridans
- B. Streptococcus hemolyticus
- C. Streptococcus foecalis.
- D. Staphylococcus aureus
- E. E.Coli

18. Nephrotic syndrome is NOT characterized by:

- A. Heavy proteinuria
- B. Hypoproteinemia
- C. Edema of the face only
- D. Hyperlipidemia
- E. Generalized edema

19. Nephritic syndrome is characterized by all EXCEPT:

- A. Hematuria
- B. Heavy proteinuria
- C. Oliguria
- D. Hypertension
- E. Edema of the face

20. Wire loop appearance in the glomeruli is characteristic of:

- A. Diabetic glomerulosclerosis
- B. Lupus nephritis
- C. Renal amyloidosis
- D. All of the above
- E. None of the above

21. Piece-meal necrosis means necrosis of:

- A. Single liver cells
- B. A limited zone of the hepatic lobule
- C. Groups of liver cells in the hepatic lobule
- D. Hepatocytes at the limiting plate between the parenchyma and portal tract.
- E. None of the above

22. Piece-meal necrosis is characteristic of:

- A. Hepatic schistosomiasis
- B. Acute yellow atrophy
- C. Viral hepatitis
- D. Drug-induced hepatitis
- E. Chronic venous congestion

23. The type of hepatocyte necrosis in viral hepatitis is:

- A. Focal necrosis
- B. Piece-meal necrosis
- C. Bridging necrosis
- D. Any of the above
- E. None of the above

24. The following type of hepatic necrosis is characteristic of acute yellow atrophy:

- A. Focal necrosis
- B. Zonal necrosis
- C. Piece-meal necrosis
- D. Bridging necrosis
- E. Massive hepatic necrosis

- 25. The following type of hepatocyte necrosis is characteristic of chronic venous congestion:**
- A. Focal necrosis
 - B. Zonal necrosis
 - C. Piece-meal necrosis
 - D. Bridging necrosis
 - E. Massive hepatic necrosis
- 26. Acute hematogenous osteomyelitis is due to spread of infection from all EXCEPT:**
- A. Tonsillitis
 - B. Appendicitis
 - C. Septic tooth -
 - D. Upper respiratory tract infection
 - E. Boils
- 27. The commonest site of hematogenous osteomyelitis is:**
- A. Epiphysis of long bones
 - B. Metaphysis of long bones
 - C. Short bones
 - D. Flat bones
 - E. Epiphysis of long bones
- 28. Sequestrum is a:**
- A. Newly formed bone
 - B. Dead bone
 - C. Dead soft tissue
 - D. Newly formed soft tissue
 - E. Granulation tissue
- 29. Involucrum is a:**
- A. Newly formed bone
 - B. Dead bone
 - C. Dead soft tissue
 - D. Newly formed soft tissue
 - E. Granulation tissue
- 30. In acute osteomyelitis, the nearby joint may be affected if:**
- A. The causative organism is virulent
 - B. The patient's resistance is weak
 - C. The metaphysis is intra-articular
 - D. Infection becomes chronic
 - E. There is delay in diagnosis

**G. Indicate whether each of the following sentences is true (T) or false (F)
(half mark for each):**

31. Gonorrhoeal conjunctivitis is commonly seen in neonates of infected mothers. (T - F)
32. In cervical intraepithelial neoplasia (CIN), the epithelial cells show nuclear atypia with preservation of the maturation pattern. (T - F)
33. Cervical smear can differentiate between carcinoma in situ and invasive carcinoma. (T - F)
34. Endometrial hyperplasia is never precancerous. (T - F)
35. Endometriosis means the presence of the endometrial glands in abnormal sites. (T - F)
36. Acute pancreatitis is due to pyogenic infection. (T - F)
37. Calcification occurring in pancreatitis is due to liberation of amylase enzyme. (T - F)
38. Acute pancreatitis is characterized by chalky-white plaques which represent fatty change. (T - F)
39. Excess alcohol consumption is an important cause of pancreatitis. (T - F)
40. Chronic pancreatitis is characterized by destruction of the exocrine portion of the pancreas only. (T - F)

Good Luck