Sohag University **1/6/2015**
Faculty of Medicine **Final Exam**
Pathology Department **Time allowed: Three Hour**

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

1. Define hyperplasia, and describe its etiology and types.
2. Describe types and complications of wound healing.
3. Enumerate types of emboli, sites of embolism and describe course and effect of thrombo-embolism

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

4. A male patient presented with enlarged cervical lymph nodes. Biopsy examination gave the diagnosis of metastatic carcinoma. What is the most possible primary site (s) if the tumor shows?

A. Cell nest formation and the patient has hoarsness of voice
B. Papillary formation and the patient has a mass in the middle of the neck
C. Signet ring cells and the patient complains of hematemesis
D. Small cells with neurosecretory granules and the patient complains of hemoptysis

5. A young female suffered from a bone tumor arising from upper end of tibia. Biopsy examination showed a mixture of multinucleated giant cells and oval or spindle-shaped stromal cells.

A. What is the diagnosis?
B. Describe the radiologic picture of this tumor.
C. Which type of cells mentioned above is neoplastic?
D. What are the most common sites and age range of this tumor?

6. A male patient presented with hematemesis. Abdominal sonography showed cirrhotic liver. Blood examination was positive for HBsAg. On liver biopsy, the hepatocytes have ground glass cytoplasm and sanded nuclei.

A. Define cirrhosis.
B. Describe the histological picture of cirrhosis.
C. Explain the cause of hematemesis in this patient.
D. Why the hepatocytes have ground glass cytoplasm and sanded nuclei?

C. Compare between (8 marks each):

5. Rheumatic and rheumatoid arthritis.
6. Ulcerative colitis and Crohn's disease.

D. Answer 6 of the 8 questions below: (4 marks each)

Outline the:

7. Types of pulmonary emphysema
8. Complications of meningitis
9. Pathological features of endometriosis
10. Pathogenesis of atherosclerosis
11. Classifications of adrenal gland tumors
12. Causes of right sided heart failure
13. Types of renal caliculi
14. Complications of benign prostatic hyperplasia

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

1- Lobar pneumonia	a) apical lung cavitations
2- Lobular pneumonia	b) hemorrhagic edematous lung
3- T.B	c) patchy lung consolidation
4- Interstitial pneumonia	d) honeycomb lung
5- Bronchiactasis	e) diffuse lung consolidation

6- Mycotic aneurysm	a- abdominal aorta
7- Congenital aneurysm	b- hematoma
8- False aneurysm	c- cerebral vessels
9- Atherosclerotic aneurysm	d- thoracic aorta
10- Syphilitic aneurysm	e- subacute infective endocarditis

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

11. The histological feature of breast ductectasia is:

A. Dilation of the mammary ducts
B. Hyperplasia of the ductal epithelium
C. Infiltration of the stroma by polymorphs
D. Fibrosis of the stroma
E. None of the above

12. Fat necrosis of the breast is usually due to:

A. Autoimmune reaction
B. Trauma
C. Infection
D. Ischemia
E. Metabolic disorders

13. The histological features of fibrocystic disease include all EXCEPT:

A. Cyst formation
B. Stromal fibrosis
C. Lymphocytic infiltration
D. Columnar metaplasia
E. Epithelial hyperplasia

14. Fibroadenoma is characterized by:

A. Proliferation of the mammary glands
B. Proliferation of the fibrous tissue stroma
C. Proliferation of both glands and stroma
D. Cyst formation
E. All of the above

15. Nipple discharge is NOT a feature of:

A. Duct ectasia
B. Fibroadenoma
C. Fibrocystic change
D. Intraductal papilloma
E. Paget's disease of the nipple

16. Adult polycystic kidney is characterized by all EXCEPT:

A. Inherited as an autosomal dominant trait
B. Commonly leads to renal failure
C. Bilateral
D. Shows multiple cysts communicating with the pelvis
E. The cysts are lined by cuboidal or columnar epithelium

17. Acute diffuse proliferative glomerulonephritis is NOT characterized by:

A. Hypercellular glomeruli
B. Infiltration of the glomeruli by polymorphs
C. Proliferation of endothelial cells
D. Proliferation of mesangial cells
E. Epithelial crescents in the glomeruli

18. The following is NOT a cause of nephrotic syndrome:

A. Acute diffuse proliferative glomerulonephritis
B. Membranous glomerulonephritis
C. Membrano- proliferative glomerulonephritis
D. Minimal change glomerulonephritis
E. Systemic lupus erymematosus

19. The following disease is diagnosed only by electron microscopy;

A. Acute diffuse proliferative glomerulonephritis
B. Rapidly progressive glomerulonephritis
C. Membranous glomerulonephritis
D. Membrano-proliferauve glomerulonephritis
E. Minimal change glomerulonephritis

20. Gross features of the kidneys in chronic glomerulonephritis include all EXCEPT:

A. Both kidneys are contracted
B. Contraction of the kidneys is asymmetrical
C. Outer surface is granular
D. Cut surface shows thick-walled blood vessels
E. Loss of differentiation between cortex and medulla

21. Activity in chronic gastritis means:

A. Excess infiltration by lymphocytes
B. Excess infiltration by plasma cells
C. Infiltration by polymorphs
D. Proliferation of fibroblasts
E. Dysplastic changes

22. The nuclear features of cervical intraepithelial neoplasia include all except:

A. Hyperchromatism
B. Pleomorphism
C. Abnormal chromatin distribution
D. Decreased nuclear-cytoplasmic ratio
E. Increased mitotic activity

23. Grading of cervical intraepithelial neoplasia (CIN) depends on:

A. Thickness of the epithelium showing loss of maturation
B. Nuclear-cytoplasmic ratio
C. Number of the mitotic figures
D. All of the above
E. None of the above

24. Choriocarcinoma consists of all except:

A. Malignant Langhans cells
B. Malignant syncytial cells
C. Fibrous stroma
D. Areas of hemorrhage
E. Areas of necrosis

25. The following tumor never occurs in infancy

A. Seminoma
B. Mature teratoma
C. Immature teratoma
D. Malignant teratoma
E. Yolk sac tumor

26. Pure cholesterol stone is NOT:

A. Solitary
B. Mammillated
C. Whitish
D. Formed of cholesterol only
E. Radio-opaque

27. The following is NOT true for gall bladder carcinoma:

A. It is usually associated with gall stones
B. It may be papillary
C. Rare lymphatic spread
D. It is usually well differentiated adenocarcinoma
E. Amoebic dysentery

28. Chronic pancreatitis is characterized by all EXCEPT:

A. Hemorrhage
B. Excessive fibrosis
C. Destruction of the pancreatic tissue
D. Intraductal calcification
E. Pseudocyst formation

29. The commonest cause of acute peritonitis is:

A. Perforation of gastrointestinal ulcer
B. Rupture of amoebic liver abscess
C. Outside infection
D. Blood-borne infection
E. None of the above

30. Peritoneal extension of the following carcinoma may be associated with pseudomyxoma peritonei:

A. Squamous cell carcinoma
B. Adenocarinoma
C. Mucinous carcinoma
D. Undifferentiated carcinoma
E. Transitional cell carcinoma

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

31. Metaphysis of long bones is the commonest site of osteomyelitis because it is the weakest part of the bone. (T- F)
32. Astrocytoma is NOT always a benign tumor. (T- F)
33. The meninges are NOT a site of tumor metastases. (T- F)
34. There is no benign papillary thyroid tumor. (T- F)
35. Lymph nodes are NOT the only site of lymphoid tissue. (T - F)
36. Staging of Hodgkin's disease is of prognostic significance.(T- F)
37. Follicular lymphoma usually has a better prognosis than diffuse lymphoma. (T- F)
38. All non-Hodgkin's lymphomas show replacement of the nodal architecture by neoplastic cells. (T- F)
39. Infectious mononucleosis is a cause of localized lymph node enlargement. (T - F)
40. Hypersplenism is characterized by destruction of all blood elements. (T- F)

Good Luck