

Department of Pathology
Brahmanbaria Medical College
1st Term Examination (BMC)
Haematology and General Pathology (SAQ)

Total Marks:70

Time: 02 Hrs 30 Mins

GROUP: A (35 Marks)

Answer any 6 (Six) question including question No. 7 & 8 which is compulsory.

- Q. 1. Classify congenital hemolytic anemia. State the Blood picture of thalassemia major with its confirmatory laboratory diagnosis. 3+3
- Q. 2. Define leukaemia with classification. What are the difference between myeloblast and lymphoblast ? 1+3+2
- Q.3. Mention the causes of pancytopenia. Write down the differences between aplastic anemia and subleukemic leukemia. 2+4
- Q.4. Name the common causes of thrombocytopenia? How will you proceed to diagnose a case of ITP? 2+4
- Q.5. What are the absolute indications of bone marrow aspiration? How will you diagnose a case of CGL? 2+4
- Q.6. Mention the screening tests of donor before blood transfusion. What are the complication of massive blood transfusion? 3+3
- Q.7. Short note:
a) Coomb's test. b) Polycythemia c) Leukamoid reaction. (2 + 2 +2)
- Q. 8.
a. A 60 yrs old male presented with severe weakness, headache, low back pain has and vertebral collapse, his X-ray shows osteolytic lesion. What is the probable diagnosis? How can you confirm it? 2.5
b. A male of 26 yrs presented with gum bleeding, bone pain and weakness. His peripheral blood film shows significant number of blast cells with increased leucocyte count and reduced platelet count. What is the probable diagnosis? How will you confirm it? 2.5

GROUP: B(35 Marks)

Answer any 6 (Six) question including question No. 7 & 8 which is compulsory.

- Q. 1. Mention the stages and the cellular responses to injury? What is the basic mechanism of Metaplasia? Give example. 3+3
- Q.2. What are the important ultrastructural changes in irreversible cell injury? Tabulate the difference between the features of Necrosis and apoptosis. 3+3
- Q.3. Define metastatic calcification. What are the causes of hypercalcemia? What are the common sites of metastatic calcification? 2+2+2
- Q.4. What are the major components of acute inflammation? Tabulate the differences between the features of acute and chronic inflammation. State the harmful consequences of inflammation? 2+2+2
- Q.5. What do you mean by grading and staging of tumour? Mention the grades of squamous cell carcinoma. What is the major staging system currently in use? Why staging of tumour has more clinical value? 2+1+1+2
- Q.6. Define embolus with different type of emboli. Why does thrombus develop frequently after surgery? What are the fates of a thrombus? 2+2+2
- Q. 7. Define necrosis. Mention the different types of necrosis with examples. Tabulate the differences between coagulative and caseous necroses. 1+2+2
- Q.8. Write short notes on:
(a) Atrophy, (b) Dystrophic calcification (c) Paraneoplastic syndrome 2+2+2

Department of Pathology Brahmanbaria Medical College

1st Term Examination (BMC-1)
Multiple Choice Questions (MCQ)

Total Marks:20

Time: 30 Minutes

1.	The following statement are correct for eosinophilia?	6.	Poly cythemia occurs in:
a.	Absolute count of eosinophil is more than 200/mm ³ but less than 400/mm ³ .	a.	Congenital heart disease
b.	Occurs in atopic asthma & hay fever.	b.	Renal cell carcinoma
c.	Absence of eosinophilia exclude parasitic infection.	c.	Carcinoid tumour
d.	Hodgkin's disease	d.	Lead poisoning
E	Food & drug hypersensitivity causes eosinophilia.	e.	Hypoxia
2.	The following disease associated with lymphocytosis.	7.	Leukaemoid Reaction Occurs in :
a.	Chronic granulocytic leukaemia (CGL)	a.	Acute haemolysis
b.	Non-Hodgkin's lymphoma.	b.	Pertusis
c.	Typhoid fever	c.	Necrotic tumours
d.	Pertusis	d.	Von Willidrand's disease
E	Secondary Syphilis	e.	Acute myeloid leukaemia
3.	Neutropenia occurs in the following condition.	8.	ITP is associated with :
a.	Typhoid fever	a.	Massive splenomegaly
b.	Overwhelming Sepsis	b.	Large joint bleeding
c.	Loeffler's Syndrome	c.	Increased bleeding time
d.	Diabetic Ketoacidosis	d.	Large abnormal megakaryocytes in bone marrow
e.	Carbimazole	e.	Pancytopenia in PBF
4.	The following are the causes of Autoimmune haemolytic anaemia	9.	Haemophilia:
a.	Methyldopa or -L.dopa	a.	It is a X. linked recessive disorder
b.	Lead poisoning	b.	Superficial mucosal bleeding is the main manifestation.
c.	Mefenamic acid	c.	PT increased
d.	Lobar Pneumonia	d.	Clotting time increased
e.	Haemolytic uremic Syndrome	e.	Bleeding time normal
5.	Bleeding time is prolonged.	10.	Myeloproliferative disorders include:
a.	Low platelets count < 40,000/mm ³	a.	Chronic myeloid leukemia
b.	Paraproteinaemia	b.	Myelodysplastic syndrome
c.	Uraemia	c.	Essential thrombocythemia
d.	Christmas disease	d.	Haemoglobinopathies
e.	Vit-K deficiency	e.	Polycythemia vera

11. Granulation tissue:	16. Granulomatous inflammatory response induced by
a. Is a feature of wound healing	a. Mycobacterium tuberculosis.
b. Contains fibroblasts	b. Staphylococcus aureus.
c. Contains thin walled capillaries	c. Trepanoma pallidum
d. Often contains granuloma	d. Mycobacterium leprae
e. Leads to malignant transformation	e. Streptococcus pneumoniae
12. The antioxidants include	17. Foci of dystrophic calcification are seen in -
a. Ceruloplasmin	a. Old tuberculous lesion
b. Nitric oxide	b. Scar.
c. Transferrin	c. Nephrocalcinosis.
d. Catalase	d. Atheromatous plaque.
e. Glutathione peroxidase	e. Dead parasite
13. Following factors are associated with apoptosis	18. The followings are used in tumour grading
a. Enlargement of cells	a. Mitotic index
b. Breakdown of cytoskeleton	b. Necrosis
c. Cytoplasmic bleb formation	c. Differentiation
d. Activation of caspase enzyme	d. Nodal spread
e. Random breakdown of DNA	e. Calcification
14. Manifestation of Autosomal Dominant disorders are:	19. Precancerous conditions include
a. Homozygous state of affected allele	a. Solar keratosis of skin.
b. Both male and female are affected	b. Ulcerative colitis.
c. Both can transmit the condition	c. Leukoplakia of penis
d. Variable expressivity	d. Bowen's disease.
e. Reduced penetrance	e. Molluscum contagiosum
15. Disorders of the immune system include:	20. Necrotic tissue is characterized by
a. Hypersensitivity reactions	a. Decreased eosinophilia
b. Autoimmune disease	b. Denaturation of protein
c. Immunologic deficiency	c. Increased protein synthesis
d. Amyloidosis.	d. Loss of cell membrane phospholipids
e. Nodular hyperplasia of prostate	e. Increased pH of cells

DEPARTMENT OF PATHOLOGY

Brahmmanbaria Medical College, Ghatara, Brahmmanbaria

Term-2 Examination. BM-8 Batch (Session: 2020-21) Date: 02.10.2024

Subject: Syst. Path-2 (SAQ); Full Marks: 80; Time: 2 hours 35 minutes.

Use separate answer scripts for each group. The number of each question is shown below

Answer **eight** questions from each group including question No. 10 which is compulsory

Group-A

1. What do you mean by PUD? Write the predisposing factors for peptic ulcer. Mention the differentiating points between a benign ulcer and a malignant ulcer. (1+2+2)
2. Define polyp. Name the polyps of gastrointestinal tracts. Mention the differences between Crohn's disease and ulcerative colitis. (1+2+2)
3. Define liver cirrhosis. What are the causes of liver cirrhosis? Describe the pathogenesis of ascites in liver cirrhosis. (1+2+2)
4. Mention the indication of enzymes of medical importance with examples. What enzymes are elevated in hepatocellular and obstructive jaundice? Mention the urinary finding of obstructive jaundice. (2+1.5+1.5)
5. Give the laboratory investigations to differentiate AGN from nephrotic syndrome. Write the pathogenesis of acute post-streptococcal glomerulonephritis. (3+2)
6. What are the ischemic heart diseases? Give the pathogenesis of myocardial infarction. Name the different cardiac markers related to the diagnosis of MI. (1+2+2)
7. Define goitre. What are the causes of goitre? Give the etiopathogenesis of multinodular goitre. (1+2+2)
8. What are the differences between type I and type II diabetes mellitus? How does ketoacidosis develop in uncontrolled DM? (3+2)
9. Write short notes on: a) Barrett's esophagus ; b) Hashimoto's thyroiditis. (2.5+2.5)
10. a) Mention important uses of the frozen section. What are the common stains and fixatives used for histopathological examinations? (1+1.5)
b) A boy of 11 years suddenly develops puffiness of face with scant high-colored urine formation. He gave a history of sore throat about 3 weeks back. What is the likely diagnosis? Give the positive findings of his routine urine examination test. (1+1.5)

Term: _____
Subject: _____
Fill up the _____
1. Major criteria: _____

Group-B

01. What is pneumonia? What are the differences between bronchopneumonia and lobar pneumonia? Briefly state the stages of lobar pneumonia (1+2+2)
02. Classify tumors of the lung. How will you diagnose a case of bronchogenic carcinoma? What is respiratory acidosis? (2+2+1)
03. What is atherosclerosis? Name the blood vessels more frequently involved by atherosclerosis with their possible clinical consequences. Give the lipid profile and their normal range. (1+2+2)
04. Write down the pathogenesis of rheumatic fever. Which valves are commonly involved? What are the complications of rheumatic fever? (2+1+2)
05. What is CIN? Write down the role of human papillomavirus in causing cervical cancer. Mention the diagnostic tool for cervical cancer. (1+2+2)
06. Classify breast carcinoma. Mention the prognostic factors involved in breast carcinoma. (2+3)
07. Classify the testicular tumor. Mention the normal findings of semen analysis. State the causes of azoospermia. (2+1.5+1.5)
08. What is osteomyelitis? Mention its predisposing factors and etiologic agents. Write the morphology of pyogenic osteomyelitis. (1+2+2)
09. Mention indications of CSF examination. Write the normal CSF findings and the changes observed in pyogenic and tubercular meningitis, and name the investigations needed to confirm such cases. (1.5+2.5+1)
10. a.) A 55-year-old female complained of a hard lump in her right breast for 3 months. On examination, the overlying skin appears fixed and puckered. What is your clinical diagnosis? Name the investigations to diagnose the case. (1+1.5)
b.) A 60-year-old female presented with irregular per vaginal bleeding for one month after menopause. Her PV examination revealed an apparently healthy cervix but with bloody discharge. What is your provisional diagnosis? How can you confirm it? (1+1.5)

Term-2 Examination (MCQ) 8 Batch (Session: 2020-2021)

Subject: Syst. Path-2 (MCQ). Full Marks: 20; Time: 25 minutes. All questions carry equal marks

Fill up the "T" box for true and "F" box for False in the answer sheet provided.

1. Major criteria for diagnosis of acute rheumatic fever

- a. Arthralgia
- b. Fever
- c. Chorea
- d. Morning stiffness
- e. Subcutaneous nodule

2. Congenital cyanotic heart diseases are

- a. VSD
- b. TOF
- c. ASD
- d. TGA
- e. PDA

3. Followings are related with endometrial carcinoma

- a. Oral contraceptives increase risk
- b. Associated with Hereditary nonpolyposis colorectal carcinoma
- c. Glucose intolerance
- d. Respond well with radiation therapy
- e. Associated with low parity

4. Characteristics of pleomorphic adenoma include

- a. Present as painful mobile masses
- b. Radiation exposure increases the risk
- c. Most frequent in adult males
- d. They show both epithelial and mesenchymal differentiation
- e. Composed of cells from more than one germ layer

5. Ewing sarcoma is related to

- a. The most common bone sarcoma in children
- b. Tumor cells are pleomorphic
- c. X-ray shows osteolytic lesion
- d. usually arise in the epiphysis of long bones
- e. Presents with pain and fever

6. Carcinoma esophagus

- a. Difficulty in swallowing liquid appears earlier than solid
- b. An endoscopic biopsy may confirm the diagnosis
- c. Adenocarcinoma more commonly occurs in the upper third
- d. The majority diagnosed in the advanced stage
- e. Tend to disseminate early

7. Barrett's esophagus is related to

- a. A dysplastic change in response to chronic GERD
- b. Increased risk of esophageal adenocarcinoma
- c. Characterized by gastric metaplasia
- d. Most patients develop esophageal tumors
- e. Complicated with bleeding

8. Regarding gastric cancer

- a. H. pylori is an important etiological factor for proximal gastric cancer
- b. Diffuse type has the worst prognosis
- c. Proximal gastric cancer is most common in our country
- d. It is radiosensitive
- e. Diffuse cancers occur in younger patients

9. Hepatitis A virus can produce

- a. Hemolytic jaundice
- b. Acute hepatitis
- c. Chronic hepatitis
- d. Fulminant hepatitis
- e. Carrier state

10. Insulin resistance develops in the following major tissues

- a. Neuron
- b. Skeletal muscle
- c. Adipose tissue
- d. Kidney
- e. Liver

11. Causes of hyperglycemia include	
a.	Insulinoma
b.	Heavy exercise
c.	Thiazide diuretic intake
d.	Septic shock
e.	Thiazide diuretic intake
12. Hyperglycemia sine glycosuria	
a.	Presence of glucose in urine
b.	Old diabetes mellitus
c.	Decreased renal threshold level of kidney
d.	Proteinuria
e.	Hematuria

13. Features of hypothyroidism are	
a.	Hyperreflexia
b.	Tachycardia
c.	Hypertension
d.	Cold intolerance

e.	Weight gain
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14. Blood urea is elevated in	
a.	Severe dehydration

b.	Pregnancy
c.	Tubular necrosis
d.	Diabetes insipidus
e.	Cortical necrosis

15. CSF findings in viral meningitis	
a.	Polymorphs in CSF
b.	Clot formation
c.	Blood in CSF
d.	CSF protein is raised
e.	CSF sugar is normal

16. Followings are associated with carcinoma liver	
a.	Tobacco smoking
b.	Aspergillus infection
c.	Helicobacter pylori infection
d.	Schistosoma haematobium
e.	Chronic alcoholism

17. Complication of gallstone	
a.	perforation
b.	Empyema
c.	Large gut obstruction
d.	Chronic pancreatitis
e.	Malignancy

18. Exudative pleural effusion occurs in	
a.	Tuberculosis
b.	Nephrotic syndrome
c.	Malignancy
d.	Pneumonia

e.	Meig's syndrome
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19. Serum PSA level is raised in	
a.	Acute prostatitis

b.	Nodular hyperplasia
c.	Testicular neoplasm
d.	Carcinoma of seminal vesicle
e.	Prostate cancer

20. Carcinoma prostate is characterized by	
a.	Always arises in the peripheral zone of the gland
b.	Mutations of BRCA2 gene
c.	Is related to raised acid phosphatase level
d.	Nodular hyperplasia is a risk factor for cancer development
e.	Usually produces osteolytic bony metastasis