

**The West Bengal University of Health Sciences**  
**MBBS 2nd Professional Examination (New Regulation) March - April 2024**

Subject: Pathology  
 Paper: II

Full Marks: 100  
 Time: 3 hours

*Attempt all questions. The figures in the margin indicate full marks.*

- 1.a) A 59 year old male presented with weight loss, painless hematuria, flank pain and a large mass in lower abdomen. 3+6+6
  - i) What is your provisional diagnosis?
  - ii) How will you proceed to investigate the patient in the laboratory?
  - iii) Describe the gross and microscopic features of the lesion.
  
- b) A 45 year old male was brought to the hospital with complain of uneasiness and squeezing type of pain in chest radiating to left arm. His ECG showed ST elevation and T inversion in lead V3, V4. 2+6+4+3
  - i) What is the provisional diagnosis?
  - ii) Discuss the pathogenesis of this condition.
  - iii) What laboratory investigations are to be done to confirm the diagnosis?
  - iv) Mention the complications of this condition.
  
2. Answer the following:
  - a) Classify Hodgkin's disease. Describe the microscopic feature of the mixed cellularity type. Describe the features of diagnostic cell present in Hodgkin's disease. 3+3+4
  - b) Briefly discuss the pathogenesis of cirrhosis of liver. 10
  - c) Describe the pathogenesis of acute (pyogenic) osteomyelitis. 10
  
3. Write short notes on: 2x5
  - a) Retinoblastoma.
  - b) Prognostic factors for invasive breast carcinoma.
  
4. Explain the following statements: 5x4
  - a) Bronchiectasis results from a defect in airway clearance.
  - b) The most important prognostic factor in colorectal adenocarcinoma are depth of invasion and the presence of lymph node metastases.
  - c) Pigment gallstones are seen in chronic haemolytic anaemia.
  - d) FNAC cannot replace histological study.
  - e) Dysgerminoma is the ovarian counterpart of testicular seminoma.
  
5. Choose the correct option for each of the following: 10x1
  - (i) Following are associated with EB virus infection except:
    - a) Infectious mononucleosis.
    - b) Epidermodysplasia verruciformis.
    - b) Nasopharyngeal carcinoma.
    - c) Oral hairy leucoplakia.
  
  - (ii) Most common gene involved in familial male breast cancer:
    - a) BRCA-1.
    - b) BRCA-2.
    - c) P53.
    - d) INK-2.

- (iii) Bronchial asthma is predominantly mediated by:
- $T_H2$  lymphocytes and IgE.
  - $T_H1$  lymphocytes and IgE.
  - Regulator T lymphocytes and IgE.
  - Cytotoxic T lymphocytes and IgE.
- (iv) MacCallum patch is seen in:
- Myocardial infarction.
  - Atherosclerosis.
  - Rheumatic heart disease.
  - SLE.
- (v) All are features of alcoholic steatohepatitis except:
- Hepatocyte swelling and necrosis.
  - Ground glass hepatocytes.
  - Mallory-Denk bodies.
  - Neutrophilic infiltration.
- (vi) Renal papillary necrosis is seen in:
- Urinary tract obstruction.
  - Sickle cell disease.
  - Diabetes mellitus.
  - All of the above.
- (vii) Codman triangle is a radiological finding in:
- Chondrosarcoma.
  - Giant cell tumor.
  - Ewing sarcoma.
  - Osteosarcoma.
- (viii) Charcot Leyden crystals and Cruschmann's spirals are seen in:
- Bronchial asthma.
  - Chronic bronchitis.
  - Bronchiectasis.
  - Emphysema.
- (ix) All of the following are germ cell tumours except:
- |                        |                             |
|------------------------|-----------------------------|
| a) Mesonephroid tumors | b) Teratoma.                |
| b) Dysgerminoma.       | d) Endodermal sinus tumour. |
- (x) All are sex cord stromal tumor except:
- Granulosa cell tumor.
  - Sertoli Leydig cell tumor.
  - Embryonal carcinoma.
  - Fibroma thecoma of ovary.