

The West Bengal University of Health Sciences
MBBS 2nd Professional Examination (New Regulation) July-August 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 14 year old female presents with a painful tender swelling in the right thigh accompanied with fever, leucocytosis and high ESR. Plain X-ray shows osteolytic lesion with onion skin appearance. 2+5+5+3
 - i) What is your provisional diagnosis?
 - ii) Describe the gross and microscopic features of this lesion.
 - iii) Enumerate the molecular and genetic abnormalities associated with this disease entity.

- b) A 34 year old male presented with fatigue, loss of appetite, jaundice and mild tender hepatomegaly. 2+7+6
 - i) What is the provisional diagnosis?
 - ii) What is the pathogenesis and fate of this condition?
 - iii) How will you diagnose the case?

2. Answer the following: 3x10
 - a) Which part of the bone is the commonest site of osteomyelitis in children and why? What is sequestrum? Describe the pathogenesis of formation of involucrum. 3+2+5
 - b) Enumerate the risk factors of carcinoma cervix. Describe the role of viruses in the pathogenesis. Which test is used in screening of the disease? What is carcinoma in situ? 3+5+1+1
 - c) Discuss the role of FNAC in breast carcinoma. 10

3. Write short notes on: 2x5
 - a) Hashimoto's thyroiditis.
 - b) Nodular hyperplasia of prostate.

4. Explain the following statements: 5x4
 - a) Cavitary pulmonary tuberculosis may give rise to hemoptysis.
 - b) Carcinoma colon is a genetic disorder.
 - c) Rapidly progressive glomerulonephritis does not denote a specific etiologic form of glomerulonephritis.
 - d) In spite of increased pus cells in urine, routine culture may be negative.
 - e) Pathogenesis of development of ascites in cirrhosis is complex.

5. Choose the correct option for each of the following: 10x1
 - (i) Psammoma bodies can be seen in:
 - a) Astrocytoma.
 - b) Medulloblastoma.
 - c) Meningioma.
 - d) Ependymoma.

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- (ii) Which of the following is true of giant cell tumour?
- Osteoclasts are neoplastic.
 - Neoplastic cells express RANKL.
 - Typically arise in metaphysis.
 - Produces sun-burst appearance in X-ray.
- (iii) All are precancerous lesion of the skin except:
- Actinic keratosis.
 - Seborrheic keratosis.
 - Bowen's disease.
 - Keratoacanthoma.
- (iv) All are true for familial adenomatous polyposis except:
- Presence of minimum of 500 polyps are required for diagnosis.
 - APC gene mutation is on chromosome 5q21.
 - All untreated FAP patients develop colon carcinoma.
 - Gardner syndrome and Turcot syndrome share the same genetic defect as FAP.
- (v) Which is true for ulcerative colitis?
- Skip lesion.
 - Creeping of fat.
 - Presence of granuloma.
 - Sparing of anal canal.
- (vi) Germ cell tumor may occur in all the sites except:
- Mediastinum.
 - Ovary.
 - Salivary gland.
 - Brain.
- (vii) The highest malignant potential is seen in:
- Crohn's disease.
 - Ulcerative colitis.
 - Infantile polyp.
 - Familial polyposis.
- (viii) Azzopardi effect is seen in:
- Renal cell carcinoma.
 - Small cell carcinoma of lung.
 - Seminoma.
 - Squamous cell carcinoma of lung.
- (ix) Which statement is false about HPV infection and carcinoma cervix?
- HPV infection always leads to CA cervix
 - High and low risk types are there.
 - Superficial squamous epithelial cells are resistant to infection.
 - Vaccination can prevent the cancer when given at early age.
- (x) Gene associated with pancreatic carcinoma is:
- RB gene.
 - KRAS mutation.
 - BCL-6.
 - Loss of E cadherin.