

Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase – II (CBME) Degree Examination - 30-Jan-2024

Time: Three Hours**Max. Marks: 100 Marks****PATHOLOGY – PAPER I (RS-4)****Q.P. CODE: 1026****(QP contains two pages)**

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS**2 x 10 = 20 Marks**

- 10 year old male presented with pain abdomen, fever and vomiting of one day duration. On examination there is tenderness over McBurney's point. Ultrasound examination of the abdomen showed evidence of dilated appendix.
 - What type of inflammation is seen in this condition?
 - Discuss the cellular events occurring in this condition
 - List the chemical mediators that facilitate the cellular events
- 13 year old male has sudden onset of severe abdominal pain and cramping accompanied by chest pain, non productive cough, pain in the bones of the hand and fever. Physical examination revealed that his temperature is 39°C and pulse rate is 110/min. He has diffuse abdominal tenderness and splenomegaly. Lab studies show haematocrit of 18% and peripheral smear showed sickle shaped cells. X ray chest showed bilateral pulmonary infiltrates
 - Discuss the pathogenesis of the sudden onset symptoms in the child
 - Discuss the laboratory investigations relevant to the history provided

SHORT ESSAYS**8 x 5 = 40 Marks**

- Microscopic variants of Hodgkins Lymphoma.
- Enumerate the steps in the investigations of the transfusion reaction.
- Define necrosis. Discuss various types of necrosis with examples.
- Paraneoplastic syndrome.
- Type I hypersensitivity.
- Chemical carcinogenesis.
- Etiopathogenesis of Septic shock.
- Define hypertrophy. Discuss the types of hypertrophy with their mechanism.

SHORT ANSWERS**10 x 3 = 30 Marks**

- Draw labelled diagram of fatty liver.
- List any three tumour suppressor genes.
- Stains for amyloidosis.
- Packed cell volume.
- Define granuloma and draw a neat diagram.
- Differences between transudate and exudate.
- Exfoliative cytology.
- Fate of thrombus.
- Draw peripheral smear picture of Megaloblastic anaemia.
- Causes of Thrombocytopenia.

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Multiple Choice Questions

10 x 1 = 10 Marks

- 21 i) All are chemical mediators of acute inflammation **EXCEPT**
- Histamine
 - Prostaglandin
 - Leukotrienes
 - Progesterone
- 21 ii) 50 year old male presents with breathlessness and weight loss. Imaging revealed nodular lesion in the left lung lower lobe. Biopsy shows an adenocarcinoma. Which of the following is the likely mutation associated with this condition?
- EGFR mutation
 - PTEN mutation
 - BCL2 mutation
 - APC mutation
- 21 iii) Ghon's complex comprises of which one of the following
- Hilar lymphadenopathy
 - Apical fibrocavitary lesion
 - Miliary lesions across bilateral lungs
 - Progressive primary lesions
- 21 iv) Down's syndrome is due to
- Trisomy 22
 - Trisomy 21
 - Trisomy 18
 - Trisomy 20
- 21 v) 63 year old male hypertensive develops paralysis of the right side of the body. Which of the following patterns of tissue injury is likely to be present in the brain after 4-5 days?
- Fat necrosis
 - Caseous necrosis
 - Coagulated necrosis
 - Liquefactive necrosis
- 22 i) Acute promyelocytic leukemia characteristically shows presences of Auer rods in the blast. Which of the following stains highlight these Auer rods
- Verhoff stain
 - Myeloperoxidase
 - PAS
 - Glial fibrillary acidic protein
- 22 ii) 70 year old male presented with worsening heart failure. Echocardiogram showed cardiomegaly with four chamber dilatation. Which type of amyloid is likely to be present in the heart
- SAA
 - Transthyretin
 - AL
 - Beta2 microglobulin
- 22 iii) ESR is markedly raised in
- Multiple myeloma
 - Malaria
 - Acute myeloblastic leukemia
 - Haemophilia
- 22 iv) Howell Jolly bodies are seen in
- Myeloblasts
 - Lymphoblasts
 - Megaloblasts
 - Sickle cell
- 22 v) Neutrophilia is typically seen in
- Acute bacterial infections
 - Typhoid
 - Malaria
 - Infectious mononucleosis
