

# Rajiv Gandhi University of Health Sciences, Karnataka

## MBBS Phase – II (CBME) Degree Examination - 04-Feb-2023

**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**

1. A 12 year boy presented with sudden onset of fever and vomiting with abdominal pain. On palpation there is tenderness at MC Burney's point
  - a) What is the probable diagnosis?
  - b) Define inflammation? Enumerate cellular events of inflammation
  - c) Outcomes of acute inflammation
2. A 20 year male patient presented with swelling of both knees and pain for the past one week. He gives history of similar episodes earlier. He also gives history of excessive bleeding after minor injuries. His maternal uncle has similar complaints and has been treated by repeated blood transfusions following excessive bleeding episodes
  - a) What are the probable differential diagnosis?
  - b) What are the laboratory investigations required for the diagnosis?
  - c) What is the etiopathogenesis of these disorders?
  - d) How will you make the final specific diagnosis?

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

3. Opportunistic infections in AIDS
4. Define Amyloidosis? Write the physical and chemical nature of Amyloid and note on special stains
5. Describe the morphology of different types of infarcts with examples
6. Peripheral smear and bone marrow findings in megaloblastic anemia
7. Describe different types of cellular adaptations to stress with examples
8. Type III hypersensitivity reactions with examples
9. Define and classify anaemia according to aetiology
10. Describe the modes of spread of malignant neoplasms with examples

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

11. Differences in CSF findings between pyogenic and Tuberculous meningitis
12. Gaucher's disease
13. Virchow's triad
14. Advantages of fine needle aspiration cytology
15. Name three conditions with raised ESR
16. Primary wound healing
17. Bence-Jones protein
18. Peripheral smear findings in accelerated phase of chronic myeloid leukemia
19. Mandatory serological test in screening of blood donors
20. Immediate complications of blood transfusion

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## Multiple Choice Questions

10 x 1 = 10 Marks

- 21 i) Which of the following pigment's presence is a telltale sign of free radical injury
- Lipofuscin
  - Melanin
  - Bilirubin
  - Hematin
- 21 ii) Diapedesis is
- Movement of leucocytes in the extra vascular compartment
  - Immigration of the leucocytes through the vessel wall at the site of inflammation
  - Aggregation of lymphocytes at the site of bleeding
  - Autodigestion of the cells
- 21 iii) Which of the following organs are heart failure cells seen in
- Myocardium
  - Lungs
  - Liver
  - Spleen
- 21 iv) White infarct is seen in all **EXCEPT**
- Lungs
  - Spleen
  - Kidney
  - Heart
- 21 v) Correct sequence of cell cycle is
- G<sub>0</sub>-M-G<sub>2</sub>-S-G<sub>1</sub>
  - G<sub>0</sub>-G<sub>1</sub>-G<sub>2</sub>-S-M
  - G<sub>0</sub>-G<sub>1</sub>-S-G<sub>2</sub>-M
  - G<sub>0</sub>-G<sub>1</sub>-S-M-G<sub>2</sub>
- 22 i) All of the following are examples of tumour markers **EXCEPT**
- Human chorionic Gonadotropin
  - Alpha Fetoprotein
  - Prostate specific antigen
  - Cyclin D1
- 22 ii) Antigen presenting cells present in skin are called
- Langerhans cells
  - Kupffer cells
  - Microglia
  - Melanocytes
- 22 iii) Which of the following is not true about innate immunity
- It is present prior to antigenic exposure
  - It is relatively non-specific
  - Memory is seen
  - It is the first line of defence
- 22 iv) Autoimmune haemolytic anemia is most likely to be associated with which of the following conditions
- Acute lymphoid leukemia
  - Acute myeloid leukemia
  - Chronic Myelogenous leukemia
  - Chronic lymphocytic leukemia
- 22 v) Hypersegmented neutrophils are seen in
- Iron deficiency anaemia
  - Megaloblastic anaemia
  - Sickle cell anaemia
  - Autoimmune hemolytic anaemia

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