MBBS Second Year Pathology Paper-I Important Question Bank

Essay Questions:

1. Define Oedema. Discuss the pathophysiology of oedema. Add a note on pulmonary oedema.
2. Define and classify Leukemias. Describe the blood and bone morrow findings in chronic myeloid leukemia.
3. . Define inflammation. Describe the major events of acute inflammation with a note on defective Leukocyte function.
4. Enumerate the various carcinogenic agents. Classify the chemical carcinogens and describe the steps involved in chemical carcinogenesis.
5. Define Necrosis. Name the different types of necrosis. Discuss in detail with examples the different types of necrosis. Differentiate between Necrosis and Apoptosis.
6. A 70 year old women admitted with worsening anemia and pathological fracture of the Humerus had an ESR of 120mm in 1 hour. Her peripheral smear showed increased rouleaux formation. Xray of skull showed multiple punched out osteolytic lesions. a. What is the most probable diagnosis? Write briefly on the etiopathogenesis of this disease. b. Describe the Bone Marrow Changes in this disease. c. Enumerate the common laboratory investigations for this disease. d. Enlist the complications of this disease.
7. 40 yrs female c/o loss of weight, huge splenomegaly with peripheral blood white blood cell count of more than 1 lakh cells/cc a. What is the probable diagnosis? b. What are the characteristic peripheral smear findings? c. What is the course of the disease? d. What is the chromosomal abnormality involved?
8. Define inflammation. Write in detail about the vascular and cellular changes in inflammation.
9. 60 yrs male presented with normocytic normochromic anaemia, pathological fracture femur and proteinura. X ray skull revealed punched out lesions in the calvarium and peripheral smear studied show rouleaux formation. a) What is your probable diagnosis. b) Discuss in detail the molecular pathogenesis, morphology and clinical features of above said disorder.
10. Define shock. Discuss in detail the pathogenesis of septic shock. Describe the morphology of kidneys and lungs affected by shock.
11. Chronic myeloid leukemia – clinical features peripheral smear and bone marrow findings and clinical outcome.
12. Write in detail about carcinogenesis physical, chemical and biological and also molecular basis of Carcinogenesis.

13. Define and classify anaemia. Discuss etiopathogenesis, peripheral smear and bone marrow picture in iron deficiency anaemia.
14. Define edema. Discuss the etiopathogenesis of various types of edema with examples.
15. Discuss in detail the molecular pathogenesis and morphology of Hodgkin lymphoma.
16.) 23 yrs female presented with oral ulcers, malar rash photosentivity and non erosive arthritis involving both knees. Laboratory investigations show persistent proteinuria and leucopenia. What is your probable diagnosis. b) Discuss in detail the pathogenesis and morphology of kidney affected by the above disorder.
17. 40 yr old male presented with h/o fever, vomiting and diarrhoea. Patient had temperature of 103 degrees F. Weak rapid pulse, hypotension, tachypnoea, cold, clammy, cyanotic skin. Blood culture gram negative bacterial infection positive. (a) What is your diagnosis? (b) Explain the pathogenesis and morphology.
18. Define thrombosis, write in detail about pathogenesis, causes, morphology and fate of thrombus.
19. Define Thrombocytopenia? Classify causes of Thrombocytopenia? Discuss various tests in evaluating bleeding disorders?
20. a) A 12 year boy weighing 70 kgs, doesn't play any outdoor games and is always in front of his play station with lot of snacks besides him. What is he having? What are the methods to assess it? b) What is the etiopathogenesis? Enumerate the complications?
21. Classify Hemolytic Anemias. Write in detail about the pathogenesis, blood picture and clinical features of beta Thalassemia major.
22. Define Neoplasia. Write in detail about the molecular basis of cancers. Add a note on Oncogenes and their mode of activation.
23. Define apoptosis. What are the causes of apoptosis? Write about the biochemical features and mechanisms of apoptosis. Add a note on dysregulated apoptosis.
24. Describe the pathogenesis, morphology and clinical features of tuberculosis.
25. List the causes of megaloblastic anemia. Discuss about the pathogenesis, morphology and bone marrow picture of megaloblastic anemia.
26. Define edema. Tabulate the pathophysiological categories of edema and write in detail about each category with suitable examples and illustrations.
27. Define anaemia. Classify haemolytic anaemia. Write in detail about the pathogenesis, clinical features and lab diagnosis of sickle cell anaemia.
28. Define Neoplasia. Discuss in detail the pathogenesis, pathophysiology of radiation oncogenesis.
29. Define inflammation. Describe the major events of acute inflammation with a note on its outcome.
30. Define and classify leukaemia. Describe the blood and bone marrow findings in acute myeloid leukaemia.
31. Define Inflammation. Enumerate the cellular events in acute inflammation. Discuss in detail the mechanism of Chemotaxis and Phagocytosis.Enlist the common defects in Leukocyte functions.
32. Define and classify shock. Discuss in detail about septic shock.

Short Answer Questions:

1. Phagocytosis
2. Haematocrit
3. Sickle cell
4. Tumour suppressor genes
5. Anaphylactic reaction
6. Down's syndrome
7. Metaplasia
8. Kwashiorkar
9. Mycetoma
10. Eosinophilia
11. Name four causes of fatty liver
12. State four differences between dry and wet gangrenes
13. Define atrophy Give two examples to physiological atrophy
14. Describe four staining character of amyloid
15. Microscopic appearance of lepromatous leprosy
16. Name two opportunistic infections and two neoplasms seen in AIDS
17. Name two human oncogenic viruses and tumours caused by them
18. Blood components prepared in a blood bank
19. What is a Reticulocyte? Mention two causes of reticulocytosis
20. What is cross matching?
21. Free Radical Injury
22. Septic Shock
23. Rickets
24. Tertiary Syphilis
25. Proteins in urine
26. Cardiac edema
27. Klinefelter syndrome
28. Type I hypersensitivity reaction
29. Factors affecting wound healing
30. Apoptosis
31. Sago Spleen
32. Paraneoplastic syndromes

33. ESR
34. Coomb's Test
35. Reed Sternberg Cell
36. Hemophilia
37. Metaplasia
38. CVC liver
39. Blood picture in megaloblastic Anemia
40. CSF in tuberculous meningitis
41. Role of Arachidonic Metabolites in inflammation
42. Pathogenesis of Septic Shock
43. Tumour Metastasis
44. Mitochondrial Inheritance
45. Etiopathogenesis of Cystic Fibrosis
46. Anemia of Chronic Disease
47. FAB classification of Acute Leukemia
48. Idiopathic Thrombocytopenic purpura
49. Transfusion Reaction
50. Hematocrit
51. Give four examples for pathological calcification
52. Give four examples for Metaplasia
53. Mention two differences between exudates and transudate
54. Mention two renal changes in SLE
55. Give two examples for trace elements and their deficiency states
56. Give four causes for iron deficiency anaemia
57. Mention two important marrow changes in B deficiency
58. Two characteristic difference between Myeloblasts and Lymphoblasts
59. Mention two pathognomonic features of Hairy cell leukemia
60. Mention four applications of reticulocyte count
61. Classify pigments and write about Lipofuschin
62. Write about outcomes of acute inflammation
63. Growth factors
64. Hybridisation techniques to detect genomic alterations
65. Antibody mediated hypersensitivity
66. Molecular basis of cancer
67. Immunology of Leprosy
68. Primary myelofibrosis
69. Hemophilia A
70. Peripheral smear and Bone marrow findings in Multiple Myeloma

71. Define metaplasia and give two examples
72. Antiphospholipid antibody syndrome
73. Mention four X linked recessive disorders
74. Mention four special stains for Amyloid
75. Lead and blood and marrow changes
76. Four infections associated with AIDS
77. Hamartoma
78. Prions
79. Four Systemic effects of inflammation
80. Hyper IGM syndrome
81. Turner syndrome
82. Immune complex mediated hypersensitivity
83. Differentiation and anaplasia
84. Viral haemorrhagic fevers
85. Morphology of leprosy
86. Morphology of primary myelo fibrosis
87. Pathogenesis of sickle cell disease
88. Chronic immune thrombocytopaenic purpura
89. Free radicals
90. Defects in leucocyte function
91. Fat necrosis
92. Heart failure cells
93. Lines of zahn
94. Warburg effect
95. Mott cells
96. tumors associated with AIDS
97. Cross matching
98. Anticoagulants
99. PSEDO PELGER HUET ANOMALY
100. Black water fever
101. Air embolism
102. Kline felters syndrome
103. Arthus reaction
104. Morphology of Primary Tuberculosis
105. Fracture healing
106. Sickle cell disease
107. Poycythemia vera
108. Leukemoid reaction

109. Christmas disease
110. Fanconi's Anemia
111. Warthin finkeldey giant cells
112. Factors downregulation apoptosis
113. Gamma – Gandy bodies
114. Virchow's traid
115. Bernard – soulier syndrome
116. Sago spleen
117. Two special stain for Amyloid
118. Howell – Jolly bodies
119. Tear drop cell
120. MCV
121. Oncogenic viruses
122. Anaphylactic reaction
123. Bence jones proteins
124. Pathologic Calcification
125. Vitamin A Deficiency
126. Neonatal respiratory distress syndrome
127. Von Willebrand's Disease
128. Granulomatous inflammation
129. Familial hypercholesterolemia
130. Embolism
131. Types of necrosis
132. Factors influencing wound healing
133. Fate of thrombus
134. Clinical features of Trisomy
135. Oncofetal antigens
136. Reticulocyte
137. Philadelphia chromosome
138. Reed-Sternberg cell
139. Tertiary Syphilis
140. Agranulocytosis
141. Caseous necrosis
142. Pathology of Fracture healing
143. Morphology of Thrombi
144. Familial hypercholesterolemia
145. Oncogenic Epstein – Barr virus
146. Pathogenesis of Amyloidosis

147. Aetiology and morphology of bone marrow in Aplastic anaemia
148. Morphology of multiple myeloma
149. Molecular pathogenesis of Acute myeloid leukaemia
150. Pathogenesis of disseminated intra vascular coagulation
151. Define metaplasia & give examples
152. Tigered effect
153. Define Granuloma
154. Systemic factors that influence wound healing
155. Warburg effect
156. Role of Vitamin C in wound healing
157. Prothrombin time
158. Megalobast
159. Rh factor
160. Auer rods
161. Definition and characteristics of types of necrosis
162. Phagocytosis
163. Paraneoplastic syndromes
164. Gaucher's disease
165. Hypersensitivity reaction II
166. Morphological changes in apoptosis
167. Vascular events in acute inflammation
168. Chemokines
169. Morphology of infarct
170. Opportunistic infections in AIDS
171. Write any two stem cell niches
172. Heinz bodies
173. Types of leprosy
174. Mention the cause of thrombocytopenia
175. Bart haemoglobin
176. Types of wound healing
177. Two inherited disorders of platelets
178. Two oncogenic DNA virus
179. Two tumor suppressor genes
180. Two examples of acute phase proteins
181. Define Virchow's triad?
182. Outcomes of acute inflammation?
183. Caissons disease
184. Epstein barr virus

185. Leucocyte alkaline phosphatase
186. Hemophilia A
187. Wilms Tumor
188. Amniotic fluid embolism
189. Russell bodies
190. Mention two sites of biopsy for amyloidosis?
191. Autosomal recessive hematopoietic disorder
192. Special stain to diagnose Gaucher's disease
193. Fluorescent in situ hybridization
194. Name two trisomy syndromes
195. Neurofibromatosis gene
196. Name two familial cancers?
197. Stages of shock
198. Mention two sites of oncocytomas
199. Growth factors
200. Transplant rejection
201. Cystic fibrosis
202. Hodgkin Lymphoma
203. Dystrophic calcification
204. Gaucher's cell
205. Arthus reaction
206. Chloroma
207. Vitamin C deficiency
208. Pathogenesis of shock
209. Amyloidosis
210. Megaloblastic Anemia
211. Myelofibrosis
212. Acute phase reactants
213. Le cell
214. Chronic granulomatous disease
215. Langerhans cell histiocytosis
216. Name four Monoclonal Gammopathies
217. Embolism
218. Stem cells in tissue homeostasis
219. Myelodysplastic syndrome
220. Von willebrand disease
221. Role of sirutins in cellular aging
222. Wilson's disease

223. Sea blue histiocytosis
224. Agranulocytosis
225. Lead poisoning
226. Gangrene
227. Blood picture of chronic myeloid leukemia
228. Disseminated intravascular coagulation
229. Down syndrome
230. Name four cell derived mediators of inflammation
231. Differences between benign and malignant tumor
232. Reed Sternberg cell and its variants
233. Define hyperemia and congestion
234. Four opportunistic infections in HIV
235. Morphological patterns of tissue necrosis
236. Tumor markers
237. Klinefelter syndrome
238. Haemophilia
239. Metaplasia
240. Lipoxins
241. Morphology of thrombi
242. Conditions associated with protein energy malnutrition
243. Russell bodies
244. Write about dystrophic and metastatic calcification
245. Type III hypersensitivity reaction
246. Enumerate four risk factors for DIC
247. Morphology of granuloma
248. Name the stages of shock
249. Name four virus implicated in carcinogenesis
250. Reticulocyte
251. Chemical carcinogenesis
252. Different types of giant cells with morphology and examples
253. Protein energy malnutrition
254. Glycogen storage disorders
255. Mechanism of autoimmunity
256. Warthin Finkeldey giant cells
257. Types of necrosis
258. Mention two causes for pancytopenia
259. Mott cell
260. Mention four X- linked recessive disorders

261. Enumerate four examples for metastatic calcification
262. Type II hypersensitivity reaction
263. Von villebrand disease
264. Factors affecting wound healing
265. Obesity
266. Tumor markers
267. Vitamin D deficiency
268. Hematocrit in dengue fever
269. Dysplasia
270. Phagocytosis
271. Heinz bodies
272. Give two examples of autosomal recessive disorder
273. Actinomycosis
274. Type I hypersensitivity reaction
275. Blood and bone marrow picture in multiple myeloma
276. Anti-phospholipid syndrome
277. Mechanism of apoptosis
278. Lab diagnosis of neoplasm
279. Fracture healing
280. Sago spleen
281. Microscopic appearance of lepromatous leprosy
282. Mention any four childhood malignancies
283. Enumerate four types of chromosomal rearrangements
284. Virchow triad
285. Reed Sternberg cell
286. Complications of myocardial infarction
287. Sideroblastic anemia
288. Tumour metastasis
289. Graft versus host disease
290. Viral haemorrhagic fever
291. Down's syndrome
292. Morphology of infarction
293. Chloroma
294. Vitamin C deficiency
295. Name four cell derived mediators of inflammation
296. Define hyperplasia and give two examples
297. Anticoagulants
298. Types and causes for Pathologic Calcification

299. Type I hypersensitivity reaction
300. Pathogenesis of Septic Shock
301. Chemical Carcinogenesis
302. Laboratory Investigations done for diagnosis of Autoimmune Haemolytic Anaemia
303. Enumerate two common cytogenetic disorders involving Sex Chromosomes
304. Enlist two common stains used to demonstrate fat in tissues
305. Mention two causes for Basophilic Stippling
306. Enumerate four common organs involved in Amyloidosis
307. Enlist four important sequelae for Thrombosis
308. What is Bombay Blood group?
309. Classification of acute leukemia
310. Vitamin D deficiency
311. Pathogenesis of aquired immuno deficiency syndrome
312. Asbestosis
313. Coagulation disorders
314. Burkitts lymphoma
315. Transcription factors
316. Hematopoietic cytokines
317. Asteroid bodies
318. Keloid
319. Mutations in chronic myeloid leukemia
320. Hematocrit in dengue fever

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