



MBBS Second Year Microbiology Paper-II (Virology, Mycology, Parasitology, Applied Microbiology) Important Question Bank

Essay Questions:

1. List the common blood and tissue flagellates causing human disease. Describe the pathogenesis, clinical features, lab diagnosis and prophylaxis of Chaga's disease.
2. Explain the pathogenesis, epidemiology, laboratory diagnosis and prevention of HIV infection.
3. Write an essay on Emerging and Reemerging Infections and the factors responsible for this.
4. Enumerate the viruses transmitted by blood transfusion. Write in detail about Hepatitis B virus and its Prophylaxis.
5. Classify Herpes viruses. Discuss the Laboratory diagnosis of chicken pox.
6. Discuss the pathogenesis and laboratory diagnosis of Kala Azar.
7. List out the malarial parasites infecting man. Describe the complications and Laboratory diagnosis of Malignant tertian Malaria.
8. Discuss briefly on viral vaccines.
9. Describe the Life cycle of *Dracunculus medinensis*.
10. Discuss briefly on Immunoprophylaxis of viral diseases.
11. Classify Arbo viruses. Discuss briefly on pathogenesis and laboratory diagnosis of Dengue fever.
12. Discuss briefly on laboratory diagnosis of Leishmaniasis.
13. Name the hepatotropic viruses. Write in detail about the pathogenesis and laboratory diagnosis of hepatitis B virus.
14. Classify filarial worms. Write in detail about the life cycle, pathogenesis and laboratory diagnosis of *Wuchereria bancrofti*.
15. Describe the pathogenesis, laboratory diagnosis and prophylaxis of poliomyelitis.
16. Classify nematodes. Describe the life cycle and laboratory diagnosis of hookworm.
17. Describe the morphology, pathogenesis and laboratory diagnosis of Hepatitis B virus.
18. Enumerate the intestinal nematodes of medical importance. Describe the morphology, life cycle and laboratory diagnosis of *Ascaris lumbricoides*.
19. Discuss the various methods for isolation of viruses in the laboratory.
20. Name the various haemoflagellates. Discuss the life cycle of *Leishmania Donovanii* and describe the laboratory diagnosis of Kala-azar.

21. Describe the morphology, pathogenesis and laboratory diagnosis of influenza virus.
22. Enumerate parasites causing Anemia. Describe in detail, morphology, life cycle and laboratory diagnosis of *Ankylostoma duodenale*.
23. . Describe the pathogenesis, laboratory diagnosis and prophylaxis of poliomyelitis.
24. Describe the lifecycle, pathogenesis and laboratory diagnosis *Ascaris lumbricoides*.
25. Name the viruses infecting the liver. Write the morphology, pathogenesis lab diagnosis and prophylaxis of hepatitis B virus.
26. Name the Haemoflagellates. Write the morphology, life cycle, clinical features and lab diagnosis of kala azar.
27. Classify nematodes. Describe the life cycle and laboratory diagnosis of *ankylostoma duodenale*.
28. Classify Rhabdo virus. Describe the pathogenesis, laboratory diagnosis and prophylaxis of rabies virus.
29. Classify Herpes Viruses. Describe the morphology, pathogenesis and laboratory diagnosis of acute Herpes Simplex virus.
30. Describe the morphology, life cycle, pathogenesis, and laboratory diagnosis of *Echinococcus granulosus*.
31. Classify picornaviruses. Describe the pathogenesis, clinical feature and laboratory diagnosis of polioviruses. Add a note on prophylaxis against poliomyelitis.
32. Enumerate the arboviruses in India. Describe in detail the pathogenesis, laboratory diagnosis, treatment, prevention and control of dengue fever.
33. Describe the morphology and genomic structure of hepatitis B virus. Write in detail regarding epidemiology and laboratory diagnosis of HBV infection.
34. Describe the morphology of HIV. Describe the pathogenesis and laboratory diagnosis of HIV infection. Add a note on pre exposure prophylaxis.
35. Describe the life cycle, pathogenesis, complications and laboratory diagnosis of *plasmodium falciparum*. Add a note on anti-malarial drugs.
36. Enumerate viruses causing post-transfusion hepatitis. Discuss in detail about the morphology, pathogenesis, laboratory diagnosis and prophylaxis of hepatitis B virus.
37. Describe the morphology of HIV. Describe the pathogenesis and laboratory diagnosis of HIV infection. Add a note on pre exposure prophylaxis.
38. Categorise Bio-Medical waste and write BMW lifecycle and disposal Mechanisms.

Short Answer Questions:

1. Features used for identification of *Wbancrofti* microfilaria in blood smear
2. Differences between fixed and street rabies virus
3. Modes of HIV transmission in humans
4. CSF findings in acute bacterial meningitis
5. Scolex of *Tsolium*
6. Measles
7. Histoplasmosis
8. Chikungunya
9. Hydatid cyst
10. List four viruses which can cause cancer in humans
11. Vector for Kala-azar, cerebral malaria, Kyasanur Forest disease and chikungunya
12. Name four dimorphic fungi
13. Prevention of hepatitis B virus infection
14. Peripheral blood smear findings in vivax malaria
15. Neurocysticercosis
16. Life cycle of hookworm
17. Dengue
18. Candidiasis
19. Human Herpes Virus
20. Prophylaxis against Poliomyelitis
21. Japanese encephalitis
22. Laboratory diagnosis of Malaria
23. Discuss various methods of detecting viral growth in cell culture
24. Von Magnus Phenomenon
25. Creeping eruption
26. Malignancies associated with Epstein-Baar Virus
27. Phage Typing
28. Define Bacteremia, Septicemia, Pyemia and Endotoxemia
29. How can the Virus be Isolated in the Laboratory?
30. Eijkman test
31. Superficial Mycoses
32. *Balantidium Coli*
33. Cutaneous and Genital warts
34. Rhinovirus Infection
35. *Coccidioidomycosis*
36. *Microfilaria*
37. Name the parasites that cause anemia Mention the type of anemia caused



38. What are free living amoebae? Name them
39. What are the media used for fungal cultivation?
40. Name the most common bacteria causing nosocomial infections
41. What is germ tube test?
42. What are calabar swellings? Which parasite causes this lesion?
43. What are the complications of Ascaris infection?
44. What is cysticercus cellulosae?
45. Name the parasites that produce operculated eggs
46. What is benign tertian malaria? Name the parasite that causes it
47. Tinea versicolor
48. Extraintestinal amoebiasis
49. Tissue culture in viruses
50. Ancylostoma duodenale
51. Prophylaxis of Influenza
52. Toxoplasma gondii
53. Mycetoma
54. Bacteriophage
55. Sporotrichosis
56. Laboratory diagnosis of poliomyelitis
57. Interferons – types and importance
58. Pathogenesis and complications of Measles
59. Viral haemorrhagic fevers
60. Suckling mice – Definition & uses in virology
61. Role of Cyclops in parasitic diseases
62. Larval forms of Diphyllbothrium latum
63. Cutaneous Larva migrans
64. Viviparous parasites
65. Dimorphic fungi
66. Significant bacteriuria
67. Name two Epstein-barr virus associated malignancies
68. What is antigenic shift?
69. Name the transmitting agent of Chikungunya
70. Name two hepatitis viruses producing chronic infection
71. Name two parasitic diseases in which man is the intermediate host
72. Name two opportunistic amoebae
73. Name two bile stained parasitic eggs
74. Name the infective stage of Ancylostoma duodenale
75. What is the pH of Sabourauds dextrose agar?
76. What is the use of Casoni test?
77. Name two opportunistic diseases associated with HIV





78. What is the normal range of CD count?
79. Name the transmitting agent of Yellow fever
80. What are Hypnozoites?
81. Name two hepatitis viruses associated with cirrhosis
82. Name two media used for fungal culture
83. Name the largest and the smallest tapeworms infecting humans
84. Name the infective stage of *Ancylostoma duodenale*
85. What is the pH of Sabourauds dextrose agar?
86. What is swimmers itch?
87. Dermatophytes
88. Otomycosis
89. Viral haemorrhagic fevers
90. Cytopathic effects
91. Lab diagnosis of Hepatitis C
92. Herpes zoster
93. Role of cyclops in parasitic diseases
94. Viviparous parasites
95. Free living amoeba
96. Significant bacteriuria
97. Viral inclusion bodies
98. Recent swine flu pandemic
99. Lab diagnosis of Hepatitis B infection
100. Viral gastroenteritis
101. Extra intestinal Amoebiasis
102. Visceral larva migrans
103. Bile stained eggs
104. Lab diagnosis of Filariasis
105. *Pneumocystis jirovecii*
106. Superficial mycoses
107. Name two contraindications for MMR vaccine
108. Name the transmitting agent of Yellow fever
109. What is Dane particle?
110. Name two human slow viral infections
111. Name a parasite transmitted by sexual contact
112. Name the skin test used for the diagnosis of Hydatid cyst
113. Name the definitive host of *Wuchereria bancrofti*
114. Name the causative agent of cerebral malaria
115. Name the mycotoxin produced by *Aspergillus flavus*
116. Name two antifungal agents
117. Viral plaques





118. Name four oncogenic viruses
119. Name four viruses transmitted through mosquito
120. Ectothrix
121. Classify fungi based on morphology
122. Name four dimorphic fungi
123. Diagnosis of congenital HIV infection
124. Fungal spores
125. Name four parasites do not require intermediate host
126. Name two viviparous nematode
127. Viral haemagglutinin
128. Polio vaccine
129. Cytomegalovirus
130. Chromomycosis
131. Mycotic keratitis
132. Giardiasis
133. Polymerase chain reaction
134. Role of vectors in transmission of infectious agents
135. Normal microbial flora
136. Trichinellosis
137. Classify inclusion bodies
138. Mention three antifungal agents
139. Live viral vaccine
140. Name two pigment producing fungi
141. Name two parasites infecting the eye
142. Germ tube test
143. Hepatitis markers
144. Name three blood borne viruses
145. Name the concentration methods of stool examination
146. Name four bile stained ova
147. Dimorphic fungi
148. Varicella zoster
149. Laboratory diagnosis of urinary tract infections
150. Dermatophytes
151. Free living amoebae
152. Extra intestinal amoebiasis
153. Prions
154. Universal precautions
155. Antigenic drift
156. Dengue virus
157. Name four dimorphic fungi





158. Name the medically important trematodes
159. Name the opportunistic viral infections in AIDS
160. Name the killed viral vaccines
161. Mention the diseases caused by Coxsackie virus
162. Diagram of *Balantidium coli*
163. Name four medically important candida
164. Name the parasites causing anaemia
165. Ectothrix and Endothrix infection of hair
166. Name the virus causing conjunctivitis
167. Viral cell cultures
168. Measles virus
169. Rota virus
170. Rhinosporidiosis
171. Cysticercosis
172. Concentration methods for stool EXAMINATION
173. Primary anaerobic meningo encephalitis
174. Laboratory diagnosis of HIV infection
175. Opportunistic fungal infections
176. Bacteriology of milk
177. Bachman Intradermal test
178. Oviparous nematodes
179. Free living amoebae
180. Deltavirus
181. Orf
182. Live viral vaccines
183. Germ tube test
184. Otomycosis
185. RT-PCR
186. Infection control policy
187. Bacteriophage
188. Prophylaxis of rabies
189. Oncogenes
190. Laboratory diagnosis of urinary tract infection
191. Superficial mycoses
192. Antibigram
193. Dimorphic fungi
194. *Cryptosporidium Parvum*
195. Examination of faeces for parasitic infection
196. Classification of Nematodes according to the habitat of adult worms





197. Cytopathic effect
198. Subcutaneous mycosis
199. Dengue virus
200. Life cycle of *Entamoeba histolytica*
201. Dermatophytes
202. *Cryptococcus neoformans*
203. *Toxoplasma gondii*
204. *Cysticercus Cellulosae*
205. Life cycle of *Ascaris Lumbricoidis*
206. Lab Diagnosis of Malaria
207. Three methods of cultivation of viruses
208. Viral interferons
209. Hepatitis markers
210. Complication of neural vaccine
211. Bile-Stained eggs
212. Germ Tube Technique
213. Diagram of *Trichomonas – Vaginalis*
214. MMR
215. Life cycle of *Balantidium – coli*
216. Visceral larva migrans
217. Name four fungi causing opportunistic mycosis
218. Fungi causing superficial mycosis
219. Classify inclusion bodies
220. Universal precautions
221. Draw the diagram of microfilaria
222. Name four parasites causing CNS infection
223. Name the concentration methods of stool EXAMINATION
224. Kopliks spots
225. Name the live viral vaccines
226. *Cryptosporidium*
227. Extra intestinal amoebiasis
228. Complications produced by *plasmodium falciparum*
229. Larva migrans
230. Casonis test
231. Diagnosis and prophylaxis of HN infection
232. Rhinosporidiosis
233. Prions
234. Interferon
235. Dimorphic fungi
236. Antigenic drift





237. Viral multiplication
238. Mycetoma
239. Interferons
240. Chikungunya virus
241. Free living amoebae
242. Life cycle of *Balantidium coli*
243. Life cycle of *taenia solium*
244. Stool examination of parasitic infections
245. Candidiasis
246. Dermatophytes
247. Morphology of HIV virus
248. Von magnus phenomenon
249. Write four differences between salk and sabin vaccines
250. Paul Bunnell test
251. Draw the morphology of penicillium
252. Name two pigment producing fungi
253. Life cycle of *taenia saginata*
254. Draw the diagram of ascaris egg
255. NNN Medium (Novy, Bicolle, Mcneal)
256. Name four opportunistic parasitic infections in AIDS
257. Name four DNA viruses
258. Draw and label a bacteriophage
259. Define definitive host Give two examples
260. Otomycosis
261. *Trichomonas Vaginalis*
262. Mention four species of candida
263. Complications of ascariasis (roundworm infestation)
264. Define an intermediate host
265. Mention three antifungal agents
266. Complication of dengue virus
267. Laboratory diagnosis of acute pyogenic meningitis
268. Japanese 'B' encephalitis
269. Opportunistic fungi
270. Nosocomial infection
271. Pathogenesis and laboratory diagnosis of Hydatid disease
272. Methods of HIV transmission
273. Exo erythrocytic schizogony
274. Laboratory diagnosis of fungal infections
275. Viral Haemorrhagic fevers
276. Varicella zoster





277. Morphology and laboratory diagnosis of kalaazar
278. Laboratory diagnosis of Urinary Tract Infection
279. Differences between ortho myxo and Paramyxo viruses
280. Sporotrichosis
281. Cryptosporidium parvum
282. Coxsackie Viruses
283. Universal Precautions
284. Primary amoebic meningoencephalitis
285. Cryptococcus neoformans
286. Microfilaria
287. Vaccines against polio myelitis
288. Four arbovirus infections prevalent in India
289. Delta Hepatitis agent
290. Draw the ovum of Enterobius vermicularis
291. Two parasites infecting the eye
292. Name two parasites causing (a) Anemia and (b) Visual larva migrans
293. Chlamydo spore
294. Name two fungi causing oculomycosis
295. Enumerate four dermatophytes
296. Four organisms causing Mycetoma
297. Describe the common types and prevention of hospital acquired infections
298. Dermatophytes
299. Prophylaxis against rabies
300. Laboratory diagnosis of intestinal amoebiasis
301. Cytopathogenic effect of viruses
302. Antigenic shift
303. Otomycosis
304. Name four intestinal nematodes
305. Spill management
306. Dimorphic fungi
307. Laboratory diagnosis of malaria
308. Blood culture
309. Congenital toxoplasmosis
310. Mucormycosis
311. Real time PCR
312. Post exposure prophylaxis of HIV
313. Latency in herpes simplex viral infections
314. Negative staining in mycology



315. Rabies prophylaxis
316. Laboratory diagnosis of candidiasis
317. Complications of falciparum malaria
318. Cryptococcosis
319. Amoebic liver abscess
320. Segregation of biomedical waste
321. Von magnus phenomenon
322. Herpes Zoster
323. Enumerate four fungi causing eumycetoma
324. Pulse polio immunization
325. Heterazan provocation test
326. Antigenic shift
327. Immune prophylaxis in polio
328. Laboratory diagnosis of dermatophytosis
329. Life cycle of plasmodium vivax
330. Chromoblastomycosis
331. Free living amoebae
332. Pyrexia of unknown origin
333. Primary cell cultures
334. Bacteriology of water
335. Reynold Braude phenomenon
336. Negri bodies
337. Occult filariasis
338. Antigenic drift
339. Post kala-azar dermal leishmaniasis
340. Cyclops
341. Tzanck smear
342. Germ tube test
343. Polio vaccine
344. Bacteriocins
345. Larva migrans
346. Subacute sclerosing panencephalitis
347. Specimen collection, transport and lab diagnosis of swine flu
348. Aspergillosis
349. Clean catch mid-stream urine
350. Infection control committee
351. Antibiotic sensitivity testing
352. Histoplasma capsulatum
353. Bio-medical waste management
354. Epidemic keratoconjunctivitis



355. Loa Loa
356. Lab diagnosis of malaria
357. Name four parasitic zoonotic diseases
358. Viral diarrhoea
359. Lumbar puncture and collection of CSF sample
360. Wood's lamp in mycology
361. Prion protein
362. Aedes aegypti as a vector
363. Prions
364. Aflatoxins
365. Reynolds braude phenomenon
366. Negri bodies
367. Sheathed microfilaria
368. Viral oncogenes
369. Japanese B encephalitis
370. Hepatitis vaccines
371. Hydatid disease
372. Histoplasmosis
373. Free living amoebae
374. Laboratory diagnosis of bloodstream infections
375. Life cycle of Trichomonas vaginalis
376. Otomycosis
377. Paul Bunnell test
378. Culture methods for Parasites
379. Plasmodium ovale
380. Bacteriocins
381. Tzanck smear
382. Name four Prion Diseases
383. Antigenic shift
384. Newer safe blood collection devices
385. Iodamoeba butschilli
386. Rhinosporidium seeberi

