

## PHARMACOLOGY FINAL 2024 (fall semester 6)

### Nota Bene!

1. All lecture notes & didactic materials You can find on:

<https://farmacologie.usmf.md/en/node/14228/pharmacology/didactic-materials>

2. PHARMACOLOGY BOOK:

[https://farmacologie.usmf.md/sites/default/files/inline-files/Pharmacology%20Book\\_0.pdf](https://farmacologie.usmf.md/sites/default/files/inline-files/Pharmacology%20Book_0.pdf)

### **DRUGS AFFECTING THE RESPIRATORY SYSTEM, CARDIOVASCULAR SYSTEM, DIGESTIVE SYSTEM**

#### *Respiratory*

1. Determine the thiolic derivative(s) used as expectorant(s):
2. Determine the proteolytic enzyme(s) used as expectorant(s):
3. Determine the stimulant(s) of surfactant secretion:
4. Determine the respiratory analeptic drug(s):
5. Determine the indication(s) for the use of analeptic drug(s):
6. Determine the indication(s) for secretostimulating expectorant(s):
7. Determine the mechanism(s) of action of acetylcysteine:
8. Determine the mechanism(s) of action of bromhexine:
9. Determine the indication(s) for secretolytic expectorant(s):
10. Determine the sympathomimetic(s) used as bronchodilator(s):
11. Determine the beta2-adrenomimetic(s) used as bronchodilator(s):
12. Determine the beta2-adrenomimetic(s) used in bronchial asthma attack(s):
13. Determine the antagonist(s) of leukotriene receptor(s) used in bronchial asthma:
14. Determine the M-cholinoblocker(s) used as bronchodilator(s):
15. Determine the effect(s) of M-cholinoblocker(s) used as bronchodilator(s):
16. Determine the indication(s) of M-cholinoblocker(s) used as bronchodilator(s):
17. Determine the adverse effect(s) of M-cholinoblocker(s) used as bronchodilator(s):
18. Determine the inhaled glucocorticoid(s) used in bronchial asthma:
19. Determine the mechanism(s) of action of methylxanthine(s) as bronchodilator(s):
20. Determine the indication(s) for methylxanthine(s) as bronchodilator(s):
21. Determine the drug(s) used to reduce alveolar-capillary permeability in pulmonary edema:
22. Determine the diuretic(s) used in the management of pulmonary edema:
23. Determine the ganglion-blocking drug(s) used to decrease arterial pressure in pulmonary edema:
24. Determine the narcotic analgesic(s) used for dyspnea relief in pulmonary edema:
25. Determine the drug(s) used for acid-base deregulation in respiratory failure:
26. Determine the indication(s) for glucocorticoid(s) in pulmonary edema treatment:
27. Determine the contraindication(s) for the use of codeine in children:
28. Determine the sympathomimetic drug(s) with both alpha and beta activity used in asthma:
29. Determine the effect(s) of M-cholinoblocker(s) in reducing bronchial secretion(s):
30. Determine the antagonist(s) of 5-lipoxygenase used in asthma management:

### **CARDIOVASCULAR**

#### *Antiarrhythmics.*

31. Determine the antiarrhythmic(s) from group 1A:
32. Determine the antiarrhythmic(s) from group 1B:
33. Determine the indication(s) of antiarrhythmic(s) of group 1B:

34. Determine the antiarrhythmic(s) from group 1C:
35. Determine the mechanism(s) of action of sodium channel blocker(s) used as antiarrhythmic(s):
36. Determine the beta-adrenoblocker(s) used as antiarrhythmic(s):
37. Determine the indication(s) of beta-adrenoblocker(s):
38. Determine the side effect(s) of beta-adrenoblocker(s):
39. Determine the antiarrhythmic(s) that block(s) calcium channels:
40. Determine the antiarrhythmic(s) that block(s) potassium channels:
41. Determine the mechanism(s) of action of amiodarone:
42. Determine the indication(s) of amiodarone:
43. Determine the indication(s) of adenosine:
44. Determine the side effect(s) of amiodarone:
45. Determine the mechanism(s) of action of adenosine:
46. Determine the beta-adrenoblocker(s) used as class II antiarrhythmic(s):
47. Determine the indication(s) for beta-adrenoblocker(s) in arrhythmia(s):
48. Determine the antiarrhythmic drug(s) of choice for ventricular fibrillation:
49. Determine the antiarrhythmic drug(s) used for atrial fibrillation:
50. Determine the beta1-selective adrenoblocker(s) used in arrhythmia(s):
51. Determine the indication(s) for sotalol in arrhythmia(s):
52. Determine the potassium channel blocker(s) used for atrial flutter:

***Cardiac glycosides and cardiostimulants.***

53. Determine the inotropic-positive drug(s):
54. Determine the Na,K-ATPase inhibitor(s):
55. Determine the mechanism(s) of action of Na,K-ATPase inhibitor(s):
56. Determine the effect(s) of cardiac glycosides on the functions of the heart:
57. Determine the hemodynamic effect(s) of cardiac glycosides:
58. Determine the indication(s) for the use of Na,K-ATPase inhibitor(s):
59. Determine the phosphodiesterase inhibitor(s) with direct positive inotropic effect(s):
60. Determine the mechanism(s) of action of amrinone:
61. Determine the effect(s) of amrinone:
62. Determine the mechanism(s) of action of levosimendan:
63. Determine the effect(s) of levosimendan:
64. Determine the mechanism(s) of action of positive inotropic drug(s):
65. Determine the direct-acting positive inotropic drug(s):
66. Determine the indirect-acting positive inotropic drug(s):
67. Determine the role of digoxin in atrial fibrillation:
68. Determine the mechanism(s) of action of cardiac glycosides on Na,K-ATPase:
69. Determine the effect(s) of cardiac glycosides on intracellular calcium levels:
70. Determine the indication(s) for digoxin:
71. Determine the phosphodiesterase inhibitor(s) with inotropic-positive effect(s):
72. Determine the effect(s) of levosimendan:
73. Determine the mechanism(s) of action of beta-adrenomimetic(s) in acute heart failure:

***Antianginal drugs, cerebral and peripheral vasodilators. Antimigrainous drugs. Venotrops. Vasodilators (Antihypertensives) and vasoconstrictors (Antihypotensive).***

74. Determine the antianginal drug(s) that decrease(s) myocardial oxygen demand and increase(s) myocardial oxygen delivery:
75. Determine the antianginal drug(s) that decrease(s) myocardial oxygen demand:

76. Determine the antithrombotic agent(s) used in the treatment of angina pectoris:
77. Determine the drug(s) used for cessation of angina pectoris attack(s):
78. Determine the effect(s) of organic nitrate(s):
79. Determine the indication(s) for organic nitrate(s):
80. Determine the mechanism(s) of antianginal action of beta-adrenoblocker(s):
81. Determine the antianginal mechanism(s) of action of calcium channel blocker(s):
82. Determine the indication(s) of calcium channel blocker(s):
83. Determine the side effect(s) of dihydropyridine calcium channel blocker(s):
84. Determine the side effect(s) of non-dihydropyridine calcium channel blocker(s):
85. Determine the effect(s) of calcium channel blocker(s):
86. Determine the effect(s) of ranolazine:
87. Determine the antianginal drug(s) that increase(s) myocardial oxygen delivery:
88. Determine the effect(s) of beta-blocker(s):
89. Determine the indication(s) of beta-blocker(s):
90. Determine the myotropic antihypertensive(s):
91. Determine the angiotensin-converting enzyme (ACE) inhibitor(s):
92. Determine the dihydropyridine calcium channel blocker(s):
93. Determine the potassium channel activator(s):
94. Determine the arteriodilator(s):
95. Determine the arterio-venodilator drug(s):
96. Determine the effect(s) of centrally acting antihypertensive(s):
97. Determine the mechanism(s) of action of centrally acting antihypertensive preparation(s):
98. Determine the mechanism(s) of action and effect(s) of alpha-adrenoblocker(s) used as antihypertensive(s):
99. Determine the side effect(s) of alpha-adrenoblocker(s) used as antihypertensive(s):
100. Determine the indication(s) of beta-adrenoblocker(s):
101. Determine the side effect(s) of beta-adrenoblocker(s):
102. Determine the side effect(s) of non-dihydropyridine calcium channel blocker(s):
103. Determine the indication(s) of dihydropyridine calcium channel blocker(s):
104. Determine the adverse reaction(s) of angiotensin-converting enzyme (ACE) inhibitor(s):
105. Determine the indication(s) of angiotensin receptor blocker(s):
106. Determine the effect(s) of sodium nitroprusside:
107. Determine the effect(s) of potassium channel opener(s):
108. Determine the preparation(s) used in hypertensive crisis(es):
109. Determine the vasoconstrictor(s) used as antihypotensive(s):
110. Determine the antihypotensive(s) that increase(s) cardiac output:
111. Determine the indication(s) of antihypotensive(s) from alpha-beta-adrenomimetic(s):
112. Determine the effect(s) of antihypotensive(s) from alpha-adrenomimetic(s):
113. Determine the mechanism(s) of action of isothiurea derivative(s):
114. Determine the effect(s) of isothiurea derivative(s):
115. Determine the effect(s) of antihypotensive(s) from beta-1-adrenomimetic(s):
116. Determine the indication(s) of antihypotensive(s) from beta-1-adrenomimetic(s):
117. Determine the indication(s) of ergot alkaloid derivative(s) as cerebral vasodilator(s):
118. Determine the preparation(s) used in migraine attack(s):
119. Determine the effect(s) of long-acting nitrate(s) in angina treatment:
120. Determine the mechanism(s) of action of molsidomine in nitrate intolerance:
121. Determine the potassium channel opener(s) used in refractory angina:

122. Determine the role of ivabradine in reducing myocardial oxygen demand:
123. Determine the indication(s) for trimetazidine in ischemia-reperfusion injury:
124. Determine the mechanism(s) of action of ranolazine in angina treatment:
125. Determine the calcium channel blocker(s) used in Prinzmetal angina:
126. Determine the effect(s) of beta-blocker(s) in silent myocardial ischemia:
127. Determine the contraindication(s) for the use of nitrate(s) in myocardial infarction:
128. Determine the role of angiotensin-converting enzyme (ACE) inhibitor(s) in heart failure:
129. Determine the role of angiotensin receptor blocker(s) (ARBs) in diabetic nephropathy:
130. Determine the adverse effect(s) of hydralazine in chronic hypertension:
131. Determine the use of nimodipine in preventing cerebral vasospasm:
132. Determine the mechanism(s) of action of sodium nitroprusside as a vasodilator:
133. Determine the side effect(s) of calcium channel blocker(s) in hypertension management:
134. Determine the role of potassium channel opener(s) in refractory hypertension:
135. Determine the effect(s) of pentoxifylline in peripheral artery disease:
136. Determine the mechanism(s) of action of ergot alkaloid(s) in cerebrovascular disorder(s):
137. Determine the indication(s) for centrally acting alpha-2 agonist(s) in hypertension:
138. Determine the mechanism(s) of action of clonidine as an antihypertensive agent:
139. Determine the side effect(s) of alpha-adrenergic blocker(s) in hypertension therapy:
140. Determine the mechanism(s) of action of alpha-1 blocker(s) in hypertension:
141. Determine the side effect(s) of beta-adrenergic blocker(s) in ischemic heart disease:
142. Determine the contraindication(s) for the use of calcium channel blocker(s):
143. Determine the role of nitric oxide donor(s) in vasodilation:
144. Determine the mechanism(s) of action of captopril among ACE inhibitor(s):
145. Determine the indication(s) for the use of minoxidil as an antihypertensive:
146. Determine the mechanism(s) of action of methyldopa in pregnancy-induced hypertension:
147. Determine the effect(s) of thiazide-like diuretic(s) in blood pressure control:

***Diuretics. Drugs which are used in nephrolithiasis and gout treatment. drugs with influence upon acid-base balance.***

148. Determine the diuretic(s) acting in the proximal convoluted tubule (PCT):
149. Determine the diuretic(s) acting in the distal convoluted tubule:
150. Determine the diuretic(s) acting in the collecting tubules:
151. Determine the osmotic diuretic(s):
152. Determine the diuretic agent(s) that act(s) by competing with aldosterone for its cytosolic receptor(s):
153. Determine the diuretic(s) that inhibit(s) carbonic anhydrase:
154. Determine the diuretic(s) that promote(s) osmotic diuresis:
155. Determine the noncompetitive aldosterone antagonist(s):
156. Determine the very potent diuretic(s) (10-35% glomerular filtrate in the urine):
157. Determine the moderately potent diuretic(s) (5-10% glomerular filtrate in the urine):
158. Determine the weak diuretic(s) (low efficacy) (5% of the glomerular filtrate in the urine):
159. Determine the fast and short-acting diuretic(s):
160. Determine the diuretic(s) of medium duration of action:
161. Determine the mechanism(s) of action of osmotic diuretic(s):

162. Determine the indication(s) for osmotic diuretic(s):
163. Determine the side effect(s) of osmotic diuretic(s):
164. Determine the mechanism(s) of action of loop diuretic(s):
165. Determine the effect(s) of loop diuretic(s):
166. Determine the indication(s) for loop diuretic(s):
167. Determine the side effect(s) of loop diuretic(s):
168. Determine the mechanism(s) of action of thiazide and thiazide-like diuretic(s):
169. Determine the effect(s) of thiazide and thiazide-like diuretic(s):
170. Determine the indication(s) for thiazide and thiazide-like diuretic(s):
171. Determine the mechanism(s) of action of spironolactone:
172. Determine the effect(s) of competitive aldosterone antagonist(s):
173. Determine the indication(s) of spironolactone:
174. Determine the side effect(s) of spironolactone:
175. Determine the antidote drug(s):
176. Determine the mechanism(s) of action and effect(s) of colchicine:
177. Determine the effect(s) of dextrans:
178. Determine the indication(s) of human albumin:
179. Determine the side effect(s) of human albumin:
180. Determine the indication(s) of sodium bicarbonate:
181. Determine the indication(s) of L-arginine hydrochloride:
182. Determine the diuretic(s) used in the treatment of glaucoma:
183. Determine the paradoxical effect(s) of thiazide diuretic(s) in diabetes insipidus:
184. Determine the osmotic diuretic(s) used to reduce intracranial pressure:
185. Determine the role of loop diuretic(s) in acute pulmonary edema:
186. Determine the diuretic(s) contraindicated in hypercalcemia:
187. Determine the side effect(s) of thiazide diuretic(s) in long-term use:
188. Determine the mechanism(s) of action of potassium-sparing diuretic(s):
189. Determine the role of acetazolamide in altitude sickness:
190. Determine the effect(s) of diuretics on electrolyte balance:
191. Determine the diuretic(s) of choice for metabolic alkalosis:

***Drugs affecting the gastro-intestinal functions***

192. Determine the preparation(s) of pancreatic enzyme(s):
193. Determine the indication(s) for pancreatic enzyme preparation(s):
194. Determine the group(s) of drugs used in gastric ulcer disease:
195. Determine the H<sub>2</sub>-histaminoblocker(s):
196. Determine the mechanism(s) of action of H<sub>2</sub>-histaminoblocker(s):
197. Determine the indication(s) for H<sub>2</sub>-histaminoblocker(s):
198. Determine the side effect(s) of H<sub>2</sub>-histaminoblocker(s):
199. Determine the proton pump inhibitor(s):
200. Determine the mechanism(s) of action of proton pump inhibitor(s):
201. Determine the indication(s) for proton pump inhibitor(s):
202. Determine the indication(s) for prostaglandin analogue(s):
203. Determine the systemic antacid(s):
204. Determine the non-systemic antacid(s):
205. Determine the side effect(s) of systemic antacid(s):
206. Determine the prokinetic(s):
207. Determine the indication(s) of prokinetic(s):
208. Determine the antiemetic agent(s):
209. Determine the mechanism(s) of action of antiemetic drug(s):

210. Determine the indication(s) of antiemetic drug(s):
211. Determine the antiflatulent drug(s):
212. Determine the bulk (volume) laxative(s):
213. Determine the mechanism(s) of action of bulk (volume) laxative(s):
214. Determine the indication(s) for bulk (volume) laxative(s):
215. Determine the osmotic purgative(s):
216. Determine the indication(s) for osmotic purgative(s):
217. Determine the irritating (stimulant) purgative agent(s):
218. Determine the mechanism(s) of action of irritating (stimulant) purgative(s):
219. Determine the indication(s) for irritating (stimulant) purgative(s):
220. Determine the spasmolytic(s):

## **CHEMOTHERAPEUTIC PREPARATIONS**

### *Antibiotics*

221. Select the group(s) of antibiotics beta-lactam(s):
222. Select the beta-lactamase inhibitor(s):
223. Select the mechanism(s) of action of antibiotic(s) beta-lactam(s):
224. Select the biosynthetic penicillin(s):
225. Select the side effect(s) of penicillin(s):
226. Choose the correct association(s) between the cephalosporin(s) and their generation(s):
227. Select the carbapenem antibiotic(s):
228. Select the spectrum of action of carbapenem(s):
229. Select the monobactam antibiotic(s):
230. Choose the correct association(s) between aminoglycoside(s) and their generation(s):
231. Select the spectrum of action of aminoglycoside(s):
232. Select the mechanism(s) of action of aminoglycoside(s):
233. Select the side effect(s) of aminoglycoside(s):
234. Select the macrolide(s):
235. Select the spectrum of action of macrolide(s):
236. Select the mechanism(s) of action of the macrolide(s):
237. Select the indication(s) of the macrolide(s):
238. Select the lincosamide(s):
239. Select the mechanism(s) of action of the lincosamide(s):
240. Select the tetracycline antibiotic(s):
241. Select the spectrum of action of tetracycline(s):
242. Select the indication(s) for tetracycline(s):
243. Select the side effect(s) of tetracycline(s):
244. Select the antibiotic(s) from amphenicol derivative(s) group:
245. Select the spectrum of action of the antibiotic(s) from amphenicol derivative(s) group:
246. Select the mechanism(s) of action of antibiotic(s) from amphenicol derivative(s) group:
247. Select the side effect(s) of antibiotic(s) from amphenicol derivative(s) group:
248. Select the glycopeptide antibiotic(s):
249. Select the mechanism(s) of action of glycopeptide antibiotic(s):
250. Select the indication(s) for glycopeptide antibiotic(s):
251. Select the side effect(s) of glycopeptide antibiotic(s):



252. Select the mechanism(s) of action of polymyxin(s):
253. Select the spectrum of action of polymyxin(s):
254. Select the side effect(s) of polymyxin(s):
255. Select the ansamycin antibiotic(s):
256. Select the mechanism(s) of action of ansamycin(s):
257. Select the indication(s) of ansamycin(s):
258. Select the spectrum of action of glycopeptide antibiotic(s):

***Antibacterial sulfonamides. Antibacterial substances with diverse chemical structures.***

259. Select the systemic antibacterial sulphonamide(s):
260. Select the sulphonamide(s) with intestinal action:
261. Select the sulphonamide(s) with local action:
262. Determine the side effect(s) of antibacterial sulphonamide(s):
263. Determine the combined systemic antibacterial sulphonamide(s):
264. Select the nitrofurantoin derivative(s):
265. Determine the mechanism(s) of action of nitrofurantoin derivative(s):
266. Determine the indication(s) of nitrofurantoin derivative(s):
267. Determine the side effect(s) of nitrofurantoin derivative(s):
268. Determine the non-fluorinated quinolone(s):
269. Indicate the mechanism(s) of action of non-fluorinated quinolone(s):
270. Indicate the spectrum of action of non-fluorinated quinolone(s):
271. Choose the indication(s) for non-fluorinated quinolone(s):
272. Select the fluoroquinolone(s):
273. Select the mechanism(s) of action of fluoroquinolone(s):
274. Determine the nitroimidazole derivative(s):
275. Determine the spectrum of action of oxazolidinone(s):
276. Determine the indication(s) for oxazolidinone(s):
277. Choose the 8-oxyquinoline derivative(s):
278. Indicate the mechanism(s) of action of 8-oxyquinoline derivative(s) with systemic action:

***Antituberculous, antileprosy drugs. Antispirochetosis. Antihelminthic agents.***

279. Determine the antituberculous drug(s):
280. Select the mechanism(s) of action of antituberculous drug(s):
281. Determine the anti-leprosy drug(s):
282. Select the mechanism(s) of action of anti-leprosy drug(s):
283. Select the drug(s) used in malaria:
284. Select the preparation(s) used in trichomoniasis:
285. Select the preparation(s) used in lamblia infection:
286. Select the drug(s) used in toxoplasmosis:
287. Determine the preparation(s) used in intestinal nematodiasis:
288. Determine the preparation(s) used in intestinal cestode(s):
289. Determine the mechanism(s) of action of preparation(s) used in the treatment of intestinal cestode(s):
290. Determine the preparation(s) used in extraintestinal helminthiasis:
291. Determine the mechanism(s) of action of preparation(s) used in the treatment of extraintestinal helminthiasis:
292. Select the preparation(s) used in the treatment of infections caused by spirochete(s):

***Antiviral. Antifungal.***

293. Choose the antiviral drug(s) active against influenza viruses:
294. Select the indication(s) for anti-influenza drug(s):
295. Select the mechanism(s) of action of antiherpetic drug(s):
296. Select the antiviral antiherpes drug(s):
297. Select the antiviral antiretroviral drug(s):
298. Select the mechanism(s) of action of antiretroviral drug(s):
299. Select the indication(s) for antiretroviral antiviral(s):
300. Select the antiviral drug(s) used in viral hepatitis B:
301. Select the antiviral drug(s) used in viral hepatitis C:
302. Select the medicine(s) used in COVID-19:
303. Determine the spectrum of action of echinocandin(s):
304. Determine the mechanism(s) of action of echinocandin(s):
305. Select the antifungal(s) used in dermatomycoses:

### **ANTI-INFLAMMATORY, ANTIALLERGIC**

306. Determine the non-selective non-steroidal anti-inflammatory drug(s):
307. Determine the selective COX-2 inhibitor(s):
308. Determine the effect(s) of non-steroidal anti-inflammatory drug(s):
309. Determine the mechanism(s) of action of non-steroidal anti-inflammatory drug(s):
310. Determine the indication(s) for non-steroidal anti-inflammatory drug(s):
311. Determine the side effect(s) of non-steroidal anti-inflammatory drug(s):
312. Determine the mechanism(s) of action of steroidal anti-inflammatory drug(s):
313. Determine the disease-modifying antirheumatic drug(s) (DMARDs):
314. Determine the mechanism(s) of action of disease-modifying antirheumatic drug(s):
315. Determine the indication(s) of disease-modifying antirheumatic drug(s):
316. Determine the group(s) and antiallergic drug(s) that inhibit the release of mediators:
317. Determine the H1-antihistamine(s) from generation I:
318. Determine the H1-antihistamine(s) from generation II:
319. Determine the H1-antihistamine(s) from generation III:
320. Determine the effect(s) of H1-antihistamine(s) from generation I:
321. Determine the indication(s) of H1-antihistamine(s):
322. Determine the side effect(s) of H1-antihistamine(s) from generation I:
323. Determine the side effect(s) of H1-antihistamine(s) from generation II:
324. Determine the indication(s) for glucocorticoid(s) as antiallergic(s):
325. Determine the antileukotriene agent(s):
326. Determine the immunomodulatory drug(s) of bacterial origin:
327. Determine the contraindication(s) for non-steroidal anti-inflammatory drug(s):
328. Determine the role of selective COX-2 inhibitor(s) in reducing gastrointestinal side effect(s):
329. Determine the role of glucocorticoid(s) in autoimmune disease(s):
330. Determine the side effect(s) of long-term glucocorticoid therapy:
331. Determine the indication(s) for disease-modifying antirheumatic drug(s) (DMARDs):
332. Determine the mechanism(s) of action of methotrexate as a disease-modifying antirheumatic drug (DMARD):
333. Determine the indication(s) for antileukotriene agent(s):
334. Determine the difference(s) between first- and second-generation H1-antihistamine(s):



335. Determine the side effect(s) of selective COX-2 inhibitor(s):.

### **HORMONAL PREPARATIONS**

336. Determine the hormonal preparation(s) of the hypothalamus:
337. Determine the mechanism(s) of action of hormonal preparation(s) of the thyroid gland:
338. Determine the effect(s) of hormonal preparation(s) of the thyroid gland:
339. Determine the indication(s) for hormonal preparation(s) of the thyroid gland:
340. Determine the side effect(s) of hormonal preparation(s) of the thyroid gland:
341. Determine the antithyroid preparation(s):
342. Determine the mechanism(s) of action of antithyroid drug(s):
343. Determine the indication(s) for thioamide antithyroid drug(s):
344. Determine the indication(s) for iodide preparation(s) as antithyroid drug(s):
345. Determine the sulfonylurea oral antidiabetic(s):
346. Determine the DPP-IV inhibitor(s) oral antidiabetic(s):
347. Determine the meglitinide antidiabetic agent(s):
348. Determine the GLP-1 agonist oral antidiabetic(s):
349. Determine the tetrasaccharide ( $\alpha$ -glucosidase inhibitor) oral antidiabetic(s):
350. Determine the oral antidiabetic(s) that inhibit carbohydrate absorption:
351. Determine the oral antidiabetic(s) that promote glucose utilization:
352. Determine the effect(s) of insulin preparation(s) on carbohydrate metabolism:
353. Determine the biphasic human insulin preparation(s):
354. Determine the ultra-rapid and ultra-short insulin preparation(s):
355. Determine the basal human insulin preparation(s):
356. Determine the mechanism(s) of action of insulin preparation(s):
357. Determine the side effect(s) of insulin preparation(s):
358. Determine the absolute and relative indication(s) of insulin preparation(s):
359. Determine the mechanism(s) of action of sulfonylurea(s):
360. Determine the mechanism(s) of action of meglitinide(s):
361. Determine the mechanism(s) of action of thiazolidinedione(s):
362. Determine the mechanism(s) of action of aldoreductase inhibitor(s):
363. Determine the glucocorticoid(s) for intravenous administration:
364. Determine the glucocorticoid(s) for inhalation:
365. Determine the glucocorticoid(s) according to their potency:
366. Determine the effect(s) of glucocorticoid(s):
367. Determine the effect(s) of mineralocorticoid(s):
368. Determine the estrogen preparation(s):
369. Determine the indication(s) for estrogen preparation(s):
370. Determine the preparation(s) of semisynthetic progestin(s):
371. Determine the effect(s) of progesterone preparation(s):
372. Determine the preparation(s) of semisynthetic androgen(s):
373. Determine the vaginal contraceptive(s):
374. Determine the contraceptive preparation(s) - subcutaneous implant(s):
375. Determine the role of hypothalamic hormone(s) in pituitary regulation:
376. Determine the mechanism(s) of action of levothyroxine in hypothyroidism:
377. Determine the indication(s) for radioactive iodine therapy:
378. Determine the adverse effect(s) of methimazole:
379. Determine the contraindication(s) for sulfonylurea use in diabetes:
380. Determine the role of GLP-1 receptor agonist(s) in weight loss management:
381. Determine the side effect(s) of  $\alpha$ -glucosidase inhibitor(s) in diabetic treatment:

382. Determine the mechanism(s) of action of SGLT-2 inhibitor(s):
383. Determine the role of basal insulin:
384. Determine the effect(s) of mineralocorticoid receptor antagonist(s) in hypertension:
385. Determine the role of progesterone in endometrial protection:
386. Determine the mechanism(s) of action of combined oral contraceptive(s):
387. Determine the adverse effect(s) of estrogen-based contraceptive(s):
388. Determine the indication(s) for subdermal contraceptive(s): implants.