

**The Questionnaire of the State Examination in Cardiology Department of Cardiology of the  
Faculty of General Medicine 2018/2019 academic year**

1. Electrocardiography (ECG). The Basics of ECG. ECG waveforms and intervals, the main ECG leads, normal ECG.
2. The ECG characteristics of cardiac enlargement and hypertrophies.
3. The classification and mechanisms of ventricular arrhythmias.
4. Ectopic rhythms caused by re-entry mechanism (supraventricular and ventricular extrasystoles).
5. Paroxysmal ventricular tachycardia, types and treatment approaches.
6. Atrial fibrillation, the types and treatment approaches.
7. Atrial flutter, the types and treatment approaches.
8. Sinoatrial block, intra-atrial block.
9. Atrioventricular (AV) blocks. I, II, III degree AV blocks.
10. Intraventricular conduction disturbances. The complete left bundle branch block (LBBB) and right bundle branch block (RBBB).
11. Ventricular pre-excitation syndrome. Wolf-Parkinson-White (WPW) Syndrome.
12. The classification of antiarrhythmic drugs (Vaughan-Williams).
13. ECG changes during myocardial ischemia, injury and necrosis: ECG dynamics during acute myocardial infarction, ECG signs of ventricular aneurysm.
14. Diagnostic significance and indications for ECG exercise tests: 24-hour Holter monitor test.
15. Chronic heart failure, classification, clinical symptoms, diagnosis and treatment.
16. Intensive cardiac care and reanimation in cardiology. The physician's approach during circulatory arrest. Cardiopulmonary resuscitation (CPR). Evaluation and management of the condition, the realization approaches of urgent procedures.
17. The treatment of acute cardiac failure according to the level of severity.
18. Ischemic heart disease (IHD). Angina. Etiology, pathogenesis, classification, clinical presentation, the characteristics of pain, the ECG and stress ECG diagnostics of stable angina.
19. The classification of anti-ischemic drugs. The contemporary treatment of ischemic heart disease.
20. The indications for invasive procedures and surgical treatment during ischemic heart disease.
21. Myocardial infarction (MI). Etiology, pathogenesis, classification, diagnostics, clinical symptoms (typical and atypical forms) and differential diagnosis. STEMI and non-STEMI. ECG diagnostics of myocardial infarction, ECG changes.
22. Acute heart failure: pulmonary edema and shock.
23. The treatment of non-complicated myocardial infarction. The indications of urgent percutaneous coronary intervention (PTCA) and coronary bypass surgery.
24. The complications of MI, acute cardiac failure, the evaluation of severity.
25. The arrhythmic complications of acute MI. Ventricular arrhythmias, ventricular tachycardias, prevention and treatment.
26. Management of antiplatelet and anticoagulant agents in acute MI.

27. The general principles of anti-ischemic drug therapy in patients with IHD.
28. Arterial hypertension. Risk factors, pathogenesis, JNC 6-7 classification, clinical presentation, complications, diagnosis.
29. The pharmacological management of arterial hypertension. Classification of antihypertensive drugs. The selection of optimal drug therapy in different clinical situations.
30. Hypertensive crisis. definition, clinical presentation and treatment principles.
31. Secondary Arterial Hypertension. Classification, clinical characteristics, differential diagnosis, principles of pharmacological therapy.
32. Renal symptomatic (secondary) arterial hypertension. Differential diagnosis, treatment principles.
33. Endocrine symptomatic (secondary) arterial hypertension. Differential diagnosis, treatment principles.
34. Congenital Heart Diseases. Classification. Patent ductus /Botallo/ arteriosus (PDA).
35. Atrial septal defect (ASD). The instrumental diagnostic methods. Indications for surgical treatment. The pathogenesis of hemodynamical disorders, clinical presentation, symptomology, diagnosis.
36. Ventricular septal defects (VSD), types. The instrumental diagnostic methods. Indications for surgical treatment. The pathogenesis of hemodynamical disorders, clinical presentation, symptomology, diagnosis.
37. Coarctation of aorta. The instrumental diagnostic methods. Indications for surgical treatment. The pathogenesis of hemodynamical disorders, clinical presentation, symptomology, diagnosis.
38. Mitral valves prolapse. Diagnosis. Indications for surgical treatment.
39. Mitral stenosis. Hemodynamics, clinical presentations, complications, treatment.
40. Mitral insufficiency (MI). Hemodynamics, clinical presentations, complications, treatment.
41. Aortic stenosis. Etiology. Hemodynamics, clinical presentations, echocardiographic assessment of severity, complications, treatment.
42. Aortic insufficiency (AI). Hemodynamics, clinical presentations, complications, treatment.
43. Myocarditis. Etiology, pathogenesis, clinical presentation, diagnosis, possible outcomes, complications.
44. Pericarditis. Etiology, pathophysiology, clinical types, diagnosis, differential diagnosis, principles of pharmacological treatment. Indications for pericardiocentesis.
45. Dilated cardiomyopathy. Morphology, pathophysiology, etiopathogenesis, types, clinical symptoms, diagnosis, differential diagnosis, treatment, prognosis.
46. Hypertrophic cardiomyopathy. Morphology, clinical symptoms, diagnostic parameters, differential diagnosis, complications, treatment.
47. Restrictive cardiomyopathy (Endomyocardial fibrosis, Loffler's endocarditis), pathomorphology, clinical symptoms, treatment.
48. Infective endocarditis. Etiology, pathogenesis, clinical symptoms, types

according to disease course, complications, differential diagnosis and diagnosis.

49. Infective endocarditis. Principles of pharmacological therapy, indications for surgical treatment, prognosis and prevention.

Literature:

Number 1 – 7, 9 - 11, 13, 15 – 19 themes from Harrison`s Internal Medicine 19th ed.,

Number 8, 12 and 20 themes from Kanu Chatterjee 2013, first edication.

Number 31,32,33 theme is provided by the Departament of Cardiology.

Chairman of Cardiology Department

Professor, MD,PhD Sisakyan H.S.