

## CARDIOLOGY

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**1) Major reversible risk factors for coronary artery disease include:**

1. arterial hypertension; \*
2. age;
3. gender;
4. diabetes mellitus. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**2) Attack of angina occurs due to:**

1. increase in left ventricle wall tension; \*
2. decrease in blood pressure;
3. coronary blood flow reduction; \*
4. accelerated heart rate.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**3) Typical duration of the anginal pain:**

1. 2-15 minutes; \*
2. 1-1,5 hours;
3. 20-30 minutes;
4. 24 hours.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**4) Increase in heart rate in patients with angina pectoris leads to:**

1. increase in oxygen supply;
2. increase in CO<sub>2</sub> supply;
3. increase in oxygen requirements; \*
4. decrease in oxygen requirements.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**5) Characteristics quality of chest pain in patient with angina:**

1. "pressurelike"; \*
2. sharp;
3. dull ache;
4. burning;
5. squeezing. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**6) Unstable angina includes:**

1. new onset angina (de novo); \*

2. increasing angina (crescendo); \*
3. angina developing within 2 weeks of AMI (postinfarction angina); \*
4. angina pectoris Class III by the CCS.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**7) Angina pectoris Class I by the CCS (Canadian Cardiovascular Society Classification System) is characterized by:**

1. anginal attack occurring during running; \*
2. angina occurring on walking at a normal pace;
3. anginal pain occurring in cold, or in wind;
4. rare anginal attack occurring at rest.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**8) Drugs used as first-line therapy in patients with stable angina pectoris:**

1. analgesic;
2.  $\beta$ -blockers; \*
3. calcium antagonists;
4. antiplatelet drugs; \*
5. angiotensin converting enzyme inhibitor.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**9) Selective beta-blockers are:**

1. atenolol; \*
2. propranolol;
3. metoprolol; \*
4. papaverin;
5. riboxin.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**10) In patients with angina pectoris effect of nitroglycerine is connected with:**

1. decrease in heart rate
2. dilation of coronary arteries\*
3. dilation of peripheral veins \*
4. direct analgesic effect
5. release of NO \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**11) Typical signs of Prinzmetal's angina:**

1. elevation of CK-MB in blood;
2. transient ST-segment elevation; \*

3. spasm of major coronary vessel; \*
4. favorable prognosis.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**12) Invasive testing in ischemic heart disease includes:**

1. stress imaging studies;
2. ambulatory ECG monitoring;
3. ventriculography; \*
4. intracoronary ultrasound; \*
5. coronary angiography. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**13) Indications for CABG:**

1. left main obstruction; \*
2. three-vessels disease; \*
3. 50% distal stenosis of coronary artery.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**14) Noninvasive testing in ischemic heart disease includes:**

1. myocardium scintigraphy \*
2. stress-echocardiography\*
3. ambulatory ECG monitoring \*
4. ventriculography
5. treadmill ECG test \*
6. coronary angiography.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**15) Lifestyle measures recommended for patients with angina pectoris are:**

1. smoking cessation \*
2. statins administration
3. physical exercise \*
4. weight normalisation \*
5. vitamins intake.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**16) Pain in angina pectoris is:**

1. pain during deep breathing,
2. pain relieved by antacids,
3. pain relieved by nitrates \*
4. pain which patient can be distracted from.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**17) Contraindications for stress testing are:**

1. acute myocardial infarction \*
2. diabetes mellitus
3. ventricular tachycardia\*
4. single atrial extrasystoles
5. acute pericarditis or myocarditis.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**18) Stress test can be stopped if:**

1. ischemic changes occur on ECG \*
2. ECG remains unchanged during one minute
3. excessive increase of blood pressure \*
4. occurrence of chest pain \*
5. increase of heart rate up to 120 per minute.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**19) Positive (ischemic) response during exercise test is characterized by:**

1. occurrence of typical anginal chest pain; \*
2. ST-segment depression on 0,5 mm;
3. ST-segment depression greater than 2 mm; \*
4. achievement of submaximal heart rate.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**20) Antiaggregants are:**

1. aspirin \*
2. heparin
3. clopidigrel (plavix),\*
4. analgin.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**21) Processes leading to development of myocardial ischemia:**

1. coronary atherosclerosis \*
2. endothelial dysfunction of coronary arteries
3. spasm of coronary arteries \*
4. intracoronary thrombus formation \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**22) Non modifiable risk factors of IHD are:**

1. smoking
2. excessive intake of fatty food
3. age more than 40 years \*
4. dyslipidemia
5. sex (gender) \*
6. hypodynamia
7. hereditary predisposition \*
8. obesity

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**23) IHD by WHO classification include:**

1. atrial fibrillation
2. angina pectoris \*
3. arrhythmias \*
4. acute myocardial infarction \*
5. acute coronary syndrome
6. heart failure\*
7. old myocardial infarction (postinfarction cardiosclerosis) \*
8. sudden cardiac death \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**24) Chest pain in angina is characterized by:**

1. attack character \*
2. sharp or stabbing pain occurring during cough or deep breathing
3. pain radiating in legs
4. pricking pain in one point
5. pain during physical exertion \*
6. duration from 2 to 15 minutes \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**25) 3rd functional class angina pectoris is characterized by:**

1. inability to carry on any physical activity
2. chest pain occurring on climbing one flight of stairs \*
3. marked limitations of ordinary physical activity \*
4. may be rare chest pain at rest \*
5. chest pain occurring on walking one to two blocks on the level \*
6. chest pain occurring on walking 50 meters

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**26) 2nd functional class angina pectoris is characterized by following:**

1. ordinary physical activity does not cause angina
2. chest pain occurs on climbing 4 flights of stairs
3. slight limitation of ordinary activity \*
4. pain occurs in cold or in wind \*
5. may be rare chest pain at rest
6. pain occurs on walking rapidly \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**27) The most specific marker of myocardial necrosis is:**

1. ALT
2. LDH
3. Troponin T \*
4. ALT

**28) The most specific marker of myocardial necrosis is:**

1. AST
2. Alkaline phosphatase
3. Troponin T \*
4. GGTP

**29) The most specific marker of myocardial necrosis is:**

1. LDH
2. AST
3. MB-CK \*
4. Cholesterol

**30) When the maximal concentration of myoglobin may be detected after the onset of myocardial infarction?**

1. 6 hours\*
2. 12 hours
3. 24 hours
4. 48 hours

**31) When the maximal activity of MB-CK may be detected after the onset of myocardial infarction?**

1. 6 hours
2. 12 hours \*
3. 24 hours
4. 48 hours

**32) When the maximal level of Troponin T may be detected after the onset of myocardial infarction?**

1. 6 hours
2. 12 hours
3. 24 hours \*
4. 48 hours

**33) Which isoenzyme of CK is elevated in AMI:**

1. MM-CK
2. MB-CK \*
3. BB-CK

**34) What cardiac marker has the longest persistence in serum after AMI?**

1. MB-CK
2. Myoglobin
3. Troponin T \*
4. AST

**35) What cardiac marker is the most early but the least specific for AMI?**

1. Troponin T
2. LDH
3. Myoglobin \*
4. MB-CK

**36) In acute uncomplicated MI elevated level of leucocytes usually does not exceed:**

1.  $12 \times 10^9 / l$
2.  $15 \times 10^9 / l^*$
3.  $20 \times 10^9 / l$
4.  $10 \times 10^9 / l$

**37) Leucocytosis in uncomplicated AMI usually occurs:**

1. at the end of the 1<sup>st</sup> day \*
2. in a week
3. in 2-3 days

**38) Leucocytosis in uncomplicated AMI usually remains not more than:**

1. 2-3 days
2. one week \*
3. 10-12 days

**39) In uncomplicated MI elevation of ESR usually occurs:**

1. in 3-5 days \*
2. in a week
3. in 10 days
4. in 2 weeks

**40) Elevation of ESR in AMI usually can remain up to:**

1. 1 month
2. 2-3 weeks \*
3. 1,5 month

**41) In acute uncomplicated MI elevation of temperature usually does not exceed:**

1. 37.5°
2. 40.0°
3. 38.5° \*
4. 41.0°

**42) If leucocytosis and fever in patients with uncomplicated acute MI remain more than one week it reflects:**

1. usual course of myocardial infarction
2. possible development of complications \*

**43) Fever in patients with uncomplicated acute MI usually remains not more than:**

1. one week \*
2. 1 month
3. 2 months

**44) Total CK may increase in all these diseases excepting:**

1. acute myocardial infarction
2. severe physical exertion
3. pneumonia \*
4. stroke

**45) Is it correct sentence: The more level of myocardial markers, the more damage size in myocardium?**

1. yes \*
2. no

FIND AN ACCORDANCE:

**46) Marker of necrosis      Time of peak concentration after AMI**



1. MB-CK \*\*\* a) 12 hours \*\*\*
2. Troponin T \*\* b) 6 hours \*
3. Myoglobin \* c) 24 hours \*\*

FIND AN ACCORDANCE:

**47) The time of normalization of necrotic markers in AMI:**

1. Myoglobin \* a) 72 hours \*\*\*
2. Troponin T \*\* b) 7-14 days \*\*
3. MB-CK \*\*\* c) 48 hours \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**48) Development of myocardial infarction is probable if duration of anginal pain is not less than:**

1. 60 minutes
2. 10 minutes
3. 30 minutes \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**49) In acute myocardial infarction pain can radiate to:**

1. left shoulder \*
2. left arm \*
3. left leg
4. left side of mandible \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**50) Is pain in AMI usually sharp, stabbing, precipitated with deep respiration?**

1. yes
2. no \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**51) Is pain in AMI intensive, radiating to the left arm and shoulder with duration more than 30 minutes?**

1. yes \*
2. no

CHOOSE THE NUMBER OF CORRECT ANSWER:

**52) Is thrombolytic therapy indicated in AMI with ST segment elevation if it lasts less than 6 hours?**

1. yes \*

2. no

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**53) Typical ECG signs of acute stage MI:**

1. ST segment elevation \*
2. new left bundle branch block \*
3. AV block 2<sup>nd</sup> degree Mobitz 2
4. changes of T wave
5. atrial fibrillation

**54) Diagnostic criteria of myocardial infarction:**

1. typical ECG signs \*
2. heart enlargement
3. increased cardiac markers \*
4. increased pressure in pulmonary artery
5. chest pain more than 30 minutes \*

**55) Which drug is thrombolytic**

1. heparin
2. alteplase \*
3. aspirin
4. streptokinase \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**56) Trombolytics should be administered:**

1. subcutaneously
2. intravenous \*
3. intramuscularly
4. per os

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**57) Fractionated heparins are:**

1. dalteparin \*
2. heparin
3. enoxaparin \*
4. curantyl

CHOOSE THE NUMBER OF CORRECT ANSWER:

**58) On the first day of AMI heparin should be administered:**

1. subcutaneously

2. intramuscularly
3. intravenous \*
4. per os

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**59) Direct anticoagulants are:**

1. heparin \*
2. enoxaparin \*
3. warfarin
4. clopidogrel (plavix)
5. aspirin

**60) Antiaggregants are:**

1. enoxaparin
2. aspirin \*
3. clopidogrel \*
4. warfarin
5. phenylin

CHOOSE THE NUMBER OF CORRECT ANSWER:

**61) Within 24 hours from the onset of AMI all these drugs should be administered excepting:**

1. plavix
2. nitrates intravenous
3. aspirin
4. nifedipin \*
5. heparin intravenous
6. beta-blockers

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**62) After AMI patient should be given:**

1. antiaggregants \*
2. Calcium channels blockers
3. beta-blockers \*
4. H2-blockers
5. statins \*
6. vasopressors

**63) Drugs lowering cholesterol level are:**

1. statins \*

2. fibrates \*
3. alfa-lipoic acid
4. nicotinic acid \*
5. cholasasum

CHOOSE THE NUMBER OF CORRECT ANSWER:

**64) Atherogenic fraction of cholesterol is:**

1. LDL cholesterol \*
2. HDL cholesterol

**65) FIND AN ACCORDANCE:**

(1Д, 2В, 3Г, 4а, 5б)

QUESTION

ANSWER

**BP category**

**Level of BP:**

- |                  |                             |
|------------------|-----------------------------|
| 1) normal;       | a) 160/100 - 179/110 mm Hg; |
| 2) high normal;  | b) more then 180/110 mm Hg; |
| 3) AH I degree;  | c) 130/85-139/89 mm Hg;     |
| 4) AH II degree; | d) 140/90 - 159/99 mm Hg;   |
| 5) AH III degree | e) less then 140/90 mm Hg;  |
|                  | f) less then 160/90 mm Hg.  |

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**66) Drugs for treatment of arterial hypertension:**

1.  $\beta$ -blookers; \*
2.  $\beta$ -adr. mimetics;
3. calcium channel's antagonists; \*
4. glycosides;
5. diuretics; \*
6. ACE inhibitors. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**67) Diseases leading to hemodynamic arterial hypertension:**

1. atherosclerosis of renal arteries;
2. aortic insufficiency; \*
3. glomerulonephritis;
4. coarctation of aorta. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**68) Depressive mechanisms of blood pressure regulation are:**

1. prostacycline synthesis; \*

2. kinine system; \*
3. renin-angiothensine-aldosterone system;
4. sympathetic-adrenal system.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**69) ECG signs of the left ventricular hypertrophy are:**

1. ST segment downsloping depression in V5-V6;
2. increased amplitude of the R wave in left chest leads; \*
3. deep S wave in right chest leads; \*
4. widening and deformation of the QRS complex in the left chest leads;
5. transitional zone shift to the left. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**70) Vasodilators are:**

1. captopril;\*
2. curantil;
3. losartan; \*
4. sodium nitroprusside; \*
5. talonolol.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**71) Contraindications for  $\beta$ -blockers are:**

1. left bundle branch block;
2. AV block II-III degree; \*
3. heart failure I stage;
4. bronchial asthma; \*
5. atrial fibrillation.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**72) Target-organs in arterial hypertension:**

1. heart;\*
2. brain;\*
3. kidneys;\*
4. liver;
5. vessels.\*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**73) Heart injury in arterial hypertension is:**

1. left ventricle hypertrophy
2. coronary atherosclerosis;

3. systolic dysfunction;
4. diastolic dysfunction;
5. all a forenamed. \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**74) Brain injury in arterial hypertension is:**

1. ischemic stroke;
2. hemorrhage stroke;
3. transitory ischemic attack;
4. hypertensive encephalopathy;
5. all a forenamed.\*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**75) Kidney injury in arterial hypertension is:**

1. microalbuminuria;\*
2. proteinuria;\*
3. leucocyturia;
4. elevated creatinine in urine;
5. elevated creatinine in blood.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**76) Lifestyle measures recommended for patients with arterial hypertension:**

1. smoking cessation;\*
2. weight reduction;\*
3. limitation of physical exercises;
4. physical exercise;\*
5. reduction of fluid intake;
6. reduction of salt intake.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**77) Algorithm in arterial hypertension with low risk:**

1. Lifestyle modification \*
2. Monitoring during 3-6 months
3. Monitoring during 6-12 months \*
4. Immediate prescription of pharmacological treatment

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**78) Algorithm in arterial hypertension with medium risk:**

1. Lifestyle modification \*
2. Monitoring during 3-6 months \*

3. Monitoring during 6-12 months
4. Immediate prescription of pharmacological treatment

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**79) Algorithm in arterial hypertension with high risk:**

1. Lifestyle modification \*
2. Monitoring during 3-6 months
3. Monitoring during 6-12 months
4. Immediate prescription of pharmacological treatment \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**80) Diagnosis of 2nd stage arterial hypertension means:**

1. absence of target-organs damages;
2. presence of target-organs damages; \*
3. presence of associated clinical manifestations related to target-organs.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**81) Obligatory investigations in arterial hypertension include:**

1. urinalysis;
2. urinary catecholamines;
3. ECG;
4. ambulatory monitoring of ECG;
5. scintigraphy of kidney;
6. ophtalmoscopy.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**82) Investigations used for evaluation of left ventricle hypertrophy:**

1. scintigraphy of myocardium;
2. ECG;\*
3. coronary angiography;
4. EchoCG;\*
5. PET.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**83) Routine blood chemistry in arterial hypertension should include:**

1. potassium; \*
2. creatinine;\*
3. plasma renin activity;
4. fasting glucose;\*
5. ALT, AST;

6. total cholesterol.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**84) Investigations used for evaluation of renal function:**

1. blood potassium; \*
2. blood CK;
3. blood creatinine;\*
4. glomerular filtration;\*
5. renal ultrasonography.

ADD:

**85) Patients with grade 3 hypertension and without risk factors and target-organs damages have \_\_\_\_\_ level of cardiovascular risk. (high – 3)**

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**86) Pressor mechanisms of blood pressure regulation:**

1. prostacycline synthesis;
2. kinine system;
3. renin-angiothensine-aldosterone system; \*
4. sympathetic-adrenal system. \*

FIND AN ACCORDANCE: (1b, 2b, 3r)

**87)**

QUESTION

ANSWER

**Group of the patients**

**Target level of BP:**

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1) all the patients with AH;        | a) less than 160/90 mm Hg; |
| 2) patients with diabetes mellitus; | b) less than 140/90 mm Hg; |
| 3) CRF with proteinuria > 1g/day;   | c) less than 130/80 mm Hg; |
|                                     | d) less than 125/75 mm Hg; |
|                                     | e) less than 110/70 mm Hg. |

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**88) Effective combinations of drugs for the treatment of hypertension:**

1. diuretic and ACE inhibitor; \*
2. phenylalkylaminic calcium channels blocker and beta-blocker;
3. dihydropyridinic calcium channels blocker and beta-blocker; \*
4. ACE inhibitor and angiotensin II receptors blocker;
5. calcium channel blocker and ACE inhibitor. \*



CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**89) Which drug is  $\beta$ -blocker?**

1. physiotens;
2. metoprolol; \*
3. dyovan;
4. bisoprolol;\*
5. amlodipin;
6. betaxolol;\*
7. arifon.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**90) Conditions which do not require obligatory hospitalization in AH:**

1. uncomplicated hypertonic crisis; \*
2. hypertonic encephalopathy,
3. hemorrhagic or ischemic stroke,
4. acute heart failure;
5. myocardial infarction or unstable angina

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**91) Which drug is calcium channels blocker?**

1. physiotens;
2. corinfar-retard;\*
3. diovan;
4. bisoprolol;
5. amlodipin; \*
6. arifon;
7. diltiazem.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**92) Symptomatic hypertensions account for:**

1. 5-10% of all cases of hypertension;\*
2. 15-20% of all cases of hypertension;
3. about 50% of all cases of hypertension;
4. about 90% of all cases of hypertension.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**93) The most significant risk factors for hypertension:**

1. increased physical activity;
2. hereditary predisposition; \*
3. smoking; \*

4. professional hazards;
5. hyperlipidemia; \*
6. obesity. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**94) Which drugs are ACE inhibitors?**

1. captopril; \*
2. physiotens;
3. enalapril;\*
4. perindopril;\*
5. diovan;
6. arifon.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**95) 1<sup>st</sup> degree arterial hypertension may be diagnosed if blood pressure level is:**

1. 160/100- 179/109 mm Hg
2. 140/90- 159/99 mm Hg \*
3. more than 180/110 mm Hg
4. less than 139/89 mm Hg.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**96) 2<sup>nd</sup> degree arterial hypertension may be diagnosed if blood pressure level is:**

1. 160/100- 179/109 mm Hg \*
2. 140/90- 159/99 mm Hg
3. more than 180/110 mm Hg
4. less than 139/89 mm Hg.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**97) 3<sup>rd</sup> degree arterial hypertension may be diagnosed if blood pressure level is:**

1. 160/100- 179/109 mm Hg
2. 140/90- 159/99 mm Hg
3. more than 180/110 mm Hg \*
4. less than 139/89 mm Hg.

**98) Optimal level of blood pressure is:**

1. less than 120/80 mm Hg \*
2. 140/90- 159/99 mm Hg
3. more than 180/110 mm Hg
4. 120/80 - 139/89 mm Hg.

**99) High normal level of blood pressure is:**

1. less than 120/80 mm Hg
2. 140/90- 159/99 mm Hg
3. more than 180/110 mm Hg
4. 130/85 - 139/89 mm Hg \*

**100) Normal level of blood pressure is:**

1. less than 120/80 mm Hg
2. 140/90- 159/99 mm Hg
3. 120/80 -129/84 mm Hg
4. 130/85 - 139/89 mm Hg

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**101) Obligatory investigations in arterial hypertension:**

1. serum creatinine \*
2. urinalysis \*
3. serum C-reactive protein
4. chest X-ray
5. ECG \*
6. assessment of retinal vessel \*

**102) Obligatory investigations in arterial hypertension:**

1. fasting glucose\*
2. ultrasonography of epinephrons
3. serum creatinine and potassium\*
4. EchoCG \*
5. serum cholesterol, LDL, HDL, triglycerides\*
6. dopplerography of renal arteries

CHOOSE THE NUMBER OF CORRECT ANSWER:

**103) What class of antihypertensive drugs enalapril belongs to?**

1. beta-blockers
2. calcium channels blocker
3. angiotensin converting enzyme inhibitor \*
4. imidazoline receptors agonist
5. angiotensin II receptor blocker
6. diuretic

**104) What class of antihypertensive drugs metoprolol belongs to?**

1. beta-blockers \*

2. calcium channels blocker
3. angiotensin converting enzyme inhibitor
4. imidazoline receptors agonist
5. angiotensin II receptor blocker
6. diuretic

**105) What class of antihypertensive drugs nifedipine belongs to?**

1. beta-blockers
2. calcium channels blocker \*
3. angiotensin converting enzyme inhibitor
4. imidazoline receptors agonist
5. angiotensin II receptor blocker
6. diuretic

**106) What class of antihypertensive drugs moxonidine (physiotens) belongs to?**

1. beta-blockers
2. calcium channels blocker
3. angiotensin converting enzyme inhibitor
4. imidazoline receptors agonist \*
5. angiotensin II receptor blocker
6. diuretic

**107) What class of antihypertensive drugs hypothiazide belongs to?**

1. beta-blockers
2. calcium channels blocker
3. angiotensin converting enzyme inhibitor
4. imidazoline receptors agonist
5. angiotensin II receptor blocker
6. diuretic \*

**CHOOSE THE NUMBERS OF CORRECT ANSWERS:**

**108) For evaluation of cardiovascular risk in patients with hypertension one should consider:**

1. degree of arterial hypertension \*
2. stage of hypertension
3. complications of hypertension
4. risk factors \*
5. target organs damages \*
6. associate clinical conditions \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**109) Risk factors which should be considered during evaluation of cardiovascular risk in patients with hypertension**

1. age \*
2. smoking \*
3. alcohol consumption
4. dyslipidemia \*
5. excessive salt intake
6. family history of premature cardiovascular diseases \*
7. psychoemotional stress
8. abdominal obesity \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**110) 1<sup>st</sup> stage of essential hypertension may be diagnosed if:**

1. target-organs damages are absent; \*
2. target-organs damages are present;
3. associated clinical manifestations related to target-organs are present.

**111) 3<sup>rd</sup> stage of essential hypertension may be diagnosed if:**

1. target-organs damages are absent;
2. target-organs damages are present;
3. associated clinical manifestations related to target-organs are present.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**112) What conditions can lead to development of arterial hypertension?**

1. hypocalciemia,
2. hyponatriemia,
3. hypokaliemia,
4. hypernatriemia, \*
5. high level of plasma aldosterone. \*

**113) Hypernatriemia promote development of hypertension due to:**

1. blood condensation,
2. development of hypervolemia, \*
3. increase of sensitivity of adrenoreceptors to pressor substances, \*
4. increase of synthesis of prostacyclines by vessel endothelium,
5. development of edema of cells of vessel endothelium, \*
6. increase of synthesis of angiotensin II.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**114) Which endocrinopathy is characterized by hypertension?**

1. Itsenko-Kushing syndrome, \*
2. acromegaly, \*
3. Addison syndrome,
4. mixedema,
5. feochromocitoma, \*
6. panhypopituitarism,
7. Conn syndrome, \*
8. thyrotoxicosis. \*

ADD:

**115) Patients with grade 2 hypertension and 1 to 2 risk factors and absence of target-organs damages have \_\_\_\_\_ level of cardiovascular risk. (moderate – 2)**

ADD:

**116) Patients with grade 1 hypertension and presence of associate clinical condition have \_\_\_\_\_ level of cardiovascular risk. (very high – 4)**

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**117) The main mechanisms of arrhythmias:**

1. increase of vagal activity
2. repeated entry if excitation \*
3. triggering activity \*
4. decrease of baroreflex
5. automatism abnormality \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**118) Mechanisms of atrial fibrillation are:**

1. triggering
2. focal \*
3. micro-reentry \*
4. macro-reentry

ADD:

**119) The main electrophysiological mechanism of atrial flutter is \_\_\_\_\_(macro re-entry)**

CHOOSE THE NUMBER OF CORRECT ANSWER:

**120) Atrial fibrillation may be caused by:**

1. thyrotoxicosis
2. cardiomegaly

3. mitral stenosis
4. all above listed \*
5. nothing of these

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**121) Arrhythmias may be caused by:**

1. electrolyte disturbances \*
2. lipid metabolism disorders
3. organic diseases of the heart \*
4. alcohol influence \*
5. antiarrhythmic drugs \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**122) Reasons of transient (temporary) atrial fibrillation:**

1. alcohol intoxication \*
2. mitral stenosis
3. acute myocardial infarction \*
4. acute pericarditis \*
5. pulmonary embolism \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**123) The causes of permanent atrial fibrillation are:**

1. congenital heart disease; \*
2. cardiomyopathy; \*
3. heart surgery;
4. thyrotoxicosis; \*
5. electro trauma

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**124) Clinical manifestations of the paroxysm of atrial fibrillation:**

1. palpitation \*
2. pulse deficiency \*
3. Morgagni-Adams-Stokes attack
4. dyspnea on physical exertion \*
5. dilation of the heart border to the right

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**125) Diagnostic investigations used in patients with arrhythmias:**

1. chest X-ray
2. ECG ambulatory monitoring \*

3. electrophysiological study \*
4. thyroid gland hormones assessment\*
5. dexamethasone test

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**126) ECG signs of atrial extrasystole:**

1. QRS complex is broad and deformed
2. QRS complex is usually unchanged \*
3. P wave before QRS complex is absent
4. P wave before premature complexes \*
5. compensatory pause is incomplete \*
6. compensatory pause is usually complete

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**127) ECG signs of AV-nodal extrasystole:**

1. QRS complex is broad and deformed
2. QRS complex is usually unchanged \*
3. P wave before QRS complex is absent \*
4. P wave before premature complexes
5. compensatory pause is incomplete \*
6. compensatory pause is usually complete

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**128) ECG signs of ventricular extrasystole:**

1. QRS complex is broad and deformed \*
2. QRS complex is usually unchanged
3. P wave before QRS complex is absent \*
4. P wave before premature complexes
5. compensatory pause is incomplete \*
6. compensatory pause is usually complete\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**129) Sinus P wave is absent in following arrhythmias:**

1. atrial flutter \*
2. atrial tachycardia
3. sinus-arrest \*
4. sinus arrhythmia
5. atrial fibrillation \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:



**130) The ECG signs of atrial fibrillation are:**

1. absence of "P" wave; \*
2. presence of "f" waves; \*
3. regular RR intervals;
4. irregular RR intervals; \*
5. "P" waves before each QRS complex

CHOOSE THE NUMBER OF CORRECT ANSWER:

**131) The frequency of "f" waves in atrial fibrillation is:**

1. 150-240 per minute;
2. 240-400 per minute;
3. 400-700 per minute; \*
4. 700-800 per minute

**132) The ECG signs of atrial flutter:**

1. absence of "P" wave;
2. presence of "F";
3. regular or irregular RR intervals;
4. all above; \*
5. all answers are wrong.

**133) The frequency of "F" waves in atrial flutter is:**

1. 150-240 per minute;
2. 240-400 per minute; \*
3. 400-700 per minute;
4. 700-800 per minute.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**134) High grade ventricular extrasystoles are:**

1. polymorphic ventricular extrasystoles; \*
2. monomorphic frequent ventricular extrasystoles;
3. couple ventricular extrasystoles; \*
4. single rare ventricular extrasystoles;
5. nonsustained ventricular tachycardia. \*

**135) What is the aim of EchoCG in patients with atrial fibrillation?**

1. assessment of left atrium size \*
2. assessment of diastolic function
3. revealing of thrombi in the left atrium \*
4. measurement of right ventricle size

5. revealing of left ventricle hypertrophy

CHOOSE THE NUMBER OF CORRECT ANSWER:

**136) Investigation which has the most sensitivity for the revealing of the thrombi in left atrium:**

1. chest X-ray
2. transthoracal echocardiography
3. transesophageal echocardiography \*
4. perfusion scintigraphy of myocardium

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**137) Arrhythmias which increase the risk of sudden death after AMI:**

1. polytopic atrial tachycardia
2. polymorphic ventricular extrasystole \*
3. reciprocal AV-nodal tachycardia
4. nonsustained ventricular tachycardia \*
5. atrial fibrillation

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**138) Which arrhythmia may be called an allorhythmia?**

1. ventricular bigeminia \*
2. ventricular parasystole
3. atrial trigeminia \*
4. polymorphic extrasystole

ADD:

**139) Regular alternation of extrasystoles and normal sinus complexes with ratio 1:2 is named \_\_\_\_\_ (trigeminia)**

FIND AN ACCORDANCE: (1-E; 2-Д; 3- Г; 4-A; 5-B)

**140)**

**Grade of VE**

1. I grade
2. II grade
3. III grade
4. IV grade
5. V grade

**Characteristics of VE**

- a. pair VE
- b. absence of VE
- c. nonsustained VT
- d. polymorphic VE
- e. more than 30 VE per 1 hour
- f. less than or equal to 30 VE per 1 hour

CHOOSE THE NUMBER OF CORRECT ANSWER:

**141) Duration of permanent atrial fibrillation is:**

1. less than 24 hours;
2. more than 48 hours but less than 7 days;
3. more than 7 days; \*
4. not less than 6 months.

**142) Duration of paroxysmal atrial fibrillation is:**

1. not more 24 hours;
2. less than 7 days; \*
3. more than 7 days;
4. variable and has no time limits.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**143) In persistent atrial fibrillation:**

1. sinus rhythm is usually restored spontaneously;
2. pharmacological cardioversion should be only used;
3. electrical is not effective;
4. all above is correct;
5. all answers are wrong. \*

ADD:

**144) Atrial fibrillation which lasts more than 7 days and does not terminate spontaneously is called \_\_\_\_\_ (persistent)**

FIND AN ACCORDANCE: (1-Б, В, Г; 2-Д, А; 3- Д, А, Е)

**145)**

**Pattern of AF**

1. Paroxysmal
2. Persistent
3. Permanent

**Characteristics**

- a. Duration more than 7 days
- b. Duration less than 7 days
- c. Duration less than 24 hours
- d. Terminates spontaneously
- e. Does not terminate spontaneously
- f. Cardioversion failed

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**146) The most dangerous complications of atrial fibrillation:**

1. transformation into the atrial flutter
2. thromboembolic complications \*
3. development of pulmonary hypertension
4. progressive heart failure \*

**147) Which class of drugs is antiarrhythmic?**

1. beta-blockers \*
2. nitrates
3. calcium channel blockers \*
4. ACE inhibitors
5. cordarone \*
6. warfarin

**148) FIND AN ACCORDANCE: (1-Б, E; 2-Г; 3- Д, А; 4-В)**

<b>Antiarrhythmic class</b>	<b>Drug</b>
1. I class	a. Cordarone
2. II class	b. Chinidin
3. III class	c. Verapamil
4. IV class	d. Atenolol
	e. Ibutilide
	f. Flecainide

**CHOOSE THE NUMBER OF CORRECT ANSWER:**

**149) Verapamil belongs to:**

1. I class antiarrhythmic drugs
2. II class antiarrhythmic drugs
3. III class antiarrhythmic drugs
4. IV class antiarrhythmic drugs \*

**CHOOSE THE NUMBERS OF CORRECT ANSWERS:**

**150) Drugs used for treatment of atrial fibrillation:**

1. atenolol \*
2. aspirin \*
3. verapamil \*
4. nifedipine
5. cordarone \*
6. warfarin \*
7. mexiletin

**151) Drugs used for treatment of ventricular extrasystoles:**

1. atenolol \*
2. aspirin
3. verapamil

4. nifedipine
5. cordarone \*
6. warfarin
7. mexiletin \*

**152) Drugs effective for treatment of supraventricular tachycardia:**

1. verapamil \*
2. cordarone \*
3. lidocaine
4. mexiletin
5. adenosine \*

ADD:

**153) Treatment of choice in patient with paroxysm of atrial fibrillation with hypotension and dyspnea \_\_\_\_\_ (electrical cardioversion)**

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**154) Contraindications for cardioversion are:**

1. BP < 100/60 mm Hg;
2. thrombosis of the left atrium; \*
3. heart failure;
4. duration of atrial fibrillation more than 1 year; \*
5. age more than 65 year.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**155) Warfarin is indicated in patients with atrial fibrillation if:**

1. they are of young age
2. age is more than 65 years \*
3. patients have arterial hypertension \*
4. they have stroke in anamnesis \*
5. risk of thromboembolism is low

CHOOSE THE NUMBER OF CORRECT ANSWER:

**156) The most possible complication associated with cardioversion in patient with atrial fibrillation without anticoagulant treatment:**

1. cardiogenic shock
2. ventricular fibrillation
3. ischemic stroke \*
4. unstable angina
5. heart failure

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**157) Anticoagulant treatment during 3 weeks in patient with atrial fibrillation is required before cardioversion if:**

1. duration of AF is less than 48 hours
2. duration of AF is more than 7 days \*
3. there are no thrombi inside left atrium proved by transesophageal EchoCG
4. duration of AF is more than 48 hours \*

**158) The drugs used for heart rate control in atrial fibrillation:**

1. verapamil; \*
2. nifedipin;
3. beta-blockers; \*
4. digoxin; \*
5. chinidin.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**159) Drugs effective for treatment of ventricular arrhythmias:**

1. digoxin
2. verapamil
3. dysopiramid
4. lidocaine \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**160) Treatment of choice in ventricular flutter**

1. DC defibrillation \*
2. carotid sinus massage
3. lidocaine intravenous
4. nifedipin intravenous

CHOOSE THE NUMBER OF CORRECT ANSWER:

**161) The most effective method for restoration of sinus rhythm in patients with paroxysm of atrial flutter:**

1. intravenous injection of lidocain
2. injection of low doses of diphenin
3. chinidin
4. electrical cardioversion \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**162) Surgical treatment of arrhythmias is indicated in case of:**

1. ventricular tachycardia associated with LV aneurysm \*
2. ventricular extrasystoles of 1<sup>st</sup> grade by Lown's classification
3. atrial fibrillation when pharmacological treatment is ineffective \*
4. asymptomatic supraventricular arrhythmias

**163) The main drugs for the restoration of sinus rhythm in atrial fibrillation**

1. ibutilide \*
2. mexiletine
3. procainamide (novocainamide) \*
4. chinidin \*
5. cordarone \*
6. lidocaine

**164) The main drugs for the maintenance of sinus rhythm in atrial fibrillation:**

1. digoxin
2. amiodarone \*
3. propafenone \*
4. sotalol \*
5. dophetilide

CHOOSE THE NUMBER OF CORRECT ANSWER:

**165) Criterion of effectiveness of heart rate control in permanent atrial fibrillation:**

1. heart rate 50-60 per minute at rest, not more than 100 per minute on exertion
2. heart rate 60-80 per minute at rest, 90-115 per minute on exertion \*
3. heart rate 80-100 per minute at rest, 120-130 per minute on exertion

**166) INR level in patients with AF receiving warfarin should be:**

1. less than 2,0
2. between 2,0 and 3,0 \*
3. between 3,0 and 4,0
4. more than 4,0
5. level of INR doesn't matter in these patients

**167) PQ interval in AV block 1<sup>st</sup> degree is:**

1. more than 0, 25 sec
2. more than 0, 20 sec \*
3. more than 0,25 sec but less than 0,28 sec
4. more than 0, 14 sec

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**168) ECG signs of first degree AV block are (if intraventricular conduction is normal):**

1. QRS complex more than 0,12 sec
2. regular sinus rhythm \*
3. QRS complex less than 0,08 sec \*
4. fixed "PQ" interval from 0,25 to 0,28 sec
5. fixed "PQ" interval more than 0, 20 sec \*

**169) ECG signs of second degree Mobitz 1 AV block are:**

1. sinus rhythm with different RR intervals \*
2. prolonged PQ interval more 0, 20 msec with periodically missed QRS complexes
3. gradual prolongation of the PQ interval with periodically missed QRS complexes \*
4. regular sinus rhythm

**170) ECG signs of second degree Mobitz 2 AV block are:**

1. constant duration of the normal or prolonged PQ interval with periodical missing of "QRS" complex \*
2. gradual lengthening of "PQ" interval with periodical missing of "QRS" complex
3. presence of P waves \*
4. prolongation of PQ interval more than 0,30 sec

**171) ECG signs of third degree AV block are:**

1. constant R-R interval \*
2. fixed PQ interval more than 0,30 sec
3. dissociation between atrial rhythm and ventricular rhythm \*
4. constant P-P interval \*

**CHOOSE THE NUMBER OF CORRECT ANSWER:**

**172) Primary pacemaker is:**

1. sinoatrial node \*
2. atrioventricular node
3. His-Purkinje system

**173) Secondary pacemaker is:**

1. sinoatrial node
2. atrioventricular node \*
3. His-Purkinje system

**174) Tertiary pacemaker is:**

1. sinoatrial node
2. atrioventricular node



3. His-Purkinje system \*

**175) Sinus bradycardia is:**

1. sinus rhythm with a heart rate of 60 per minute \*
2. sinus rhythm with a heart rate of more than 90 per minute
3. sinus rhythm with a heart rate between 60 and 90 per minute

**176) Sinus tachycardia is:**

1. sinus rhythm with a heart rate of 60 per minute
2. sinus rhythm with a heart rate of more than 90 per minute \*
3. sinus rhythm with a heart rate between 60 and 90 per minute

**177) Secondary pacemaker can generate electrical impulses with frequency of:**

1. more than 60 per minute
2. less than 90 per minute
3. between 40 and 60 per minute \*

**178) Tertiary pacemaker can generate electrical impulses with frequency of:**

1. more than 60 per minute
2. less than 40 per minute \*
3. less than 90 per minute

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**179) The most frequent complaints of the patients with AV block:**

1. palpitation
2. dizziness \*
3. dyspnea, edema on legs \*
4. weakness, decreased ability
5. loss of consciousness \*
6. chest pain

CHOOSE THE NUMBER OF CORRECT ANSWER:

**180) The most informative method for diagnostics of transient atrio-ventricular block is:**

1. standard ECG in 12 leads
2. ECG ambulatory monitoring \*
3. echocardiography
4. chest X-ray
5. heart auscultation.

**181) Treatment of the patient with sustained third degree AV block and Morgagni-**

**Adams-Stokes attacks:**

1. temporary electrocardiostimulation
2. pharmacological treatment with bellathaminal
3. pharmacological treatment with atropinum
4. implantation of permanent pacemaker \*
5. dynamic monitoring

**182) Treatment of the asymptomatic patient with intermittent (transient) second degree Mobitz type 1 AV block:**

1. temporary electrocardiostimulation
2. pharmacological treatment with bellathaminal
3. pharmacological treatment with atropinum
4. implantation of permanent pacemaker
5. dynamic monitoring \*

**183) Treatment of the patient with transitory (acute) third degree AV block with hypotension bradycardia:**

1. temporary electrocardiostimulation
2. pharmacological treatment with bellathaminal
3. pharmacological treatment with atropinum
4. implantation of permanent pacemaker
5. dynamic monitoring

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**184) Absolute indications for pacemaker implantation:**

1. Frederick syndrome \*
2. 1<sup>st</sup> degree AV block
3. symptomatic AV block 2<sup>nd</sup> degree Mobitz 2 \*
4. symptomatic complete AV block (3<sup>rd</sup> degree) \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**185) Absolute indications for pacemaker implantation:**

1. asymptomatic 3<sup>rd</sup> degree AV block
2. 1<sup>st</sup> degree AV block
3. asymptomatic AV block 2<sup>nd</sup> degree Mobitz 2
4. pauses more than 3 seconds in heart block \*

**186) Etiologic factor of rheumatic fever is:**

1. group A hemolytic Streptococcus \*
2. Staphylococcus

3. Streptococcus viridans
4. E. coli

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**187) Damaging action of streptococcal components at rheumatic fever is connected with:**

1. M-protein of the cell wall \*
2. T- protein \*
3. hyaluronoc acid of capsule \*
4. products of metabolism of staphylococci

**188) Polyarthritis in rheumatic fever is characterized by:**

1. migratory character \*
2. persistent function impairment
3. symmetric joint involvement \*
4. asymmetric joint involvement

**189) Rheumatic fever is characterized by:**

1. edema and redness of joints \*
2. limitation of movement in joints \*
3. enlargement of joints without changes in surrounding tissue
4. pain in joints \*

**190) Rheumatic fever is characterized by:**

1. polyarthritis \*
2. palpitation \*
3. dispnea \*
4. fever \*
5. streptococcal infections in anamnesis \*
6. viral infections in anamnesis

**191) Physical examinations in patients with rheumatic fever can reveal:**

1. rheumatic nodules \*
2. stria
3. scratch
4. erythema marginatum \*
5. furunculosis

**192) Physical examinations in patients with rheumatic fever can reveal:**

1. palmary erythema
2. chorea \*

3. subcutaneous nodules \*
4. erythema marginatum \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**193) Major Jones criteria include:**

1. carditis \*
2. pericarditis
3. pleuritis
4. enlargement of liver

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**194) Major Jones criteria include:**

1. chorea \*
2. polyarthritits \*
3. erythema marginatum \*
4. elevated ESR

**195) Activity of rheumatic fever may be reflected by:**

1. ESR \*
2. leucocytosis \*
3. C-RP \*
4. creatinine

**196) Activity of rheumatic fever may be reflected by:**

1. protein fractions \*
2. ESR \*
3. fibrinogen \*
4. thrombocytosis

**197) Activity of rheumatic fever may be reflected by:**

1. leucocytosis \*
2. erythrocytosis
3. thrombocytosis
4. ESR \*

**198) Immune respond against streptococcal infection may be verified by evaluation of:**

1. titres of antistaphylococcal antibodies
2. titres of antistreptococcal antibodies \*
3. titres of atistreptolysine \*
4. titres of antistreptokinaze \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**199) Activity of rheumatic fever may be reflected by:**

1. ESR 20-40 mm per hour \*
2. ESR 5-10 mm per hour
3. ESR 2-8 mm per hour.

**200) Rheumatic fever usually develops in:**

1. 2-4 weeks after streptococcal infection \*
2. 10-12 weeks after streptococcal infection
3. 6-8 weeks after streptococcal infection

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**201) Organs which are affected in rheumatic fever:**

1. skin \*
2. joints \*
3. nervous system \*
4. heart \*
5. eyes

**202) Diagnosis of rheumatic fever requires:**

1. two major criteria \*
2. one major and two minor criteria \*
3. one major and one minor criteria
4. three minor criteria

**203) Drug used in active phase of rheumatic fever:**

1. penicillin \*
2. cephalosporin \*
3. nistatin

**204) Drug used in active phase of rheumatic fever:**

1. glucocorticosteroids \*
2. non-steroid anti-inflammatory drugs \*
3. antidepressants

CHOOSE THE NUMBER OF CORRECT ANSWER:

**205) Drug of choice in case of intolerance of penicillin in patients with rheumatic fever:**

1. tetracycline
2. neomycin

3. erythromycin \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**206) Primary prophylaxis of the rheumatic fever include:**

1. stimulation of immunity \*
2. revealing and treatment of streptococcal infection \*
3. short courses of antibacterial therapy before surgical operation

**207) Secondary prophylaxis of the rheumatic fever include:**

1. course of cytostatics 1 time a year
2. prophylaxis with bicillin \*
3. treatment of chronic foci of infection \*

**208) Minor Jones criteria include:**

1. chorea
2. fever \*
3. C-reactive protein \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**209) Duration of stationary treatment of the patients with active rheumatic fever:**

1. 2 weeks
2. 6-8 weeks \*
3. 2-3 months

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**210) Non-steroid anti-inflammatory drugs are:**

1. derivates of salicylic acid \*
2. pyrazolone derivates \*
3. derivates of indolacetic acid \*
4. hydrocortisone
5. derivates of phenylacetic acid

**211) Pathogenetic therapy of rheumatism includes:**

1. corticosteroids \*
2. nonspecific anti-inflammatory drugs \*
3. immunosuppressants \*
4. penicillin group antibiotics
5. immunostimulators \*
6. chinoline derivates \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**212) The most common reason of the mitral stenosis is:**

1. rheumatism \*
2. athrosclerosis
3. arterial hypertension

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**213) Mitral valve consists of:**

1. two cusps \*
2. three cusps
3. fibro-muscular annulus \*
4. subvalvular apparatus \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**214) Normal square of mitral orifice:**

1. 4-6 sq.sm \*
2. 2-8 sq.sm
3. 2-4 sq.sm
4. 1-4 sq.sm

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**215) Types of mitral stenosis:**

1. diaphragm \*
2. funnel \*
3. double narrowing \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**216) Mitral stenosis is critical if square of mitral orifice is:**

1.  $< 2$  sq.sm
2.  $> 2$  sq.sm
3.  $< 1$  sq.sm \*
4.  $< 0.1$  sq.sm.

**217) Normal pressure in pulmonary artery:**

1. less than 25 mm Hg \*
2. less than 35 mm Hg
3. less than 40 mm Hg
4. less than 15 mm Hg

**218) Kitaev's reflex of is :**

1. spasm of pulmonary arterioles \*
2. spasm of pulmonary veins
3. dilation of pulmonary arterioles

**219) Rivero-Corvallo systolic murmur reflects:**

1. relative mitral insufficiency
2. relative tricuspid insufficiency \*
3. relative pulmonary insufficiency

**220) The reason of diastolic Graham-Steell's murmur is:**

1. relative insufficiency of mitral valve
2. relative insufficiency of tricuspid valve
3. relative insufficiency of pulmonary valve\*

**221) First complaint of the patient with mitral stenosis:**

1. edema on legs
2. edema on the face
3. enlargement of the liver
4. dispnea \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**222) Complications of the mitral stenosis:**

1. myocardial infarction
2. atrial fibrillation \*
3. pulmonary edema \*
4. status asthmaticus

**223) Complications of the mitral stenosis:**

1. sepsis
2. infective endocarditis
3. pneumonia
4. COPD

**224) Physical examination of the patients with mitral stenosis can reveal:**

1. acrocyanosis \*
2. heart "hump" \*
3. diffuse cyanosis
4. "shoemaker's" chest

CHOOSE THE NUMBER OF CORRECT ANSWER:



**225) Heart borders in mitral stenosis are:**

1. dilated to the right and upwards \*
2. dilated to the left and upwards
3. dilated upwards
4. dilated to the left

**226) Auscultation: S1 in mitral stenosis is:**

1. weaken
2. clapping \*
3. unchanged

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**227) Auscultative phenomena in mitral stenosis include:**

1. weakened S1
2. clapping S1 \*
3. opening snap \*
4. diastolic murmur \*
5. systolic murmur

**228) Patients with mitral regurgitation complain of:**

1. dispnea \*
2. fever
3. palpitation \*
4. cough \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**229) If permanent atrial fibrillation develops in patient with mitral stenosis it is recommended to prescribe for this patient:**

1. aspirin
2. warfarin \*
3. plavix
4. heparin

**230) Drugs administered to patients with mitral stenosis for prophylaxis of atrial fibrillation:**

1. beta-blockers \*
2. diuretics
3. ACE inhibitors

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**231) Complications of the mitral stenosis:**

1. Dressler's syndrom
2. infective endocarditis \*
3. atrial fibrillation \*
4. pulmonary edema \*

**232) Surgical correction of the mitral stenosis include:**

1. commissurotomy \*
2. implantation of prosthetic valve \*
3. balloon valvuloplasty \*
4. stenting

CHOOSE THE NUMBER OF CORRECT ANSWER:

**233) The most precise evaluation of the severity of the mitral regurgitation can be got using:**

1. color dopplerography
2. transesophageal EchoCG
3. ventriculography \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**234) Mitral regurgitation is characterized by:**

1. weakening of the S1 \*
2. clapping S1
3. gallop rhythm \*
4. accent of S2 on the pulmonary artery \*
5. accent of S2 on the aorta

CHOOSE THE NUMBER OF CORRECT ANSWER:

**235) In mitral insufficiency heart borders are increased**

1. to the right and upwards
2. to the left and upwards \*
3. to the left

CHOOSE THE NUMBER OF CORRECT ANSWER:

**236) Infective endocarditis is:**

1. autoimmune disease affecting valvular apparatus of the heart
2. infectious disease developing as a sepsis, defeating the valvular apparatus of heart \*
3. both sentences are correct.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**237) Etiologic factors for of infective endocarditis are:**

1. Streptococci
2. Staphylococci
3. Pneunococus
4. viruses
5. fungi
6. all listed above \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**238) The main predisposing factors of developing of infective endocarditis are:**

1. changes of the valval apparatus of heart
2. ischemic heart disease
3. interventricular septum defect
4. all listed above \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**239) Is it correct, that obligatory condition for developing of the infective endocarditis is bacteriemia?**

1. yes \*
2. no

CHOOSE THE NUMBER OF CORRECT ANSWER:

**240) Possible causes of the infective endocarditis:**

1. dental procedures
2. cardio surgery
3. urologic endoscopic investigations
4. intravenous drug abuse
5. all listed above \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**241) What are stages of development of the infective endocarditis:**

1. bacteriemia
2. damage of endothelium of the valval apparatus of heart
3. bacterial colonization
4. fibrin depositing
5. calcification
6. all listed above \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**242) Clinical forms of the infective endocarditis:**

1. acute
2. subacute
3. chronic
4. all listed above \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**243) Primary infective endocarditis develops:**

1. on the changed valves \*
2. on the unchanged valves \*
3. on the fibrous ring of the aortic valve

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**244) The most frequent etiological factors for development of infective endocarditis are:**

1. fungi;
2. hemolytic streptococcus; \*
3. Streptococcus viridans; \*
4. Staphylococcus aureus;
5. Enterococcus.

CHOOSE THE NUMBER OF CORRECT ANSWER:

**245) The most typical valve lesion due to infective endocarditis is:**

1. aortic regurgitation; \*
2. aortic stenosis;
3. mitral regurgitation;
4. mitral stenosis.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**246) Sentences concerning infective endocarditis which are correct:**

1. anemia in blood analyses; \*
2. always dental procedures in anamnesis;
3. high temperature and chill are frequent symptoms; \*
4. corticosteroids are the first line medication;
5. enlargement of the liver and spleen.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**247) Sentences concerning infective endocarditis which are correct:**

1. defeating of the aortic valve is the most frequent; \*
2. renal failure develops quickly;
3. long antibacterial therapy is indicated; \*
4. embolism is usual complication; \*

5. staphylococcus aureus in blood culture is one of the diagnostic criteria. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**248) What signs of infective endocarditis can be found using EchoCG?**

1. single microbial vegetations \*
2. multiple microbial vegetations \*
3. pericardial exudate
4. myocardial abscesses

CHOOSE THE NUMBER OF CORRECT ANSWER:

**249) Radioscopy and radiography may be used in patients with infective endocarditis for:**

1. revealing of signs of progressing of valve damage
2. revealing of pulmonary embolism and following infarction-pneumonia
3. all above listed.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**250) What are the laboratory changes in patients with infective endocarditis?**

1. revealing of bacteria in blood is characteristic \*
2. revealing of bacteria in urine is characteristic
3. leucocytosis more than  $6-18 \times 10^9$  per liter with shift the left, lymphopenia are characteristic. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**251) The most common symptoms and syndromes in patients with infective endocarditis:**

1. heart failure
2. fever \*
3. joints lesions
4. infective-toxic syndrome \*
5. hepatomegaly
6. glomerulonephritis
7. all listed above.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**252) The major Duke's criteria of the infective endocarditis are:**

1. typical microorganism for IE from two separate blood cultures \*
2. community-acquired Peptostreptococcus
3. typical echocardiographic signs of endocardial involvement (vegetations on valve, abscess or new partial dehiscence of prosthetic valve or new valvular regurgitation). \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**253) The minor Duke's criteria of the infective endocarditis are:**

1. predisposing heart condition \*
2. intravenous drug abuse, \*
3. decrease in blood pressure,
4. vascular phenomena (major arterial emboli, septic pulmonary infarcts, mycotic aneurism etc) and immunological phenomena (glomerulonephritis, Osler's nodes, Roth spots, rheumatoid factor) \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**254) What is treatment of the infective endocarditis?**

1. etiotropic therapy (antimicrobial therapy depending on causative agent)
2. pathogenetic therapy (hyperimmune plasma, glucocorticosteroids)
3. Symptomatic therapy (treatment of heart failure, heart block and arrhythmias)
4. all listed above \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**255) Clinical criteria of the antibacterial treatment efficiency in the infective endocarditis are:**

1. improvement of general condition of patients in first 48-72 hours of the treatment, improvement of appetitis, decreasing of chills, disappearance of the fever.
2. clinical effect occurs 3-6 days after start of treatment (significant decreasing of temperature, chills, petechiae, embolic phenomena, stop of decreasing of hemoglobin, decrease ESR, blood culture is sterile) \*
3. at the end of the 2-3 week leukocyte formula normalizes, ESR significantly decreases, size of liver and spleen decreases, blood inflammatory indices normalize.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**256) Diagnostic methods used for estimation of heart failure are:**

1. dopplerography of the leg vessels;
2. assessment of the brain natriuretic hormon level; \*
3. chest X-ray;
4. bone marrow biopsy;
5. rest echocardiography. \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**257) The symptoms of the right ventricular heart failure are:**

1. crepitation in lower lobes of lungs;
2. neck veins distention;\*
3. dyspnea;

4. legs edema;\*
5. hepatomegaly.\*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**258) The symptoms of the left ventricular heart failure are:**

1. crepitation in lower lobules of lungs;\*
2. neck veins distention;
3. dyspnea;\*
4. edema on legs;
5. hepatomegaly.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**259) Drugs used for treatment of heart failure are:**

1.  $\beta$ -blockers; \*
2. calcium channels blockers;
3. diuretics; \*
4. ACE inhibitors; \*
5. glycosides; \*
6. central adrenomimetics.

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**260) Diseases which can lead to development of CHF:**

1. ischemic heart disease \*
2. arterial hypertension \*
3. cardiomyopathy and myocarditis \*
4. congenital and acquired valvular heart disease \*
5. systemic diseases of connective tissue with heart involvement (SLE, RA) \*
6. chronic glomerulonephritis without secondary hypertension

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**261) Causes of chronic heart failure:**

1. systolic dysfunction \*
2. diastolic dysfunction \*
3. spasm of peripheral arteries
4. all listed above is wrong

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**262) Pathogenesis of the main symptoms of heart failure is connected with:**

1. decreasing of the tone of sympathetic nervous system
2. increasing of the tone of sympathetic nervous system \*

3. increasing of the tone of parasympathetic nervous system
4. decreasing of the activity of the renin-angiotensin system
5. increasing of the activity of the renin-angiotensin system \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**263) The main principles of the therapy of the heart failure are:**

1. treatment of the heart diseases leading to heart failure \*
2. elimination or decrease of the factors promoting development of heart failure (arrhythmias, embolism etc) \*
3. correction of the main manifestations of heart failure \*
4. antibacterial treatment

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**264) Diseases which can lead to development of the heart failure due to overload of the heart with pressure:**

1. aortic stenosis \*
2. mitral insufficiency
3. essential hypertension \*
4. myocarditis

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**265) Diseases which can lead to development of the heart failure due to overload of the heart with volume:**

1. aortic insufficiency \*
2. mitral insufficiency \*
3. aortic stenosis
4. pericarditis

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**266) Causes which can provoke heart failure or worsen it's clinical manifestations:**

1. atrio-ventricular block of 1<sup>st</sup> degree
2. development of infection
3. significant increase in blood pressure \*
4. anemia \*
5. atrial fibrillation \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**267) Chronic heart failure is characterized by:**

1. diffuse cyanosis
2. acrocyanosis \*



3. cold extremities \*
4. warm extremities
5. prolonged expiration

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**268) Drugs for treatment of heart failure with class A level of evidence:**

1. angiotensin converting enzyme inhibitors \*
2. diuretics \*
3. beta blockers \*
4. aldosterone receptors blockers \*
5. nitrates

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**269) Drugs for heart rate control in patients with chronic heart failure and atrial fibrillation:**

1. cardiac glycosides \*
2. beta-blockers \*
3. calcium channels blockers

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**270) Methods of surgical treatment of chronic heart failure:**

1. biventricular pacing \*
2. artificial left ventricle implantation \*
3. heart transplantation \*
4. mitral commissurotomy

**271) The causes of the valvular aortic stenosis:**

1. Rheumatism \*
2. Trauma
3. Atherosclerosis \*
4. Syphilis
5. Degenerative calcinosis \*
6. Hypertrophic cardiomyopathy
7. Anomalies of aortic valve development

ESTABLISH THE SEQUENCE: (3-2-1-4-5)

**272) Consequence of the changes of the myocardium in aortic stenosis:**

1. diastolic dysfunction of the left ventricle
2. left ventricle hypertrophy
3. increase in pressure gradient between the left ventricle and aorta

4. increase in the end diastolic pressure of the left ventricle
5. left ventricle failure signs

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**273) Obstruction of the outflow from the left ventricle may be due to:**

1. Mitral stenosis
2. idiopathic hypertrophic subaortic stenosis \*
3. aortic stenosis \*
4. pulmonary stenosis
5. mitral insufficiency

CHOOSE THE NUMBER OF CORRECT ANSWER:

**274) Pulse in aortic stenosis is:**

1. parvus et tardus \*
2. rare (bradycardia)
3. celer et altus
4. arrhythmic, with different filling

**275) What kind of murmur can be heard in aortic stenosis?**

1. protodiastolic
2. mesosystolic \*
3. presystolic
4. protosystolic

**276) In aortic stenosis maximal intensiveness of the systolic murmur can be registered on the heart apex:**

1. that's right
2. that's wrong \*

**277) Systolic murmur in aortic stenosis radiates to:**

1. subclavicular region
2. carotid arteries \*
3. interscapular region
4. axillar region

**278) Trembling can be found on the apex in:**

1. mitral stenosis
2. aortic stenosis \*
3. mitral insufficiency
4. tricuspid insufficiency

**279) In aortic stenosis S2 is:**

1. strengthened \*
2. weakened
3. unchanged

**280) In aortic stenosis trembling is:**

1. systolic \*
2. diastolic

**CHOOSE THE NUMBERS OF CORRECT ANSWERS:**

**281) Auscultative phenomena in patient with aortic stenosis:**

1. systolic murmur on the apex
2. accent of S2 on aorta \*
3. weakened S2 on aorta
4. systolic murmur on aorta \*
5. diastolic murmur on aorta
6. weakened S1 on the apex

**282) Clinical manifestations of aortic valve stenosis are characterized by:**

1. absence of the symptoms for a long time \*
2. appearance of complaints during formation of aortic stenosis \*
3. angina on exertion \*
4. syncope \*
5. dispnea \*
6. decrease in diastolic blood pressure

**283) In patient with aortic stenosis during physical examination one can find:**

1. carotid pulsation
2. heart beat \*
3. amplified apex beat \*
4. systolic trembling \*

**284) Aortic stenosis is characterized by:**

1. atrial fibrillation \*
2. anginal chest pain \*
3. syncope \*
4. hemoptysis
5. ventricular arrhythmias \*

CHOOSE THE NUMBER OF CORRECT ANSWER:

**285) It's not typical for very severe aortic stenosis:**

1. angina attacks
2. syncope
3. sudden death
4. high arterial hypertension \*

CHOOSE THE NUMBERS OF CORRECT ANSWERS:

**286) Changes on ECG in aortic stenosis include the following signs:**

1. left ventricle hypertrophy \*
2. left atrium hypertrophy \*
3. AV block
4. right atrium hypertrophy
5. left bundle branch block

**287) Surgical treatment in aortic stenosis is indicated in this cases:**

1. asymptomatic patients with maximal systolic gradient on aortic valve more than 50 mm Hg and square of aortic orifice less than 0,75 sq.sm \*
2. all patients with complaints (dyspnea, angina, syncope) \*
3. age less than 60 years

CHOOSE THE NUMBER OF CORRECT ANSWER:

**288) Methods of diagnostics of the aortic stenosis:**

1. ECG
2. chest X-ray
3. EchoCG \*
4. catheterization of the heart

ANSWERS

1	4	98	1	195	1,2,3
2	1,3	99	4	196	1,2,3
3	1	100	3	197	1,4
4	2,3	101	1,2,5,6	198	2,3,4
5	1,5	102	1,3,5	199	1
6	1,2,3	103	3	200	1
7	1	104	1	201	1,2,3,4
8	2,4	105	2	202	1,2
9	1,3	106	4	203	1,2
10	2,3,5	107	6	204	1,2
11	2,3	108	1,4,5,6	205	3

12	3,4,5	109	1,2,4,6,8	206	1,2
13	1,2	110	1	207	2,3
14	1,2,3,5	111	3	208	2,3
15	1,3,4	112	4,5	209	2
16	3	113	2,3,5	210	1,2,3
17	1,3,5	114	1,2,5,7,8	211	1,2,3,5,6
18	1,3,4	115	2- moderate risk	212	1
19	1,3	116	4 – very high risk	213	1,3,4
20	1,3	117	2,3,5	214	1
21	1,3,4	118	2,3	215	1,2,3
22	3,5,7	119	macro re-entry	216	3
23	2,3,4,6,7,8	120	4	217	1
24	1,5,6	121	1,3,4,5	218	1
25	2,3,4,5	122	1,3,4,5	219	2
26	3,4,6	123	1,2,4	220	3
27	3	124	1,2,4	221	4
28	3	125	2,3,4	222	2,3
29	3	126	2,4,5	223	
30	1	127	2,3,5	224	1,2
31	2	128	1,3,6	225	1
32	3	129	1,3,5	226	2
33	2	130	1,2,4	227	2,3,4
34	3	131	3	228	1,3,4
35	3	132	4	229	2
36	2	133	2	230	1
37	1	134	1,3,5	231	2,3,4
38	2	135	1,3	232	1,2,3
39	1	136	3	233	3
40	2	137	2,4	234	1,3,4
41	3	138	1,3	235	2
42	2	139	trigemina	236	2
43	1	140	1-f,2-e,3-d,4-a,5-b	237	6
44	3	141	3	238	4
45	1	142	2	239	1
46	1-a,2-c,3-b	143	5	240	5
47	1-c,2-b,3-a	144	Persistent	241	6
48	3	145	1-b,c,d,2-a,e, 3-a,e,f	242	4
49	1,2,4	146	2,4	243	1,2
50	2	147	1,3,5	244	2,3

51	1	148	1-b,f,2-d,3-a,e, 4-c	245	1
52	1	149	4	246	1,3
Ě53	1,2	150	1,2,3,5,6	247	1,3,4,5
54	1,3,5	151	1,5,7	248	1,2
55	2,4	152	1,2,5	249	3
56	2	153	Electrical cardioversion	250	1,3
57	1,3	154	2,4	251	2,4
58	3	155	2,3,4	252	1,3
59	1,2	156	3	253	1,2,4
60	2,3	157	2,4	254	4
61	4	158	1,3,4	255	2
62	1,3,5	159	4	256	2,5
63	1,2,4	160	1	257	2,4,5
64	1	161	4	258	1,3
65	1-e,2-c,3-d,4-a,5-b	162	1,3	259	1,3,4,5
66	1,3,5,6	163	1,3,4,5	260	1,2,3,4,5
67	2,4	164	2,3,4	261	1,2
68	1,2	165	2	262	2,5
69	2,3,5	166	2	263	1,2,3
70	1,3,4	167	2	264	1,3
71	2,4	168	2,3,5	265	1,2
72	1,2,3,5	169	1,3,5	266	3,4,5
73	5	170	1,3	267	2,3
74	5	171	1,3,4	268	1,2,3,4
75	1,2,5	172	1	269	1,2
76	1,2,4,6	173	2	270	1,2,3
77	1,3	174	3	271	1,3,5
78	1,2	175	1	272	3-2-1-4-5
79	1,4	176	2	273	2,3
80	2	177	3	274	1
81	1,3,6	178	2	275	2
82	2,4	179	2,3,5	276	2
83	1,2,4,6	180	2	277	2
84	1,3,4	181	4	278	2
85	3- high risk	182	5	279	1
86	3,4	183	1	280	1
87	1-b,2-c,3-d	184	1,3,4	281	2,4
88	1,3,5	185	4	282	1,2,3,4,5

89	2,4,6	186	1	283	2,3,4
90	1	187	1,2,3	284	1,2,3,5
91	2,5,7	188	1,3	285	4
92	1	189	1,2,4	286	1,2
93	2,3,5,6	190	1,2,3,4,5	287	1,2
94	1,3,4	191	1,4	288	3
95	2	192	2,3,4		
96	1	193	1		
97	3	194	1,2,3		