

Department of Pathology  
 Azra Naheed Medical College  
 TEST CVS  
 MBBS 4<sup>th</sup> Year SEQ

**(Heart + Vessels)**

1000 19  
 00663903  
 Complete

Time Allowed: 40 min  
 Q10- Proceeds -  
 Quit Dec Smo ky  
 staining  
 vasodilator  
 Omega-3  
 inc. exercise

Lab. Diag  
 ECG  
 CRP  
 Lipid Profile  
 angiography

Total Marks: 30

Q-1 A 57 years diabetic female presented to emergency department with breathlessness and constriction over chest for 3 hrs. Her coronary vessel revealed raised lesion on the surface with narrowing of the lumen.

- a- What is your diagnosis? (0.5) *Atherosclerosis*
- b- How will you proceed and what investigations you will do to diagnose (1) *→ ECG, Lab-tests*
- c- What is the fate of this lesion. (1) (P#342) *Rupture, erosion, ulceration, Embolus Hemorrhage (336) into a plaque, Aneurysm, Thromboembolism, Atheroma.*
- d- What are the different risk factors for this condition. (2.5) *EQ 2*

Q-2 Briefly describe the steps involved in the pathogenesis of atherosclerosis. Elaborate with the help of diagram or flow charts. (4). (338) *L99*

b- What is difference between arteriosclerosis and atherosclerosis. (1) (335)

- *Hardening of blood vessels*
- *Small arteries, Arterioles*
- *Atherosclerosis*
- *Large arteries*
- *Narrowing of vessels due to plaque*
- *Muscular arteries*
- *Aorta*

Q-3 During a routine physical examination, a 60-year-old white male is found to have a 5-cm pulsatile mass in his abdomen. Angiography reveals a marked dilation of his aorta distal to his renal arteries.

- a- What is the most likely diagnosis? 0.5 *Abdominal Aortic Aneurysm.*
- b- What is the most common cause for its formation. 0.5 *→ Atherosclerosis*
- c- Give classification of this abnormality 1.5 *503 → Inflammatory AAA, Mycotic AAA, 1944 Aortic valve disease*
- d- What are the complications of this disease. 2.5 *→ (346) 503*

Q-4A 30-year-old male smoker presents with gangrene of his extremities. Histological examination reveals fibrinoid necrosis. *Buerger's disease*

- a- What is the most likely diagnosis. 0.5 *→ Wegener's granulomatosis*
- b- How do you classify vasculitis 2 *506*
- c- Give its pathogenesis 1 *→ (353)*
- d- What are different types of cardiomyopathies 1.5 *564 → Dilated Cardiomyopathy, Hypertrophic, Restrictive*

Q-5 Enlist the early and late complications of myocardial infarction? 2 *Sub*

- *Contractile dysfunction*
- *Myocardial rupture*
- *Arrhythmias*
- *Papillary muscle dysfunction*
- *Mural thrombi*
- *Pericarditis*
- *Chamber dilation*

b- what are the pathological changes occurring in myocardium after ischemic necrosis. 2

M.I ⇒ (337) 539

c- Write down the enzyme based lab evaluation of myocardial infarctions as below

Enzymes	Begin to rise	Peaks	Returns to normal
CK-MB	3-12 hr	24 hr	48-72 hr
cTn-T	3-12 hr	12-48 hr	5-14 days
cTn-I	3-12 hr	24 hr	5-10 days

Q-6 A 10 years old male presented to OPD with complaints of syncope and dyspnea. He had previous history of Pharyngeal infection. He had migratory polyarthritis as well. His echocardiography was done and it revealed aortic stenosis and ventricular hypertrophy.

- a- What is the most likely diagnosis. 0.5 → Rheumatic fever. Jones criteria
- b- Give other important features to diagnose this disease. 1.5 → (p. #392)
- c- How vegetations of different diseases affecting valves differ with each other. 1.5 (p. #394) 560
- d- What is the most common benign tumor of blood vessel and most common tumour of heart. Give microscopic appearance. 1.5

→ Hemangioma  
 ↳ Myxoma. PRKAR1GNAS

↳ Region - fossae

Sessile or pedunculated lesion

globular masses

Wrecking ball

Histologically composed of stellate or globular

Myxoma

Capillary hemangioma

Cavernomas

Juvenile

Pyogenic granulomas

Hemangioma

Thick capillary wall with scant stroma