STATE MEDICAL FACULTY OF WEST BENGAL

Preliminary Examinations for Diploma in Cath-Lab Technician : DCLT Course

Paper – I Anatomy, Physiology, Pharmacology

Question No. 1 & 2 are Compulsory. Attempt any (Five) 5 Questions from Question No. 3 to 9

Time – 3 hours Full Marks – 80

Q1 Choose the best Answer for the following:-

5 X 1 = 5

- 1) In normal heart all are true, except:
 - a) LV is thicker than RV
 - b) LV has moderator band
 - c) LV is smoother than RV
 - d) Tricuspid valve drains into RV
- 2) Obtuse marginal artery is branch of:
 - a) LMCA
 - b) LAD
 - c) RCA
 - d) LCX
- 3) Vitamin K dependent clotting factors are all, except:
 - a) VII
 - b) VIII
 - c) IX
 - d) X
- 4) All are features of cardiac myocytes, except:
 - a) Chronotropy
 - b) Atopy
 - c) Bathmotropy
 - d) Inotropy
- 5) All of these are used in dyslipidemia, except:
 - a) Niacin
 - b) Warfarin
 - c) Fibrate
 - d) Statin

Q2. Write True (T) or False (F):-

 $5 \times 1 = 5$

- a) Parasympathetic stimulation produces tachycardia. (T/F)
- b) Number of pulmonary veins is 4. (T/F)
- c) Right common carotid artery is a branch of right subclavian artery. (T/F)
- d) Cardiac index = Cardiac output / Body surface area. (T/F)
- e) Enoxaparin is a high molecular weight analogue of heparin. (T/F)

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Paper - I

Anatomy, Physiology, Pharmacology

Attempt any (Five) 5 Questions from Question No. 3 to 9

5 X 14 = 70

Q3. Discuss the specialized conducting system of the heart & conduction disturbances at various levels.

14

- Q4. Give a short account of the branches of thoracic aorta & their clinical importance.
- Q5. Discuss the action potential basis of autorhythmicity & impulse propagation.
- Q6. Discuss the role of RAAS system in relation to control of blood pressure.
- Q7. Discuss the various classes of antihypertensive drugs with their mechanisms of action, common side effects & precautions.
- Q8. Discuss the medical management of atrial fibrillation & its common complications. What are the surgical procedures for atrial fibrillation?
- Q9. Write short notes on:

5+4+5=14

- a) Inotropes
- b) AV node
- c) Fibrinolytic pathway & various agents for thrombolysis.

Full Marks - 80

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Preliminary Examinations for Diploma in Cath-Lab Technician : DCLT Course

Paper – II Microbiology, Preventive Cardiology

Question No. 1 & 2 are compulsory. Attempt any (Five) 5 Questions from Question No. 3 to 9:

Time - 3 hours

5 X 1 = 5Q1 Choose the best Answer for the following questions:-1) Acute infective endocarditis is usually caused by: a) Staphylococcus b) Enterococcus c) Streptococcus d) Pneumococcus 2) Chagas' disease is caused by: a) Trypanosoma cruzi b) Mycobacterium tuberculosis c) Mycobacterium leprae d) Corynebacterium diphtherae 3) Drug used for prevention of embolism in atrial fibrillation: a) Digoxin b) Amiodarone c) Frusemide d) Warfarin 4) All are regarded as major risk factors for CAD, except: a) Smoking b) Diabetes c) Male sex d) High HDL-C levels 5) All are components of metabolic syndrome, except: a) Central obesity b) Elevated fasting plasma glucose c) Elevated LDL-cholesterol levels d) Elevated triglyceride levels $5 \times 1 = 5$ Q2. Write True (T) or False (F):a) Rheumatic heart disease is an immunologically mediated disease. (T/F)b) Intravascular stent is sterilized by gamma radiation. (T/F) c) PPIs are used to prevent gastric erosions due to aspirin. (T/F)d) Saturated fat is good for CAD. (T/F)

e) Post-menopausal women are at increased risk of CAD.

(T/F)

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Paper - II

Microbiology, Preventative Cardiology

Attempt any (Five) 5 Questions from Question No. 3 to 9:

5 X 14 = 70

Q3. Classify diabetes mellitus. What are the complications of longstanding diabetes mellitus? Discuss the non-pharmacological management of diabetes mellitus.

14

Q4. What are the traditional & novel risk factors for CAD? What are the modifiable & non-modifiable risk factors for CAD? Enumerate them & point out the salient strategies to modify the modifiable ones.

14

Q5. Discuss the adverse health consequences of long-term smoking. Discuss the strategies for smoking cessation.

14

Q6. Discuss the methods of disinfection. How do you disinfect your operation theatre?

14

Q7. Mention the bacteria responsible for acute rheumatic fever. Discuss the etiopathogenesis of rheumatic fever. Enumerate the criteria for diagnosis of acute rheumatic fever.

14

Q8. Discuss post-exposure prophylaxis of HIV.

14

Q9. Write short notes on:

5+4+5=14

- a) Vitamin K antagonists
- b) Rheumatic fever prophylaxis
- c) Pacemaker pocket infection.
