

**POST GRADUATE DIPLOMA IN CLINICAL
CARDIOLOGY (PGDCC)**

Term-End Examination

June, 2015

MCC-003 : COMMON CARDIOVASCULAR DISEASES – I

Time : 2 hours

Maximum Marks : 60

Note :

- (i) *There will be multiple choice type of questions in this examination which are to be answered in **OMR Answer Sheets**.*
- (ii) *All questions are **compulsory**.*
- (iii) *Each question will have four options and only one of them is correct. Answers have to be marked in figures in the appropriate rectangular boxes corresponding to what is the correct answer and then blacken the circle for the same number in that column by using HB or lead pencil and not by ball pen in **OMR Answer Sheets**.*
- (iv) *If any candidate marks more than one option it will be taken as the wrong answer and no marks will be awarded for this.*
- (v) *Erase completely any error or unintended marks.*
- (vi) *There will be 90 questions in this paper and each question carries equal marks.*
- (vii) *There will be no negative marking for wrong answers.*
- (viii) *No candidate shall leave the examination hall at least for one hour after the commencement of the examination.*

1. Which of the following is **wrong** while recording BP in a pregnant lady near term ?
 - (1) Recording should be done in left lateral decubitus position
 - (2) Can be done in sitting position
 - (3) Phase IV Korotkoff sounds shall be taken as diastolic BP
 - (4) A diastolic BP of 90 mmHg is normal

2. Which of the following regarding renovascular hypertension is **wrong** ?
 - (1) Young individual without family history of hypertension
 - (2) Any patient with papilloedema
 - (3) Fibroplastic disease is common in elderly
 - (4) Abdominal bruit is present

3. Which of the following is **not** recommended by 2014 (JNC 8) hypertension guidelines ?
 - (1) Treatment goal in those above 60 years is to lower BP below 150/90 mmHg.
 - (2) In black population, initial antihypertensive drug should be thiazide-type diuretic or calcium channel blocker.
 - (3) In those with chronic kidney disease, initial drug should be ACE inhibitor or ARB.
 - (4) In diabetes as well as those with chronic kidney disease, treatment goal is below 130/80 mmHg.

4. Which of the following statements is **correct** ?
 - (1) Sodium nitroprusside, labetalol and ramipril can be given intravenously in hypertensive emergencies.
 - (2) Hypertensive urgencies require rapid reduction of BP within one hour.
 - (3) Head ache, irritability and seizures denote hypertensive encephalopathy.
 - (4) Presence of retinal hemorrhage indicates malignant hypertension.

5. Which of the following statements is **correct** ?
 - (1) Renovascular hypertension presents with spells of nausea, headache, palpitation, sweating, nervousness and tremors.
 - (2) Preeclampsia denotes elevated blood pressure after 12 weeks of gestation.
 - (3) When diastolic blood pressure increases from 91 mmHg to 105 mmHg, risk of stroke increases six fold.
 - (4) ACE inhibitors and thiazides reduce the frequency of recurrent strokes.

6. A 40 year old hypertensive, on regular medications, is admitted with a BP of 170/120 mmHg and Class II dyspnoea on exertion. Chest X-ray showed prominence of upper lobe pulmonary veins and Kerley B lines in both bases. ECG showed Sinus rhythm with 'S' wave of 20 mm in V1 and 'R' wave of 27 mm in V5 with ST depression and T inversion in V5, V6. Which of the following statements is *wrong* ?
- (1) Target organ damage is present
 - (2) Ramipril and Diuretic can be prescribed
 - (3) Sublingual Nifedipine should be given to quickly bring down the pressure
 - (4) It is hypertensive urgency
7. Which of the following betablockers does *not* have vasodilation property ?
- (1) Carvedilol
 - (2) Nebivolol
 - (3) Labetalol
 - (4) Acebutolol
8. The following statements are correct about Moxonidine *except*
- (1) It increases sympathetic activity
 - (2) Is a centrally acting antihypertensive
 - (3) A selective agonist of Imidazoline receptor subtype I
 - (4) Improves insulin resistance
9. Which of the following statements regarding heart failure is *wrong* ?
- (1) ACE inhibitors are useful in all stages of heart failure.
 - (2) Diuretics are used in stage C of heart failure.
 - (3) A patient with coronary artery disease is in stage A of heart failure.
 - (4) Cardiac transplantation in cardiac failure has 5 years survival rate of about 20%.
10. Which of the following statements about diuretics is *false* ?
- (1) When metolazone is added to furosemide clinical improvement can occur.
 - (2) Eplerenone increases potassium secretion by distal convoluted tubule.
 - (3) Continuous intravenous administration of loop diuretics may overcome diuretic resistance.
 - (4) Metolazone acts on proximal convoluted tubule.

11. Which one of the following is **false** ?

- (1) Sodium and water retention causes pulmonary congestion and edema in long term.
- (2) Sympathetic stimulation increases HR and stroke volume and decreases energy expenditure.
- (3) Vasoconstriction increases BP but causes pump dysfunction by increase in afterload in long term.
- (4) Hypertrophy helps to unload individual muscle fibres, but leads to cardiac cell death and cardiomyopathy of overload.

12. Cardiomegaly is a feature of

- (1) Heart failure with preserved ejection fraction
- (2) Ebstein's anomaly of tricuspid valve
- (3) Constrictive pericarditis
- (4) Restrictive cardiomyopathy

13. A cardiac failure patient well compensated on treatment gets admitted with sudden worsening of symptoms. Which of the following investigations is **not** appropriate ?

- (1) Serum creatinine
- (2) Electrocardiogram
- (3) D Dimer
- (4) Serum calcium

14. Which of the following is **not** a correctable cause of heart failure ?

- | | |
|------------------|----------------------|
| (1) Arrhythmias | (2) Amyloidosis |
| (3) Hypertension | (4) Valvular lesions |

15. Which of the following statements regarding heart failure is **not** correct ?

- (1) A person with hypertension is in stage A of heart failure.
- (2) Betablocker can be initiated in stage B of heart failure in patients with valvular heart disease and coronary artery disease.
- (3) Digoxin can be used in stage C of heart failure.
- (4) Family history of cardiomyopathy puts a person in stage B of heart failure.

16. Which of the following is *not* a major Framingham criteria for cardiac failure ?
- (1) Paroxysmal nocturnal dyspnoea
 - (2) S3 gallop
 - (3) Bilateral ankle edema
 - (4) Hepato jugular reflux
17. Anticoagulation in cardiac failure is *not* indicated in the following conditions :
- (1) Echo demonstrated recent LV apical thrombus
 - (2) Atrial fibrillation
 - (3) All patients with LV dysfunction
 - (4) History of embolism
18. The following can cause profound fatigability *except*
- (1) Severe heart failure
 - (2) Betablockers
 - (3) Diuretics
 - (4) Hydralazine
19. In the pathogenesis of atherosclerosis, which of the following statements is *incorrect* ?
- (1) Stage 1 lesion develops when monocytes accumulate in intima.
 - (2) In fatty streak pools of extracellular lipids are seen.
 - (3) Lipid core and subendothelial smooth muscle cells migration are characteristic of stage IV lesions.
 - (4) Formation of fibrous capsule around the lipid core occurs in stage V.
20. Which of the following statements regarding hypertension is *wrong* ?
- (1) Risk of coronary artery disease is related to the level of blood pressure.
 - (2) End organ damage indicates higher cardiovascular risk.
 - (3) Systolic blood pressure is more strongly correlated to coronary artery disease than diastolic blood pressure or pulse pressure.
 - (4) Hyperinsulinemia decreases the risk for coronary artery disease.

21. Which of the following statements is *incorrect* ?
- (1) Sedentary lifestyle doubles the risk of coronary artery disease.
 - (2) Exercise programs in patients with coronary artery disease improves quality of life but does not reduce mortality.
 - (3) Major physical exercise of 30 minutes or more on most days of the week is a good lifestyle intervention.
 - (4) Exercise has favourable effect on coronary risk factors like diabetes mellitus, hypertension, dyslipidemia and obesity.
22. Which of the following statements is *correct* ?
- (1) Aorta and its major branches are conductant vessels.
 - (2) Prinzmetal's angina is due to abnormal function.
 - (3) Intramyocardial arterioles controls microvascular circulation.
 - (4) Significant occlusion of conductance vessels leads to maximal constriction and resistance vessels.
23. Which of the following statements is *correct* ?
- (1) Lpa is homologous aminoacid sequence with aopB.
 - (2) Estrogen therapy increases the level of Lpa.
 - (3) The predictive value of Lpa is more in young individuals.
 - (4) Atherogenicity of Lpa has no correlation to LDL cholesterol levels.
24. Which of the following statements is *wrong* with respect to heart healthy diet ?
- (1) Dietary cholesterol should be less than 200 mg/day
 - (2) Polyunsaturated fat should be up to 10% of total calories
 - (3) Total fat should be about 30% of total calories
 - (4) Total protein should be 30% of total calories
25. Which of the following statements is *wrong* ?
- (1) Cell membrane fluidity is stablized by cholesterol esters
 - (2) Lipoprotein contains phospolipids and free cholesterol in its outer layer
 - (3) Cholesterol ester is hydrophylic
 - (4) Triglycerides are esters of glycerol

26. The following drugs are to be avoided in RV infarction *except*

- | | |
|---------------|--------------------|
| (1) Morphine | (2) Nitroglycerine |
| (3) Diuretics | (4) Pethidine |

27. Which of the following statements is *correct* ?

- (1) Completely occluding thrombus in a coronary artery leads to non-ST elevation myocardial infarction.
- (2) Hibernation leads to acute LV dysfunction.
- (3) Stunned myocardium results from reperfusion following transient ischemia.
- (4) Ventricular remodelling following myocardial infarction leads to thinning and expansion.

28. Which of the following statements is *incorrect* in management of acute myocardial infarction ?

- (1) Prehospital thrombolysis was ineffective in clinical trials.
- (2) Door to needle time should be < 60 minutes.
- (3) Time to treatment from onset of symptoms is very important.
- (4) Primary angioplasty and thrombolysis are equally effective in the first hour of onset of symptoms.

29. Which of the following statements is *incorrect* ?

- (1) Papillary muscle rupture is uncommon in anterior wall myocardial infarction.
- (2) Mitral regurgitation secondary to papillary muscle rupture results in holosystolic murmur with thrill.
- (3) Ventricular septal rupture can occur within 24 hours of infarction.
- (4) Cardiac rupture can present as sudden unanticipated death.

30. Which of the following statements is *not correct* ?

- (1) Beyond 72 hours after suspected MI, serum LDH levels are useful to diagnose MI.
- (2) Cardiac troponin T has 31 aminoacids not present in skeletal forms.
- (3) Myoglobin is released more rapidly from injured myocardium than CKMB.
- (4) CKMB levels return to normal by 72 hours after myocardial infarction.

31. Which of the following is **not** indicative of successful thrombolysis ?
- (1) Accelerated idioventricular rhythm
 - (2) Relief of symptoms
 - (3) More than 50% resolution of ST elevation at 90 minutes
 - (4) Ventricular tachycardia
32. Which of the following is **not** a contraindication for thrombolysis ?
- (1) Intracranial hemorrhage in the past
 - (2) Suspected aortic dissection
 - (3) Renal biopsy one week ago
 - (4) Menstrual bleeding
33. In which of the following statements, is nitroglycerine **not** indicated ?
- (1) Acute pulmonary edema
 - (2) Right ventricular infarction
 - (3) Persisting angina
 - (4) Hypertension
34. Which of the following secondary prevention strategies is **most** useful ?
- (1) Weight reduction
 - (2) Smoking cessation
 - (3) Statin
 - (4) Clopidogrel
35. Which of the following statements is **correct** ?
- (1) B1 stimulation decreases intracellular cyclic AMP
 - (2) Alpha 2 stimulation increases intracellular cyclic AMP
 - (3) Dopamine is the precursor of norepinephrine
 - (4) Norepinephrine binds to Alpha 2 and Beta 2 receptors
36. Which of the following statements is **correct** ?
- (1) IV calcium increases myocardial contractility and vascular tone
 - (2) Calcium antagonises the cardiac effects of hypokalemia
 - (3) Milrinone decreases cyclic AMP levels
 - (4) Enoximone increases preload and afterload

37. Which of the following statements is **correct** regarding management of ventricular tachycardia ?
- (1) When patient is conscious without angina and stable BP asynchronous electrical cardioversion is the treatment of choice.
 - (2) If systolic BP is < 90 mmHg pharmacological cardioversion is indicated.
 - (3) If pulse is not felt management should be as a cardiopulmonary arrest.
 - (4) Intravenous lignocaine is preferred over amiodarone.
38. Which of the following statements is **correct** regarding cyanotic spells ?
- (1) Deep rapid breathing with subcostal retraction is a cardinal feature
 - (2) Gasping respiration and apnea are very early features
 - (3) Pulmonary ejection may disappear during the spell
 - (4) Cyanosis remains same throughout the spell
39. Which of the following statements about pulmonary embolism is **correct** ?
- (1) A normal perfusion scan excludes pulmonary embolism.
 - (2) Echocardiography detects pulmonary thrombi in most of the cases.
 - (3) Contrast pulmonary angiogram is not the gold standard.
 - (4) Normal level of 'D' dimer does not rule out pulmonary embolism.
40. What is the **correct** dose for the following drugs in cardiopulmonary resuscitation ?
- (1) Vasopressin : 40 IU/kg
 - (2) Amiodarone : 450 mg bolus given over 10 minutes
 - (3) Epinephrine : 10 mcg/kg
 - (4) Atropine : 30 mcg/kg
41. Which of the following doses is **correct** ?
- (1) Dobutamine 20 – 40 ug/kg/min
 - (2) Isoproterenol 0.05 ug–0.5 ug/kg/min
 - (3) Dopamine 1 – 20 ug/kg/min
 - (4) Norepinephrine 2 – 20 ug/min

42. In pulmonary oedema which of the following statements is **correct** ?
- (1) Transudation of fluid into alveoli is less than lymphatic drainage.
 - (2) Rhonchi and crackles develop first in apical zone.
 - (3) Lungs become less compliant.
 - (4) Adrenergically mediated vaso dilatation occurs.
43. Which of the following statements regarding pulmonary embolism is **correct** ?
- (1) Elevation of 'D' dimer is specific for pulmonary embolism.
 - (2) A normal pulse oximetry (SpO_2) excludes pulmonary embolism.
 - (3) S1 Q3 T3 in ECG has less sensitivity.
 - (4) A normal chest X-ray does not rule out pulmonary embolism.
44. Which of the following is **wrong** regarding cardiopulmonary resuscitation ?
- (1) Triple Airway Manoeuvre includes "Head lift-chin tilt and Jaw thrust".
 - (2) Best chance of survival after cardiac arrest lies in successful defibrillation.
 - (3) Optimal defibrillator paddle size for adults is 13 cm.
 - (4) To defibrillate children, energy required is 2 – 4 J/kg.
45. Which of the following statements is **incorrect** regarding cardiopulmonary resuscitation ?
- (1) Amiodarone is the preferred antiarrhythmic drug.
 - (2) Sodium bicarbonate is indicated for tricyclic antidepressant toxicity.
 - (3) Intravenous magnesium is indicated in torsade de pointes.
 - (4) Magnesium mirrors the action of extracellular calcium.
46. Which of the following statements about recording blood pressure is **wrong** ?
- (1) Width of the cuff should be 60% arm circumference.
 - (2) Length of the cuff should be more than 80% of arm circumference.
 - (3) Oversized cuff will underestimate the blood pressure.
 - (4) Normally the difference in systolic BP between the two upper limbs is less than 10 mmHg.

47. Which of the following statements is *wrong* ?

- (1) Isolated systolic hypertension has systolic BP of more than 140 and diastolic BP of less than 90 mmHg.
- (2) Renal parenchymal disease is the commonest cause of secondary hypertension.
- (3) Coarctation of aorta can be suspected by proper clinical examination.
- (4) Persistent hyperkalemia indicates primary aldosteronism.

48. Hypertension, tremors and palpitation occur in the following *except*

- (1) Pheochromocytoma
- (2) Anxiety state
- (3) Thyrotoxicosis
- (4) Cushing syndrome

49. Which of the following statements is *false* ?

- (1) Diuretics and ACE inhibitors are the first line of drugs in gestational hypertension.
- (2) Decrease of 1 kg of body weight is associated with an average fall of 1.6 mm of BP.
- (3) Daily consumption of more than one ounce of Ethanol increases blood pressure.
- (4) Selectivity of betablockers is lost in high doses.

50. Which of the following statements is *true* ?

- (1) Transient ischaemic attack (TIA) occurs due to intracranial atherosclerosis.
- (2) Hypertension induces microalbuminuria in late stages.
- (3) Commonest abnormality of aorta associated with systemic hypertension is thoracic aortic aneurysm.
- (4) Systolic BP is a stronger and more consistent predictor of cardiovascular risk than diastolic BP.

51. Which of the following drugs does *not* have pulmonary veno dilator action ?

- (1) Nitroglycerine
- (2) Furosemide
- (3) Morphine
- (4) Sodium Nitroprusside

52. In a person with diabetes mellitus, bronchial asthma and hypertension, which of the following drugs should be **avoided** ?
- (1) Ramipril
 - (2) Propranolol
 - (3) Verapamil
 - (4) Telmisartan
53. Which of the following is **incorrect** regarding tachyarrhythmias ?
- (1) Reduce ventricular filling
 - (2) Cause only systolic dysfunction
 - (3) Increase myocardial oxygen demand
 - (4) Can lead to cardiomyopathy
54. A patient on long term treatment for atrial fibrillation presents with anorexia, nausea and yellow vision. The likely diagnosis is
- (1) Tachycardiomyopathy
 - (2) Digitoxicity
 - (3) Infective hepatitis
 - (4) Congestive hepatomegaly
55. Which of the following statements is **true** ?
- (1) Pulsus alternans will persist inspite of successful treatment of heart failure.
 - (2) Unilateral pleural effusion usually occurs in left side.
 - (3) In constrictive pericarditis and severe TR, pedal edema is more prominent than ascites.
 - (4) Heart failure patients with wide QRS complex can be considered for cardiac resynchronization therapy.
56. Which of the following is **not** true in heart failure ?
- (1) Increased sympathetic activity results in sodium retention.
 - (2) Increased N terminal pro BNP is a reliable marker.
 - (3) Warm extremities with narrow pulse pressure occurs in high output failure.
 - (4) With RV failure, hepatomegaly, pedal oedema and elevated JVP occur.

57. Which of the following statements about Renin Angiotensin system is not *correct* ?

- (1) Juxta glomerular apparatus release renins
- (2) Angiotensin II is involved in remodeling of cardiomyocytes
- (3) Angiotensin II causes systemic vasodilatation
- (4) Angiotensin II causes release of aldosterone from adrenal cortex

58. Which of the following is *false* about diuretics ?

- I. Continuous intravenous administration of loop diuretics may overcome diuretic resistance.
- II. When metolazone is added to furosemide, clinical improvement can occur.
- III. Metolazone is lipophobic.
- IV. Spironolactone acts on distal convoluted tubule and increases K⁺ secretion.

- (1) I, III
- (2) II, IV
- (3) III, IV
- (4) IV

59. Which of the following statements in treatment of heart failure is *correct* ?

- (1) Short acting metoprolol does not improve survival
- (2) Hydralazine increases preload
- (3) Calcium channel blockers improve survival
- (4) Digoxin gives mortality benefit

60. Which of the following statements regarding cardiac resynchronization therapy is *wrong* ?

- (1) QRS duration should be more than 140 msec
- (2) Both ventricles are paced using 3 leads
- (3) Clinical trials have shown enhanced survival
- (4) Quality of life is improved

61. Which of the following statements is *wrong* ?
- (1) Supraventricular tachycardia with AV block occurs in digitoxicity.
 - (2) Milrinone decreases breakdown of cyclic AMP.
 - (3) Dopamine acts through release of endogenous norepinephrine.
 - (4) Dobutamine increases peripheral vascular resistance.
62. Which of the following statements is *true* ?
- (1) Unilateral pleural effusion usually occurs in left side.
 - (2) In constrictive pericarditis and severe tricuspid regurgitation, pedal oedema is more prominent than ascites.
 - (3) Cardiomegaly is always present in diastolic heart failure.
 - (4) Pulsus alternans tends to disappear with successful treatment of heart failure.
63. Which of the following statements is *incorrect* regarding acute coronary syndrome ?
- (1) Fissuring and ulceration of atherosclerotic plaque is a triggering factor.
 - (2) Platelets have important role in pathogenesis.
 - (3) More than half of deaths following acute myocardial infarction occur before the patient is hospitalised.
 - (4) Modern management of acute myocardial infarction has eliminated non-fatal recurrence.
64. In the pathogenesis of plaque formation, which of the following statements is *incorrect* ?
- (1) Endothelial erosion is a first step in plaque formation
 - (2) Lipid core is derived from dying foam cells
 - (3) Macrophage invasion causes destruction of collagen matrix
 - (4) Below intimal thickening, neovascularisation of media occurs
65. Among the coronary risk factors, which of the following statements is *correct* ?
- (1) Cardiovascular risk of smoking continues beyond 20 years after cessation
 - (2) Smoking is a most single preventable cause of death
 - (3) Adverse effects of smoking is less in women
 - (4) Nicotine decreases the level of fibrinogen

- 66.** Which of the following statements is *incorrect* ?
- (1) Addition of fibrate to statin has shown mortality benefits in clinical trials.
 - (2) Thrombospondin is involved in cell adhesion and thrombosis.
 - (3) Administration of folic acid in the setting of Vit B12 deficiency can lead to megaloblastic anaemia.
 - (4) Plasma fibrinogen level of more than 350 mg/dl increases the risk for myocardial infarction and stroke.
- 67.** Which of the following statements is *correct* ?
- (1) Distribution of fat in the body is more important than total amount of fat.
 - (2) BMI of 25 – 29 leads to 3-fold increase in coronary artery disease.
 - (3) Exercise alone can cause great weight loss.
 - (4) Exercise decreases HDL cholesterol and triglycerides.
- 68.** Which of the following statements is *wrong* regarding therapeutic lifestyle change in diet ?
- (1) Saturated fat should be less than 10% of total calories
 - (2) Monounsaturated fat should constitute up to 20% of total calories
 - (3) Carbohydrates should not exceed 60% of total calories
 - (4) Dietary fibre should be 20 – 30 g/day
- 69.** Which of the following statements is *correct* ?
- (1) Cardiac contraction utilizes glucose by aerobic metabolism.
 - (2) 20% of oxygen from coronary circulation is extracted at rest.
 - (3) Diastolic BP influences coronary perfusion.
 - (4) When myocardium requires more oxygen, it is met by increased oxygen extraction.
- 70.** Which of the following statements is *wrong* ?
- (1) Statins reduce LDL cholesterol in primary hyperlipidemia.
 - (2) Statins reduce total cholesterol in mixed hyperlipidemia.
 - (3) All patients receiving statins should have repeated CK measurements.
 - (4) Statins should be discontinued if transaminases are elevated more than 3/4th.

71. Combination of hypertension with elevated JVP occurs in all the following conditions *except*
- (1) Cardiac tamponade
 - (2) Right ventricular infarction
 - (3) Acute pulmonary embolism
 - (4) Hemorrhagic shock
72. Which of the following is *not* an indication for temporary transvenous pacing in acute myocardial infarction ?
- (1) Complete heart block
 - (2) Bifascicular block
 - (3) Mobitz type II block
 - (4) Mobitz type I block
73. A patient with acute anterior wall myocardial infarction presents to emergency room within one hour chest pain; with a blood pressure of 80/60 mmHg. Which of the following statements is *not correct* ?
- (1) Patient is in Killip class IV
 - (2) Primary PCI is the treatment of choice
 - (3) IABP may be beneficial
 - (4) Streptokinase will be as effective as primary PCI
74. Which of the following is *not* absolute contraindication for thrombolysis ?
- (1) Head injury within 3 months
 - (2) Prolonged CPR of more than 10 minutes
 - (3) Ischaemic stroke within 3 months
 - (4) Malignant intracranial neoplasm
75. The following conditions lead to high mortality *except*
- (1) Malignant ventricular arrhythmias
 - (2) Cardiogenic shock
 - (3) Free wall rupture
 - (4) Pericarditis

76. Dominant R wave in V1 occurs in the following *except*
- (1) Right ventricular hypertrophy
 - (2) Posterior wall myocardial infarction
 - (3) Pre-excitation
 - (4) Left bundle branch block
77. In a patient admitted with acute anterior wall myocardial infarction, which of the following drugs is *not* appropriate ?
- (1) Clopidogrel 300 mg
 - (2) Enteric coated aspirin 150 mg
 - (3) Nitroglycerine
 - (4) Morphine
78. Which of the following statements is *incorrect* ?
- (1) Aspirin is as effective as Streptokinase in treatment of acute myocardial infarction.
 - (2) Thrombolysis is indicated in non-ST elevation myocardial infarction.
 - (3) Eptifibatide is indicated in high risk unstable angina.
 - (4) All patients with unstable angina should undergo immediate coronary angiogram within 24 hours.
79. Which of the following is *not correct* with respect to VSD ?
- (1) Occurs in 1 – 3% of acute myocardial infarction
 - (2) More common in inferior wall myocardial infarction
 - (3) Majority occurs in first week of myocardial infarction
 - (4) Signs of systemic venous congestion are more than pulmonary venous congestion
80. In management of atrial fibrillation complicating AMI, which of the following is *incorrect*, if hemodynamically unstable ?
- (1) IV betablocker
 - (2) IV amiodarone
 - (3) Synchronised cardioversion
 - (4) IV digoxin

81. Which of the following statements are **correct** ?
- (1) Norepinephrine is a powerful vaso constrictor rather than a powerful inotrope.
 - (2) Norepinephrine is useful in patients with cardiac decompensation.
 - (3) Phenyl ephrine has action on betareceptors.
 - (4) Isoproterenol is an endogenous catecholamine.
82. Which of the following statements are **correct** regarding supraventricular tachycardia ?
- (1) Cardioversion is the treatment of choice in all cases of supraventricular tachycardia.
 - (2) Valsalva maneuver will increase the ventricular rate in atrial fibrillation.
 - (3) Intravenous adenosine should be followed by a bolus of 20 ml of normal saline and elevation of the limb (arm).
 - (4) In hemodynamically unstable patients, intravenous verapamil or metoprolol can be given.
83. In management of pulmonary oedema, which of the following statements is **incorrect** ?
- (1) Mechanical ventilation decreases venous return to thorax
 - (2) Morphine is the drug of choice
 - (3) Intravenous loop diuretics have venodilator action
 - (4) Vasodilators are contraindicated
84. The following measure is **incorrect** while managing cyanotic spell :
- (1) Keep the child in knee chest position
 - (2) Sodabcarb in isolyte P can be given as infusion
 - (3) Sedate the child with subcutaneous morphine
 - (4) Start isoprenaline infusion
85. Which of the following statements are **incorrect** regarding cardiopulmonary resuscitation ?
- (1) Intraosseous administration of drugs can be done in children.
 - (2) Endotracheal route of administration requires 2 – 3 times of intravenous dose.
 - (3) Epinephrine enhances cerebral and coronary blood flow.
 - (4) Acidosis inhibits the effect of vasopressin.

- 86.** Which of the following statements are *incorrect* ?
- (1) Dopamine causes more tachycardia and arrhythmias than dobutamine.
 - (2) Alpha 1 receptor stimulation does not alter levels of cyclic AMP.
 - (3) Dobutamine does not cause norepinephrine release.
 - (4) In heart failure, beta receptors are unregulated.
- 87.** In a patient with supraventricular tachycardia, synchronized cardio version is *not* indicated when there is
- (1) Acute myocardial infarction
 - (2) Systolic blood pressure of less than 90 mmHg
 - (3) Decreased level of consciousness
 - (4) Palpitation
- 88.** Which of the following facts are *incorrect* regarding the mechanism of cyanotic spell ?
- (1) Catecholamine induced infundibular spasm
 - (2) Fall in systemic vascular resistance increase in right to left shunt
 - (3) Activation of mechano receptors in ventriculans
 - (4) Increase in pulmonary blood flow
- 89.** Which of the following statements are *true* ?
- (1) Computed tomographic pulmonary angiogram has reduced the need for invasive pulmonary angiogram.
 - (2) MR pulmonary angiogram is superior to CT pulmonary angiogram.
 - (3) Thrombolysis is indicated in pulmonary embolism if there is no RV dysfunction demonstrated by echocardiogram.
 - (4) Unfractionated heparin has better bio-availability than low molecular weight heparin.
- 90.** Which of the following statements are *incorrect* ?
- (1) Prolonged use of dobutamine leads to desensitization
 - (2) Dopamine stimulates release of Norepinephrine
 - (3) Epinephrine is effective in patients with transplanted heart
 - (4) Isoproterenol causes tachycardia and hypertension

SPACE FOR ROUGH WORK