

## POST GRADUATE DIPLOMA IN CLINICAL CARDIOLOGY (PGDCC)

### Term-End Examination

June , 2010

### 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 Sheet.
- (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 Sheet.
- (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. Blood pressure of 124/84 mmHg is classified according to JNC VII as :
  - (1) Stage 1 HTN
  - (2) Pre Hypertension
  - (3) White Coat HTN
  - (4) Normal Blood Pressure
2. All are true about auscultatory gap except :
  - (1) Mistakenly high BP is measured
  - (2) Its the difference of BP between first appearance of Korotkoff sounds and the one at lower levels
  - (3) Elevate cuff pressure high beyond disappearance of brachial pulse
  - (4) Does not affect measurement of diastolic BP
3. Sounds that we hear during the measurement of BP are called :
  - (1) Korotkoff sounds
  - (2) Anitiskov sounds
  - (3) Pistol sounds
  - (4) Traubes sounds
4. All are causes of secondary Hypertension except :
  - (1) Renal Parenchymal disease
  - (2) Renovascular disease
  - (3) Coarctation of Aorta
  - (4) Hypopituitarysm
5. Commonest cause death in chronic uncontrolled Hypertension patients :
  - (1) Cardiovascular causes
  - (2) Cerebrovascular causes
  - (3) Renal failure
  - (4) Peripheral vascular disease
6. What level of BP would you aim for in treating hypertension in Renal failure patients :
  - (1) < 130/80 mmHg
  - (2) < 140/90
  - (3) < 150/90
  - (4) No specific levels
7. All are true about Hypertensive urgency except :
  - (1) BP is very high
  - (2) There is always ongoing target organ damage
  - (3) Does not always need ICU admission
  - (4) Needs prompt control of BP
8. Keith - Wagner classification describes :
  - (1) Grade of proteinuria in HTN Nephropathy
  - (2) Retinal changes in HTN patients
  - (3) Doppler signs in Reno vascular HTN patients
  - (4) Atherosclerotic changes in ascending aorta in hypertension patients

9. Symptoms of SOB even at rest suggests NYHA class :
- (1) Class I                      (2) Class II                      (3) Class III                      (4) Class IV
10. All are true about Heart Failure Except :
- (1) Heart failure can occur with preserved LV ejection fraction  
 (2) Symptoms worsen with advancing NYHA class III  
 (3) Precipitating causes of heart failure need to be excluded  
 (4) Renin-Angiotensin-Aldosterone system is depressed in heart failure
11. Following investigation is most specific to differentiate acute LVF from acute asthma in emergency setup :
- (1) Plasma BNP levels                      (2) Chest x-ray  
 (3) 2D ECHO                      (4) PFT
12. All the following are true about atherosclerotic plaque except :
- (1) Its mostly intimal and subintimal in distribution  
 (2) It contains foam cells, collagen, smooth muscle etc  
 (3) The earliest form-Fatty streak starts in early childhood  
 (4) Its highly localized to a specific vascular territory
13. All are risk factors for CAD except :
- (1) Female sex                      (2) Tobacco consumption  
 (3) Age                      (4) Sedentary lifestyle
14. All are risk factors for CAD except :
- (1) Positive family history                      (2) OC pills with high estrogen  
 (3) Pre menstrual women                      (4) Hyperlipidemia
15. All are primary preventive trials except :
- (1) WOSCOPS                      (2) AFCAPS/TEXCAPS  
 (3) HPS                      (4) 4 S
16. All of the following are HMG Co-A reductase inhibitors except :
- (1) Atorvastatin                      (2) Ezetemibe  
 (3) Simvastatin                      (4) Fluvastatin
17. All are true about diabetic dyslipidemia except :
- (1) Statins are required only if LDL is more than 100 mg/dl  
 (2) Therapeutic life style is advised to all regardless of LDL levels  
 (3) Having diabetes is a CAD equivalent  
 (4) Insulin resistance is the main cause of high TGL in them

18. Best drug to increase HDL :
- (1) Simvastatin
  - (2) Nicotinic acid
  - (3) Ezetemibe
  - (4) Bile acid sequestrants
19. Commonest cause of death in India :
- (1) CAD
  - (2) Ceribrovascular disease
  - (3) Accidents
  - (4) Cancers
20. All are true about Acute MI except :
- (1) Levine sign may be positive
  - (2) 50% mortality before Hospitalization
  - (3) Early recognition and prompt treatment is key to success
  - (4) Killip class IV patients are most stable
21. ST elevation in ECG in leads V1 to V3 denotes :
- (1) Antero Septal MI
  - (2) Extensive anterior wall MI
  - (3) Lateral or apical MI
  - (4) Inferior wall MI
22. The earliest enzyme to rise in plasma after acute MI is :
- (1) Troponin T
  - (2) Troponin I
  - (3) Myoglobin
  - (4) CKMB
23. All are true about Troponin I in Acute MI except :
- (1) Its a cardiac specific Biomarker
  - (2) Maximal activity reached by 24-36 hrs
  - (3) Return to normal levels by 48-72 hrs
  - (4) Both slide test and quantative analysis are available
24. All are true about streptokinase infusion in acute MI except :
- (1) It is the most widely available thrombolytic
  - (2) Can be given up to >24 hrs in case of ongoing angina
  - (3) Pregnancy is a relative contraindication
  - (4) Hypotension is not uncommon during initial infusion
25. All are absolute contraindication for Thrombolysis in Acute MI except :
- (1) In a prior intracranial bleed
  - (2) Ischemic stroke three months
  - (3) Active peptic ulcer
  - (4) Presence of intracranial tumors

26. All are features of cardiogenic shock except :
- (1) Cold clammy peripheries
  - (2) Systolic BP less than 80 mmHg
  - (3) Cardiac index less than 1.8 L/mt/m<sup>2</sup>
  - (4) PCWP less than 18 mmHg
27. All are true about cardiac rupture in post MI patients except :
- (1) More common in first MI
  - (2) More common in elderly male
  - (3) More common in Hypertensive without LVH
  - (4) Usually occurs in first - Second week post MI
28. All are true about STK infusion in acute MI except :
- (1) Given as infusion over 30-45 minutes
  - (2) Repeat dose can be given in the second week
  - (3) Ineffective in cardiogenic shock
  - (4) Indicated up to 12 hrs in acute anterior wall MI
29. Largest Endocrine organ in the body :
- (1) Liver
  - (2) Pancreas
  - (3) Endothelium
  - (4) Pituitary gland
30. Following are the modifiable risk factors for CAD except :
- (1) Hypotension
  - (2) Deletion Polymorphism in the ACE gene
  - (3) Diabetes Mellitus
  - (4) Hyperlipedemia
31. Prinzmetal's Angina is :
- (1) Vasospastic Angina
  - (2) Unstable Angina
  - (3) Post MI Angina
  - (4) Micro Vascular Angina
32. IV Adenosin is usually indicated in :
- (1) SVT
  - (2) VT
  - (3) Atrial Flutter
  - (4) Atrial Fibrillation
33. Cardiac lesions that can produce cyanotic spells except :
- (1) Truncus Arteriosis
  - (2) Tetralogy of Fallot
  - (3) DORV with VSD and PS
  - (4) TGA with VSD and PS

34. All are true about management of cyanotic spell except :
- |                         |                           |
|-------------------------|---------------------------|
| (1) Oxygen inhalation   | (2) Subcutaneous morphine |
| (3) Knee chest position | (4) IV Digoxin            |
35. Confirmation of diagnosis of Pulmonary Embolism is by :
- |                           |                         |
|---------------------------|-------------------------|
| (1) VQ scan               | (2) Elisa D-dimer assay |
| (3) Pulmonary angiography | (4) Chest x-ray         |
36. All are true about pulmonary embolism except :
- |  |
|--|
| (1) Frequently undiagnosed medical emergency |
| (2) Massive PE can cause Shock               |
| (3) Rarely presents as pulmonary infraction  |
| (4) ECG and X-ray are diagnostic             |
37. All are true about Hypertensive urgencies except :
- |  |
|--|
| (1) Acute severe elevation of BP up to 200 mmHg systolic |
| (2) There is ongoing target organ dysfunction            |
| (3) BP can be controlled in 24-72 hrs                    |
| (4) They can be managed with oral drugs at home          |
38. All are features of cardiac tamponade except :
- |                              |                                     |
|------------------------------|-------------------------------------|
| (1) Kussmaul's sign positive | (2) Dyspnea and Tachycardia         |
| (3) Pulsus Paradoxus present | (4) Develops Slowly over many weeks |
39. Following class of drugs has proved to have mortality benefit in chronic Heart Failure patients :
- |                    |                                    |
|--------------------|------------------------------------|
| (1) ACE inhibitors | (2) IV Frusemide                   |
| (3) Oral Digoxin   | (4) Intermittent Inotropic support |
40. All are features of Acute Pulmonary Edema except :
- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| (1) Pink frothy sputum            | (2) Pulsus paradoxis                |
| (3) Crepitations over lung fields | (4) Bat's wing edema on Chest X-ray |
41. Most favored drug in ventricular tachycardia :
- |                     |                   |
|---------------------|-------------------|
| (1) IV Amiodarone   | (2) IV Lignocaine |
| (3) IV Procainamide | (4) IV Sotalol    |
42. One of the following is a phosphodiesterase inhibitor :
- |                   |                   |
|-------------------|-------------------|
| (1) Phenylephrine | (2) Isoproterenol |
| (3) Milrinone     | (4) Dopamine      |

43. All are true about posterior wall MI except :
- (1) Isolated Posterior Wall MI is rare
  - (2) Diagnosis can be missed if ECG is not properly analyzed
  - (3) RS ratio in V1 is  $\geq 1$
  - (4) ST elevation in V3 R-V4 R
44. All are true about ventricular remodeling after MI except :
- (1) Denotes change in size, shape or configuration of LV
  - (2) It is a heterogeneous and regional process
  - (3) Can lead to thinning of myocardium and aneurysm
  - (4) ACE inhibitors worsen this condition
45. Killip Class IV in Acute MI denotes :
- (1) MI with pulmonary edema
  - (2) MI with cardiogenic shock
  - (3) MI with complete heart block
  - (4) MI ineligible for thrombolysis
46. Ideal treatment for acute ST elevation MI with window period of 2 hrs is :
- (1) Refer to a centre with a primary PCI facility
  - (2) Prompt thrombolysis
  - (3) Institute ACLS protocol
  - (4) Intravenous heparin
47. All are treatment options for acute inferior MI with complete heart block except :
- (1) IV Atropine
  - (2) Temporary pacing
  - (3) IV beta blockers
  - (4) Primary PCI
48. Following is true about statin therapy in diabetes :
- (1) All diabetics should be given statins irrespective of LDL levels
  - (2) Statins given only if LDL is more than 100 mg/dl
  - (3) Statins is given only if LDL is  $> 130$  mg/dl
  - (4) Statins given only if CAD is associated
49. Anterior two thirds of the inter ventricular septum is supplied by :
- (1) Left anterior descending artery
  - (2) Obtuse marginal artery
  - (3) Posterior descending artery
  - (4) Conus artery
50. Normal Blood pressure according to the JNC VII classification :
- (1)  $< 120/80$  mmHg
  - (2)  $< 130/80$  mmHg
  - (3)  $< 140/80$  mmHg
  - (4)  $< 110/70$  mmHg

51. All are true about Digoxin in Heart Failure except :
- (1) Useful in diastolic heart failure
  - (2) Not proved to decrease mortality rate
  - (3) Decrease no. of hospitalization
  - (4) Improves quality of life
52. Following investigations are done on the follow up in patients receiving statins :
- (1) LFT and CPK
  - (2) LFT and CPKMB
  - (3) Renal function tests and CPK
  - (4) BNP and CPKMB
53. All following are true about beta blockers and Heart Failure except :
- (1) "Start Low go slow"
  - (2) Mortality benefit present
  - (3) Increase the dose with worsening Heart Failure
  - (4) Both Bisoprolol and Metoprolol are proved to benefit
54. All are X-ray features of pulmonary thrombo embolism except :
- (1) Elevated dome of diaphragm
  - (2) Bats wing type edema
  - (3) Wedge shaped shadow in the periphery S/O pulmonary infarct
  - (4) Normal Chest X-ray
55. Correct position of V3 chest lead while taking ECG :
- (1) Left fourth inter costal space mid clavicular line
  - (2) Left fifth inter costal space mid clavicular line
  - (3) Left fourth parasternal space
  - (4) Between V2 and V4 chest leads
56. Dopamine and Dobutamine are :
- (1) Beta adrenergic agonists
  - (2) Synthetic catecholamine
  - (3) Phosphodiesterase inhibitor
  - (4) Pure alpha agonists
57. All are true about smoking and CAD except :
- (1) Single most preventable cause of death
  - (2) Second hand smoke does not cause CAD
  - (3) Risk of cardiac death is 2-4 times greater in current smokers than non-smokers
  - (4) Smoking activates platelets and increases fibrinogen
58. All are relative contraindications for thrombolytic therapy in acute MI except :
- (1) Pregnancy
  - (2) Major surgery < 3 weeks
  - (3) Active peptic ulcer
  - (4) Prior intracranial hemorrhage



59. All are features of Heart Failure except :
- |                          |                   |
|--------------------------|-------------------|
| (1) Fatigue and weakness | (2) Nocturia      |
| (3) Hemoptysis           | (4) Yellow vision |
60. All are side effects of ACE inhibitors except :
- |                 |                  |
|-----------------|------------------|
| (1) Angio Edema | (2) Hyperkalemia |
| (3) Bradycardia | (4) Hypotension  |
61. Blood pressure of 140/90 mmHg is classified under what stages of JNC VII :
- |                      |                    |
|----------------------|--------------------|
| (1) Stage 1 HTN      | (2) Stage 2        |
| (3) Pre Hypertension | (4) Unclassifiable |
62. Systolic Blood Pressure range of Pre-Hypertension is defined according to JNC VII classification as :
- |                  |                       |
|------------------|-----------------------|
| (1) 130-139 mmHg | (2) 120-139 mmHg      |
| (3) 110-130 mmHg | (4) None of the above |
63. All are true about ideal recording of Blood Pressure except :
- |   |
|---|
| (1) Cuff should snugly fit around the arm                                     |
| (2) Pregnant women's BP should not be checked in lying down position          |
| (3) BP checked after mild exercise is more reliable than that done at rest    |
| (4) Width of the BP cuff must be at least 40% of the circumference of the arm |
64. Auscultatory gap can be best described as :
- |  |
|--|
| (1) No. of days lapsed after the last BP recording   |
| (2) The difference of BP between first appearance of Korotkoff sounds and the one at lower level |
| (3) Difference of BP between two health workers about the same patient                           |
| (4) Long time gap between two successive BP recordings in the same patient in same day           |
65. All are causes of secondary Hypertension except :
- |                       |                        |
|-----------------------|------------------------|
| (1) Addison's disease | (2) Cushing's syndrome |
| (3) Conn's syndrome   | (4) Pheochromocytoma   |
66. All are causes of secondary hypertension except :
- |                               |                             |
|-------------------------------|-----------------------------|
| (1) Renal Parenchymal disease | (2) Renal Artery stenosis   |
| (3) Sheehan's syndrome        | (4) Eclampsia/Pre-eclampsia |

67. All are complications of long standing uncontrolled Hypertension except :
- (1) S3/S4 gallop
  - (2) LVH
  - (3) Heart failure
  - (4) Aortic Stenosis
68. Commonest cause of death in patients with untreated severe BP :
- (1) CAD & Heart Failure
  - (2) CVA
  - (3) CKD & renal failure
  - (4) Abdominal Aortic Aneurysm with rupture
69. All are treatment options for HTN emergencies except :
- (1) Sublingual Captopril
  - (2) Sublingual Nifedipine
  - (3) I.V Lasix
  - (4) I.V Labetelol
70. Drugs to be avoided in pregnancy induced HTN with Pre eclampsia :
- (1) I.V Diuretics
  - (2) ACE inhibitors
  - (3) Both
  - (4) None
71. Following merits classification under isolated systolic HTN :
- (1) Systolic BP > 140 mmHg & Diastolic BP < 90 mmHg
  - (2) Systolic BP > 130 mmHg & Diastolic BP < 80 mmHg
  - (3) Systolic BP > 150 mmHg & Diastolic BP < 90 mmHg
  - (4) None of the above
72. Goal of BP in HTN with DM/CKD :
- (1) < 130/80 mmHg
  - (2) < 120/90 mmHg
  - (3) < 140/80 mmHg
  - (4) < 130/90 mmHg
73. Symptoms of Heart Failure includes all except :
- (1) Dyspnoea
  - (2) Anasarca
  - (3) Cough/Hemoptysis
  - (4) PND
74. All are true about Hypertensive urgency except :
- (1) BP is very high
  - (2) Needs prompt control of BP
  - (3) Does not always need ICU admission
  - (4) There is always ongoing target organ damage

75. All are true about Heart Failure Except :
- (1) Heart failure can occur with preserved LV ejection fraction
  - (2) Renin-Angiotensin-Aldosterone system is depressed in heart failure
  - (3) Precipitating causes of heart failure need to be excluded
  - (4) Symptoms worsen with advancing NYHA class III
76. All are secondary prevention trials involving statins except :
- (1) 4 S
  - (2) HPS
  - (3) LIPID
  - (4) CARE
77. All are HMG CoA reductase inhibitors except :
- (1) Simvastatin
  - (2) Lovastatin
  - (3) Rosuvastatin
  - (4) Fenofibrate
78. Killip Classification is meant to assess severity of :
- (1) Acute MI
  - (2) Acute Decompensated Heart Failure
  - (3) Ventricular Arrhythmias
  - (4) Out comes after PCI
79. All are routine drugs that are used during immediate Post MI period except :
- (1) High dose statins
  - (2) Calcium channel blockers
  - (3) Beta Blockers
  - (4) ACE inhibitors
80. Mechanism of action of Milerenone given during heart failure management is :
- (1) Beta adrenergic stimulation
  - (2) Calcium Channel Activation
  - (3) Inhibition phosphodiesterase
  - (4) Late sodium channel inhibitor
81. All are indicated in pregnancy induced Hypertension except :
- (1) Beta blockers
  - (2) ACE inhibitors
  - (3) Diuretics
  - (4) Calcium channel blockers
82. Ideal treatment for acute ST elevation MI with window period of 2 hrs is :
- (1) Prompt thrombolysis
  - (2) Institute ACLS protocol
  - (3) Refer to a centre with a primary PCI facility
  - (4) Intravenous heparin
83. Morbid obesity is defined in men and women respectively at what BMI levels :
- (1) 31.1 & 32.3
  - (2) 30.1 & 31.3
  - (3) 28.1 & 31.3
  - (4) 35.3 & 38.3

84. Paroxysmal nocturnal dyspnoea is a classical symptom of :
- (1) Acute left heart failure
  - (2) Uncontrolled hypertension
  - (3) Constrictive pericarditis
  - (4) Pulmonary thromboembolism
85. All are ECG features of pulmonary thromboembolism except :
- (1) LBBB
  - (2) S1, Q3, T3 pattern
  - (3) ST-T changes in V1-V3 and inferior leads
  - (4) Normal ECG
86. Following investigations are done on the follow up in patients receiving statins :
- (1) BNP and CPKMB
  - (2) Renal function tests and CPK
  - (3) LFT and CPKMB
  - (4) LFT and CPK
87. All are true about Digoxin in Heart failure except :
- (1) Dose need to be adjusted according to serum creatinine
  - (2) May not be useful in diastolic heart failure
  - (3) Decreased Hospitalization rate
  - (4) Decreases Mortality
88. All are relative contraindications for thrombolytic therapy in acute MI except :
- (1) Pregnancy
  - (2) Prior intracranial hemorrhage
  - (3) Active peptic ulcer
  - (4) Major surgery < 3 weeks
89. All are given for the treatment of unstable Angina except :
- (1) Antiplatelets
  - (2) Thrombolytics
  - (3) Statins
  - (4) Anti thrombotics
90. Correct position of V3 chest lead while taking ECG :
- (1) Between V2 and V4 chest leads
  - (2) Left fifth inter costal space mid clavicular line
  - (3) Left fourth inter costal space mid clavicular line
  - (4) Left fourth parasternal space
-