

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

90094

**Term-End Examination**

**June, 2016**

**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. Which of the following antihypertensive drugs can cause gout ?  
 (1) ACE inhibitor (2) Calcium Channel Blocker  
 (3) Beta Blocker (4) Thiazide
  
2. The drug of choice for systemic hypertension in a patient with benign hypertrophy of prostate.  
 (1) Thiazide (2) Amlodipine (3) Doxazosin (4) Metoprolol
  
3. Which of the following thrombolytic agent administered as a single bolus dose ?  
 (1) Reteplase (2) Tenecteplase (3) Streptokinase (4) Urokinase
  
4. Which creatine Kinase iso enzyme is relatively specific for heart ?  
 (1) CK BB (2) CK MM (3) CK MB (4) All of the above
  
5. The optimal HBAIC Level for a diabetic patient :  
 (1) <9 (2) <8 (3) <6 (4) <7
  
6. All of the following antihypertensive drugs are useful for patients in heart failure except :  
 (1) ACE inhibitor (2) Beta Blocker  
 (3) Diuretics (4) Calcium Channel Blocker
  
7. Thiazide diuretics contribute to all except :  
 (1) Hypouricemia (2) Hyponatraemia  
 (3) Hypercalcemia (4) Hypercholesterolemia
  
8. In pre-eclampsia all the following features are seen except :  
 (1) Proteinuria (2) Pedal Oedema  
 (3) B.P. > 160/95 mmHg (4) Seizures
  
9. Which of the following drugs belongs to loop diuretics ?  
 (1) Bumetanide (2) Spironolactone  
 (3) Chlorthalidone (4) Triamterine
  
10. The target B.P. in diabetes mellitus patient is :  
 (1) <110/80 mmHg (2) <140/90 mmHg  
 (3) <120/80 mmHg (4) <130/80 mmHg

11. Which is the commonest cause of right sided heart failure ?
- (1) COPD
  - (2) Pulmonary embolism
  - (3) Infective endocarditis
  - (4) Secondary to left sided heart failure
12. Nitroglycerine is indicated in all the following conditions except one :
- (1) Bradycardia <50/min
  - (2) Ongoing chest discomfort
  - (3) Control of hypertension
  - (4) Management of pulmonary congestion
13. Trepopnoea refers to :
- (1) Orthopnea due to bronchial asthma
  - (2) Dyspnoea while sleeping
  - (3) Dyspnoea on sitting up
  - (4) Dyspnoea in one lateral decubitus position
14. ECG features of pulmonary thromboembolism are all the following except :
- (1) RBBB
  - (2) S<sub>1</sub>Q<sub>3</sub>T<sub>3</sub> Pattern
  - (3) Ventricular arrhythmias
  - (4) ST-T changes in anterior and inferior leads
15. Framingham criteria for diagnosis of heart failure includes all the following except :
- (1) Central venous pressure > 16 cm H<sub>2</sub>O
  - (2) Circulation time < 25 sec
  - (3) PND
  - (4) Acute pulmonary oedema
16. Drugs used in Hypertensive crisis include all of the following except :
- (1) Fendolopam
  - (2) Frusemide
  - (3) Phentolamine
  - (4) Ketamine
17. Pulsus paradoxus is characteristic feature of :
- (1) Hypertensive encephalopathy
  - (2) Acute pulmonary embolism
  - (3) Acute LVF
  - (4) Cardiac tamponade

18. All are true about Acute MI except :
- (1) Most Common in the evening around midnight
  - (2) Commonest cause of death in the first hour is VF
  - (3) Pain is the most common complaint
  - (4) Triggered by physical exercise, emotion
19. BP levels of 140/90 mmHg can be classified as :
- (1) Stage I HTN
  - (2) Stage II HTN
  - (3) Pre-Hypertension
  - (4) Isolated systolic HTN
20. All are risk factors for CAD except :
- (1) Age
  - (2) Sedentary lifestyle
  - (3) Tobacco Consumption
  - (4) Marfanoid habitus
21. Symptoms of SOB even at rest suggests NYHA class :
- (1) Class IV
  - (2) Class III
  - (3) Class I
  - (4) Class II
22. Which of the following drugs cause dilation of Pulmonary vein ?
- (a) Nitroglycerine
  - (b) Frusemide
  - (c) Morphine
  - (d) Sodium Nitrotrusside
- (1) (a) + (b)
  - (2) (c) + (d)
  - (3) (a) + (b) + (c)
  - (4) (a) + (d)
23. The earliest enzyme to rise in plasma after acute MI is :
- (1) CKMB
  - (2) Myoglobin
  - (3) Tropohin I
  - (4) Tropohin T
24. All are absolute contraindication for thrombolysis in Acute MI except :
- (1) In a prior intracranial bleed.
  - (2) Ischemic Stroke three months.
  - (3) Presence of intracranial tumours.
  - (4) Active peptic ulcer.
25. Adenosine IV is usually indicated in :
- (1) AF
  - (2) VT
  - (3) Atrial flutter
  - (4) SVT
26. All are features of acute pulmonary oedema except :
- (1) Bat's wing edema in chest X-Ray
  - (2) Pulsus paradoxus
  - (3) Pinky frothy sputum
  - (4) Crepitations over lung fields

27. Following statements about cyanotic spells are true except :
- (1) Commonly seen below 2 years.
  - (2) Murmur becomes loud.
  - (3) Tachypnea is present.
  - (4) Cyanosis deepens as spell progresses.
28. Following are side effects of HMGCOA reductase inhibitors except :
- (1) Neurological Symptoms.
  - (2) Liver function test abnormalities.
  - (3) Myopathy.
  - (4) Hypothyroidism.
29. On chest X-Ray, alveolar edema suggests pulmonary venous pressure is likely to be :
- |                  |                    |
|------------------|--------------------|
| (1) 12 - 18 mmHg | (2) $\geq 35$ mmHg |
| (3) 25 - 34 mmHg | (4) 19 - 24 mmHg   |
30. Following drugs may be used in gestational hypertension except :
- |                    |                   |
|--------------------|-------------------|
| (1) ACE inhibitors | (2) Hydralazine   |
| (3) Methyldopa     | (4) Beta blockers |
31. As per JNC VII classification of Blood Pressure, normal B.P. is :
- |                      |                     |
|----------------------|---------------------|
| (1) $< 120/80$ mmHg  | (2) $< 130/80$ mmHg |
| (3) $< 130/90$ mmHg. | (4) $120/80$ mmHg   |
32. 37 years old patient previous Myocardial infarction and LVEF 50%, who has never shown signs and symptoms of heart failure earlier will be classified in which stage of heart failure as per ACC/AHA guidelines.
- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| (1) Stage A | (2) Stage B | (3) Stage C | (4) Stage D |
|-------------|-------------|-------------|-------------|
33. Which of the following drug belongs to thiazide group of diuretics ?
- |              |               |                |                |
|--------------|---------------|----------------|----------------|
| (1) Amloride | (2) Torsemide | (3) Eplerenone | (4) Indapamide |
|--------------|---------------|----------------|----------------|
34. Which of the condition causes heart failure with volume overload ?
- |                           |                          |
|---------------------------|--------------------------|
| (1) Aortic stenosis       | (2) Hypertension         |
| (3) Co-arctation of aorta | (4) Mitral regurgitation |

35. In patients with hypertension with diabetes mellitus which of the anti hypertensive medications are first choice ?
- (1) Calcium channel blocker                      (2) ACE I  
(3) Diuretics    (4) Beta blockers
36. All of the following pharmacologic agents are direct thrombin inhibitors except :
- (1) Hirudin                      (2) Hirulog                      (3) Warfarin                      (4) Ximelagatran
37. Which of the following drug is used for ventricular arrhythmias due to digoxin ?
- (1) Amiodarone                      (2) Phenytoin                      (3) Quinidine                      (4) Propafenone
38. All the following measures are done in right ventricular myocardial infarction except one :
- (1) Early thrombolysis  
(2) Early use of nitrates  
(3) Maintain AV synchrony in case of high grade block  
(4) Maintain Right ventricular preload
39. Commonest cause of secondary hypertension is because of :
- (1) Coarctation of aorta.                      (2) Pheochromocytoma.  
(3) Cushing's syndrome.                      (4) Renal parenchyma disease.
40. Following are features of Cushing's syndrome except :
- (1) Rough Skin                      (2) Round Face                      (3) Truncal Obesity                      (4) Loss of Weight
41. Calcium Channel Blockers can cause all except :
- (1) Hyponatremia                      (2) Pedal Oedema  
(3) Gingival hyperplasia                      (4) Constipation
42. Following are some of the side effects of ACE-inhibitors except :
- (1) Pedal oedema                      (2) Hyperkalemia  
(3) Angioneurotic oedema                      (4) Renal agenesis in foetus
43. Increased BNP (B - type Natriuretic peptide) concentrations are most commonly found in following :
- (1) Obesity                      (2) Myocardial infarction  
(3) Septic Shock                      (4) Heart Failure

44. In the management of acute pulmonary oedema because of left ventricular failure, following are recommended except :
- (1) IV Metoprolol (2) IV Morphine  
(3) IV Furosemide (4) 100 percent oxygen
45. Aggressive lipid lowering drug treatment of persons at various risk levels reduces CAD morbidity and mortality, following are some of the primary prevention trials except :
- (1) The west of Scotland coronary prevention study.  
(2) The Air force/Texas coronary atherosclerosis prevention study.  
(3) The Heart prevention study.  
(4) The Scandinavian Simvastatin Survival Study.
46. As per JNC VII classification stage 2 Hypertension systolic B.P. is :
- (1) >160 mmHg (2) >140 mmHg (3) >120 mmHg (4) >130 mmHg
47. White coat hypertension systolic blood pressure can go up to :
- (1) 27 - 37 mmHg (2) 17 - 27 mmHg (3) 7 - 17 mmHg (4) 0 - 7 mmHg
48. Commonest cause of secondary hypertension :
- (1) Ischemic heart disease (2) COPD  
(3) Renal parenchymal disease (4) Cirrhosis of liver
49. In pregnancy hypertension associated with proteinuria and oedema it is called as :
- (1) Eclampsia (2) Pre - eclampsia  
(3) Cushing's syndrome (4) TIA
50. Hypertensive patients Echo cardiography shows :
- (1) Increase in thickness of LV (2) Decrease in thickness of LV  
(3) No change in LV thickness (4) None of the above
51. In hypertensive patients purpose of examining abdomen are following except :
- (1) Abnormal Kidney masses (2) Polycystic Kidneys  
(3) Abdominal aortic aneurysm (4) Crohn's disease

52. Keith Wagner classification Grade 2 :

- (1) Narrowing of arteries giving rise to copper wire appearance.
- (2) Narrowing of arteries giving rise to copper wire appearance, arteriovenous nipping where the arteries cross the veins.
- (3) Narrowing of arteries, copper wire appearance, arteriovenous nipping, superficial flame shaped and deep dot like haemorrhages and cotton wool exudates.
- (4) In addition to all the above, papilloedema.

53. Normal Blood Pressure is :

- (1) SBP > 160 DBP > 100
- (2) SBP 120 - 139 DBP 80 - 89
- (3) SBP < 120 DBOP < 80
- (4) SBP 140 - 159 DBP 90 - 99

54. Instrument used to record B.P. is :

- |                      |                |
|----------------------|----------------|
| (1) Thermometer      | (2) Glucometer |
| (3) Sphygmomanometer | (4) Otoscope   |

55. What is the commonest abnormality related to hypertension in the aorta ?

- |                        |                       |
|------------------------|-----------------------|
| (1) Abdominal aneurysm | (2) Polycystic Kidney |
| (3) Splenic aneurysm   | (4) Cholecystitis     |

56. Target B.P. in Patients with Diabetes or renal disease is :

- |            |            |            |            |
|------------|------------|------------|------------|
| (1) 120/80 | (2) 140/90 | (3) 130/80 | (4) 140/80 |
|------------|------------|------------|------------|

57. Non-pharmacological management for Hypertension are all the following except :

- (1) Lowering excess body weight
- (2) Restriction of dietary sodium
- (3) Cessation of smoking
- (4) Amlodepin

58. Loop diuretics are all the following except :

- |                |                |               |                |
|----------------|----------------|---------------|----------------|
| (1) Bumetanide | (2) Furosemide | (3) Torsemide | (4) Indapamide |
|----------------|----------------|---------------|----------------|

59. In patients with hypertension and stable angina the drug of choice :

- |                  |          |         |               |
|------------------|----------|---------|---------------|
| (1) Beta blocker | (2) ARBS | (3) CCB | (4) Diuretics |
|------------------|----------|---------|---------------|



60. Which is the cardinal symptom of left ventricular failure ?  
(1) Chest Pain      (2) Dyspnoea      (3) Fatigue      (4) Haemoptysis
61. Name one condition that can impose a pressure overload on the heart :  
(1) Hypertension      (2) Aortic regurgitation  
(3) Mitral regurgitation      (4) Ventricular septal defect
62. In heart failure patient liver is enlarged and tender and pulsatile in the presence of severe :  
(1) Mitral regurgitation      (2) Tricuspid regurgitation  
(3) Aortic regurgitation      (4) Pulmonary regurgitation
63. When the pulmonary venous pressure exceeds 25 mmHg, alveolar oedema occurs the condition called as :  
(1) Acute pulmonary oedema      (2) Myocardial infarction  
(3) Pulmonary embolism      (4) Aortic dissection
64. Framingham major criteria for diagnosing heart failure are all the following except :  
(1) Paroxysmal nocturnal dyspnoea      (2) Rales  
(3) S3 gallop      (4) Nocturnal cough
65. In pulmonary oedema adventitious sounds are :  
(1) Mainly rhonchi and occasional crepitation  
(2) Mainly crepitations and occasional rhonchi  
(3) Crepitations alone  
(4) Rhonchi alone
66. In management of acute pulmonary oedema patient should be in following position :  
(1) Propped up position      (2) Prone position  
(3) Supine position      (4) Left lateral position
67. Side effects of potassium sparing diuretics are all the following except :  
(1) Hypokalemia      (2) Hyperkalemia  
(3) Renal dysfunction      (4) Gynaecomastia

68. In heart failure patients following drugs have shown to reduce mortality except :
- (1) Calcium channel blockers
  - (2) Beta blockers
  - (3) Aldosterone antagonist
  - (4) Angiotensin Converting Enzyme Inhibitors (ACEI)
69. Contraindications for beta blockers are all the following except :
- (1) Advanced heart block
  - (2) Reversible airways obstructive disease
  - (3) Episodic decompensation
  - (4) Myocardial infarction
70. Functional murmurs can occur in heart failure are :
- (1) Functional mitral regurgitation and tricuspid regurgitation murmurs can appear with ventricular dilatation
  - (2) Aortic regurgitation and pulmonary regurgitation and pulmonary regurgitational murmurs
  - (3) Mitral stenosis and aortic stenosis murmurs
  - (4) Austin - Flint murmurs
71. What are the auscultatory signs over the chest in acute pulmonary oedema ?
- (1) Auscultation reveals crepitations and occasionally rhonchi
  - (2) Pericardial Knock
  - (3) Mid-diastolic murmur
  - (4) Pericardial rub
72. What are the features of acute pulmonary oedema on the chest X-Ray ?
- (1) Butterfly or bat wing appearance
  - (2) Wedge shaped hypoperfused shadows
  - (3) Honey comb appearance
  - (4) Cannon ball appearance
73. Phosphodiesterase inhibitors side effect is :
- (1) Leucocytosis
  - (2) Anaemia
  - (3) Thrombocytopenia
  - (4) Leucocytopenia
74. What is the percentage of 1 year survival rate after cardiac transplantation ?
- (1) 10 - 20%
  - (2) 30 - 40%
  - (3) 60 - 70%
  - (4) 80 - 90%

75. Roughly how many percentage untreated hypertensives die of heart problems ?  
(1) 10%                      (2) 20%                      (3) 50%                      (4) 80%
76. Which diuretics have been accepted as the primary foundation of anti hypertensive therapy ?  
(1) Loop diuretics                      (2) Potassium sparing diuretics  
(3) Thiazide diuretics                      (4) Aldosterone receptor blocker
77. Patients with heart failure are at a higher risk of developing which of the following condition ?  
(1) Tender Liver                      (2) Myocarditis  
(3) Pericardial effusion                      (4) Malaria
78. Atrial Natriuretic Peptide (ANP) is stored in :  
(1) Mainly in Kidneys                      (2) Mainly in Atrium  
(3) Mainly in Brain                      (4) Mainly in Liver
79. The commonest cause of right sided heart failure is :  
(1) Right sided failure                      (2) Left sided failure  
(3) Both sided                      (4) None of the above
80. Paroxysmal Nocturnal dyspnoea means :  
(1) Here the patient before going to sleep for some time, suddenly gets up with chest pain.  
(2) Here the patient, after going to sleep for some time, suddenly gets up with dyspnea and suffocation and sits upright gasping for breath.  
(3) Night sweating  
(4) Nocturnal angina
81. In diastolic dysfunction echocardiology generally has :  
(1) Right ventricular hypertrophy                      (2) Left ventricular hypertrophy  
(3) Right atrial enlargement                      (4) Left atrial enlargement
82. Large randomized trials with beta blockers in heart failure patients have shown mortality reduction to the tune of :  
(1) 75%                      (2) 50%                      (3) 90%                      (4) 35%

83. Currently available only orally active positive inotropic agent is :  
(1) Dopamine (2) Dobutamine (3) Amrinone (4) Digitalis
84. In digitalis toxicity following drugs should be avoided except :  
(1) Quinidine (2) Amiodarone (3) Propafenone (4) Lidocaine
85. Calcium channel blockers are not recommended for the treatment of CHF because :  
(1) Positive inotropic effects (2) Negative inotropic effects  
(3) All the above (4) None of the above
86. Patients with advanced structural heart disease and marked symptoms of Heart failure at rest despite maximal medical therapy and who require specialized interventions. This belongs to which stage in Heart failure ?  
(1) Stage A (2) Stage B (3) Stage C (4) Stage D
87. MDCT Coronary calcium Scoring shows Coronary calcification which is earliest sign of :  
(1) Pulmonary embolism (2) Coronary artery disease  
(3) Pleural effusion (4) Myocarditis
88. Elevated jugular venous pressure reflects raised :  
(1) Left atrial pressure (2) Right atrial pressure  
(3) Right ventricular pressure (4) Left ventricular pressure
89. By echocardiography Severe Mitral Stenosis means MVOA by planimetry is :  
(1)  $< 2 \text{ cm}^2$  (2)  $> 2 \text{ cm}^2$  (3)  $< 1.5 \text{ cm}^2$  (4)  $> 1.5 \text{ cm}^2$
90. Hypokalemia which wave can be seen in EKG :  
(1) T Wave (2) P Wave (3) U Wave (4) Q Wave
-