

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

00823

Term-End Examination

December, 2010

MCC-004 : COMMON CARDIOVASCULAR DISEASES - II

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. Commonest Valvular lesion during acute Rheumatic Fever is :
 - (1) aortic regurgitation
 - (2) mitral regurgitation
 - (3) tricuspid regurgitation
 - (4) mitral stenosis

2. Characteristic feature of polyarthritis during acute rheumatic fever is :
 - (1) It involves small joints.
 - (2) It is migratory in characters.
 - (3) Involvement is bilaterally symmetrical.
 - (4) Joint swelling and pain usually takes 8-10 weeks to subside.

3. Major criteria for diagnosis of Acute Rheumatic Fever according to Revised Jones's criteria is :
 - (1) Raised ESR
 - (2) Fever
 - (3) Arthralgia
 - (4) Erythema marginatum

4. Confirmation of diagnosis of Acute Rheumatic Fever is made by :
 - (1) Major criteria
 - (2) Major and minor criteria
 - (3) Major and minor criteria with supportive evidence of GAS pharyngitis
 - (4) Major and minor criteria and Echocardiography

5. Combined MS and MR in Rheumatic heart disease patients are seen in :
 - (1) 40%
 - (2) 35%
 - (3) 30%
 - (4) 25%

6. In severe mitral stenosis, mitral valve area is :
- (1) < 1 cm (2) 1 - 1.5 cms (3) < 2 cms (4) < 2.5 cms
7. Aschoff's bodies are most frequently seen in :
- (1) Valve tissue (2) Myocardium
(3) Aorta (4) Epicardium
8. Transvalvular gradient in mitral stenosis is increased by all except :
- (1) exercise (2) pregnancy
(3) Anaemia (4) bradycardia
9. ECG finding on Hypertrophic cardiomyopathy include all except :
- (1) Abnormal Q waves (2) Grant negative 'T' waves
(3) Early repolarisation changes (4) Low voltage graphy
10. Drug treatment of Hypertrophic cardiomyopathy includes all except :
- (1) Beta blockers (2) Beta blockers
(3) Amiodarone (4) Digoxin
11. AVR for Adults with severe AS is indicated in all except :
- (1) Mild symptoms (2) Severe comorbidity
(3) Exercise induced symptoms (4) Associated CABG
12. Severe calcific Aortic stenosis is characterised by all except :
- (1) Pulsus Parvus (2) Grade IV systolic murmur with thrill
(3) S₂ may be single (4) Aortic Ejection Click

13. Sudden death in Hypertrophic cardiomyopathy can be prevented by :
- (1) Amiodarone
 - (2) Verapamil
 - (3) ICD
 - (4) Metoprolol
14. Most common sustained Arrhythmia in Hypertrophic Cardiomyopathy is :
- (1) Atrial fibrillation
 - (2) Ventricular tachycardia
 - (3) Heart block
 - (4) PSVT
15. Preferred treatment for severe drug refractory heart failure symptoms in hypertrophic cardiomyopathy is :
- (1) Dual chamber pacing
 - (2) Alcohol septal ablation
 - (3) Metoprolol and verapamil together
 - (4) Surgical septal myomectomy
16. Severity of MR on Echo is indicated by :
- (1) Effective regurgitant orifice area $\geq 0.20 \text{ cm}^2$
 - (2) Mitral regurgitation volume $> 40 \text{ cc}$
 - (3) Regurgitant fraction $\geq 30\%$
 - (4) Pulmonary vein systolic flow reversal
17. Severity of mitral stenosis is indicated by :
- (1) Presence of opening snap
 - (2) Intensity of diastolic murmur
 - (3) Duration of diastolic murmur
 - (4) Radiation of murmur to axilla
18. Sensitivity of transthoracic Echocardiography for detecting vegetation in native valve is :
- (1) less than 90%
 - (2) less than 83%
 - (3) less than 75%
 - (4) less than 65%

19. Classical ECG - changes in Acute pericarditis are :

- (1) ST elevation with concavity upwards in all leads except aVR and v1
- (2) PR segment elevation
- (3) SOT Electrical alterans
- (4) Tall T waves

20. All are clinical features of large pericardial Effusion except :

- (1) Dyspnea
- (2) Severe excruciating chest pain
- (3) Hoarsness
- (4) Dysphagia

21. Clinical presentation of constrictive pericarditis is :

- (1) Negative Kussmaul's sign
- (2) Low pitched S3
- (3) Square root appearance of ventricular diastolic pressure trace
- (4) AI in majority of cases

22. Echo features of cardiac tamponade include all except :

- (1) RV early diastolic collapse
- (2) Swings heart motion in Pericardial Sac
- (3) Right atrial systolic collapse
- (4) Massive Pericardial Effusion

23. Aortic stenosis is considered severe when :

- (1) Mean systolic pressure gradient exceeds 40 mm Hg with normal cardiac output
- (2) Aortic orifice area is 1.5 cm^2
- (3) Aortic jet velocity is $> 3 \text{ m/sec}$
- (4) Severely calcified valve

24. Adverse outcome in Hypertrophic cardiomyopathy is noted in all except :
- (1) Early onset of disease
 - (2) LVOT gradient > 20 mm Hg
 - (3) H10 sudden under death in family
 - (4) VT/NSVT on holter
25. Prosthetic valve endocarditis is labelled early when :
- (1) Symptoms begin within 30 days of valve surgery
 - (2) Symptoms begin within 60 days of valve surgery
 - (3) Symptoms begin within 90 days of valve surgery
 - (4) Symptoms begin within 120 days of valve surgery
26. One of following is true regarding infective endocarditis in IV drug abusers :
- (1) Endocarditis involves left sided valves mainly .
 - (2) Staph. aureus is the causative organism
 - (3) Endocarditis occurs in diseased valves before infection in majority of cases
 - (4) Prognosis after treatment is excellent
27. For Hypertrophic cardiomyopathy all is true except :
- (1) asymmetrical septal hypertrophy
 - (2) LV out flow gradient in one half of patient
 - (3) LV diastolic dysfunction
 - (4) Arrhythmia
28. TEE is method of choice on diagnosis of Infective Endocarditis in :
- (1) difficult to image valves
 - (2) Native valve endocarditis
 - (3) Patients with low suspicion of IE
 - (4) Patients with low risk of IE related complication

29. Relapse of IE after discontinuation of antimicrobial therapy occurs :
- (1) Usually within one month (2) Usually within two months
(3) Usually within three months (4) Usually within four months
30. Infective endocarditis prophylaxis indicated in all except :
- (1) Dental procedures (2) Tonsillectomy
(3) GI surgery (4) Intra oral infection
31. Relative risk of infective Endocarditis is highest with :
- (1) Prosthetic valves (2) Pure mitral stenosis
(3) Pulmonary valve disease (4) Coronary artery disease
32. Severe MR is suggested by all except :
- (1) Colour flow area Equal to 30% of LA area
(2) Eccentric regurgitant jet reaches the posterior wall of LA
(3) Dense continuous wave doppler signal
(4) LV dimension \geq 7 cms
33. Mitral valve repair for severe MR is indicated in all except :
- (1) Children and young adults with pliable valves
(2) Chordal rupture
(3) Mitral valve prolapse
(4) Calcific mitral stenosis

34. Causes of Acute Mitral Regurgitation :
- (1) Rheumatic heart disease
 - (2) SLE
 - (3) Parachute mitral valve
 - (4) Spontaneous Chordal rupture
35. Clinical finding of Acute MR :
- (1) Prominent 'Q' in pulmonary artery tracing
 - (2) Holosystolic murmur
 - (3) P₂ may be loud
 - (4) Cardiomegaly
36. Adverse prognostic factors for surgery for MR :
- (1) Preserved LV function
 - (2) Lower NVHA class
 - (3) Normal PA pressure
 - (4) Atrial fibrillation
37. Pulsus paradoxus is seen in :
- (1) Tension Pneumothorax
 - (2) Constrictive pericarditis
 - (3) Severe MR
 - (4) Severe TR
38. Drug of choice for a secondary prevention of Rheumatic fever is :
- (1) Sulfadiazene
 - (2) Levofloxacin
 - (3) Oral Penicillin
 - (4) Benzathine Penicillin
39. Severe Aortic Regurgitation require surgical repair can result from :
- (1) Marfan's syndrome
 - (2) Severe AS with bicuspid valve
 - (3) Aortic dissection
 - (4) Marfan's syndrome

40. Roth's spot are seen in :

- | | |
|-----------|-------------|
| (1) Heart | (2) Fundus |
| (3) Palms | (4) Pharynx |

41. Rapid Y descent in JVP occurs in :

- | | |
|-----------------------------|--------------------------|
| (1) Tricuspid regurgitation | (2) Complete Heart block |
| (3) Mitral Regurgitation | (4) Mitral stenosis |

42. Changing characters of murmur in patients with joint pain and embolic phenomenon occurs is :

- | | |
|--------------------------------------|--------------------------|
| (1) Aortic regurgitation | (2) Rheumatoid arthritis |
| (3) Sub acute bacterial endocarditis | (4) Mitral stenosis |

43. Electrical alterans in ECG is seen in :

- | | |
|----------------------|-----------------------|
| (1) Severe LVF | (2) Severe AR |
| (3) Bronchial asthma | (4) Cardiac tamponade |

44. Carcinoid syndrome involves which valve primarily :

- | | |
|---------------------|---------------------|
| (1) Mitral valve | (2) Aortic valve |
| (3) Tricuspid valve | (4) Pulmonary valve |

45. Which lesion resembles mitral stenosis :

- | | |
|------------------------|------------------------|
| (1) Left atrial myxoma | (2) ASD |
| (3) Ebstein's anomaly | (4) Pulmonary stenosis |

46. Recurrent chest pain and syncope is commonly seen in :
- | | |
|--------------------------|---------------------|
| (1) Aortic regurgitation | (2) Mitral stenosis |
| (3) Aortic stenosis | (4) MVP |
47. Sustained Heaving apex is seen in :
- | | |
|--------------------------|---------------------|
| (1) Mitral regurgitation | (2) Aortic stenosis |
| (3) Aortic regurgitation | (4) Mitral stenosis |
48. Aortic Regurgitation is seen in all except :
- | | |
|-----------------------|----------------------------|
| (1) Rheumatic fever | (2) Infective endocarditis |
| (3) Marfan's Syndrome | (4) Myocardial Infarction |
49. Severe MS is associated with :
- | | |
|----------------------|---------------------------|
| (1) LV dilatation | (2) RV hypertrophy |
| (3) Septal deviation | (4) Right atrial thrombus |
50. Severity of mitral stenosis is judged by :
- | | |
|-------------|---------------|
| (1) Loud S1 | (2) A2-OS gap |
| (3) S3 | (4) S4 |
51. All are true about the Idiopathic Hypertrophic cardiomyopathy except :
- (1) autosomal dominant inheritance with complete penetrance
 - (2) sudden death
 - (3) may have associated MR
 - (4) verapamil may ameliorate symptoms

52. Not true of hypertrophic cardiomyopathy :

- | | |
|------------------------------|--------------------------|
| (1) Systolic anterior motion | (2) Asymmetrical septal |
| (3) Digitalis helpful | (4) LV outflow obstacles |

53. Dilated cardiomyopathy occurs with all except :

- | | |
|-----------------------|-------------------------------|
| (1) alcohol | (2) Loeflu's syndrome |
| (3) Viral myocarditis | (4) Peripartum cardiomyopathy |

54. Treatment of acute cardiac tamponades :

- | | |
|----------------------------------|----------------------------|
| (1) Emergency pericardiocentesis | (2) Emergency thoractotomy |
| (3) Pericardiectomy | (4) IV Fluids |

55. In large pericardial Effusion all are seen except :

- | | |
|-----------------|-----------------------|
| (1) Raised JVP | (2) Hepatomegaly |
| (3) Pedal Edema | (4) Loud heart sounds |

56. All the following may be seen in cardiac tamponade except :

- | | |
|----------------------|-------------------------|
| (1) Pulsus paradoxus | (2) Electrical alterans |
| (3) Kussmaul's sign | (4) Raped Y descent |

57. Commonest presentation of TB pericarditis is :

- | | |
|-------------------|-----------------|
| (1) Serofibrinous | (2) Hemorrhage |
| (3) Constrictive | (4) Suppurative |

58. All the following produces Restrictive cardiomyopathy except :

- | | |
|-------------------------------|-----------------------------|
| (1) Hypothyroidism | (2) Amyloidosis |
| (3) Hyper-eosinophil syndrome | (4) Endomyocardial fibrosis |

59. Not seen in constrictive pericarditis is :
- (1) Acute pulmonary Edema (2) Ascites
 (3) Pericardial knock (4) tapped apex
60. True about Rheumatic Fever :
- (1) Chorea is aggravated during pregnancy
 (2) Chorea and arthritis coexisting
 (3) Subcutaneous nodules are tender
 (4) Erythema multiforme seen
61. In India, average age of presentation of Rheumatic heart disease is :
- (1) 5 - 15 years (2) 25 - 30 years (3) 40 - 50 years (4) beyond 60 years
62. Cardinal lesion in Rheumatic Fever Carditis is :
- (1) Pericarditis (2) Myocarditis (3) Valvulitis (4) Heart failure
63. Subacute infection is caused by all except :
- (1) Streptococcus viridans (2) Staphylococcus aureus
 (3) Enterococcus (4) Staphylococcus epidermids
64. Most likely predisposing condition for Infective endocarditis of native valve in age group of 2 months to 15 years is :
- (1) mitral valve prolapse (2) Rheumatic heart disease
 (3) Parenteral drug abuse (4) Congenital heart disease
65. Ashoff's bodies are usually seen in :
- (1) acute phase of Rheumatic fever carditis
 (2) Chronic rheumatic heart disease
 (3) Coronary artery disease
 (4) SLE carditis

66. Potential reversible causes of dilated cardiomyopathy are all except :

- (1) Ischemic
- (2) Valvular
- (3) CMV
- (4) Riboflavin deficiency

67. Regarding Alcoholic cardiomyopathy one of following is true :

- (1) Patient presents with low output heart failure.
- (2) Occurs due to prolonged alcohol Intake for more than 10 years.
- (3) Occurs due to alcohol toxicity
- (4) Prognosis is bad even if alcohol is stopped

68. Following is true about peripartum cardiomyopathy :

- (1) occurs during last month of pregnancy or within 6 months of delivery
- (2) Presentation is like restrictive cardiomyopathy
- (3) Pregnancy is strictly contra indicated
- (4) Majority of patients do not Improve completely

69. Murmur of Hypertrophic obstructive cardiomyopathy increase with all except :

- (1) Valsalva manoeuver
- (2) Standing
- (3) Bradycardia
- (4) Digitalis

70. Most common cause of Acute peridcarditis is :

- (1) Tuberculosis
- (2) Uremia
- (3) Viral
- (4) Idiopathic

71. Regarding pain of Acute Pericarditis one of the following is true :

- (1) Pain is ill localised
- (2) Pain is mild and bearable
- (3) No relationship with respiration
- (4) Pain alleviated by setting and leaning forward

72. Most common symptoms of Acute Pericarditis is :
- (1) Fever
 - (2) Dyspnea
 - (3) Chest pain
 - (4) Cough
73. Characteristic ECG finding specific for cardiac tamponade is :
- (1) Low voltage graph
 - (2) Electrical alternans
 - (3) ST, T changes
 - (4) PR segment depressions
74. Most common cause of mitral stenosis in young adults is :
- (1) Congenital
 - (2) Carcinoid
 - (3) Rheumatic
 - (4) Rheumatoid arthritis
75. Isolated mitral stenosis on Rheumatic heart disease patients is seen in which percentage of cases :
- (1) 20%
 - (2) 25%
 - (3) 30%
 - (4) 35%
76. All are common presenting symptoms of mitral stenosis except :
- (1) Dyspnea
 - (2) Palpitation
 - (3) Chest pain
 - (4) Fatigue
77. Least common valve to be affected in Rheumatic heart disease is :
- (1) Tricuspid valve
 - (2) Aortic valve
 - (3) Mitral valve
 - (4) Pulmonary valve
78. Mitral facies is seen in :
- (1) mitral stenosis and mitral regurgitation
 - (2) moderate mitral stenosis
 - (3) mild mitral stenosis
 - (4) severe chronic mitral stenosis

79. Angina in severe Aortic stenosis occurs in :

- (1) all patients
- (2) half of patients
- (3) two third of patients
- (4) one third of patients

80. Predictions of poor out come after AVR for Aortic stenosis are all except :

- (1) Hypertension
- (2) Heart failure
- (3) Atrial fibrillation
- (4) Male gender

81. Most common complication of mitral stenosis is :

- (1) Infective endocarditis
- (2) Systemic embolism
- (3) Atrial fibrillation
- (4) Rheumatic fever

82. BMV for mitral stenosis is indicated in :

- (1) Moderate to severe mitral stenosis
- (2) LA thrombus
- (3) Associated moderate MR
- (4) Mitral annular calcification

83. Systolic murmur of MR is increased in Intensity by :

- (1) Valsalva manoeuver
- (2) Exercise
- (3) Standing
- (4) Handgrip and squatting

84. Ejection systolic murmur of Aortic stenosis is decreased in intensity with :

- (1) Amyl nitrate
- (2) Valsalva manoeuver
- (3) Standing
- (4) Isoproterenol

85. Mitral valve repair in asymptomatic patients of severe MR is indicated in :
- (1) LVEF > 60% (2) LVEF < 60%
(3) LVESD > 30 mm (4) Normal PA pressure
86. Aortic stenosis is considered severe when Aortic valve area is :
- (1) 1 - 1.5 cm² (2) 2 - 2.5 cm²
(3) < 1.0 cm² (4) > 2.5 cm²
87. Echo diagnosis of Tricuspid stenosis established when mean diastolic gradient across tricuspid valve is :
- (1) 2 mm (2) 4 mm (3) 5 mm (4) 7 mm
88. In asymptomatic severe AR patients, AVR is indicated in all except :
- (1) LVEF < 50% (2) LVEDD > 75 mm
(3) LVESD > 55 mm (4) PHT ≥ 400 msec
89. 'Nocturnal Angina' is classically described in which valvular lesion :
- (1) MR (2) AR (3) TR (4) PR
90. Clinically severe AR is characterised by all except :
- (1) Corrigan's pulse (2) Hill's sign > 60 mm Hg
(3) LVS3 (4) Early diastolic murmur