

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

00575

Term-End Examination

June, 2012

MCC-006 : CARDIO VASCULAR EPIDEMIOLOGY

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) *There will be 90 questions in this paper and each question carries equal marks.*
- (vi) *There will be no negative marking for wrong answers.*
- (vii) *No candidate shall leave the examination hall at least for one hour after the commencement of the examination.*

1. All of the following are Factors for Atherosclerotic except :
 - (1) Increased waist hip ratio
 - (2) Hyper homo cysteinemia
 - (3) Decreased fibrinogen level
 - (4) Decreased HDL level

2. Best predictor for future risk of the cardiovascular events, amongst the following is :
 - (1) Hs CRP
 - (2) Lipoprotein 'a'
 - (3) Homocystine
 - (4) Interleukin - 6

3. Amino acid associated with atherosclerosis is :
 - (1) Lysine
 - (2) Homocysteine
 - (3) Cysteine
 - (4) Alanine

4. Risk Factors for CAD is :
 - (1) High HDL
 - (2) Decreased Lipoprotein
 - (3) Decreased fibrinogen level
 - (4) Increased Homocysteine level

5. Predisposing factors for CAD include all except :
 - (1) Homocysteinemia
 - (2) ↑Lipoprotein B
 - (3) ↑Fibrinogen
 - (4) ↑Plasminogen activator Inhibitor - 1

6. Which of the following increases the susceptibility to CAD :
 - (1) Type V Hyper lipo proteinemia
 - (2) Von willbrand's disease
 - (3) Nephrotic syndrome
 - (4) SLE

7. In an old patient, the best Indicator of probability of developing cardiovascular disease can be calculated by :
 - (1) LDL/HDL ratio
 - (2) Triglycerides
 - (3) Total Cholesterol
 - (4) Serum LDL

8. Most important predictor of CAD is :
 - (1) VLDL
 - (2) LDL
 - (3) Chylomicrons
 - (4) LDL/HDL

9. Framingham risk score include all except :
- (1) Total (or) LDL Cholesterol (2) History of diabetes
(3) Gender (4) Lipoprotein levels
10. Which among these fat substance is not harmful ?
- (1) Mono unsaturated fatty acid (2) Saturated fatty acid
(3) Trans fatty acid (4) Omega 3 unsaturated fatty acid
11. All of the following dietary goals are recommended for patients with high risk or coronary heart disease except :
- (1) LDL cholesterol < 100mg/dl (2) Saturated fat < 7% of total calories
(3) Salt restriction < 6gm/day (4) Avoid alcohol
12. Treatment with Omega - 3 - poly unsaturated fatty acid, will have the following effect on lipid profile :
- (1) ↑LDL, ↑total cholesterol (2) ↓LDL, ↑total cholesterol
(3) ↓LDL, ↑HDL total cholesterol (4) ↑LDL, ↓HDL
13. Most common site of MI is :
- (1) Anterior wall of LV (2) Posterior Wall of LV
(3) Inferior Wall of LV (4) Right Ventricle
14. Least common site of occlusion of an artery is :
- (1) LAD (2) RCA (3) LCX (4) OM
15. 12 - lead ECG is poor in detecting ischemia in areas supplied by which vessel :
- (1) LAD (2) LCX (3) LCA (4) RCA
16. Which of the following ECG lead is most sensitive in detecting intra operative ischemia ?
- (1) Lead I (2) Lead II (3) V₂ (4) V₅

17. A 66 years old man presents with chest pain since last 6 hours and is diagnosed as acute MI, Angiography showed total occlusion of LAD, the most common site of infarct is :
- (1) Anterior Wall (2) Posterior Wall
(3) Inferior Wall (4) Septum
18. In stable angina :
- (1) CK - MB is elevated
(2) Troponin I is elevated
(3) Cardiac Markers remain unchanged
(4) Myoglobin is elevated
19. Symmetrical T - wave inversion in chest leads is seen in :
- (1) Anterior Wall MI (2) Hyperkalemia
(3) Sub-endocardial Infarct (4) Restrictive cardiomyopathy.
20. In MI, Which enzyme is raised in 4-6 hours and decreased in 3-4 days :
- (1) SGOT (2) LDH (3) CPK (4) SGPT
21. Which of these enzymes is not altered in MI ?
- (1) Troponin (2) SGPT (3) CPK (4) SGOT
22. Patient presents 12 hours following a MI, test of choice is :
- (1) LDH (2) Cardiac troponins
(3) CPK (4) Myoglobin
23. Other than myocardial disease, Troponin - T is also elevated in :
- (1) Renal Disease (2) Lung Disease (3) GI - disease (4) Liver Disease
24. CPK - MB is preferred over Troponins in which of the following :
- (1) Bed Side diagnosis of MI (2) POST - CABG
(3) Re - infarction within a week (4) Re - infarction within a month

31. Streptokinase is contra - indicated in :
- (1) Intra Cranial Malignancy (2) Pulmonary Apoplexy
(3) AV - Fistula (4) Thrombo Phlebitis
32. Patient with acute Inf. Wall MI develops shock most likely cause is :
- (1) Cardiac Tamponade (2) Right Ventricular Infarct
(3) Papillary muscle rupture (4) VSD - acquired
33. In a patient with Acute Inf. Wall MI, best modality of treatment is :
- (1) Digoxin (2) Diuretics (3) IV Fluids (4) Vasodilators
34. A new systolic murmur after acute myocardial infarction may be due to all of the following except :
- (1) Complete heart block (2) VSD
(3) Mitral regurgitation (4) Ischemic cardiomyopathy
35. True about Dressles's syndrome is all except :
- (1) Occurs within a week after MI (2) Recurrence may be seen
(3) Chest pain is common (4) Responds well to selicylates
36. Which of the following tests is used to detect reversible myocardial Ischemia ?
- (1) Angiography (2) Thallium scan
(3) MUGA (4) TMT
37. Following MI, mortality and morbidity of the patient is indicated by :
- (1) Ventricular extra systoles
(2) LVEF
(3) Percentage of narrowness of coronary artery
(4) TMT

38. Statins treatment following unstable angina is :
- (1) Primordial prevention (2) Primary prevention
(3) Secondary prevention (4) Tertiary prevention
39. Alcohol causes all except :
- (1) Holiday heart syndrome (2) Lowers HDL
(3) Cardiomyopathy (4) Hypertension
40. Drugs useful in patients with CCF are all except :
- (1) Beta blockers (2) ACE -1 (3) Aspirin (4) ARB
41. Major risk factors for CAD are all except :
- (1) Hypertension (2) CRP (3) DM (4) Obesity
42. High risk for CAD as per LDL levels is :
- (1) < 100mg/dl (2) < 160mg/dl (3) \geq 160mg/dl (4) \geq 200mg/dl
43. NCEP recommendation for total fat intake for energy is :
- (1) 5-0% (2) 10-15% (3) 15-30% (4) 25-35%
44. Newer risk for CAD are all except :
- (1) Oxidative stress (2) Drugs (3) Infection (4) LVH
45. All are non - modifiable risk factors except :
- (1) Age (2) Gender (3) Diet (4) Hereditary
46. Premature CAD refers to :
- (1) Men < 55, Women < 65 (2) Men < 50, Women < 60
(3) Men < 60, Women < 70 (4) Men < 45, Women < 55

47. Incidence of CAD in rural area as per 2000 is :
- (1) 3% (2) 4% (3) 4.5% (4) 5.5%
48. Incidence of CAD in urban area in 2000 is :
- (1) 9% (2) 10% (3) 10.5% (4) 11.5%
49. Maximum CAD prevalence in urban area is in :
- (1) Agra (2) Delhi
(3) Thiruvananthapuram (4) Chennai
50. All are features of CAD in Indians except :
- (1) Higher mortality (2) Higher unstable plaque
(3) 10 years earlier onset (4) Single vessel disease common
51. Percentage of GDP spent on health in India is :
- (1) 2% (2) 5% (3) 10% (4) 20%
52. Most important cause of death in India as per 2001 census is :
- (1) CVA (2) Trauma (3) CAD (4) Infection
53. Fatty streaks starts at the age of :
- (1) 10 (2) 20 (3) 30 (4) 40
54. Basis of atheroma is :
- (1) Injury theory (2) Lipid theory
(3) Both of the above (4) None of the above

55. All are Non - modifiable risk factors except :
- (1) Age (2) Metabolic syndrome
(3) Gender (4) Heredity
56. Moderate alcohol intake has been protective for CAD through :
- (1) Increased HDL (2) Platelets (3) Fibrinolysis (4) All of the above
57. Ratio of TC/HDL is considered risk for CAD :
- (1) < 4.5 (2) > 4.5 (3) < 5.5 (4) > 5.5
58. Normal BMI as per Indian standard is :
- (1) < 20 (2) 20 - 23 (3) 23 - 25 (4) 20 - 25
59. IDF TG level for metabolic syndrome is :
- (1) ≥ 250 mg/dl (2) ≥ 200 mg/dl (3) ≥ 150 mg/dl (4) ≥ 100 mg/dl
60. HDL level lower than what level is feature of metabolic syndrome in men :
- (1) < 30 (2) < 40 (3) < 50 (4) < 60
61. B.P level above which is a risk for metabolic syndrome :
- (1) 120/80 (2) 130/80 (3) 130/85 (4) 135/80
62. Fasting level of blood sugar above which is risk for metabolic syndrome :
- (1) 90mg/dl (2) 100mg/dl (3) 110mg/dl (4) 120mg/dl
63. Which of these is **not** newer risk factor for CAD ?
- (1) LVH (2) Infection (3) Inflammation (4) LDH
64. Which of these is a newer risk factor for CAD ?
- (1) DM (2) Hyperlipidemia
(3) Oxidative stress (4) Serum Ferritin

65. Pathological effects of LP (a) is above :
(1) 10-20 mg/dl (2) 20-30 mg/dl (3) 30-40 mg/dl (4) 5-10 mg/dl
66. Risk factors increasing blood coagulation are all except :
(1) Factor VII (2) PAI - 1
(3) CRP (4) Platelet derived growth factor
67. Intake of which of these vitamins is **not** protective against oxidative stress :
(1) Vit A (2) Vit C (3) Vit D (4) Vit E
68. Which of these infection is **not** associated with CAD ?
(1) HSV (2) CMV (3) Helicobacter (4) EBV
69. Which of these infections is mostly associated with CAD ?
(1) HSV (2) Chlamydia (3) CMV (4) E. Coli
70. Most potent marker of inflammation is :
(1) S Ferritin (2) IL - 1 (3) IL - 6 (4) CRP
71. In Chennai Urban Population Study (CUPS) which of these risk factors **not** considered ?
(1) LDL (2) TG (3) VLDL (4) HDL
72. Which of these is **not** used in Framingham risk prediction score as major component ?
(1) Age (2) Gender (3) SBP (4) DM
73. Recommended diet recommendation for PUFA is :
(1) 0-3% (2) 3-7% (3) 7-10% (4) 10-15%
74. Recommended salt intake to prevent CAD is :
(1) < 29gm/day (2) < 4gm/day (3) < 6gm/day (4) < 8gm/day

85. Indians have lower threshold for waist circumference as :
- (1) Indians have lower BMI
 - (2) Higher risk of DM
 - (3) Higher risk even at lower threshold
 - (4) Most are vegetarians
86. Which is true in CAD for women ?
- (1) Less severe than for men at any age
 - (2) Less mortality
 - (3) Infarct size smaller
 - (4) More lethal
87. Which of the following is a primary prevention trial :
- (1) Jupiter (2) HOPE (3) 4S (4) CURE
88. Which among these oil have high PUFA ?
- (1) Coconut (2) Olive oil (3) Vanaspathi (4) Ghee
89. Framingham study is :
- (1) Randomized double blind control study
 - (2) Cohort study
 - (3) Registry data
 - (4) Observational case control study
90. Which is **not** a feature of unstable plaque :
- (1) More lipid core (2) Thin fibrous cap
- (3) Thick fibrous cap (4) Internal hemorrhage
-