

# SECOND YEAR BSC PERFUSION TECHNOLOGY

## GENERAL MEDICINE

### ESSAY

1. What is ischemic heart disease. What is the pathophysiology of myocardial infarction.
  - Definition
  - Etiopathogenesis
  - Risk factors or coronary atherosclerosis
  - Angina pectoris
  - Types of angina
  - Investigation
  - Management
  - Treatment
  
2. Describe briefly the management of angina pectoris
  - Definition
  - Classification
  - Stable
  - Unstable
  - Investigation
  - Management
  - Variable (Acute coronary syndrome)
  - Causes of ACS
  - Treatment
  
3. What is chronic renal failure. What are the implications of CRF on CPB. Describe briefly the management of chronic renal failure. 4. Discuss the management of rheumatic heart disease in detail
  - Definition
  - Stages
  - Causes
  - Risk factors
  - Clinical features

- Management
  - Metabolic disturbances
  - Systemic changes
  - Treatment
4. Discuss the classification and management of chronic obstructive pulmonary disease.
- Definition
  - Classification
  - Chronic bronchitis
  - Emphysema
  - Pathology
  - Risk factors
  - Clinical features
  - Science
  - Diagnosis
  - Lab diagnosis
  - Complications
  - >Treatment
5. What are the causes of aortic stenosis and aortic regurgitation. Describe the pathology, clinical features, diagnosis and management of aortic stenosis.
- Etiology
  - Types : Mitral stenosis
  - Mitralregurgitatanon
  - Aorticstenosis
  - Aortic regurgitation
  - Pathophysiology
  - Clinical features
  - Signs
  - Investigation
  - Complications
  - Treatment
6. Classify cardiomyopathies. What are the causes of each type. Describe briefly the clinical features, diagnosis and management of dilated cardiomyopathy

- Definition
- Classification
- Pathophysiology
- Etiology
- Clinical features
- Diagnosis
- Management
- Treatment

7. What are the Duckett Jones criteria for diagnosing rheumatic fever. Describe the clinical features, diagnosis and management of mitral stenosis.

- Definition
- Riskfactor Pathogenst
- Pathogenesis Diagnosis
- Lab diagnosis
- Treatment
- Treatment for symptoms

8. What are the causes of acute renal failure. What is the role of dialysis and renal transplantation in its management.

- Definition
- Stages
- Classification
- Lab diagnosis
- History
- Physical examination
- Complications
- Types of dialysis
- Symptoms
- Indication
- Complication

9. Discuss bleeding disorders and their relevance to perfusion technology.
  - Definition
  - Systems involved in hemostasis
  - Disorders of hemostasis
  - Investigation of platelets and platelet function
  - Thrombocytopenia
  - How to approach to thrombocytopenia
  - ITP
  - Classification
  - Physical function
  - Lab diagnosis
  - Treatment
  - Chronic ITP
  - TTP
  - Pathogenesis
  - Bernard soliar syndrome
  - Glandzmanthrombasthenea
  - Vascular disorder associated with bleeding

## **SHORT ESSAY**

1. Chronic bronchitis and emphysema
  - Definition
  - Classification of COPD
  - Pathology
  - Risk factors
  - Clinical features
  - Diagnosis
  - Management
  - Treatment
  - Complications
  
2. Cardiomyopathies
  - Definition
  - Classification

- Pathophysiology
  - Etiology
  - Clinical features
  - Diagnosis
  - Management
  - Treatment
3. Complications of myocardial infarction
- Definition
  - Etiopathogenesis
  - Risk factors or coronary atherosclerosis
  - Angina pectoris
  - Types of angina
  - Investigation
  - Management
  - Treatment
4. Cardiac manifestations in diabetes mellitus
- Definition
  - Classification
  - Pathophysiology
  - Types
  - Genetic factors
  - Clinical
  - Diagnosis
  - Management
5. Chronic obstructive airway disease
- Definition
  - Classification
  - Chronic bronchitis
  - Emphysema
  - Pathology
  - Risk factors
  - Clinical features

- Science
  - Diagnosis
  - Lab diagnosis
  - Complications
  - >Treatment
6. Rheumatic carditis.
- Definition
  - Risk factor
  - pathogenesis
  - Lab diagnosis
  - Treatment
  - Treatment for symptoms
7. Anemia
- Definition
  - Morphology
  - Etiology
  - Clinical features
  - Signs
  - Systems involved
  - Examination
  - Evaluation
  - Diagnosis
  - Management
  - Treatment
8. Complications of obesity
- Definition
  - Classification
  - Measurement of obesity
  - Types
  - Factors responsible
  - Prevention of obesity
  - Primary prevention

- Secondary prevention
9. Differentiate between acute and chronic renal failure
- Definition
  - Stages
  - Classification
  - Lab diagnosis
  - History
  - Physical examination
  - Complications
  - Types of dialysis
  - Symptoms
  - Indication
  - Complication
10. Aortic aneurysms
- Definition
  - Morphology
  - Classification
  - Etiology
  - Pathogenesis
  - Clinical features
  - Major risk factors
  - Complications
  - Treatment
11. Atrial septal defects
- Etiology
  - Types : Mitral stenosis  
Aorticstenosis  
: Aortic regurgitation
  - Pathophysiology
  - Clinical features
  - Signs
  - Investigation

- Complications
- Treatment

12. Ischemic heart disease

- Definition
- Etiopathogenesis
- Risk factors or coronary atherosclerosis
- Angina pectoris
- Types of angina
- Investigation
- Management
- Treatment

13. Bronchial asthma

- Definition
- Manifestations
- Risk factors
- Classification
- Drugs used in the treatment
- Adverse effects of the drugs
- Systemic effects
- Management

14. Haemophilia

- Definition
- Morphology
- Etiology
- Clinical features
- Signs
- Systems involved
- Examination
- Evaluation
- Diagnosis
- Management
- Treatment



15. Aplastic anemia
  - Definition
  - Morphology
  - Etiology
  - Clinical features
  - Signs
  - Systems involved
  - Examination
  - Evaluation
  - Diagnosis
  - Management
  - Treatment

## **SHORT ANSWERS**

1. Infective endocarditis
  - Definition
  - Etiology
  - Pathophysiology
  - Clinical features
  - Risk factors
  - Management
  - Treatment
2. Body mass index
  - Definition
  - Normal range
  - Equation
  - Conditions related
3. Clinical features of aortic regurgitation
  - Definition
  - Pathophysiology
  - Clinical features
  - Treatment

4. Bleeding time and clotting time
  - Definition
  - Normal range
  - Conditions that alter normal range
  
5. Diagnosis of morbid obesity
  - Definition of obesity
  - Classification
  - Management
  - Diagnosis
  - Prevention
  
6. Pulmonary function test
  - Definition
  - Uses
  - Risk factors
  - Complications
  
7. Diagnosis of hypertension8. Hypertrophic cardiomyopathy
  - Definition
  - Types
  - Normal range
  - Clinical features
  - Complications
  - Diagnosis
  - Treatment
  
8. Enumerate five causes of hypertension
  - What is hypertetion
  - Clinical features
  - Causes
  - Treatment
  
9. Bronchiectasis
  - Definition
  - Symptoms

- Causes
  - Diagnosis
  - Treatment
10. Takayasu arteritis
- Definition
  - Etiology
  - Clinical features
  - Diagnostic criteria
  - Management
  - Treatment
11. Takayasu arteritis
- Definition
  - Pathophysiologyclinical features
  - Diagnosis
  - Management
  - Treatment
12. Emphysema
- Definition of COPD
  - classification
  - Definition of emphysema
  - Pathophysiology
  - Clinical features
  - Treatment
13. ABG (Arterial Blood Gas) analysis and its clinical utility
- Definition
  - Normal value
  - Calculation
  - Parameters
  - Importance
  - Clinical uses

14. Changes in cardiovascular system during pregnancy

- Changes in CVS during pregnancy
- Increase in vascular volume
- Increased cardiac output
- Fall in vascular resistance

15. Digoxin

- Mechanism of action
- Mode of administration
- Dosage
- Actions
- Uses
- Adverse effects
- Contraindications

16. Vital capacity

- Definition
- Normal value
- Formula
- Factors affecting
- Significance

17. Sleep apnea

- Definition
- Risk factorsSymptoms Causes
- Treatment

18. Coronary vasodilators

- Drugs used for vasodilation
- Dosage
- Route of administration
- Side effects
- Contraindications

19. Classification of shock

- Definition

- Causes
- Classification
- Cardiogenic shock
- Hypovolemic shock
- Obstructive shock
- Treatment