

2026

Full Marks - 100

Time - As in the Programme

The figure in the right hand margin indicates marks.

Answer ALL questions.

SECTION - A

(CARDIOLOGY)

1. Answer any TWO questions : [2 x 15]
 - (a) Define Coronary Artery Disease (CAD). Discuss its causes, risk factors, pathophysiology, clinical features, diagnostic investigations, treatment, prevention and management.
 - (b) Define heart failure. Explain its classification, causes, clinical features, diagnosis, medical management, complications and nursing care.
 - (c) Define work physiology. Discuss the physiological responses of the cardiovascular, respiratory, muscular, endocrine and nervous systems during

[Cont...

[2]

exercise. Explain the importance of exercise, fatigue, recovery and principles of exercise prescription.

- (d) Discuss exercise physiology in detail, including energy systems, oxygen consumption ($\text{VO}_2 \text{ max}$), cardiovascular adaptations, respiratory adaptations, factors affecting physical performance and the role of exercise in health promotion and disease prevention.

2. Write short notes on any four : [4 x 5]

- (a) Define hypertension and list its causes.
- (b) Describe the conduction system of the heart.
- (c) Explain the functions of the cardiovascular system.
- (d) Define cardiac output and mention the factors affecting it.
- (e) Write a note on aerobic exercise.
- (f) Explain the physiological changes during exercise.
- (g) List the risk factors for coronary artery disease.
- (h) Describe the benefits of regular physical activity.

[Cont...

[3]

SECTION - B

(PAEDIATRICS)

1. Answer any TWO questions : [2 x 15 = 30]

- (a) Explain Duchenne Muscular Dystrophy with emphasis on physiotherapy assessment and rehabilitation.
- (b) Discuss Down Syndrome with reference to etiology, clinical features, associated abnormalities, assessment and management.
- (c) Define Developmental Delay. Explain milestones of normal development, causes, clinical assessment and intervention in brief.

2. Write short notes on any four : [5 x 4 = 20]

- (a) Down Syndrome.
- (b) Spina Bifida.
- (c) Meningomyelocele.
- (d) Neonatal Reflexes and their clinical significance.
- (e) Physiotherapy management of Erb's Palsy.
- (f) Club foot.

