2/7/24

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

[Time: 3 Hours]

[Max. Marks: 80]

IV SEMESTER

PAPER I - (Development of Cardiovascular System, Cardiovascular Pathology) QP CODE: 8435

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Explain stages of development of embryo.

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$

- 2. Diagnosis and management of Atrial Septal Defect.
- 3. Dilated Cardiomyopathy
- 4. Hypertension- Causes and Diagnosis
- 5. Risk Factors for IHD
- 6. Constructive Pericarditis- clinical features
- 7. Classification of Congenital Heart Disease- Describe clinical Presentation
- 8. Define Heart Failure, Discuss the clinical features and management
- 9. Diagnosis of Infective Endocarditis
- 10. Diagnosis and management of Double outlet right Ventricle (DORV)

Short Answers: (Any - 10)

- 11. Components of Tetralogy of Fallot (TOF)
- 12. Write the Etiologies of Mitral Stenosis
- 13. List the major criteria for the diagnosis of Acute Rheumatic Fever
- 14. Name the cyanotic congenital heart diseases
- 15. Write clinical features and management of cardiac tamponade
- 16. Risk factors of atherosclerosis
- 17. Clinical features of severe Aortic Stenosis
- 18. Evaluation of pulmonary hypertension
- 19. Management of hypertensive emergency
- 20. Cardiac biomarkers
- 21. Write in detail about azygous vein.

9)7/24

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

[Time: 3 Hours]

[Max. Marks: 80]

IV SEMESTER

PAPER - II (Advanced Electrocardiography) OP CODE: 8436

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Classify Atrioventricular blocks and Explain in detail.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

- 2. What are the Common sites of Ablation?
- 3. Electrocardiographic effects of hypokalemia.
- 4. Describe the three different types of RVH on ECG.
- 5. ECG features of Ventricular Tachycardia.
- 6. Write ECG changes in Ischemia, injury and infarction.
- 7. ECG evaluation of acute Anterior Myocardial Infarction.
- 8. Characteristics of complete LBBB.
- 9. Typical ECG findings in atrial fibrillation and atrial flutter.
- 10. ECG features of LVH and RVH.

Short Answers: (Any – 10)

- 11. Indications for termination of TMT.
- 12. List out the causes of low voltage QRS Complex.
- 13. Various ST patters described in Treadmill Test.
- 14. Draw Einthoven's triangle.
- 15. ECG features of ventricular premature complex.
- 16. What are the Indications for Cardioversion?
- 17. How to calculate Target Heart Rate.
- 18. ECG in mitral stenosis.
- 19. 2:1 second degree AV Block.
- 20. ECG changes in Pericarditis.
- 21. Causes of T wave inversion in ECG.

06/04/24

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

[Time: 3 Hours]

[Max. Marks: 80]

IV SEMESTER

PAPER - III (Advanced Echocardiography) **OP CODE: 8437**

Your answer should be specific to the questions asked. Write Ouestion No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Echocardiographic evaluation Mitral Stenosis and Aortic Stenosis.

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$

- 2. Echo Features of Hypertrophic Cardiomyopathy.
- 3. Write Echo features of Mitral Regurgitation.
- 4. Write different method to calculate LV Systolic Function.
- 5. Echo features of Pulmonary Hypertension.
- 6. Draw LV Segments.
- 7. Write Indications and contraindication of Stress Echo.
- 8. Write Types of ASDs and its Echo features.
- 9. Wilkins Score for Mitral Stenosis.
- 10. Echo features of VSD and writes different types.

Short Answers: (Any - 10)

- 11. Pericardial effusion.
- 12. Flail mitral valve.
- 13. LV Mass calculation.
- 14. Write Indications for Transesophageal echo.
- 15. Pressure Half Time.
- 16. Explain Nyquist Limit.
- 17. Continuity Equation.
- 18. How to calculate stroke volume by echo.
- 19. PISA Method.
- 20. Write Difference between RV and LV.
- 21. Normal LV and RV measurements.

BLDE (DEEMED TO BE UNIVERSITY)

7/24

B.Sc. in Cardiac Care Technology

[Time: 3 Hours]

[Max. Marks: 80]

IV SEMESTER

PAPER - IV (CCT Directed Clinical Education - II) QP CODE: 8438

Your answer should be specific to the questions asked. Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Explain Advance life support.

Short Essays: (Any - 8)

 $5 \times 8 = 40 \text{ Marks}$

- 2. Explain sterilization in detail.
- 3. Name different types of radiations. Briefly explain them.
- 4. Write about colloid IV fluids.
- 5. What is autoclave? Briefly explain.
- 6. Write briefly about defibrillator.
- 7. What is TMT? Explain the procedure.
- 8. What are vital signs? Write their normal range.
- 9. How to properly dispose Biochemical waste?
- 10. Briefly explain safety measures against radiation in Cath lab.

Short Answers: (Any - 10)

- 11. Types of transducers used in echo.
- 12. Write basic principle of ECG.
- 13. Write about Lignocaine.
- 14. What are alpha rays?
- **15.** Write about pasteurization.
- 16. Hot air oven
- 17. What are antibiotics?
- 18. Write about DNS
- 19. What is intubation?
- 20. Basic life support.
- 21. What are ventilators?