855A

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) OP 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 Heart with diagrams.

Short Essays: (Any - 8)

5 X 8 = 40 Marks

- 2. Constructive pericarditis.
- 3. Clinical features of IHD.
- 4. Pathophysiology of Aortic Stenosis.
- 5. Infective endocarditis.
- 6. Define Hypertension, write its causes and Classification.
- 7. Write Pathophysiology of Mitral Regurgitation.
- 8. Diagnosis and management of TOF.
- 9. Clinical features of pericardial disease.
- 10. Define VSD and write its classification.

Short Answers: (Any - 10)

- 11. Difference between DORV and TOF.
- 12. Name the Acyanotic Congenital Heart Diseases.
- 13. Mitral Valve apparatus.
- 14. Explain pulmonary circulation.
- 15. Risk factors for Atherosclerosis.
- 16. Write the major diagnostic criteria for Acute Rheumatic fever.
- 17. Causes for Mitral Stenosis.
- 18. What are Cardiac Biomarkers?
- 19. Management of cardiac Tamponade.
- 20. Classification of Coarctation of aorta.
- 21. Types of ASD.

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#### 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. Explain myocardial infarction and types with appropriate electrocardiographic illustrations.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

- 2. Electrocardiographic manifestation of VT.
- 3. Electrocardiographic effects of hyperkalemia.
- 4. Treadmill Test.
- 5. ECG features of supraventricular tachycardia.
- 6. Write ECG in Pulmonary Hypertension.
- 7. ECG evaluation of p wave.
- 8. Posterior myocardial infarction.
- 9. Pacemaker
- 10. ECG features of LVH and RVH

Short Answers: (Any - 10)

- 11. Significance of RBBB
- 12. List out the causes of low voltage QRS Complex
- 13. Narrate the causes of left axis deviation
- 14. ECG manifestation of post MI
- 15. Write about ST segment elevation
- 16. Normal and abnormal P wave in ECG
- 17. ECG features of Atrial Premature complex
- 18. ECG in Hypercalcimia.
- 19. How will you calculate the HR in ECG
- 20. ECG recognition of second degree AV Block.
- 21. How to recognize Bilateral enlargement

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#### IV SEMESTER

## PAPER - III (Advanced Echocardiography)

**QP CODE: 8437** 

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

#### **Long Questions**

10X1 = 10 Marks

1. Echocardiographic evaluation of LV Systolic Function.

Short Essays: (Any - 8)

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

- 2. Echo Features of Dilated Cardiomyopathy.
- 3. Write Echo features of rheumatic Mitral Stenosis.
- 4. Write different method to calculate pulmonary hypertension.
- 5. Echo features of Patent Ductus Arteriosus.
- 6. Draw neat labeled diagrams of LV Segments.
- 7. Write Indications and contraindication of Transesophageal Echo.
- 8. Draw M-Modes of Normal Mitral valve, Aortic Valve & Pulmonary valve.
- 9. Explain procedure of contrast echo and write its Indications.
- 10. Echo features of TOF.

### Short Answers: (Any - 10)

- 11. Echo features of Pericardial effusion
- 12. Mitral Valve Prolapse
- 13. Teichholz method
- 14. Write types of Stress Echocardiography
- 15. LV Mass Calculation.
- 16. Different types of Prosthetic Valves
- 17. Aortic Stenosis grading by PPG & MPG
- 18. Coarctation Of Aorta
- 19. PISA Method
- 20. Diastolic Dysfunction
- 21. Grade Pulmonary Stenosis

JAN-2024

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#### IV SEMESTER

## PAPER - IV (CCT Directed Clinical Education - II) OP 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. What is called biomedical waste? What are the types of BMW and why it is important?

Short Essays: (Any - 8)

5 X 8 = 40 Marks

- 2. Classify Vital signs and write the factors affecting the vital signs
- 3. ECG in Complete Heart Block
- 4. Draw different Echocardiographic views
- 5. What are the types of IV cannula? Explain.
- 6. Write about Hot Air oven
- 7. Defibrillators
- 8. Advanced life support
- 9. What are colloid fluids and crystalloid fluids?
- 10. Explain Basic life support

Short Answers: (Any – 10)

- 11. What are the indications to terminate treadmill test?
- 12. What are the four major types of radiation?
- 13. Write the types of pasteurization.
- 14. What is the principle of autoclave?
- 15. What are the 3 main types of IV fluids?
- 16. Side effects of radiation.
- 17. Explain Steam sterilization
- 18. What are the types of intubations?
- 19. Write about ventilators.
- 20. Write about Diuretics
- 21. What is operation theatre?