BSc CCT - IV

Jan - 2023.

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. Define Hypertension- Enumerate causes, diagnosis & management of secondary hypertension.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

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

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

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

Jan-2023

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

[Time: 3 Hours] **[Max. Marks: 80]**

IV SEMESTER

PAPER II - (Advanced Electrocardiography)

QP 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. ECG changes in acute Myocardial Infarction and delineation of coronary involvement.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. ECG in mitral stenosis.
3. P wave abnormalities in ECG.
4. Sick since syndrome.
5. Atrial flutter versus atrial fibrillation.
6. ECG in Pulmonary hypertension.
7. How will you give DC shock.
8. ECG changes in pericarditis.
9. ECG changes due to electrolyte imbalance.
10. ECG in acute and evolved phase of myocardial Infarction.

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

11. Write the Indications for Holter monitoring.
12. Causes for T wave inversion in ECG.
13. Einthoven's triangle.
14. Which are the Common sites of Ablation?
15. What are the Causes for Right axis deviation?
16. ECG changes in First degree AV block.
17. Which are the leads showing RV myocardial infarction?
18. Atrial and ventricular premature complexes.
19. Indications for cardioversion.
20. P pulmonale.
21. ECG features of Hyperthyroidism.

Jan-2023.

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

[Time: 3 Hours] **[Max. Marks: 80]**

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. Segmental echocardiographic approach to congenital heart diseases.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. Patent ducts arteriosus
3. Write the indications and contraindications of Transesophageal Echocardiography.
4. Echocardiographic assessment of Mitral regurgitation.
5. Mention point wise, Echocardiographic features of cardiac tamponade.
6. Echocardiographic features of Tetralogy of Fallot.
7. Wilkins score for Mitral stenosis.
8. Assessment of pulmonary hypertension by echocardiography
9. Draw neat labelled diagram of L→R shunts (ASD, VSD, PDA) seen in various echo view (A4C, PSAX, Subcostal)
10. Different methods to calculate EF by echocardiography and their limitations.

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

11. Mitral valve prolapse.
12. Coarctation of Aorta.
13. Teichholz method.
14. Type of Stress Echocardiography.
15. Pericardial effusion.
16. Stroke volume calculation by echocardiography.
17. Segments of LV by echocardiography- ASE model.
18. Dilated Cardiomyopathy.
19. Classify Aortic Stenosis based on echocardiographic gradients (peak & mean).
20. Flail Mitral valve.
21. LV mass calculation by Echocardiography.

Jan-2023

BLDE (DEEMED TO BE UNIVERSITY)

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. What is fluid therapy? Explain different types of IV fluids

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. Briefly explain the Types of Radiation.
3. Defibrillator.
4. What is basic life support. Explain.
5. What are ventilators? Briefly explain the types of ventilators.
6. Explain the procedure of TMT and write the Indications and contraindications of TMT.
7. What is autoclave? Briefly explain.
8. Briefly explain routes of drug administration.
9. Write about colloid IV fluids.
10. Briefly explain safety measures against radiation in cath lab.

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

11. Pasteurization.
12. Write about DNS.
13. Write about alpha rays.
14. What is intubation?
15. Write basic principle of ECG.
16. What is advanced cardiac life support?
17. Lignocaine
18. Hot air oven.
19. What are antibiotics?
20. Echo transducer.
21. Write basic principle of echocardiography.