BSc - CCT - March-2025

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

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

VI SEMESTER

PAPER - I (Cardiac Catheterization)

QP CODE: 8635

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

Long Questions **10X1 = 10 Marks**

1. Explain foreign body retrieval.

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

2. Explain Atherectomy.
3. Explain vital signs and management.
4. Explain Snares.
5. Explain renal artery intervention.
6. Explain CAG procedure.
7. Explain BMV.
8. Explain patient selection criteria for angioplasty.
9. Explain different types of catheterizations.
10. Explain ECHO views with ladled diagram.

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

11. ECHO probes.
12. Hypertension.
13. Heparin.
14. Protamine sulphate.
15. Vasopressors.
16. Central venous catheter.
17. What is compliance mechanism?
18. What is Diastolic dysfunction?
19. Write normal cardiac chamber pressure.
20. Write indications of IABP.
21. Activated clotting time

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

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

VI SEMESTER

PAPER - II (Pediatric Intervention)

QP CODE: 8636

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

Long Questions **10X1 = 10 Marks**

1. Explain Congenital Heart Disease

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

2. Explain pediatric BLS
3. What is PFO? Explain PFO closure procedure
4. How do you confirm VSD in ECHOCARDIOGRAPHY briefly explain
5. Write about ADO colluders
6. Explain anesthesia management during devise closure procedure
7. Briefly explain VSD closure devises
8. Briefly explain pediatric patient examination for percutaneous procedures
9. Briefly explain PDA Closure procedure
10. Briefly explain complications during percutaneous devise closure procedure

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

11. Write rims of VSD
12. Write Signs and symptoms of ASD &VSD
13. Write Classification Of PDA
14. Write steps of arterial septal aneurism
15. Write management of Acynotic heart disease
16. Name 3 ASD closure devises
17. How do you confirm PDA in Echocardiography
18. What is the role of cardiac care technologist in percutaneous procedures
19. Writ examination of thorax and heart in pediatric patient
20. Write Methods of measuring temperature in pediatric patient
21. Write types of VSD

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

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

VI SEMESTER

PAPER - III (Cardiac Surgery and Bypass Techniques)

QP CODE: 8637

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

Long Questions **10X1 = 10 Marks**

1. Explain Artificial Valves

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

2. Heparin induced thrombocytopenia
3. Briefly explain heart transplant procedure
4. Explain IABP
5. Briefly explain components of CPB
6. Explain what are the indications to refer a patient for CABG procedure after CAG
7. Explain CABG procedure
8. Explain blood components with their uses
9. Activated clotting time
10. Explain blood platelet plasma transfusion indication contraindication and uses

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

11. Write about Oxygenator
12. What is extracorporeal circulation?
13. Name venous and arterial cannulation sites
14. Indications of lung transplant
15. Define counter pulsation
16. Name clotting factors
17. Name blood proteins
18. What are mechanical valves? give example
19. What are the arteries and veins use for grafting in CABG procedure
20. Complications of artificial valves
21. What is dominance system of heart

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Cardiac Care Technology

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

VI SEMESTER

PAPER - IV (CCT Directed Clinical Education IV)

QP CODE: 8638

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

Long Questions **10X1 = 10 Marks**

1. Explain ECHO segments

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

2. Explain Speckle Tracking in ECHO
3. Explain M –Mode
4. Explain Holter Monitoring
5. Explain applications of AI in ECHO
6. How are strain measured from speckle tracking?
7. Explain Knobology in ECHO
8. What is tissue Doppler? Explain
9. Draw neat labeled diagram of echo views
10. Explain velocity,displacement,and strain rate

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

11. Pulse wave Doppler
12. What is EF? Write types of EF calculation methods
13. Continues wave Doppler
14. What is diastolic dysfunction? mention types
15. What is peak velocity in ECHO study
16. Types of ECHO probe
17. Applications of strain
18. Color Doppler
19. Write harts normal chambers pressure
20. Continues wave Doppler
21. ECHO probe position