



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND RESEARCH
(A DEEMED TO BE UNIVERSITY)**

B.Sc. Allied Health Sciences Third Year (Semester- VI)

September 2023 Examination

B.Sc. Cardiac Care Technology (CCT)

Time : 3.00 Hrs.

[Max.Marks : 100]

Cardiac Care Technology-Clinical

Q.P Code: J6791

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

Long Essay

2 X 10= 20 Marks

1. Discuss in detail about pathophysiology, clinical features, diagnosis and treatment of double outlet right ventricle
2. Define CCTGA. Discuss clinical features, Diagnosis and treatment of CCTGA.

Short Essay (any ten)

10 X 5= 50 Marks

3. Write a note on Shone's complex
4. Definition, pathophysiology and diagnosis of CTGA
5. Definition and echocardiographic features of Univentricular heart
6. Definition, classification and Clinical features of tricuspid atresia
7. Definition and classification of truncus arteriosus
8. Discuss echocardiographic features of TOF in detail
9. Diagnosis and management of truncus arteriosus
10. Management of TOF in detail
11. Define coarctation of aorta. Write in detail about echo features of COA
12. Discuss clinical features, diagnosis and management of pulmonary atresia with intact ventricular septum
13. Management of coarctation of Aorta
14. Diagnosis and management of tricuspid atresia

Short Answers (any ten)

10 X 3= 30 Marks

15. Pathophysiology of CTGA
16. Cyanosis and clubbing
17. Management of pulmonary atresia
18. Jatene procedure
19. Hypoplastic left heart syndrome
20. Interrupted aortic arch
21. BT shunt
22. Senning procedure
23. Taussig-Bing anomaly
24. Rastelli procedure
25. Assessment of pulmonary stenosis severity by echocardiography
26. Components of TOF with diagrams



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B.Sc. Cardiac Care Technology (CCT)

Time : 3.00 Hrs.

[Max.Marks : 100]

Cardiac Care Technology-Applied

Q.P Code: J6792

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

Long Essay

2 X 10= 20 Marks

1. Cardiac arrest- Definition, causes and its management
2. Define aortic dissection. Write in detail about pathophysiology, clinical features, Diagnosis and treatment of aortic dissection

Short Essay (any ten)

10 X 5= 50 Marks

3. Diagnosis and management of aortic aneurysm
4. Left ventricular apical thrombus
5. How will you recognize ventricular aneurysm
6. Write in detail about Defibrillator
7. Complications of Myocardial Infarction
8. Echocardiographic features of aortic aneurysm
9. How will you assess the severity of mitral regurgitation
10. ECG in STEMI
11. Write in detail about LV aneurysm
12. Diagnosis and management of STEMI
13. Pathophysiology and clinical features of aortic aneurysm
14. Write in detail about Non- ST Elevation Myocardial Infarction

Short Answers (any ten)

10 X 3= 30 Marks

15. Ventricular tachycardia
16. Unstable angina
17. Management of pericardial effusion
18. Cardiopulmonary Resuscitation
19. What is Automated External Defibrillator (AED)
20. Shockable and non-shockable rhythms
21. ECG features of atrial fibrillation
22. Write a note on cardioversion
23. Difference between True aneurysm and pseudo aneurysm
24. Ventricular fibrillation
25. Role of transesophageal echocardiography in case of planned cardioversion
26. Echo in pericardial effusion



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B.Sc. Allied Health Sciences Third Year (Semester- VI)

September 2023 Examination

B.Sc. Cardiac Care Technology (CCT)

Time : 3.00 Hrs.

[Max.Marks : 100]

Cardiac Care Technology-Advanced

Q.P Code: J6793

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

Long Essay

2 X 10= 20 Marks

1. Discuss in detail about the indications, procedure and complications of Coronary Angioplasty
2. Write in detail about the indications, materials used, procedure and complications of Ventricular septal defect (VSD) Device closure

Short Essay (any ten)

10 X 5= 50 Marks

3. Interventional Complications
4. PDA device closure-indications, procedure
5. Right heart catheterization
6. Defibrillator
7. Coil closure of PDA
8. Coronary Angiographic views with diagram
9. Procedure and complications of Coronary angioplasty
10. Normal values of pressure recording in various cardiac chambers
11. ASD device closure- procedure and complications
12. Wilkin's Score
13. Indications and procedure of coronary angiography
14. Balloon mitral valvuloplasty- indications, procedure

Short Answers (any ten)

10 X 3= 30 Marks

15. Causes of step-up at RA, RV level in oxymetry
16. Write a note on cardioversion
17. Judkins catheter
18. Ventricular tachycardia
19. Complications of VSD device closure
20. Role of temporary pacing during balloon Aortic valvuloplasty
21. Materials used in balloon Aortic valvuloplasty
22. Role of echocardiography during balloon mitral valvuloplasty
23. Normal oxygen saturation percentage of SVC, IVC, RA ,RV, LA and LV
24. Normal pressure tracings of RA,RV and PA
25. Role of echocardiography during ASD device closure
26. Complications of balloon Aortic valvuloplasty