



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**

**(A DEEMED TO BE UNIVERSITY)**

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

**Examination**

**B.Sc. Cardiac Care Technology (CCT)**

**Time : 3 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 (no choice)**

**2×10=20 Marks**

1. Briefly explain pathology, pathophysiology, causes and clinical manifestation of PPHN
2. Briefly explain heart murmurs in detail

**Short Essay (Answer any 10)**

**10×5=50 Marks**

3. Explain pathology and pathophysiology of ALCAPA
4. Explain echocardiographic assessment of cardiac dyssynchrony
5. Explain interpretation of DSE in detail
6. What are the abnormalities of S1?
7. What are the physiologic and pathologic causes of fourth heart sound?
8. Explain the echocardiographic findings of PPHN
9. Explain clinical usefulness of echocardiographic deformation imaging
10. Explain basics of chest x-ray
11. How to measure MPA size by chest x ray and write the causes and chest x-ray findings of prominent PA and hypoplastic PA
12. Write x-ray features of following
  - a. Cardiomegaly
  - b. LAE
  - c. PAH
13. Explain indications and contraindications of DSE
14. Explain the management of PPHN

**Short answer (Answer any 10)**

**10×3=30 Marks**

15. Chest x ray findings of Mitral stenosis
16. Write a short note on different types of strain
17. ECG and chest x ray findings of ALCAPA
18. Chest x ray findings of ASD, VSD, PDA
19. PW doppler assessment of LV dyssynchrony
20. What are the types of exercise and non-exercise stress testing?
21. Termination of DSE
22. Splitting of S2
23. What are the normal characteristics of S1 and S2 heart sound?
24. Define strain and its formula
25. Difference between AP and PA view of chest x ray
26. Chest x ray findings of RA enlargement





**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**

**(A DEEMED TO BE UNIVERSITY)**

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

September 2022 Examination

**B.Sc. Cardiac Care Technology (CCT)**

Time : 3 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 (no choice)**

**2×10=20 Marks**

1. Briefly explain clinical manifestation, ECG, X-ray, and echocardiographic findings of complete ECD
2. Briefly explain pathology, associated defects, clinical manifestation and diagnosis of CCTGA

**Short Essay (Answer any 10)**

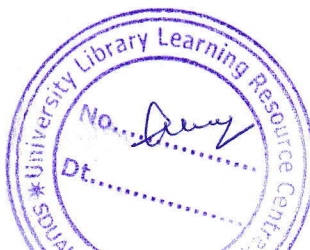
**10×5=50 Marks**

3. Explain echocardiographic findings of AP Window
4. Explain pathophysiology of complete ECD
5. Explain the pathophysiology of D-TGA
6. Explain the pathology of DORV
7. Explain ECG, X-ray and echocardiographic findings of Ebstein's anomaly
8. Explain the management of D-TGA
9. Explain clinical manifestation, ECG, X-ray and echocardiographic findings of PAPVC
10. Explain ECG, X-ray and echocardiographic findings of partial ECD
11. Explain Van Praagh's classification of truncus arteriosus with neat labelled diagram
12. Explain ECG, X-ray and echocardiographic findings of truncus arteriosus
13. Explain clinical manifestation of TAPVC with or without pulmonary venous obstruction
14. Explain the management of tricuspid atresia

**Short answer (Answer any 10)**

**10×3=30 Marks**

15. Mori's classification of AP septal defect
16. Management of ECD
17. Associated defects of D-TGA
18. Mustard and Senning operation
19. Pathology and clinical manifestation of subaortic VSD without PS in DORV
20. Pathology of partial ECD
21. Echocardiographic features common to all the types of TAPVC
22. Pathophysiology of tricuspid atresia
23. Echocardiographic findings of tricuspid atresia
24. Define the following conditions;
  - a. Straddling
  - b. Overriding of aorta
  - c. Interrupted aortic arch
25. Mustard and Senning operation
26. ECG and X-ray findings of D-TGA





**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**

**(A DEEMED TO BE UNIVERSITY)**

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

**September 2022 Examination**

**B.Sc. Cardiac Care Technology (CCT)**

**Time : 3 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 (no choice)**

**2×10=20 Marks**

1. Briefly explain indication, contraindication, Hardware's, procedure and complications of PDA device closure
2. Briefly explain indication, contraindication, selection of patients, procedure and complications of BMV

**Short Essay (Answer any 10)**

**10×5=50 Marks**

3. Explain the procedure of ASD device closure
4. Explain the procedure and complications of BAV
5. Explain the two types of stented valve used in TAVI and its procedure
6. Explain indication, contraindication of permanent pacemaker implantation
7. Explain components of permanent pacemaker implantation
8. Explain diagnostic, therapeutic and prognostic indications of cardiac catheterization
9. Explain the waveforms of RA/RV/PA and PCWP by RHC
10. Explain indication, contraindication of LHC
11. Explain procedure, Programming and follow-up of CRT
12. Explain insertion technique, patient evaluation and monitoring of IABP
13. Explain indication, contraindication of VSD device closure and write a note on device used
14. Explain indication, contraindication of Rotablator

**Short answer (Answer any 10)**

**10×3=30 Marks**

15. Indications of ASD device closure
16. Complications of VSD device closure
17. Write a note on advantages of Amplatzer Duct Occluder
18. Indications of TAVI
19. Pacing nomenclature
20. Basic concept of pacing
21. Complications of PPI
22. Equipments used in Cardiac catheterization
23. Aortic pressure tracing by catheterization
24. Role of CRT
25. Hemodynamic of IABP
26. Indications and patient selection of IVUS

