Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Cardiac Care Technology Degree Examination – 06-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

Clinical Cardiac Care Technology – I
Paper – I (RS2)
Q.P. CODE: 2920

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe right heart catheterization in detail.
2. Discuss about RHD- Echo features and management.
3. Assessment of LV systolic and diastolic function.

SHORT ESSAYS (Answer any Ten) **10 x 5 = 50 Marks**

4. VSD types on Echo views.
5. Describe ASD embryology.
6. How to handle the Cathlab machine?
7. Describe CAG procedure and indications.
8. Briefly explain Echo in IHD.
9. What are the ECG features of MI?
10. Describe infective endocarditis on Echo.
11. Discuss about Dextrocardia and its diagnosis.
12. Write about pericardial effusion – Echo features and management.
13. Classify CoA and describe its management.
14. Write a note on complications of MI.
15. Echo features post AVR.
16. ECG features in ASD, VSD.
17. Left heart catheterization.

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

18. What are the causes for step up of O2 in RV?
19. Mention any two guiding catheters.
20. Mention any two drug eluting stents.
21. Mention any two contrast agents used for Angiography.
22. Describe any two parameters of RV function assessment.
23. Describe any two Echo features of ARVD.
24. What is non compaction LV?
25. Mention any two variants of HCM.
26. What are the ways to manage HCM?
27. Echo features of pulmonary stenosis.
28. What are the functions of LA?
29. Describe an apical impulse.

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. (Allied Health sciences) Examination – 08-May-2026

Time: Three Hours **Max. Marks: 100**

CARDIAC CARE TECHNOLOGY - APPLIED TECHNOLOGY PAPER – II (RS2)
Q.P. CODE: 2921

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe stress echo indications, procedure and complications in detail
2. Explain ECG features of inferior wall MI and RVMI with culprit artery localization
3. Explain Peripheral Angioplasty – Indication, Contraindication, Procedure and materials used in detail

SHORT ESSAYS (Answer any Ten) **10 x 5 = 50 Marks**

4. ECG features in Acute Pericarditis
5. Explain Contrast Echocardiogram
6. Describe fetal echo procedure and views
7. Describe angioplasty of coarctation of aorta
8. Explain Indications and Contraindications of Transesophageal Echocardiography
9. ECG in ventricular hypertrophy. Write Romhilt Estes criteria
10. STEMI VS NSTEMI ECG findings
11. ECG in HOCM
12. Explain various stages of hypertension
13. ECG in various types of ASDs
14. ECG in VSD and PDA
15. Complications of coronary Angioplasty
16. ECG criteria of MI in LBBB
17. Significance of VPCs

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

18. Define Posterior wall Myocardial infarction
19. Define CTO. Name three CTO guide wires
20. Peripheral doppler
21. ECG in MS
22. ECG in bundle branch blocks
23. Risk stratification in AWMI, based on ECG
24. Renal angioplasty indications and complications
25. ECG in myxoedema
26. Types of Angina
27. WPW syndrome
28. Guide catheters used in coronary angioplasty
29. Basis of Q wave in acute Myocardial Infarction

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Cardiac Care Technology Degree Examination – 06-May-2026

Time: Three Hours **Max. Marks: 100**

CARDIAC CARE TECHNOLOGY - CLINICAL - PAPER – I (RS-3)

Q.P. CODE: 3276

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Describe indications, hardware, procedure and complications of coronary angiogram and write two angiographic views (Rao caudal and Rao cranial)
2. Discuss right heart catheterization – procedure, oximetry at various levels and RV angiogram and step up in RA & RV

   OR

   Role of echocardiograph in acute myocardial infarction and complications

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Echo in severe mitral stenosis
4. Echocardiography features of left atrial myxoma
5. Echocardiography in hypertrophic cardiomyopathy

   OR

   Radiation hazards
6. Echo in pericardial effusion
7. **Indication and contraindications of coronary angioplasty**
8. Echo assessment and grading of diastolic dysfunction of LV
9. Type of catheters used in coronary angiogram (Radial and femoral)
10. LV angiogram – indications, procedure and views

    OR

    CWD assessment of aortic incompetence
11. Echo features of VSD
12. Peripheral angiogram

SHORT ANSWER **10 x 3 = 30 Marks**

13. Structures evaluated in apical four chambers and five chamber view
14. Echo difference between LV and RV
15. Parasternal long axis view
16. **LAO cranial and caudal views in coronary angiogram**
17. Echo assessment of PDA
18. Type of VSD
19. Draw diagram of pigtail catheter and manifold
20. Uses of continues wave doppler
21. Types of radiograph contrast used in cath lab
22. Echo features in pulmonary stenosis

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Cardiac Care Technology Degree Examination – 08-May-2026

Time: Three Hours **Max. Marks: 100**

CARDIAC CARE TECHNOLOGY – APPLIED- PAPER-II (RS-3)

Q.P. CODE: 3277

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Coronary angioplasty – indications, procedure, hardware and complications
2. Define Myocardial Infarction, discuss ECG diagnosis and evolving ECG changes in MI. Write a note on ECG in RV MI and Posterior wall MI

   OR

   Discuss Trans – oesophageal echo – indications, contraindications, procedure and complications

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. Foetal echocardiogram
4. ECG LVH and RVH
5. Trifascicular Block

   OR

   OCT
6. ECG features of mitral regurgitation
7. Contrast echocardiogram
8. Complete heart block – causes and management
9. Ambulatory BP monitoring
10. Second degree AV block

    OR

    FFR
11. Left bundle branch block
12. WPW syndrome

SHORT ANSWER **10 x 3 = 30 Marks**

13. ECG in acute pericarditis
14. ECG in VSD
15. Commonly involved valves in rheumatic heart disease
16. ECG in SVT
17. White coat hypertension
18. IVUS
19. Components of TOF
20. ECG in dilated cardiomyopathy
21. ECG in ASD
22. ECG in pulmonary stenosis

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Cardiac Care Technology Degree Examination – 11-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

CARDIAC CARE TECHNOLOGY – ADVANCED- PAPER-III (RS-3)

Q.P. CODE: 3278

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice) **2 x 10 = 20 Marks**

1. Describe Nuclear cardiology in detail.
2. Implantable cardioverter defibrillator.
   OR
   Pacemaker types and components, procedures and indications.

SHORT ESSAYS (Question No 5 & 10 choice) **10 x 5 = 50 Marks**

3. EP study.
4. Bioprosthetic valves.
5. LA myxoma.
   OR
   Ventricular tachyarrhythmia.
6. Describe the mechanisms of Bradyarrhythmias.
7. IVUS.
8. Holter monitoring.
9. PDA device closure.
10. IVC filter.
    OR
    BLS.
11. Antiarrhythmic drugs.
12. What are the indications to use Defibrillator? How to use it?

SHORT ANSWER **10 x 3 = 30 Marks**

13. Beta blockers.
14. Cardiac asystole.
15. LA appendage morphology.
16. LV vs RV anatomy.
17. Describe normal systolic and diastolic pressure within the ventricles.
18. Draw and explain an arterial pulse waveform.
19. Mention any two mechanical prosthetic valves.
20. Mention any two antianginal drugs.
21. How do you treat DCM?
22. Draw and label any two parasternal short axis views.

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