Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Cardiac Care Technology Degree Examination – APRIL-2019

Time: Three Hours | Max. Marks: 100 Marks

Clinical Cardiac Care Technology – I

Paper – I (RS Scheme)

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. Interpretation of normal ECG and ECG abnormalities in IHD and CHD
2. Brief note on cardiac catheterization
3. Discuss in detail about the equipments used in cardiac catheterization laboratory, add a note on radiation hazards.

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

4. Echo features of cardiac tamponade
5. Echo in mitral stenosis
6. Brief note pulmonary arterial hypertension
7. ECHO in Mitral Regurgitation
8. ECHO in atrial septal defect
9. M – mode features of LV in parasternal long axis
10. Prosthetic valve malfunction
11. Step up of RV level
12. Contrast agents
13. ECHO in Ventricular Septal Defect (VSD)
14. Echo in Left Atrial (LA) Myxoma
15. LV aneurysm
16. LV angiogram
17. Coronary catheters

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

18. Echo features of Tetralogy of Fallot (TOF)
19. Dextrocardia - ECHO
20. Step up at Right Atrium (RA) level
21. Measurement of cardiac chambers
22. Echo features of constrictive pericarditis
23. Brief note on aortic regurgitation
24. Echo features of Transposition of Great Arteries (TGA)
25. Coronary balloons
26. RV angiogram
27. Various views in Angiogram
28. Echo in aortic stenosis
29. Components of Tetralogy of Fallot

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III year B.Sc. (Allied Health sciences) Examination – APRIL-2019

Time: Three Hours | Max. Marks: 100 Marks

Cardiac Care Technology
Applied Technology Paper – II (RS)
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. Classify various type of cardiomyopathy. Describe in detail about hypertrophic cardiomyopathy and interventional treatment.
2. Describe the ECG changes and their evolution in 24 to 48 hrs from the onset of acute inferior wall MI.
3. Mention the indication and contraindication of Transesophageal echocardiography. Describe how to conduct and interpret pharmacological stress echocardiography.

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

4. ECG in various rheumatic heart disease
5. Definition, classification of hypertension and commonly used method for assessing blood pressure.
6. Myocardial contrast echo
7. Complications of coronary angioplasty
8. Bundle branch blocks
9. Angioplasty of Coarctation of aorta-mention materials used.
10. How will you determine the electrical axis of the heart? What is normal and what are the abnormalities?
11. Hardware required for temporary pacemaker implantation
12. How will you recognize ventricular aneurysm?
13. Echocardiography in truncus arteriosus
14. ECG criteria for RAH and RVH
15. Materials used for renal angioplasty and stenting
16. ECG in acute pulmonary embolism
17. Echocardiographic severity of mitral regurgitation

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

18. Describe ECG in Myxedema.
19. Components of TOF
20. Hemodynamic data in tricuspid atresia
21. ECG in WPW syndrome
22. Describe ECG changes in Ostium primum and secundum atrial septal defect.
23. How do you recognize SVT in ECG?
24. Echo evaluation of pericardial effusion
25. Pulmonary stenosis – ECG changes
26. Hypokalemia ECG manifestations
27. Echocardiography in restrictive cardiomyopathy
28. Echo in chronic obstructive pulmonary disease

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29 Junctional rhythm

III year B.Sc. Cardiac Care Technology Degree Examination – OCT-2019

Time: Three Hours Max. Marks: 100 Marks

Clinical Cardiac Care Technology – I Paper – I (RS Scheme)

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 various methods used for assessment of systolic function.
2. Describe various types of cardiomyopathy.
3. Describe in detail about indication, contra indication and procedure of angiogram.

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

4. ECG in aortic stenosis
5. Guide wires
6. Assessment of diastolic function
7. Differences between a) Transmural and no transmural MI b) AWMI ECG changes
8. Echo features of PDA
9. Types and echocardiographic features of LV aneurysm
10. Write a note on Mitral valve prolapse.
11. Evaluation of pulmonary hypertension
12. Oximetry at various levels of cardiac chambers
13. Echo features of prosthetic valve dysfunction
14. Features of cardiac tamponade
15. Indication and contraindication of PTCA
16. Components of TOF
17. Echo features of vegetation and clot

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

18. M-mode of left ventricle
19. Angioplasty balloons
20. Normal variant in cardiac chambers
21. Echo evaluation of post MVR
22. LAO cranial view on angiogram
23. Diagnostic catheters
24. Write a note on LV angiogram.
25. Discuss normal ECG.
26. Name of the contrast material used and its complication.
27. TAPSE
28. Low gradient aortic stenosis
29. TAPSE and MAPSE

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III year B.Sc. (Allied Health sciences) Examination – OCT-2019

Time: Three Hours Max. Marks: 100 Marks

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

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. Define systemic hypertension and mention stages of Joint National Committee (JNC) in detail.
2. Brief note myocardial infarction – how do you make out MI by various diagnostic tools
3. Define hypertrophic obstructive cardiomyopathy in detail with the help of ECG and Echocardiography.

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

4. True posterior wall MI
5. Advantages and complications of Trans Esophageal Echocardiography (TEE)
6. How do you assess severe aortic stenosis in settings of low pressure gradient?
7. Brief note on bundle branch blocks
8. ECG in cardiac tamponade
9. Brief note on myocardial viability
10. Right Ventricular MI (RVMI) in detail – ECG and Echo
11. Brief note on fetal echocardiography
12. ECG changes in mitral stenosis
13. ECG features of various congenital heart diseases
14. Stress ECHO procedure
15. Indications for pacemaker implantation in detail
16. Fetal Echocardiogram
17. Different types of catheters used in cardiac catheterization

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

18. True and technical Dextrocardia
19. ECG in ST Elevation Myocardial Infarction (STEMI)
20. Radiographic contrast agents
21. ECG in Left Ventricular Hypertrophy (LVH)
22. How do you differentiate Left ventricle (LV) from Right ventricle (RV)?
23. Define stress echo.
24. Peripheral Doppler
25. ECG in Mitral Valve Prolapse (MVP)
26. Bazet's formula
27. ECG in Wolf Parkinson White (WPW) syndrome
28. Name some fascicular blocks.
29. Importance of Q waves in ECG

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