

[LB 0212]

AUGUST 2012
B.Sc. CARDIAC TECHNOLOGY
SECOND YEAR
PAPER – III – ECHOCARDIOGRAPHY
Q.P. Code : 801513

Sub. Code: 1513

Time : Three hours

Maximum : 100 marks

(180 Mins) Answer ALL questions in the same order

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

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|---|---|----|----|
| 1. Describe the technique of transoesophageal echocardiogram with illustrations of structures visualised at different levels. | 7 | 20 | 10 |
| 2. Describe with diagrams the 17 segment model of left ventricle for regional wall motion assessment. | 7 | 20 | 10 |
| 3. Echocardiographic differentiation of different types of cardiomyopathies. | 7 | 20 | 10 |

II. Write Notes on:

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|--|---|----|---|
| 1. Colour flow doppler imaging – Technique, utility and limitations. | 4 | 10 | 5 |
| 2. Describe with illustration the structures visualised in parasternal long axis view. | 4 | 10 | 5 |
| 3. Echocardiographic assessment of aortic stenosis. | 4 | 10 | 5 |
| 4. Echocardiographic signs of constrictive pericarditis. | 4 | 10 | 5 |
| 5. Echocardiographic detection of vegetations and complications of infective endocarditis. | 4 | 10 | 5 |
| 6. Differential diagnosis of echogenic mass lesions in left atrium. | 4 | 10 | 5 |
| 7. Echocardiographic evaluation of Tetralogy of Fallot. | 4 | 10 | 5 |
| 8. 2-D and Doppler assessment of prosthetic valves. | 4 | 10 | 5 |

III. Short Answers on:

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|---|---|---|---|
| 1. Merits and limitation of M mode echocardiogram. | 2 | 4 | 3 |
| 2. Usefulness of colour B mode scanning. | 2 | 4 | 3 |
| 3. Illustrate the structures visualised in parasternal short axis view at mitral valve level. | 2 | 4 | 3 |
| 4. Illustrate the structures visualised in apical 2 chamber view. | 2 | 4 | 3 |
| 5. Pulse doppler study of pulmonary venous flow. | 2 | 4 | 3 |
| 6. Echocardiographic assessment of stroke volume. | 2 | 4 | 3 |
| 7. Determination of mitral valve by pressure half time. | 2 | 4 | 3 |
| 8. Echocardiographic assessment of suitability of mitral valve for balloon valvuloplasty. | 2 | 4 | 3 |
| 9. Echocardiographic features of perimembranous ventricular septal defect. | 2 | 4 | 3 |
| 10. Echocardiographic features of patent ductus arteriosus. | 2 | 4 | 3 |
