

**B.Sc. CARDIAC TECHNOLOGY
THIRD YEAR**

PAPER I – CARDIAC CATHETERIZATION LABORATORY BASICS

Q.P. Code: 801521

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Adjunctive pharmacological agents used during cardiac catheterization.
2. Complications of diagnostic cardiac catheterization.
3. Angiographic views for diagnostic coronary angiography. Discuss briefly on coronary artery anomalies.

II. Write notes on:

(8 x 5 = 40)

1. Detection of right to left shunts.
2. Hakki's and Gorlin's formula.
3. TIMI frame count.
4. Total pulmonary resistance.
5. Complications of ventriculography.
6. Oximetry findings in atrial septal defect.
7. Pulmonary angiography.
8. Berman angiographic catheters.

III. Short answers on:

(10 x 3 = 30)

1. Deterministic effects of radiation. Give three examples for deterministic effects of radiation.
2. Name 3 catheters used for right heart catheterization.
3. List 3 factors that diminish the magnitude of reflected pressure waves.
4. Wedge pressure. List three examples for wedge pressure measurement.
5. List the artifacts encountered in clinical pressure measurement.
6. Fractional flow reserve.
7. Iodixanol- What are its advantages?
8. Selection of puncture site for cardiac catheterization procedures.
9. Judkins left diagnostic coronary catheter.
10. Digital subtraction angiography.
