[LL 0817] AUGUST 2017 **Sub. Code: 1521**

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. Describe various conventional views of coronary angiography.
2. Cardiac output determination. List the factors that influence cardiac output in normal subjects.
3. Methods of sterilization and their advantages and disadvantages.

II. Write notes on: **(8 x 5 = 40)**

1. Catheters used for bypass graft angiography.
2. Damping and ventricularization.
3. Left ventricular end-diastolic pressure.
4. Left-dominant coronary circulation.
5. Micromanometers.
6. Gorlin's formula.
7. Principles of radiation safety.
8. Calculation of pulmonary and systemic blood flow.

III. Short answers on: **(10 x 3 = 30)**

1. What is total pulmonary resistance? How is pulmonary vascular resistance calculated? What is the normal range for pulmonary vascular resistance?
2. Mention three catheters used in right heart catheterization.
3. Draw and illustrate Judkin's left catheter, Amplatz right catheter and multipurpose catheter.
4. List three common coronary artery anomalies.
5. What is the vasodilator cocktail used during radial access?
6. Rotational angiography.
7. Name three vascular closure devices and their characteristics.
8. List three factors that augment pressure wave reflections.
9. Side-hole catheters. List three catheters for pulmonary angiography.
10. List three complications of coronary angiography and their management.

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