

**B.Sc. CARDIAC TECHNOLOGY**  
**THIRD YEAR**  
**PAPER II – CARDIAC CATHETERIZATION LABORATORY ADVANCED**

*Q.P. Code: 801522*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Describe the indications for aortic root, arch and abdominal aortogram. Describe the angiographic angulations and catheters that are required. List the complications of the procedure.
2. Describe the steps in device closure of Patent Ductus Arteriosus. List the complications and their management.
3. Indications and complications of IABP (Intra-aortic balloon pump) insertion. What are its physiological effects? Discuss the various trigger modes.

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

1. Closure devices for hemostasis.
2. Embolic protection devices in carotid angioplasty.
3. Management of coronary air embolism.
4. Vena caval filters.
5. Stent thrombosis.
6. Contrast Nephropathy.
7. Coarctoplasty.
8. Self-expanding stents.

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

1. Hepato clavicular view.
2. Tetralogy of Fallot.
3. Steps in the puncture of interatrial septum.
4. Types of permanent pacemaker.
5. Intravascular imaging.
6. Instantaneous wave-free ratio.
7. Rotational atherectomy.
8. Guidewires used during coronary angioplasty.
9. Management of coronary perforation in the catheterization laboratory.
10. Pericardiocentesis.

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