Demonstration of Centrifugal Pump

**DO NOT** use this equipment unless an instructor has instructed you in its safe use/operation and has given permission.

- Safety glasses may be required in work areas.
- Appropriate footwear with closed-toe must be worn.
- Rings and jewellery must not be worn.
- Long and loose hair must be contained or constrained.
- Long-pants are required.
- Protective gloves may be required.

**PRE-OPERATIONAL SAFETY CHECKS**

1. Check workspaces and walkways to ensure no slip/trip-hazards are present.
2. Check that all equipment components are in position and are operational.
3. Ensure you are familiar with the operation of the equipment.
4. Keep table and work area clear of all tools and debris.
5. Faulty equipment must not be used. Immediately report suspect equipment.
6. Be aware of any other students or personnel in the immediate vicinity and ensure the area is clear before using this equipment.
7. Familiarize yourself with all mechanical operations, switches and controls, including potential chemicals that may be used.
8. If you have any questions or concerns, ask the laboratory technician or instructor first.

**OPERATIONAL PROCEDURES**

**NO FOOD OR DRINK PERMITTED NEAR EXPERIMENTS.**

1. Connect the inlet of the F1-27 apparatus to the sump drain valve of the hydraulic bench. Keep the sump drain valve fully open after connecting it with the inlet of F1-27.
2. Connect the outlet of the F1-27 with the discharge manifold which is set at the hydraulic bench.
3. Turn on the power of the pump in F1-27 apparatus.
4. Record the flow rate using a stop watch and read the inlet and outlet head from the gage.

**HOUSEKEEPING**

1. Turn off all equipment once experiment is completed and dispose of chemicals in proper receptacles on completion. Leave equipment and working area in a safe, clean and tidy state.
2. Keep all walkways and aisles free of clutter and debris.

**POTENTIAL HAZARDS**

- Chemical exposure on skin
- Noise
- Eye injuries
- Electrical shock
- Manual handling
- Broken glass

Date of last review ___________  Signature ____________________