

Maharaja Ranjit Singh Punjab Technical University, Bathinda

Name of Work:

Purchase of Apparatus for Applied Thermodynamics Lab PIT GTB Garh

Name of Agency

Sr. No.	Description of Item	Qty.	Unit	
1	<p>Study of construction and operation of 2 stroke and 4 stroke Petrol and Diesel engines using actual engines or models</p> <p>(A) 4 Stroke Petrol Engine (B) Two Stroke Petrol Engine Model Represents internal structure and operating principles of an air-cooled two-stroke engine. All parts in aluminium alloy. Ignition is shown by means of a miniature bulb. Carburetor and fuel supply also sectioned. Mounted on metal base</p> <p>To plot actual valve timing diagram of a 4 stroke petrol and diesel engines and study its impact on the performance of engine</p>	1	No.	
2	<p>Four stroke diesel engine</p> <p>Study of working, construction, mountings and accessories of various types of boilers</p> <p>(A) Lancashire Boiler (B) Babcock And Wilcox Boiler (C) Lamont Boiler (D) Benson Boiler</p> <p>Determine the brake power, indicated power, friction power and mechanical efficiency of a multi cylinder petrol engine running at constant speed (Morse Test).</p>	1	No.	
3	<p>4 cylinder 4 stroke petrol Engine test rig with Morse Test</p> <p>Performance testing of a diesel engine from no load to full load (at constant speed) for a single cylinder/ multi-cylinder engine in terms of brake power, indicated power, mechanical efficiency and specific fuel consumption and to measure the smoke density. Draw/obtain power consumption and exhaust emission curves. Also make the heat balance sheet.</p>	1	No.	
4	<p>Single cylinder 4 stroke water cooled vertical Diesel engine test rig with rope-brake dynamometer</p>	1	No.	

5