

LESSON PLAN

| Period | Date (Tentative) | Topic | Unit No. | Teaching Methodology | Remarks | Corrective Action Upon Review |
|-----------|------------------|---|----------|----------------------|---------|-------------------------------|
| 1 (5) | 24/12 2015 | INTRODUCTION: Dimensions and Units - Properties | I | PPT | | |
| 2 (6) | 24/12 2015 | Viscosity, Surface tension, Vapour pressure and their influence on fluid motion | " | CR & PPT | | |
| 3 (5) | 31/12 2015 | Pressure at a point, Pascal's law, hydrostatic law | " | CR | | |
| 4 (6) | 31/12 2015 | Atmospheric, gauge pressure and Vapour pressure | " | PPT | | |
| 5 (5) | 07/01 2016 | Measurement of Pressure: Pressure gauges | " | CR | | |
| 6 (6) | 07/01 2016 | Differential and micro manometers | " | CR | | |
| 7 (3) | 08/01 2016 | Problem Solved | " | " | | |
| 8 (4) | 08/01 2016 | FLUID KINEMATICS: Description of fluid flow: Streamline, pathline, streaklines, stream tube | " | CR & PPT | | |
| 9 (5) | 21/01 2016 | Classification of flows: Steady & Unsteady, 1D, 2D & 3D flows, etc. | " | PPT | | |
| 10 (6) | 21/01 2016 | FLUID KINEMATICS: I: Continuity equation for 1D, 2D & 3D flow | II | CR | | |
| 11 (3) | 22/01 2016 | Problems to be solved | " | " | | |
| 12 (4) | 22/01 2016 | — do — | " | " | | |
| 13 (5) | 28/01 2016 | Stream function and Velocity potential | | | | |

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| | | function - Flow net analysis | II | CR | | |
| 14 (6) | 28/01 2016 | FLUID DYNAMICS: Surface & Body forces, Euler's & Bernoulli's equations | " | CR | | |
| 15 (3) | 29/01 2016 | Navier-Stokes equation (Explanatory) | " | " | | |
| | | Momentum equation & its applications | | | | |
| 16 (4) | 29/01 2016 | Force's on pipe bend - Reynolds Experiment | " | CR & PPT | | |
| 17 (5) | 04/02 2016 | Flow between parallel plates, flow through long tubes and inclined tubes | " | CR | | |
| 18 (6) | 04/02 2016 | Problems to be solved | " | " | | |
| 19 (3) | 05/02 2016 | — do — | " | " | | |
| 20 (4) | 05/02 2016 | — do — | " | " | | |
| 21 (5) | 11/02 2016 | CLOSED CONDUIT FLOW: Darcy-Weisbach equation - Minor losses in pipes | III | CR | | |
| 22 (6) | 11/02 2016 | HGL & TEL - Pipes in Series & Parallel | " | " | | |
| 23 (3) | 12/02 2016 | Problems to be solved | " | " | | |
| 24 (4) | 12/02 2016 | — do — | " | " | | |
| 25 (5) | 25/02 2016 | MEASUREMENT OF FLOW: Pitot tube | " | " | | |
| 26 (6) | 25/02 2016 | Venturimeter - Orificemeter | " | " | | |
| 27 (3) | 26/02 2016 | Flow nozzle & Turbine flowmeter | " | " | | |
| 28 | 26/02 | Problems to be solved | " | " | | |

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| 29 (5) | 03/03 2016 | Problems to be solved | <u>III</u> | CR | | |
| 30 (6) | 03/03 2016 | — do — | " | " | | |
| 31 (3) | 04/03 2016 | HYDRAULIC TURBINES: Classification of | <u>IV</u> | CR & PPT | | |
| | | turbines - Impulse & Reaction turbines | | | | |
| 32 (4) | 04/03 2016 | — do — | " | " | | |
| 33 (5) | 10/03 2016 | Pelton wheel - Working propositions, Work done | " | CR | | |
| 34 (6) | 10/03 2016 | efficiency - Problems | | | | |
| 35 (3) | 11/03 2016 | FRANCIS turbine: Problems | " | " | | |
| 36 (4) | 11/03 2016 | Kaplan turbine: Problems | " | " | | |
| 37 (5) | 17/03 2016 | Draft tube: Theory, functions, efficiency | " | " | | |
| 38 (6) | 17/03 2016 | Problems | " | " | | |
| 39 (3) | 18/03 2016 | PERFORMANCE OF HYDRAULIC TURBINES: | " | PPT & CR | | |
| | | Geometric Similarity | | | | |
| | | Units & Specific | | | | |
| | | Quantities | | | | |
| 40 (4) | 18/03 2016 | Problems | " | CR | | |
| 41 (5) | 31/03 2016 | Characteristic Curves, Governing | P _{II} | PPT | | |
| 42 (6) | 31/03 2016 | of turbines, Selection of turbine, Cavitation | | | | |
| | | Surge tank, Water hammer | | | | |
| 43 (5) | 07/04 2016 | Problems | " | CR | | |
| 44 (6) | 07/04 2016 | — do — | " | " | | |

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| 45 (3) | 08/04 2016 | CENTRIFUGAL Pumps; classification | V | PPT | | |
| 46 (4) | 08/04 2016 | Working & Work done | " | CR | | |
| 47 (5) | 14/04 2016 | Manometric head, losses & efficiencies - Specific Speed | " | CR & PPT | | |
| 48 (6) | 14/04 2016 | Pumps in Series & Parallel - Problem | " | CR | | |
| 49 (3) | 15/04 2016 | Performance chara- cteristic Curves - NPSH | " | PPT | | |
| 50 (4) | 15/04 2016 | Problems | " | CR | | |
| 51 (5) | 21/04 2016 | RECIPROCATING PUMPS; Working, Discharge slip | " | PPT | | |
| 52 (6) | 21/04 2016 | Problems | " | CR | | |
| 53 (384) | 22/04 2016 | Indicator diagram - 2 | " | PPT. | | |
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