



NIIST BHOPAL

**NRI INSTITUTE OF INFORMATION SCIENCE
& TECHNOLOGY
DEPARTMENT : CIVIL ENGINEERING**

**FORM
NO**

NIIST/A/10

BRANCH

CIVIL

LIST OF EXPERIMENTS

REV. NO

0

SEMESTER

VII

REV. DT

30/06/2011

SUBJECT/CODE : GEOTECHNICAL ENGG.-1 / CE701

SNO

LIST OF EXPERIMENTS

- 1 Determination of water content by Oven drying method.
- 2 Determination of water content by Pycnometer
- 3 Determination of soil field density by core cutter method
- 4 Determination of soil field density by sand replacement method
- 5 Determination of Specific Gravity By Pycnometer.
- 6 Determination of Consistency Limits (i) Liquid Limit (ii) Plastic Limit (iii) Shrinkage Limit
- 7 Determination of liquid limit of soil by cone penetrometer.
- 8 Grain size analysis by sieve shaking method
- 9 Grain size analysis of fine grained soil by sedimentation using (i) pipette (ii) hydrometer.
- 10 Determination of coefficient of permeability of soil by- (a) constant head method (b) variable head method
- 11 Determination of compaction parameters by- (a) light compaction, (b) heavy compaction.
- 12 Direct Shear test
- 13 Triaxial Test
- 14 Unconfined Compression Strength Test



 NIIST BHOPAL		NRI INSTITUTE OF INFORMATION SCIENCE & TECHNOLOGY DEPARTMENT : CIVIL ENGINEERING <u>LIST OF EXPERIMENTS</u>		FORM NO	NIIST/A/10
				REV. NO	0
				REV. DT	30/06/2011
BRANCH	CIVIL				
SEMESTER	VII				

SUBJECT / CODE: Prestressed concrete structure /CE704

SNO	LIST OF EXPERIMENTS
1	Fabrication, casting and testing of simply supported prestressed concrete beam/slab for strength and deflection behaviour
2	Fabrication, casting and testing of beam/slab (pre-tensioned or post-tensioned) with different layout of cables for strength and deflection behaviour.
3	Fabrication, casting and testing of various prestressed structures as per contents given in the syllabus.
4	Minimum 15 problems from above topics along with cross checking using any opensource/ professional software
5	Modeling and analysis of at least one real-life structure using open-source/ professional software



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SEMESTER	VII		REV. DT	30/06/2011

SUBJECT /CODE: INTERNET OF THINGS/ CE705

SNO	LIST OF EXPERIMENTS
1	Study and Install IDE of Arduino and different types of Arduino.
2	Write program using Arduino IDE for Blink LED.
3	Write Program for RGB LED using Arduino.
4	Study the Temperature sensor and Write Program for monitor temperature using Arduino.
5	Study and Implement RFID, NFC using Arduino.
6	Study and Configure Raspberry Pi.
7	WAP for LED blink using Raspberry Pi.
8	Study and Implement Zigbee Protocol using Arduino / Raspberry Pi.
9	Study and implement MQTT protocol using Arduino.
10	Study and implement CoAP protocol using Arduino.

