

Lesson Plan

Course - Transportation Engg. Lab(Pr-1)

Semester- 3rd

Program- Civil Engineering

Institute - Govt. Polytechnic, Sonpur

Session - 2026-2027

Total Load-60(4/week)

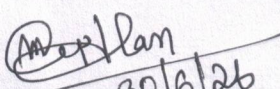
Sl. No.	Week No.	Class No.	Topic to be Covered
1	Week-1	Class-1	Flakiness Index of Aggregates – Sample preparation and procedure
2	Week-1	Class-2	Flakiness Index of Aggregates – Conduct of test
3	Week-1	Class-3	Elongation Index of Aggregates – Sample preparation and procedure
4	Week-1	Class-4	Elongation Index of Aggregates – Conduct of test and calculations
5	Week-2	Class-5	Determination of Crushing Strength of Aggregates – Sample preparation
6	Week-2	Class-6	Determination of Crushing Strength of Aggregates – Conduct of test
7	Week-2	Class-7	Determination of Crushing Strength of Aggregates – Calculations
8	Week-2	Class-8	Determination of Crushing Strength of Aggregates – Result and interpretation
9	Week-3	Class-9	Determination of Impact Value of Aggregates – Sample preparation
10	Week-3	Class-10	Determination of Impact Value of Aggregates – Conduct of test
11	Week-3	Class-11	Determination of Impact Value of Aggregates – Calculations
12	Week-3	Class-12	Determination of Impact Value of Aggregates – Result and interpretation
13	Week-4	Class-13	Determination of Abrasion Value of Aggregates – Sample preparation

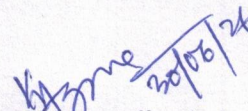
14	Week-4	Class-1 4	Determination of Abrasion Value of Aggregates – Conduct of test
15	Week-4	Class-1 5	Determination of Abrasion Value of Aggregates – Calculations
16	Week-4	Class-1 6	Determination of Abrasion Value of Aggregates – Result and interpretation
17	Week-5	Class-1 7	Angularity Number of Aggregates – Sample preparation
18	Week-5	Class-1 8	Angularity Number of Aggregates – Conduct of test
19	Week-5	Class-1 9	Angularity Number of Aggregates – Calculations
20	Week-5	Class-2 0	Angularity Number of Aggregates – Result and interpretation
21	Week-6	Class-2 1	Softening Point Test of Bitumen – Sample preparation
22	Week-6	Class-2 2	Softening Point Test of Bitumen – Conduct of test
23	Week-6	Class-2 3	Penetration Test of Bitumen – Sample preparation
24	Week-6	Class-2 4	Penetration Test of Bitumen – Conduct of test
25	Week-7	Class-2 5	Penetration Test of Bitumen – Calculations and result
26	Week-7	Class-2 6	Flash and Fire Point Test of Bitumen – Sample preparation
27	Week-7	Class-2 7	Flash and Fire Point Test of Bitumen – Conduct of test
28	Week-7	Class-2 8	Flash and Fire Point Test of Bitumen – Result and interpretation
29	Week-8	Class-2 9	Ductility Test of Bitumen – Sample preparation
30	Week-8	Class-3 0	Ductility Test of Bitumen – Conduct of test

31	Week-8	Class-3 1	Ductility Test of Bitumen – Calculations
32	Week-8	Class-3 2	Ductility Test of Bitumen – Result and interpretation
33	Week-9	Class-3 3	Determination of Viscosity of Bitumen – Sample preparation
34	Week-9	Class-3 4	Determination of Viscosity of Bitumen – Conduct of test
35	Week-9	Class-3 5	Determination of Viscosity of Bitumen – Calculations
36	Week-9	Class-3 6	Determination of Viscosity of Bitumen – Result and interpretation
37	Week-1 0	Class-3 7	Determination of Bitumen Content using Centrifuge Extractor – Sample preparation
38	Week-1 0	Class-3 8	Determination of Bitumen Content using Centrifuge Extractor – Conduct of test
39	Week-1 0	Class-3 9	Determination of Bitumen Content using Centrifuge Extractor – Calculations
40	Week-1 0	Class-4 0	Determination of Bitumen Content using Centrifuge Extractor – Result and interpretation
41	Week-1 1	Class-4 1	Marshall Stability Test – Sample preparation
42	Week-1 1	Class-4 2	Marshall Stability Test – Preparation of specimen
43	Week-1 1	Class-4 3	Marshall Stability Test – Determination of Stability
44	Week-1 1	Class-4 4	Marshall Stability Test – Determination of Flow Value
45	Week-1 2	Class-4 5	Marshall Stability Test – Calculations
46	Week-1 2	Class-4 6	Marshall Stability Test – Result and interpretation
47	Week-1 2	Class-4 7	Visit to Constructed Road – Visual inspection of road defects

48	Week-1 2	Class-4 8	Visit to Constructed Road – Identification of defects and remedial measures
49	Week-1 3	Class-4 9	Visit to Flexible/Rigid Road – Observation of drainage condition
50	Week-1 3	Class-5 0	Visit to Flexible/Rigid Road – Assessment of drainage condition
51	Week-1 3	Class-5 1	CBR Test – Sample preparation
52	Week-1 3	Class-5 2	CBR Test – Specimen preparation
53	Week-1 4	Class-5 3	CBR Test – Conduct of test
54	Week-1 4	Class-5 4	CBR Test – Load penetration observations
55	Week-1 4	Class-5 5	CBR Test – Calculations
56	Week-1 4	Class-5 6	CBR Test – Result and interpretation
57	Week-1 5	Class-5 7	CBR Test – Observation and analysis
58	Week-1 5	Class-5 8	CBR Test – Final result and discussion
59	Week-1 5	Class-5 9	Visit to Constructed Road – Observation of pavement defects and remedial measures
60	Week-1 5	Class-6 0	Visit to Flexible/Rigid Road – Observation of drainage condition and findings

Signature of Faculty
Civil Engg,GP Sonpur


30/6/26
Signature of HOD
Civil Engg,GP Sonpur


30/6/26
Academic Co-ordinator
Civil Engg,GP Sonpur