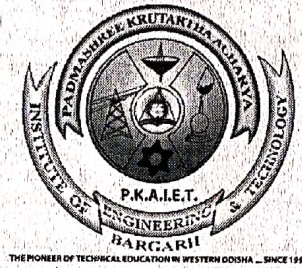


# PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



## PROGRESS REGISTER

Session-2022-2023

Discipline: Civil Engg.

Semester: 5th

Subject: Railway & Bridge Engg

Name of the Teaching Faculty: Saswat Sumon Sharma



Subject: Railway & Bridge Engg No. of Days/per week class allotted 4P/week

Semester From Date: 15-9-2022 To Date: 22-12-22 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
19/9/22	Railway terminology	Railway Terminology	Discussion on different terms related to railway	<u>S. Sharm</u>
20/9/22	Advantages of Railways	Advantages of railways	Discussion on advantages.	<u>S. Sharm</u>
21/9	Classification of Indian railways	Classification of IR	Discussion on IR	<u>S. Sharm</u>
24/9	Definition of different component of P-way.	Definition of different concept of P-way	Definition Explanation	<u>S. Sharm</u>
26/9	concept of gauge, types	concept of gauge & types.	Explanation of gauge	<u>S. Sharm</u>
27/9	Rails, section view, terms & concept	Rail section view, terms & concept.	Discussion and explanation of rail sections	<u>S. Sharm</u>
28/9	function and requirement of rails	function & requirement of rails	Discussion on rail functions	<u>S. Sharm</u>
1/10	Types of rail section, length of rail	Types of rail section, length	Discussion on types of rails	<u>S. Sharm</u>
10/10	Rail joints, Types & requirements.	Rail joints, types & requirements.	Explanation on rail joints.	<u>S. Sharm</u>
11/10	Purpose of welding on rails, advantages.	Purpose of welding on rails	Discussion on purpose of rail welding	<u>S. Sharm</u>
12/10	Creep - concept, definition & prevention	Creep - Concept, definition & prevention.	Discussion on creep concept.	<u>S. Sharm</u>



Subject: Railway & Bridge Engrg No. of Days/per week class allotted 1P/10

Semester From Date : 15-09-2022 To Date : 22-12-2022 No. of Weeks : 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
15/10/2022	Sleepers Definition	Sleepers definition	Discussion on sleepers	<u>S. Khan</u>
17/10	Functions of sleepers	function of sleepers	Discussion on function of sleepers	<u>S. Khan</u>
18/10	Concept of Ballast	Concepts of Ballast	Discussion on concept of ballast	<u>S. Khan</u>
19/10	Functions and requirement of ballast	Functions and requirement of ballast	Explanation on requirement of ballast	<u>S. Khan</u>
24/10	Assignment discussion & class test	Assignment & discussion Class test	Assignment & discussion	<u>S. Khan</u>
26/10	Fixture for broad gauge	Fixture for broad gauge	Lecture on gauge fixtures	<u>S. Khan</u>
29/10	Rail connections, bolts & plates	Rail connections bolts & plates	Lecture on rail connections	<u>S. Khan</u>
31/10	Connection of rails to sleepers	Connection of rails to sleepers	Explanation on rail, sleeper connections.	<u>S. Khan</u>
1/11/2022	Typical c/s of single & double gauge railway	Typical c/s of single & double gauge railway	Discussion on on rail gauge	<u>S. Khan</u>
2/11	Permanent & Temporary load width	Permanent & Temporary load width.	Discussion on rail c/s	<u>S. Khan</u>
5/11	Gradients for drainage	Gradient for drainage.	Explanation of rail drainage system	<u>S. Khan</u>



Subject: Railway & Bridge Engg No. of Days/per week class allotted 4P/W

Semester From Date : 15-09-2022 To Date : 22-12-2022 No. of Weeks : 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
7/11/22	Super elevation - Necessity & Limitations	Super elevation necessity & limitations	Discussion on Super elevation	<u>S. Sham</u>
9/11/22	Definition & necessity of points & Crossing	Definition on crossing	About crossings & points.	<u>S. Sham</u>
12/11/22	Types of points and crossing with tie diagrams	points & crossing diagram	Explanation of diagrams of points & crossings	<u>S. Sham</u>
14-11/22	Methods and laying maintainance of work track	Methods for track layout	Explanation of methods to track layout	<u>S. Sham</u>
15/11/22	Duties of p-way inspectors	Duties of a p-way inspector	Explanation to duties of inspectors	<u>S. Sham</u>
19/11/22	Assignment Evaluation	Assignment & discussions	Discussion on assignment	<u>S. Sham</u>
21/11/22	Introduction to Bridges	Bridges	Discussion on bridges.	<u>S. Sham</u>
22/11/22	Components of bridge	Components of bridge	Discussion of bridge component	<u>S. Sham</u>
23/11	Classification of bridge	Classification of bridge	Discussion on classification of bridge	<u>S. Sham</u>
26/11	Requirement of ideal bridge	Requirement of ideal bridge	Explanation on bridge requirement	<u>S. Sham</u>
28/11	Selection of bridge site, Alignment	Selection of bridge site	Discussion on site selection for bridges	<u>S. Sham</u>



Subject: Railway & Bridge Engg No. of Days/per week class allotted 4P/W

Semester From Date: 15-09-2022 To Date: 22-12-2022 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
29/11	Determination of flood discharge	Determination of flood discharge	Discussion on flood discharge	<u>S. Khan</u>
30/11	Waterway & Economic span	Waterway & Economic span	Discussion on waterway.	<u>S. Khan</u>
3/12	Afflux clearance and free board	Afflux & free board	Discussion on afflux & free board	<u>S. Khan</u>
5/12	Scour depth, minimum depth of foundation	Scour depth, depth of foundation	Discussion on scour depth & foundation.	<u>S. Khan</u>
6/12	Types of bridge foundation	Types of bridge foundation	Discussion on bridge foundation	<u>S. Khan</u>
7/12	Coffor dams	Coffor dams	Discussion on coffor dams.	<u>S. Khan</u>
10/12	Problems and discussion	Problems & discussion	Problems & discussion	<u>S. Khan</u>
12/12	Types of piers	Types of piers	Discussion on types of piers	<u>S. Khan</u>
13/12	Cross section of piers with components	c/s of piers & components.	Explanation of c/s of piers	<u>S. Khan</u>
14/12	Types of abutments with components	Types of abutments with components.	Discussion on types of abutments	<u>S. Khan</u>
17/12	Types of wing wall	Type of wing wall	Discussion on wing walls	<u>S. Khan</u>



Subject: Railway & Bridge Engg No. of Days/per week class allotted 1P/w

Semester From Date: 15-09-2022 To Date: 22-12-2022 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
19/12	Cross section of wing wall	c/s of wing walls	Discussion on wing walls	<u>S. Shan</u>
20/12	Approaches	Approaches	Approaches discussion	<u>S. Shan</u>
21/12	Cross section of approaches with components	c/s of approaches	Explanation of c/s of approaches	<u>S. Shan</u>
26/12	c/s diagrams of bridge sub-structure	c/s of bridge substructure	Explanation of c/s of substructure of bridge	<u>S. Shan</u>
27/12	c/s of bridge super structure	c/s of bridge super structure	Explanation of bridge super structure	<u>S. Shan</u>
28/12	Bridge site selection factors	Bridge site selection factors	Discussion on bridge site selection	<u>S. Shan</u>
2/1/23	PxQ discussions	PxQ	PxQ	<u>S. Shan</u>
3/1/23	Types of culverts with components	Types of culverts	Discussion on types of culverts	<u>S. Shan</u>
4/1/23	Types of causeway	Types of causeways	Discussion on types of causeways	<u>S. Shan</u>
7/1/23	c/s of causeway with components	c/s of causeway with components	Explanation of c/s of causeway	<u>S. Shan</u>
9/1/23	PxQ practice	PxQ	PxQ	<u>S. Shan</u>



Subject: Railway & Bridge Engg No. of Days/per week class allotted 4P/W

Semester From Date: 15-09-2022 To Date: 22-12-2022 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
10/1/23	Discussion on types of footings for bridges	Discussion on types of footing	Discussion on footings	<u>S. Ghosh</u>
11/1/23	PYQ practice	PYQ practice	PYQ practice	<u>S. Ghosh</u>
17/1/23	Numerical practice	Numerical problems practice	Problems practice	<u>S. Ghosh</u>
18/1/23	Doubt clearing class on whole syllabus.	Doubt clearing class	Discussion on whole syllabus	<u>S. Ghosh</u>
21/1/23	Doubt clearing class on whole syllabus.	Doubt class	Summarization of whole syllabus	<u>S. Ghosh</u>