

- (iii) The lessons have been designed by Railway professionals who are experts and have wide experience in the concerned field. The lessons have been so designed that these start from fundamentals and give technical details and other information so as to give an insight in working of railways. Necessary sketches and drawings have also been given in the lessons, wherever required, to explain the concept and details. At the end of each subject, under the head typical questions old question papers of last two years have been given so that students can get an idea about the type of questions likely to be asked in the examination. Presently, the medium of instructions is English only but the question papers will be bilingual i.e. in English and Hindi both.
- (iv) There are 11 subjects in Semester I and 10 subjects in Semester II. The subjects and number of lessons in each of these Semesters are given below:

SYLLABUS for Semester –I

Paper No.	Subject	Contents	Chapter
1	Civil Engineering (Works)	Design, Construction and Maintenance Organisation, Building Materials, structures, station buildings and Water Supply.	2
2	Civil Engineering (Track)	Structure of Railway Track, Track Maintenance and Modernisation of Railway Track.	2
3	Civil Engineering (Bridges)	Type of Railway Bridges and Their Construction, Inspection and Maintenance of Railway Bridges.	2
4	General Management	History of Railways, Organisational Features and Corporate Plan of Indian Railways; General Features of Indian Railways.	2
5	Personnel Management	Role and Scope of Personnel Management; Objective of Personnel Management on Railways; Recruitment Policy of Group C; Promotion Policy; Training of Railway Employees; Seniority of Railway Staff; Leave to Railway Staff; Staff Welfare; Social Security; Loan and Advances; Industrial Relations. Labour Laws: Conduct Rules; Discipline and Appeal Rules.	2

6	Commercial Management	Functions and Organisation, Booking and Delivery of Traffic; Passenger Traffic and Refund Rules, Sidings, Pricing of Rail Transport, Claims and Liability of Railways as carriers.	Parts I to VI
7	Financial Management	Framework of Financial Management; Organisation and Functions of Finance & Accounts Department on Indian Railways.	2
8	Stores and Materials Management	Scope, Importance and Organisation on Indian Railways Functions of Stores and Materials management department.	2
9	Signalling and Telecommunication Engineering	Signalling, Block Working and Interlocking, Telecommunication.	3
10	Transportation Management	Introduction & Systems of Working, Passenger Operation, Freight (Goods) Operation, Modern Trends in Transport Management.	4
11.	Railway Accidents & Safety Measures	Railway Accidents; Classification of Accidents; Relief and Restoration Facilities in case of an Accident; Action in case of a Serious Accident; Inquiries; Accident Related D & AR cases; Commission of Railways Safety; Safety Measures; Role of Various Departments in Ensuring Safety, Safety measures to prevent accidents at work sites.	2

SYLLABUS for Semester –II

Paper No.	Subject	Contents	
I	Permanent Way Engineering Part I (Track Structure)	Rail, Sleepers, Rail Fastenings, Ballast, Formation,	(I to V)
II	Permanent Way Engineering Part II (Track Maintenance)	Points & Crossings, Track Maintenance, Track Renewals, Level Crossings, Inspection of Track, Duties of P.Way officials.	(I to VI)
III	Permanent Way Engineering Part III (Track Modernisation)	Modernisation of Railways, Welding of Rails; Welded Railway Track, Modern Methods of Maintenance of Track, Curves & Super Elevation.	(I to V)

IV	Railway Work Engineering	Building Materials, Planning, Designing & Maintenance of Buildings, Railway Stations, Water Supply, Sanitary Engineering and Management of Land .	(I to VI)
V	Railway Bridge Engineering	Alphabetical Bridge Terminologies, Investigation of Railway Bridges, Construction of Bridges, Inspection of Bridges, Maintenance of Bridges, Rehabilitation of Bridges.	(I to VI)
VI	Survey and Construction of Railway Lines Including tunnels, Bridge and Structures.	Principles of Surveying; Engineering Surveys and Project Reports; New Lines, Gauge, Conversion & Doubling Projects, Elements of Formation Engineering, Earth Work in Construction Projects.	(I to V)
VII	Railway Sidings	Railway Traffic and Sidings; Planning and Working of Sidings, Survey & Construction of Sidings and Apportionment of costs.	I-III & Annexure-I
VIII	Disaster Management	Availability of Resources, Resource Units, Disaster Preparedness, Accident Relief Medical Van, Accident Relief Train, Disaster Response, Different phases of Disaster Response, Instant Action Team, Pre-accident checklist of preparation for Members of Instant Action Team, Railway Staff traveling on the accident affected train, Duties of OC Site, Formation of Groups comprising members of Instant Action Team, Duties of Members of Instant Action Team, Duties of OC Site, Duties of First Responders, Officers at Division & Headquarters, Information of Accident, Divisional officers required to go to site, Medical Department Formation of teams and their duties, Commercial Department – transportation of men and material to accident site, Mechanical Department–Duties, Security, Electrical, Signal & Telecom, Engg. Personnel, Accounts – their duties, Control Officers, Assistance from adjoining Divisions, Unified Command Centre, Local Command Centre, Formalities required to be completed by relatives of passengers, Problems encountered by relatives, Combined Assistance & Relief Enclosure, Rescue, Relief and Restoration Operations, Photography, Functions of various Departments, Training.	Lesson 1 & 2
IX	Mechanical Engineering	Responsibilities for Mechanical Engineering Department; Rolling Stock; Locomotive; Coaches; Wagons; Important system and Components of Rolling Stock; Objective of	Lesson 1-3

		Rolling Stock Management; Vacuum and Air Brake System; Railway Traction Management; Design Features of Diesel Locomotives; Maintenance and Operation of Locomotive; and Train Loads; Coaches and Wagons; Indian Railway Conference Association.	
X	Electrical	Introduction to Electricity and its Applications; Electric Tracation, Lighting & Air Conditioning in Coaches and Conservation of Electrical Energy.	Lesson 1-3

14. Scheme of Examination

- (i) The examination will be held separately for Semester I and Semester II at the selected centres in the country. (Para 14.1)
- (ii) There will be 11 papers covering all subjects in Semester I and 10 papers covering all subjects in Semester II. Marks allotted for each paper/subject and duration of paper will be given in examination plan (Para 15).
- (iii) The pass marks will be 34% in each subject. However, if the candidate has failed in a particular subject he/she can re-appear in the supplementary examination. He/She will, however, be exempted from appearing in those subjects in which he/she has passed.
- (iv) Evaluation and checking of answer sheets after every examination is done very carefully and judiciously by the Faculty members. It is possible that any of the candidates may feel that marks given to him in a certain subject or subjects appear to be less than his anticipation or what he expected to be, therefore he wants to get it rechecked. He may write to the Institution along with Demand Draft of Rs.200/- + 18% GST per subject for rechecking of papers. Application in this regard should be sent within one month after the result is out and intimated to the candidates.
- (v) Scheme of examination: Candidates who enrolled for Semester I or II Examination in a certain year but could not appear partly or wholly in the main examination of the same for reasons whatsoever, will be allowed to