## INSTITUTION OF PERMANENT WAY ENGINEERS (INDIA)

ROOM NO. 109, NCRPU BUILDING, BEHIND SHANAR MARKET, CONNAUGHT CIRCUS, NEW DELHI - 110001
(Rly. Phone: 23612 : MTNL 23411419, 23414497)
(E-Mail) - ipwedelhi@gmail.com
Website - www.ipweindia.com


## PROSPECTUS FOR CORRESPONDENCE COURSE <br> OF <br> DIPLOMA IN RAILWAY ENGINEERING (Year 2018-2019)

rice Rs.150/- in cash
May 2018
s. 200/- by post (Demand Draft)
(Last date for receipt of Applications - 31-08-2018)
Associate Office: IPWE Office, Section Engineer (Works) Office
Complex, Northern Railway Headquaraters Office,
Baroda House, New Delhi. (Phone: Rly: 32884, MTNL: 23384385)

## PROSPECTUS FOR CORRESPONDENCE COURSE OF DIPLOMA IN RAILWAY ENGINEERING

## introduction

The Institution of Permaneni Way Engineers (india) is a technicai body under the auspices of Ministry of Railways, for dissemination and sharing technical knowledge and experience of various Railway Engineers. The Institution was formed in 1967

The activities of institution are spread over indian Railways There are 16 zonai centres with their jurisdiction over the respective Zonal Railways. In addition, there is aiso, a centre each at the indian Railways Research, Designs \& Standards Organisation. Lucknow and irdian Railways Institute of Civi Engineering, Pune with the furisdiction over these respective organisations. Each Zonai Centre in turn is sub-divided into sub-centres, located at each Divisonal Headquarter of the Railways

## Administratior

The mstuton is goveneo by a Councli headed by Member Enaneeme, Ramay Boac and Ex-officio Secretary, Government mdia. who is the President of this institution. AddWhal Memoer, Civil Engineening, Ralway Board, is ex-offiolo The President and Pholoa Chef Engineer, Northern Raiwoy iser-ofich General Secretary of the Institution. The Treasure is nomnake by the President. The Governing Counct onssts of Primbal Chet Engineers of all Railways, Dircctor, ROEA, Hune and Executive Director, Track, RDSO, Lucknow.

The secretariat of the institution ocated in Rail Bnavan is conrollec ov the Executive Director assisted by Nianagers lookmo ater various ascipines.

## Aim and Activines of the institution

The aim one mstution is to disseminate and share tecnve novieuge reaung to uestun, constuction ancmanmename. 0. Ramway Enomeering assers amongst the persons assozarec witr it. For this the instiutuon organises Seminars Grour Jscussions iecnnica, eecures. Exhibitions, eto for informs. non and venefir of the Members of the Institution. It asso put. lishes and circulates a quarterly journal to facilitate interchange and sharing of iaeas.

The Institution organises an annual National Technical Seminar and regular lectures and group discussions on various major issues connected with Railway working. These seminars, lectures, group discussions and exhibitions considerably help the technical professionals in sharing and enhancing their knowledge about Railway technology.
IPWE has a website www.ipweindia.com on which latest information about the Institution and its activities is available.

## .4. Members

The membership of the Institution comprises of three categories Honorary, Corporate and Individual. Honorary Membership comprises of Fellows, Members and Associate Members.

The Corporate Membership consists of Corporate Members and Associate Corporate Members while Affiliate Membership comprises of students and subscribers who are enrolled for the same.

The present membership of the Institution is about 7000 Individual Members and 118 Corporate and Associate Corporate Members.

The membership can be applied for by the eligible odividuals or organisation as per terms and conditions given in he rules. The forms can be downloaded from our website.

## 5. Diploma in Railway Engineering

The Institution runs a Correspondence Course of Diploma in Railway Engineering for Railway professionals as well as for outsiders. The purpose is to develop a cadre of technical personnel having knowledge of Railway Engineering to work on construction and maintenance of railway lines, track renewal works, railway sidings and other projects connected with the Railways. The need for such a diploma course was particularly felt as there is no Institute in the country at present, which provides technical knowledge connected with Railway Engineering in a professional style particularly to non-railway personnel.

### 5.1 Duration of Course

The Diploma Course in Railway Engineering is presently con
ducted as a Correspondence Course consisting of 2 Semesters of 6 months each.

### 5.2 Course contents

The course contents of the Diploma Course have been designed carefully by experts in the concerned fields to enable the students to gain in-depth knowledge of railway engineering.

## 6. Eligibility of Candidates

For Railway Personnel: (Working employees of Indian Railways, Konkan Railway, Port Trust Railways and also employees of RITES, IRCON, CONCOR, CRIS, DFC, RVNL, KRCL, RLDA, and Metro Railways and any other organization under the Ministry of Railways

For Non-Railway Persons
i) High School/SSC or equivalent qualification with a minimum of 3 years experience in Railways.

## Or

ii) Minimum three years Diploma in any Engineering discipline duly recognised by Central / State or UT Governments.

## Or

iii) iii) A Science/engineering graduate (B.Sc./B.E.) or a graduate (B.A./ B.Com. etc.) in any discipline from a recognised University having Mathematics or Science as one of the subjects in Intermediate or plus 2 of SSC Examination.
i) Minimum three years Diploma in any Engineering discipline recognised by Central Government/State Governments/ Union Territory.

> Or
ii) ii) A Science/Engineering graduate (B.Sc./B.E.) or a graduate (B.A./ B.Com. etc.) in any discipline from a recognised University having Mathematics or Science as one of the subjects in Intermediate or plus 2 of SSC Examination

## 7. Relaxation

Candidates who have appeared for the Examination, the passing of which will make them eligible to join the Course may be admitted provisionally, subject to ther acquiring the requisite qualification to join the Course by the end of the same year or till the result of the examination is out. Such candidate must submit a certificate along with the application form, from the head of the Institution or authorised signatory of his/her having appeared in the final examination and the result being awaited. His/her admission ticket to the Examination will not be accepted as an evidence or proof that candidate has written the examination which makes himiher eligible for provisional admission to the Course of Dipioma in Railway Engineering.
7.1 Admit Card indicating student's Registration No. and Roll No. issued at the time of admission to Semester I will remain valid for all other future examinations to be held till the completion of the course.

## 8. How to apply

An advertisement for the enrolment of students will normally appear in prominent daily Newspapers some time during the months May to July each year. The information about the course will also be sent to Engineering and Personnel Branches of all Zonal Railways. A copy of the Advertisement will also be sent to each Divisional Railway Manager's Office of Indian Raiiways for arranging wide publicity.

However for speedy and secure delivery of prospectus at your address, please send Rs.50/- extra for postal charges i.e. Demand Draft should be Rs.200/- along with a self-addressed envelop (size $25 \mathrm{~cm} \times 15 \mathrm{~cm}$ to facilitate dispatch of prospectus by speed post/registered post. The prospectus can also be purchased from IPWE offices at New Delhi on payment of Rs.150/-in cash.

Each prospectus will have a serially numbered form, which should be filled carefully by the applicant. Detailed instructions are given in the form about its fillings and the applicant should read these instructions carefully before filling the form. The fees prescribed for the Course should be sent along with the prescribed form through a Crossed Demand Draft payable to
con"IPVVE (India)" at New Delhi. The fees can also be paid in cash at Delhi. (at the counter in IPWE Headquarters' office, Rcom No. 109, NCRPU Building behind Shankar Market, Connaught Circus, New Delhi only).

Alternatively applications may also be sent by the non-railway candidates giving the following details through e-mail to ipwedelhi@gmail

1. Full name
2. Father's name
3. Full address
4. Telephone
5. Date of birth
6. Examination passed
7. Occupation and present posting
8. Experience in brief (if any)
9. Two photographs.
10. Preferred Examination center (Deihi, Lucknow, Mumbai, Chennai,Kolkata,Secunderabad,)

Eligible candidates who apply through e-mail will be provisionally admitted and intimation about the provisional admission will be sent through e-mail address indicated by canclidates after which the candidate should send an attested copy of the eligibility qualification alongwith a DD of Rs. $3100 /$ - in favour of 'Institution of Permanent Way Engineers (India), New Delhi. The candidates may please note that the facility of e-mail admission is open only for admission to Semester-l and for non-railway candidates only.

The candidate seeking admission through e-mail may please note that the documentary evidence of the eligibility and the DD of the requisite amount must reach the Institution latest by 31.8.2018 failing which the candidate's provisional candidature shall stand cancelled.

Admissions for the year 2018-19 to commence from 2nd July 2018 and last date for receipt of applications is 31st August 2018.

The Admission given to the course is strictly for the year applied for. No request for postponement/exemption etc. from the examination for any reason whatsoever will be entertained except as laid down in this prospectus.

## 9. Course fees

$\left.\begin{array}{|l|l|l|}\hline & \text { Semester I } & \text { Semester II } \\ \hline \text { 1. Railway Personnel (Serving): } & \text { Rs.2000/- } & \text { Rs.2400/- } \\ \text { includes working employees } \\ \text { ofs.360/- } \\ \text { of Indian Railways, Konkan } \\ \text { Railway \& Port Trust Railways } \\ \text { and also employees of RITES, } \\ \text { IRCON, CRIS, CONCOR \& } \\ \text { DMRC, RVNL, DFC and other }\end{array}\right)$

Note : Above rate of GST is calculated @ $18 \%$ If, however, rate of GST is revised, the same will be applicable.

At the initial stage the Course fee will be payable for Semester - I only and the lessons supplied for the same. The study material packet will contain Admit Card for entry to Examination indicating Registration No. and Roll No. allotted and acknowledgement of fee. The fees for Semester II will be taken after the candidate appears in examination of Semester I of the Course. The course material for Semester II will be supplied after receiving the fee. Fees once paid for any Semester is valid for that particular Semester only for which admission has been given and not refundable/transferable or adjustable against the fees payable for any other Semester/examination to commence later on, under any circumstances.

Main aim of the Institution is to provide working knowledge regarding Railway engineering to the students at the minimum
possible at their door steps. Fees charges for each Semester have been kept at the barest minimum, therefore, no fee concession/exemption can be afforded by the Institution under any condition, hence applying for the same will not be entertained.
Fees once paid for any Semester of the course will not be refundable under any circumstances

Important: It will be compulsory for all the students who took admission in a year to pass in all the subject papers of Semester I and Semester II examinations within a period of 3 years from the year of admission to the course. For example a student who is admitted in the year 2010 will have to pass in all the subjects of Semester I and II Examinations by the end of year 2014, failing which the candidate will have to take admission to the Course afresh.

## 10. Contact Classes

In October 2018 optional Contact Classes will be held at New Delhi. In these Contact Classes one week's intensive training will be given to the students. Semester I students will also be taken to various railway installations. It is advisable that the students should take up the contact classes to have an insight in Railway's working.

It may be noted that contact classes are optional and conducted at New Delhi only. All arrangements and expenses for boarding, lodging including conveyance has to be made and borne by the optee student himself/herself during his/her stay at New Delhi. However, tea and light refreshment will be served in the duration of classes. Fee of Rs. 3000 /- plus $18 \%$ GST is to be deposited along with tuition fee at the time of admission only. Later requests can be entertained subject to availability of seais. These Contact Classes will be held at the Indian Social Institute, 10, Institutional Area, Lodhi Road, (Behind Sai Baba Mandir), New Delhi from 8th October 2018 to 12th October 2018.

At present Contact Classes are held only at New Delhi only.
Important: It may be noted that entry to Contact Classes is by option and not compulsory. The arrangements for Contact Classes depends on the number of optees (students) available for the same in a year. If the number
is considered insufficient, the Contact Classes may be cancelled. in such cases the contribution for the Contact: Classes fee received from the optees will be returned to them indivicually. in order to avoid any inconvenience to students from foreign countries, they are advised to initially get admission to Contact Classes for First Semes. ter only
11. Language

For the present :anguage used in course material is English only. However, question papers in the examination will be printed blinguali, The sudenis will have the cholce to give answers in English or Hindi or bilingually.
12. Examination \& passing of Diplome

Each Course of Diploma in Patway Engmeemy consists of two Senesters of sk months eacr.

After the exply of duration of aach Semester of the Course there will be an examination conducted by PWE passing of which will de necessary to get the Didoma Cettifcate. How ever falling in one or nore subjects in the enamination of Se -mester-, will not cebar any stuaent from contuing in the $S e-$ mester-il of the same course but may be no d that Diploma Certificate will be awarded to the stucents one affer passing all papers of Semesten and Il.
th may aso pe noted that any sudent dals to appeai in Semester examination on reasons whasoeve he may appeat in the stbsequen suppementary examinatio by payng the fee prescribed for the same. Fees once palo -w nether refundable nor adustabie against any of the subs guem courses under any circumstances
12.1 Supplementary examination

```
Candiales who could nor a0oear m Envall s mese ov nose
```




```
be eligible to apoear in mo suowememer wrammen"
pavment of rees mnargeabe ro ,mesme क, se.Lu*.
GS! per paper Subiect to a maxmrum of tag lobm, %-
OS
```

The Supplementary Examination for the First Semester will be held side by side with the main examination of the same Semester in the next session at all Centres.

The main examination of each Semester (I \& II) is being held at all the chosen examination centres by the candidates at Metropolitan Cities viz. Delhi, Mumbai, Kolkata, Chennai, Secunderabad (A.P.), Lucknow (U.P.)

It may be noted that question papers in the main examination are based on the Course contents of that Semester/year for which examination is held, therefore, for changes if any in the course contents, modified edition of lesson books including compiled sets of old question papers for the examinations of Semester I \& II of previous years are sent on admission to the course. For the information and knowledge of candidates, Question paper sets of the examinations held last year and in the year before that, have been attached for perusal of students at the end of each subject in the lesson books. However, if the same is lost, a duplicate copy of the course material can be obtained on cash payment of Rs.300/- each or by post by sending a DD for Rs.350/-(including cost of postage) can be obtained from the Institution's Office.
12.2 Programme of examinations and addresses of examination centres:

|  | Main Examinations <br> (Programme) | Dates of examination |
| ---: | :--- | :--- |
| (i) | First Semester (2018-19) <br>  <br> Examination Session Year. | On 9 9 <br> February 10th <br> (Saturday and Sunday). |
| (ii) | Second Semester Examination <br> for the Session Year (2018-19) | On 14 $4^{\text {th }}$ and $15^{\text {th }}$ <br> December 2019 <br> (Saturday and Sunday) |

Note: (I) Supplementary Examination of Semester I for previous year batches will also be held side by side with the main examination on above dates.
Addresses of Examination Centres will be as follows:
(i) Delhi Centre:

Office of the General Manager, Northern Railway, Baroda House, Copernicus Road, Opp. India Gate, New Delhi - 110001.
(ii) Secunderabad Centre: Principal Chief Engineer's office, SouthCentral Railway Headquarters Office, $5^{\text {th }}$ Floor, Rail Nilayam, Secunderabad.
(iii) Mumbai Centre: Office of the Chief Engineer, GM Office Building, Central Railway Mumbai CST. .
(iv) Chennai Centre: Principal Chief Engineer's office, Southern Railway Headquarters office, Park Town, Chennai-600003.
(v) Kolkata Centre: Office of the Chief Engineer, Eastern Railway, Fairlie Place, Kolkata-700 001.
(vi) Lucknow Centre

Office of Divisional Railway Manager, Northern Railway, Hazarat Ganj, Lucknow.
(If there will be any change in examination centres, same will be advised by ordinary post and also put on our website : www.ipweindia.com)
(Date and venue of the examination if changed will be intimated to all concerned in the same manner)

## 13. Course contents

(i) Semester I will consist of various modules so as to give basic information regarding various disciplines of Railways. This will consist of information regarding General Management of Railways, Civil Engineering (track, works \& bridges); Signalling \& Telecommunication Engineering; Transport Management (Operating) of Railways; Commercial Management, Stores/ Material Management, Personnel Management Financial Management of Railways \& Railway Accidents \& Safety measures.
(ii) Semester II will consist of various modules giving information with regard to various aspects of Railway Engineering connected with Mechanical Engineering and Electrical Engineering and advanced knowledge in the fields of P.Way Engineering, Track-structure, maintenance and modernization, Survey \& Construction of Railway lines, Railway sidings, Bridge Engineering, Works Engineering, and Disaster Management .

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


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

SYLLABUS for Semester -II

| Paper <br> No. | Subject | Contents |  |
| :--- | :--- | :--- | :--- |
| I | Permanent <br> Way <br> Engineering <br> Part I (Track <br> Structure) | Rail, Sleepers, Rail Fastenings, Ballast, <br> Formation, | ( to V) |
| II | Permanent Way <br> Engineering <br> Part II (Track <br> Maintenance) | Points \& Crossings, Track Maintenance, Track <br> Renewals, Level Crossings, Inspection of Track, <br> Duties of P.Way officials. | (I to VI) |
| III | Permanent <br> Way <br> Engineering <br> Part III (Track <br> Modernisation) | Modernisation of Railways, Welding of Rails; <br> Welded Railway Track, Modern Methods of <br> Maintenance of Track, Curves \& Super <br> 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 . | ( l 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 Inculuding 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. | ( 1 toV) |
| VII | Railway Sidings | Railway Traffic and Sidings; Planning and Working of Sidings, Survey \& Construction of Sidings and Apportionment of costs. | I-III \& Anne-xure-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. <br> 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. | $\begin{gathered} \text { Lesson } \\ 1 \& 2 \end{gathered}$ |
| IX | Mechanical Engineering | Responsibilities for Mechanical Engineering Department; Rolling Stock; Locomotive; Coaches; Wagons; Important system and Components of Rolling Stock; Objective of | $\begin{array}{\|c} \hline \text { Lesson } \\ 1-3 \end{array}$ |


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

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
appear in the subsequent Supplementary Examination on the Enrolment (Registration) No. and roll No. already allotted at the time of admission to the Course. Fee charges will be @ Rs.200/- + 18\% GST per subject (Maximum Rs. 1000/- + 18\% GST for all subjects) in Semester I and Semester II Examination.

### 14.1 Examination Centres

It is normally contemplated to have the examination centres at metropolitan cities including their suburbs viz. Delhi, Mumbai, Kolkata, Chennai, Secunderabad (A.P.), Lucknow (U.P.) and to suit the candidates from places all over the country. The Institution, however, reserves the right to limit the examination centre only at one or more of the above depending upon the response and other administrative reasons.

The supplementary/compartmental examination will also, be held in all these examination centres at metropolitan cities including their suburbs viz. Delhi, Mumbai, Kolkata, Chennai Lucknow (U.P.), Secundarabad (AP). in combination with the regular examination of Semesters (I \& II) in the next session.

## Examination Plan

The plan of examination for Semester I \& II is as per details given below:
SEMESTER -I

| Paper <br> No. | Subject | Marks | Duration <br> of Paper |
| :--- | :--- | :--- | :---: |
| 1. | Civil Engineering (Works) | 100 | 1 hour |
| 2. | Civil Engineering (Track) | 100 | 1 hour |
| 3. | Civil Engineering (Bridges) | 100 | 1 hour |
| 4. | General Management | 100 | 1 hour |
| 5. | Personnel Management | 100 | 1 hour |
| 6. | Commercial Management | 100 | 1 hour |
| 7. | Financial Management | 100 | 1 hour |
| 8. | Stores and Materials Management | 100 | 1 hour |
| 9. | Signalling and Telecommunication <br> Engineering | 100 | 1 hour |
| 10. | Transportation Management | 100 | 1 hour |
| 11. | Railway Accidents \& Safety Measures | 100 | 1 hour |
|  | Total 1100 marks |  |  |

SEMESTER-II

| Paper <br> No. | Subject | Marks | Duration <br> of Paper |
| :--- | :--- | :--- | :--- |
| I | Permanent Way Engineering <br> Part I (Track Structure) | 100 | 1 hour |
| II | Permanent Way Engineering <br> Part II (Track Maintenance) | 100 | 1 hour |
| III | Permanent Way Engineering <br> Part III (Track Modernisation) | 100 | 1 hour |
| IV | Railway Works Engineering | 100 | 1 hour |
| V | Railway Bridges Engineering | 100 | 1 hour |
| VI | Survey and Construction Railway <br> Lines including tunnels, bridges and <br> structures. | 100 | 1 hour |
| VII | Railway Sidings | 100 | 1 hour |
| VIII | Disaster Management | 100 | 1 hour |
| IX | Mechanical Engineering | 100 | 1 hour |
| X | Electrical Engineering | 100 | 1 hour |
| Total | 1000 marks |  |  |

Note: For candidates appearing in Supplementary Examination, marks secured under new scheme will be suitably proportioned out of the maximum marks as per the old scheme under which the candidate passed the previous examination.

## Benefits

For Railway Personnel: The Ministry of Railways has approved that passing of Diploma Course of Railway Engineering will be an additional qualification for promotion to all selection posts for Railway employees in group C Category of E:ngineering and other departments.
17. Accreditation of IPWE's Diploma Course Certificate by the Institution of Engineers (India), Kolkata -Diploma in Railway Engineering has been accredited by the Institution of Engineers (India), Kolkata and the candidates possessing the above qualification are eligible to become Senior Technician Members of their Institution. Thus Diploma holders of IPWE can pursue their studies further in engineering \& technology by passing the courses offered by the Institution of Engineers (India), Kolkata.

## 18. Admission to Semester II

Students after getting admission to the Course will automatically be promoted to Semester II on appearing in the Semester I examination even if they could not pass all the subjects. However, they have to submit the application form for admission to Semester II examination already attached with the prospectus supplied at the time of admission to the course. Last date for submission of the same to the Institution will be $30^{\text {th }}$ June, 2019.

The candidates can, however, appear in the Semester II examination only after appearing in Semester I examination even if he/she could not pass in all subject papers of Semester-l examination.

After appearing in Semester I examination, students are advised in their own interest to seek admission to Semester II examination for which application form is already attached at the end of this Prospectus. In this way they can gain more time for study of Study Material for Semester II of the course which will be supplied to them on receipt of their admission form for semester II.
It may also be noted that Diploma Certificate will be awarded to the candidates only after passing in all the subject papers in Semester-I \& II examinations.

It has been decided that such of the candidates who fail in one
or more papers in Semester-I/Il examinations will be able to appear at all or any successive supplementary examinations to follow till they clear all papers they failed last time, but subject to a maximum time limit of three years from the year of admission to the course on payment of prescribed examination fee.

## 19. Enrolment Form

Each prospectus has got an enrolment form which is serially numbered. It should be noted that only serially numbered prescribed Application Forms, along with the prescribed fee will be accepted for enrolment (admission) to the course. The Application form should be accompanied with -
(a) Certificate of High School/Secondary School Certificate.
(b) Certificate of the qualifying examination as required for admission to the course.

NOTE: All these should be Photostat and attested copies.
(c) All Railway servicemen should fill in their date of appointment in the Railway service along with certificate for Railway Service from their immediate superior at the place of his posting in column No. 7 of Bio-Data to be filled in the application form.
(d) A photo identity card is attached at the bottom of application form on which the candidates are required to write, their postal address and will be used as Admit Card for all examinations/supplementary examinations of both Semesters till the Diploma course is completed. It may be noted that only your Postal Address is to be given for correspondence by the Institution and any other address should be avoided.
20. General

Any additional information may be had from the Institution of Permanent Way Engineers (India), Room No. 109, NCRPU Building, behind Shanar Market, Connaught Place, New Delhi110001.

As per the procedure, on admission to the course, Study Material/Lesson books, Admit Card duly filled in with Enrolment
(Registration) No. - cum - Roll Number and Centre allotted for the examination will be sent. This will be valid for all future examinations till the completion of the Course. Fee receipt and other information/instructions regarding Examination will be sent in advance to the students at their addresses as given in their application forms usually by Regd./Express Parcel. Date sheet and venue of the examination centre has already been indicated in para No.12.2. This information will also be available at our website: www.ipweindia.com

To ensure speedy and secure delivery of the lesson books and other material, the students if residents of Delhi or near by may if possible, obtain the same either personally or through their authorised messenger from the Institution's office at Room No. 109, NCRPU Building, behind Shanar Market, Connaught Place, New Delhi-110001 from 11.00 hrs to 16.00 hrs on any working day. Facility for deposit in cash of admission fee is available at Delhi Centre only on the above address.

Please give your postal address in capital letters indicating pin code number so that your dak may reach you early arid without fail. Giving of more than one addresses should be avoided. Only one address should be given in all columns where a student feels that he can get the Dak easily, securely and all the times. As far as possible change of address may be avoided in the duration of a Semester. However if very necessary, change of address slip can be used for the same as given vide next page.

This office remains closed on all Saturdays, Sundays and Gazetted holidays.

If any clarification is sought for by post, it should be accompanied with duly stamped self addressed envelope.

## ALL PROVISIONS HEREIN ARE SUBJECT TO CHANGE/ALTERATION, IF REQUIRED.

In case of requiring change in old Address ADDRESS SLIPS (to be filled in by the candidate)
(Candidate must send the following Address Slips duly filled in legible hand writing if change of address is required after admission to the Course)

Registration No $\qquad$
Roll No. $\qquad$
Name $\qquad$
(Address already given in application form)


Pin Code $\qquad$

Details of changed address:
Name
Address $\qquad$
$\qquad$
$\qquad$
$\qquad$
Telephone No., if any:
e-mail ID, if any.
Pin Code $\qquad$

Signature $\qquad$

## SYNOPSIS

1. Correspondence Course of Diploma in Railway Engineering consists of two Semesters of 6 months each. (Read para No.5.1).
2. Both Railways and non-railway persons can join it. For conditions of eligibility see para Nos. 6 \& 7.
3. (i) Course fee for Railway personnel is Rs.2000/- for Semester I and Rs. $2400 /$ - for Semester II.( $18 \%$ GST to be added to the fee).
(ii) Similarly fee for non-railway persons is Rs. 2500/- for Semester I and Rs. 2900/- for Semester II. ( $18 \%$ GST to be added to the fee).
(iii) An extra fee of Rs.3000/- + GST @ 18\% (Rs.540/-) for each Semester will be charged from Railway and non-railway persons if they opt for Contact Classes which are conducted at Delhi only. (Read paras 9 and 10)
(iv) Supplementary Examination fee for each subject failed in a Semester is Rs.200/-+ GST 18\% subject to a maximum of Rs.1000/ - + 18\% GST (Read para no. 12.1 in this connection).
4. Main Examination of each Semester side by side with Supplementary Examinations will be held at all Centres viz. Delhi, Mumbai, Kolkata, Chennai, Secunderabad, Lucknow, in $9^{\text {th }}$ and 10th February 2019 for Semester I and for Semester II on $14^{\text {th }}$ and $15^{\text {th }}$ December 2019. See for details of dates and addresses of Examination Centres in para nos. 12.2 and 14.1 and for conduct of Contact classes in para No. 10.
5. Initially admission will be given to the First Semester of the Course and Registration No. and Roll No. allotted. On appearing in the First Semester Examination, the candidate will automatically be promoted to $2^{\text {nd }}$ Semester Examination provided remittance of the Tuition Fee for the same through Demand Draft/Cash Receipt is made. Registration No., Roll No. and Admit Card will be valid for all examinations till the completion of the Course. (For full details read para No.21).
6. Last date for submission of application form is 31.09.2018.

THE INSTITUTION OF ENGINEERS (INDIA)
(Established 1920, Incorporated by royal charter 1935)
8 Gokhale Road, Kolkata 700020


Ref.: EEA/AD/R-34
E-mail : exams@ieindia.org

The Institution of Permanent Way Engineers (India)
G-11, Railway Board
Rail Bhawan
Raisina Road
New Delhi-110 118
Dear Sir,
We are pleased to inform you that the Institution has decided to accredit the Diploma course in Railway Engineering conducted by the Institute of Permanent Way Engineers (India).

The candidates possessing the above qualification are eligible to become Senior Technician Members of the Institution as per rules.

Thanking you
Your faithfully

(A Das)
Assistant Director (EEA)

1) The Honorary Secretary

Delhi State Centre
The Institution of Engineers (India)
Bahadur Shah Zafar Marg
New Delhi - 110002
2) Deputy Director (Membership)

Copy forwarded to:-
The General Secretary, India Railwaymen Federation, 253, Rail Bhawan, New Delhi ( 35 copies).

The General Secretary. National Federation of India Railwaymen. Room No. 256-E (with 35 copies).

All Members, Departmental Council and National Council and secretary, Staff Side, National Council, 13-C, Ferozeshah Road, New Delhi (with 90 spares).

The Secretary General, Federation of Railway Officers Association, Room No. 256-A, Rail Bhawan, New Delhi (with 5 spares).

The Secetary General, Indian Railway Promotee Officers Association, Room No. 268, Rail Bhawan, New Delhi (with 5 spares).


For Secretary Railway Board

Copy to:-

PPSs to CRB, FC, MS, MM, MT, ML, ME
PPSs to AM(S), AM(CE)
PPs to EDE, EDE(N), EDE(Res), EDA, EDE(IR) EDE(RRB), ED.(T\&MPP), EDPC-I\&II, JS, $\operatorname{Dir(MPP),~JDE(N),~JDE(R)~I~\& ~II,~JDE(Rep),~JDE(D\& A),~}$ JDPC, DDE(N)II, DD(Code-RevisioN), DDEr I\&II, DDE (LR)I, E(NG)II, $E(R e p) I, I I, I I I, E(M P P), \operatorname{Sec}(E), R(R R B) I I, E(G)$ weith two with. AC-III, PCIII, IV\&V.

Bharat Sarkar/Government of India
Rail Mantralaya/Ministry of Railways
(Railway Board)
No. E(NG) 1-99/IC2/1.
New Delhi, dt. 17.9.1999
The General Manager ( P )
All Indian Railways, (As per Standard List)

## Sub:- Additional incentive to Railway Staff who pass the Diploma in Railway Engineering conducted by the Institution of Permanent way Engineers (India)

The question of granting weightage to the Diploma in Railway Engineering secured by Railway Employees from the Institution of Permanent Way Engineers (India) in the matter of selections held for promotion to Selection posts in Group ' $C$ ' has been under consideration of the Board for some time. In terms of extant rules selection depends inter-alia on the marks secured by him under various heads one of which is "Personality, Address, Leadership, Academic/Tecnical Qualification". It has now been decided that in respect of selections for promotion to Selection posts Diploma in Railway Engnieering awarded by the instiution of Permanent way Engineers (India) will also be taken into account, alongwith any other Technical/Academic qualifications in awarding marks under the heading "Personality, Address, Leadership and Academic/ Technical Qualifications."

Please acknowiedge receipt.

(M.D. PILLAI) Dy. Director Estt. (N) I, Railway Board.

The Executive Director, Institution of Permanent Way Engineers (India), Room No. 109, NCRPU Building, Behind Shankar Market, Connaught Circus, New Delhi-110 001

For Official Use
Registration .No. $\qquad$
ROLL No. $\mathbf{P}$
Centre
RLY/Non RLY

## Sub: Correspondence Course for Diploma in Railway Engineering organised by IPWE Application for enrolment

I wish to join the Correspondence Course for "Diploma in Railway Engineering" organised by I.P.W.E. (India) for the academic year 20182019
2. The following documents are enclosed for Semester-1:
i) Bio-data \& Students Admission Card duly filled in alongwith 2 copies of Passport size Photograph (To be affixed in Boxes).
ii) A crossed Demand Draft/Cash Receipt for Rs. $\qquad$ drawn in favour of IPWE (India) payable at New Delhi, for the following:
a) Tuition \& Examination Fees: Rs2500/- +18\% Service Tax (Rs.450)=Rs.2,950/- for non-railway persons and Rs.2000/$+18 \%$ Service Tax (Rs.360)=Rs.2,360/- for Railway personnel.
b) Optional Contact Classes including field visit Rs. $3000 /-+18 \%$ GST (Rs.540/-) Rs.3,540/- to be conducted at Delhi (Please read para No. 10 in this connection)
iii) Attested copies of educational certificates as required for admission to the course.
3. I am interested in opting for contact classes/organised by the Institution and the Demand Draft indicated above includes those fees.
4. I hereby declare that I shall abide by the rules and regulations of the Institution.
5. Kindly enroll me as a student for the above Diploma Course and send me the receipt for the amount paid by me as indicated above.

Yours faithfully,
Signature $\qquad$
Encls:
Name $\qquad$
(In Capital letters)
Contact No. e-mail ID, Telephone No,(landline and mobile), Fax No., if any. Address: (in clear handwriting)

Cash Receipt/DD No. $\qquad$ Date $\qquad$ (for Rs.)
Name of the Bank \& Branch (Issuing)

## 

(Not to be detached by the candidate himself)

## INSTITUTION OF PERMANENT WAY ENGINEERS (INDIA)

Room No. 109, NCRPU Building,
Behind Shankar Market, Connaught Circus, New Delhi-110 001
Session Year (2018-19)
STUDENT IDENTITY CARD
No. P
537
(Valid for all Examinations till the completion of the Course)
*Roll No. P $\qquad$ Examination Centre $\qquad$
(TO BE FILELD BY THE CANDIDATE
EXCEPT COLUMNS MARKED WITH*)

| Photograph to be affixed here | Name of candidate (In capital letters) |
| :---: | :---: |
|  | Rerize inn No. |
|  | Posta. dddress: |
|  | Signature of the Candidate |

# BIO-DATA OF THE CANDIDATE (TO BE FILLED IN BY CANDIDATE IN CAPITAL LETTERS) 

1. Full Name
(First Name) (Middie Name) (Last Name)
2.(i) Father's name
(ii) Mother's Maiden Name
2. Full Address $\qquad$

## (Pin)

Telephone No. (Mobile) $\qquad$ (Land line) $\qquad$ e-mail $\qquad$ Fax: $\qquad$
4. Date of Birth $\qquad$ (Certificate to be attached).
5. Examination passed (Attested photo copies of certificates to be attached) $\qquad$
6. Occupation \& Present Posting $\qquad$
7. Experience in brief (If Railwayman):

Date of appointment in Railway Service with signature of immediate superior with stamp: $\qquad$
8. Examination Centre - Delhi, Lucknow, Mumbai, Kolkata, Chennai, Hyderabad/Secunderabad

Signature of the Candidate
STUDENT ADMISSION CARD
(Valid for all Examinations till the completion of the Course)
Roll No. P $\qquad$ Examination Centre $\qquad$
(TO BE FILELD BY THE CANDIDATE)

| Photograph to be affixed here. | Name of candidate (In capital letters) <br>  <br>  <br> Registration (Enrolment No.) <br>  <br> Postal address: |
| :--- | :--- |

Signature of the Candidate

## GUIDELINES FOR FILLING UP THE APPLICATION FORM

I. Date of Birth: Date of birth should be supported by attested copies of Birth certificate like High School/SSC.
II. Examination passed: Attested photostat copies of the Certificates of Examinations passed should be attached.
III. Employment details: The Railway employees should indicate clearly the place of posting, and name of the office in which working and date of appointment in Railway service as per instructions in Col. 7 above.
IV. The Apiflication should be accompanied with the following documents:
i) 2 copies of Passport size photographs to be pasted at the space indicated.
ii) Bank Draft/Cash Receipt of tuition fee for Semester I viz. Rs.2950/- (including Service Tax) for non-Railway personnel and Rs.2360/-(including Service Tax) for Railway personnel.
iii) Bank Draft/cash for Contact Classes Rs.3540/- (Including Service Tax)

Item No.(iii) above is optional and should be paid only if the candidate opts for these classes.
The Bank Draft should be in favour of "Institution of Permanent Way Engineers (India)" payable at New Delhi. Payments are not acceptable by any other means except at Delhi Centre (Read para No. 9 \& 10).
V. Please ensure that the following particulars are correctly mentioned in the Demand Draft issued by the Bank.
i) Name and Code No. of the issuing Branch as also date of issue.
ii) Payable at New Delhi and signed by the authorised officer of the Bank.
iii) Corrections in the Demand Draft are duly attested.
iv) Also write your name, address and Contact No. on the back of the Bank Draft before submission.

Note: Payment in cash is accepted at New Delhi office at Room No. 109, NCRPU Building, Behind Shankar Market, Connaught Circus, New Delhi-110 001

# INSTITUTION OF PERMANENT WAY ENGINEERS (INDIA) (Application Form for admission to Semester II Examination) 



Intimation for Registration or enrolment to the Second Semester Examination for the Session year 2018-19 To be submitted after appearing in the Semester-I Examination for the Session Year 2018-19.

Registration (Enrolment) No.
(Same as allotted at the time of admission)

Roll No. P
(Same as allotted at the time of admission)

Centre $\qquad$

The Executive Director,
IPWE,
New Delhi.

## Sub: Enrolment to 2nd Semester Examination for the year 2018-19

Sir,
I have appeared for Semester I examination in February 2018. I wish to join Semester II of the Course. Course fee amounting to Rs. 2832/- (including G.S.T) (For Rly. personnel) and Rs.3422/- (including Service Tax) (For Non-Railway persons) is sent herewith.

I would like to join Contact Classes (Optional) for which Rs.3000/- + G.S.T. @ 18\% (Rs.540) = Rs.3540/- is also sent herewith. The above fee is being sent vide Demand Draft/cash No. , dated $\qquad$ for Rs. $\qquad$ drawn on
$\qquad$ in favour of IPWE India payable at New Delhi

Please acknowledge receipt.

1. My postal address for all correspondence is as under: (Please write clearly in legible handwriting)
$\qquad$
$\qquad$
$\qquad$

Pin Code No.
2. Contact No. with STD Code $\qquad$ E-Mail ID, if any

> Yours sincerely,

Signature $\qquad$
Name as registered $\qquad$
Enclosures:
Last date for receipt of applications is 30th June $\qquad$ .

Note: Payment in cash is accepted at our office counter in Room No. 109, NCRPU Building, Behind Shankar Market, Connaught Circus, New Delhi only.

## INSTITUTION OF PERMANENT WAY ENGINEERS (INDIA)

## APPLICATION FORM FOR SUPPLEMENTARY EXAMINATIONS OF SEMESTER I AT ALL CENTRES

(i) I propose to sit along with regular students in the examination of Semester I to be held in February $\qquad$ .

The subject papers in which I wish to reappear are tick marked below:
Centre of Examination opted
Applicant's identification to be indicated by the candidate

| Applicant's identification to be indicated by the candidate |  |
| :--- | :--- |
| Name |  |
| Registration <br> No. |  |
| Roll No. allotted at the time of Sem.I Regular Exam. |  |
| Month \& Year of last Examination appeared |  |
| Postal address: <br> With Pin Code <br> (In clear <br> handwriting in <br> capital) |  |
| Contact No. with <br> STD code |  |


| Paper <br> No. | Subjects of Semester - I | Max. <br> Marks | Put a tick ( $\checkmark$ ) mark |
| :--- | :--- | :--- | :--- |
| 1 | Civil Engg. (Works) | 100 |  |
| 2 | Civil Engg. (Track ) | 100 |  |
| 3 | Civil Engg. (Bridges) | 100 |  |
| 4 | General Managment | 100 |  |
| 5 | Personnel Managment | 100 |  |
| 6 | Commercial Management | 100 |  |
| 7 | Financial Management | 100 |  |
| 8 | Material/Stores MGT | 100 |  |
| 9 | Sig \& Telecom Engg. | 100 |  |
| 10 | Optg (Tranport) MGT | 100 |  |
| 11 | Railway Accidents and Safety Measures | 100 |  |
|  | All subjects |  |  |

Examination fee: @ Rs.200/-+18\% (Rs.36/-)Service Tax per paper subject to a maximum of Rs.1000/-+Service Tax @18\%. (Rs.180/-)

A crossed Demand Draft drawn in favour of IPWE (India) payable at New Delhi as per details given below is enclosed: DD No. $\qquad$ Dated $\qquad$ for Rs. $\qquad$ Issued by Bank $\qquad$ Branch
(Last date for submission of applications - 30th June 2018) Date:
2. Since course material is updated every year, any student appearing in subsequent year is advised to obtain the latest course material from this office at a concessional rate of Rs.300/- paid in cash/by dak Rs.350/-

## INSTITUTION OF PERMANENT WAY ENGINEERS (INDIA)

## APPLICATION FORM FOR SUPPLEMENTARY EXAMINATIONS OF SEMESTER \|AT ALL CENTRES

(i) I propose to sit along with regular students in the examination of Semester II to be held in December $\qquad$
The subject papers in which I wish to reappear are tick marked below:
Centre of Examination opted
Applicant's identification to be indicated by the candidate

| Applicant's identification to be indicated by the candidate |  |
| :--- | :--- |
| Name |  |
| Registration <br> No. |  |
| Roll No. allotted at the time of Sem.I Exam. |  |
| Month \& Year of last Examination appeared |  |
| Postal address: <br> With Pin Code <br> (In clear <br> handwriting in <br> Capital letter) |  |
| Contact No. with <br> STD code, |  |


| Paper <br> No. | Subjects of Semester -II | Put a tick (V) mark |
| :--- | :--- | :--- |
| I | Permanent way Engineering part I (Track Structure) |  |
| II | Permanent way Engineering part II (Track Maintenance) |  |
| III | Permanent way Engineering part III (Track Modernisation) |  |
| IV | Railway Works Engineering |  |
| V | Railway Bridge Engineering |  |
| VI | Survey \& Construction of Railway Lines |  |
| VII | Railway Sidings |  |
| VIII | Disaster Management |  |
| IX | Mechanical Engineering |  |
| X | Electrical Engineering |  |
|  | All subjects |  |

Examination fee: @ Rs.200/-+Service Tax @ 18\%(Rs.36/-) per paper subject to a maximum of Rs.1000/-.+Service Tax @ 18\% (Rs.180/-)

A crossed Demand Draft drawn in favour of IPWE (India) payable at New Delhi as per details given below is enclosed: DD No. $\qquad$ Dated $\qquad$ for Rs. $\qquad$ Issued by Bank $\qquad$ Branch $\qquad$ Last date for receipt of applications - 30th June $\qquad$ . Date:

## Signature of candidate

Note: 1. Roll No. allotted at the time of admission to Sem.I Exam is valid for all the examinations till completion of the course. Please enclose a self-addressed stamped By Speed Post) envelop and copy of your earlier marksheet.
2. Since course material is updated every year, any student appearing in subsequent year is advised to obtain the new print at the cost of Rs.300/- in cash and Rs.350/- by dak.

> Printed at : SRB Printo Pack
> Cell. 9810555224,9718572492

