RITES LIMITED
(A Govt. of India Enterprise)
Shikhar, Plot No. 1, Sector – 29, Gurgaon – 122001

Recruitment of Professionals on contract basis

RITES Ltd., a Mini Ratna Central Public Sector Enterprise under the Ministry of Railways, Govt. of India is a premier multi-disciplinary consultancy organization in the fields of transport, infrastructure and related technologies.

RITES Ltd. is in urgent need of dynamic and hard-working professionals as under:

S No	VC No	Post	Vacancies					
			UR	EWS	OBC (NCL)	SC	ST	Total
1	28/22	Senior Contract Expert	1	-	-	-	-	1
2	29/22	Senior Track Expert	1	-	-	-	-	1
3	30/22	Planning & Procurement Engineer	1	1	-	-	-	2
4	31/22	Drawing & Design Engineer/S&T	1	-	-	-	-	1
5	32/22	Drawing & Design Engineer/ Electrical	1	-	-	-	-	1*
6	33/22	QS and Billing Engineer	1	-	-	-	-	1
7	34/22	Design Engineer/Civil	1	1	-	-	-	2
8	35/22	Section Engineer Civil	2	1	1	-	-	4*
9	36/22	Section Engineer/Civil	1	-	-	-	-	1
10	37/22	Section Engineer/ Electrical	-	-	-	-	1	1
11	38/22	Section Engineer/ Electrical	-	-	-	-	1	1
12	39/22	Section Engineer S&T	1	-	-	-	-	1*
13	40/22	Section Engineer/S&T	-	-	-	1	-	1
14	41/22	Site Engineer QA/QC (Lab)	-	-	-	-	1	1
15	42/22	Assistant Safety and Health Expert	-	-	-	-	1	1
16	43/22	Senior Resident Engineer/Electrical (Assistant Resident Engineer – Electrical (General & OHE)	1	-	1	1	-	3
17	44/22	CAD Operator (Draftsman / CAD Operator)	2	-	-	-	-	2

***1 seat reserved for PWD on horizontal basis**

Age Limit

Maximum Age	Cut-off date for calculation of age
40 years	01.09.2022

Minimum Qualifications & Experience

S No.	VC No.	Name of Post	Educational Qualification*	Required Post Qualification Work Experience
1	28/22	**Senior Contract Expert**	**Essential**: Diploma in Civil Engineering from a recognised institution or equivalent	**Total Professional Experience (post essential professional qualification)**: At least 10 years' experience **Relevant Experience (post essential professional qualification):** At least 6 years of experience of **preparation of procurement strategy, tender documents, bid process management, managing contracts of Railway infrastructure projects or of eligible works**
2.	29/22	**Senior Track Expert**	Diploma in Civil Engineering from a recognized institute or equivalent.	**Total Professional Experience (post essential professional qualification)**: At least 10 years. **Relevant Experience (post essential professional qualification):** At least 6 years experience of **track laying in construction of Railway Lines or Track Renewals or track maintenance** in rail infrastructure projects or in any eligible works.
3.	30/22	**Planning & Procurement Engineer**	Diploma in Civil Engineering from a recognised institution or equivalent	**Total Professional Experience (post essential professional qualification**: At least 7 years. **Relevant Experience (post essential professional qualification):** Atleast 4 years' experience of preparation of procurement strategy, tender documents, bid process management, managing contracts **of Railway infrastructure projects or of any eligible works**
4.	31/22	**Drawing & Design**	Diploma in	**Total Professional Experience**

		Engineer/ S&T	Electronics and communication/ Electronics/Electrical Engineering from a recognized Institution or equivalent.	**(post essential professional qualification):** At least 7 years of experience in designing Railway Signalling
				Relevant Experience (post essential professional qualification): At least 4 years' experience shall be with Project Management Consultants or General Consultant or Construction Agency and/ or with Signalling Contractors for RRI/ SSI/ PI and/ or with OEMs of Electronic Interlocking system either individually or combined.
5.	32/22	**Drawing & Design Engineer/ Electrical**	Diploma in Electrical/ Electronics Engineering OR a combination of any sub stream of basic streams of Electrical/ Electronics Engineering from a recognized University/ Institution or equivalent.	**Total Professional Experience (post essential professional qualification):** At least 7 years of experience in Infrastructure Projects involving Railway electrification aspects.
				Relevant Experience (post essential professional qualification): At least 4 years (for Diploma holders) experience shall be with Project Management Consultant or General Consultant and/ or with Electrification Contractors either individually or combined having experience in designing of OHE and PSI for IR systems.
6.	33/22	**QS and Billing Engineer**	Diploma in Civil Engineering from a recognized Institution or equivalent.	**Total Professional Experience (post essential professional qualification):** At least 7 years
				Relevant Experience (post essential professional qualification): Atleast4years' experience of **preparation of detailed Estimate of project components, billing, budgeting & cost controlling of Railway Infrastructure projects** or of any eligible works.
7.	34/22	**Design Engineer Civil**	Graduate Degree in Civil Engineering from a recognized institution	**Total Professional Experience (post essential professional qualification):** At least 4 years
				Relevant Experience (post essential professional

				qualification): At least 3 years' experience of design involving Railway Formation, bridges, tunnels, Station buildings, earth retaining structures etc in railway infrastructure projects or any eligible work
8.	35/22	**Section Engineer Civil**	Diploma in Civil Engineering from a recognised institution or equivalent	**Total Professional Experience (post essential professional qualification):** At least 7 years
				Relevant Experience (post essential professional qualification): At least 4 years' experience of **construction/ supervision of Railway Infrastructure projects** or of any eligible works
9.	36/22	**Section Engineer Civil**	Diploma in Civil Engineering or equivalent	**Total Professional Experience (post essential professional qualification):** At least 7 years
				Relevant Experience (post essential professional qualification): At least4 years' experience of **track laying in construction of Railway Lines or Track Renewals or track maintenance** in rail infrastructure projects or in any eligible works
10.	37/22	**Section Engineer/Electrical**	Diploma in Electrical/ Electronics Engineering OR a combination of any sub stream of basic streams of Electrical/ Electronics Engineering from a recognized University/ Institution or equivalent.	**Total Professional Experience**: At least 7 years
				Relevant Experience (post essential professional qualification): (i) At least 4 years' experience of **maintenance / construction of OHE & PSI works of Railway Electrification including all its aspects** in Infrastructure projects of railway line or of any eligible works.
11.	38/22	**Section Engineer/Electrical**	Diploma in Electrical/ Electronics Engineering OR a combination of	**Total Professional Experience (post essential professional qualification):** At least 7 years

			any sub stream of basic streams of Electrical/ Electronics Engineering from a recognized University/ Institution or equivalent.	**Relevant Experience (post essential professional qualification):** At least 4 years' experience of **maintenance or construction of Electrical works for building/ sub-station/ distribution system including all its aspects** in Infrastructure projects of railway line or highway projects or of any eligible works.
12.	39/22	**Section Engineer S&T**	Diploma in Electronics/Electrical Engineering from a recognized Institution or equivalent.	**Total Professional Experience (post essential professional qualification):** At least 7 years of experience in Infrastructure Projects of Railway Signalling **Relevant Experience (post essential professional qualification)**: At least 4 years' experience shall be with Project Management Consultants or Construction Agency or General Consultant and/ or with Signalling Contractors for RRI/ SSI/ PI either individually or combined.
13.	40/22	**Section Engineer S&T**	Diploma in Electronics and communication/ Electronics/Electrical Engineering from a recognized Institution or equivalent.	**Total Professional Experience (post essential professional qualification):** Atleast7yearsof experience in Infrastructure Projects of Railway Telecommunication **Relevant Experience (post essential professional qualification)**: Atleast4years' experience shall be with Project Management Consultants or General Consultant and/ or with Telecommunication Contractors individually or combined.
14.	41/22	**Site Engineer QA/QC(Lab)**	Diploma in Civil Engineering from a recognized Institution or equivalent.	**Total Professional Experience (post essential professional qualification):** At least7 years **Relevant Experience (post essential professional qualification):** At least 4 years' experience of **Supervisor and above in Quality assurance and quality Control in construction of Railway**

				infrastructure projects or of any eligible works.
15.	42/22	**Assistant Safety and Health Expert**	Diploma in any stream.	**Total Professional Experience (post essential professional qualification):** At least 4 years **Relevant Experience (post essential professional qualification):** At least 2 years' experience in supervision of safety works in infrastructure projects.
16.	43/22	**Senior Resident Engineer/Electrical** (Assistant Resident Engineer – Electrical (General & OHE)	Diploma in Electrical/ Electronics Engineering OR a combination of any sub stream of basic streams of Electrical/ Electronics Engineering from a recognized University/ Institution or equivalent.	**(a) Total Professional Experience (post essential professional qualification):** At least 10 years for diploma holder. **(b) Relevant Experience (post essential professional qualification):** At least 6 years experience of railway electrification projects
17	44/22	**CAD Operator** (Draftsman / CAD Operator)	Diploma in Engineering/ Architecture or other related field from a recognized Institution or equivalent.	**(a) Total Professional Experience (post essential professional qualification):** At least 4 years for Diploma holder. **(b) Relevant Experience (post essential professional qualification):** At least 2 years experience in preparation of technical drawings. Should have knowledge of AutoCAD. Those having experience in Railway/ Metro Projects will be preferred.

*Candidate belonging to General/ EWS category (and candidates belonging to SC/ST/OBC(NCL)/PWD applying against unreserved posts) should have first class degree/ minimum 60% marks in Minimum Educational Qualification for consideration against unreserved posts

Reserved category candidates (SC/ST/OBC(NCL)/PWD as applicable) should have at least 50% marks in Minimum Qualification for consideration against reserved posts

Experience shall be calculated as on 01.09.2022.

Note for Educational Qualification:

The candidate should possess Degree recognized by AICTE/ UGC (as applicable); from a University incorporated by an Act of Central or State legislature in India or other Educational Institutions established by an Act of Parliament or declared to be Deemed as University under Section 3 of the University Grants Commission Act, 1956. Sections A & B examination of the Institution of Engineers (India) which is treated as equivalent to Degree by Govt. of India, shall also be accepted.

Selection Process

The applications received shall be screened for eligibility. The candidates may be shortlisted for selection. The company reserves the right to shortlist the number of candidates for selection out of eligible candidates.

The weightage distribution of various parameters of the selection shall be as under:

Experience - 5%
Written Test - 60%
Interview - 35%
(Technical & Professional proficiency - 25 %; Personality Communication & Competency – 10%)
Total - 100%

A minimum of 50% marks for UR/EWS (45% for SC/ST/OBC (NCL)/ PWD against reserved posts) in written test and a minimum of 60% marks for UR/EWS (50% for SC/ST/OBC (NCL)/ PWD against reserved posts) in interview will be required to enable the candidate to be considered for placement on panel. There will be no minimum qualifying marks required in the aggregate.

Appointment of selected candidates will be subject to their being found medically fit in the Medical Examination to be conducted as per RITES Rules and Standards of Medical Fitness for the relevant post.

The candidates shall have to produce copies of educational qualification and experience claimed which shall be verified from the original documents at the appropriate stage and shall be subject to verification from the original source.

Based upon fulfilling the conditions of eligibility; candidates shall be shortlisted for Interview.

Candidates have the option to appear for interview either in Hindi or English.

Relaxations & Concessions

Reservation/ relaxation/ concessions to EWS/ SC/ST/OBC (NCL)/PWD/ Ex-SM/ J&K Domicile would be provided against reserved posts (where applicable) as per extant Govt. orders.

Relaxation in upper age limit to OBC (NCL)/ SC/ ST candidates shall be provided against reserved posts as per extant Govt. orders.

PWD candidates suffering from not less than 40% of the relevant disability shall only be eligible for the benefit of PWD. Such PWD candidates shall be eligible for relaxation of 10 years in upper age limit.

PWD candidates will have to meet the Physical requirements and Functional Classifications which have been identified for the post as under:

VC No.	Categories for which identified	Functional Classification	Physical Requirements
28/22,29/22,30/22 ,32/22, 33/22,34/22,35/22,36/22,37/22, 38/22,41/22,43/22,44/22	Locomotor disability	OA, OL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, RW, KC, CL, JU, H
	Hearing Impairment	HH	

VC No.	Categories for which identified	Functional Classification	Physical Requirements
31/22,39/22,40/22	Locomotor disability	OA, OL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, RW, KC, CL, JU, H

VC No.	Discipline	Categories for which identified	Functional Classification	Physical Requirements
42/22	Civil	Locomotor disability	OA, OL, Leprosy Cured, Acid Attack Victims	S, ST, BN, W, SE, MF, C, R, W & RW
		Hearing Impairment	HI	
	Mechanical	Hearing Impairment	HI	
	Electrical	Locomotor disability	OA, OL, Leprosy Cured, Acid Attack Victims	
		Hearing Impairment	HI	

Functional Classification:

Code	Category of Benchmark disability
OH	Orthopedically Handicapped
VH	Visually Handicapped
HH	Hard of Hearing
OL	One leg
OA	One arm
BA	Both Arms
BH	Both Hands
MW	Muscular Weakness
OAL	One arm one leg
BLA	Both Legs and Arms
BLOA	Both Legs one Arm
LV	Low Vision
B	Blind
PD	Partially Deaf
FD	Fully Deaf
BL	Both legs
D	Deaf
Dw	Dwarfism
CP	Cerebral Palsy
LC	Leprosy Cured
AAV	Acid Attack Victims
MD	Multiple Disabilities
MI	Mental Illness
ASD	Autism Spectrum Disorder (M= Mild, MoD= Moderate),
SLD	Specific Learning Disability

Physical requirements:

Code	Functional Requirements
S	Sitting
ST	Standing
W	Walking
SE	Seeing
H	Hearing/ Speaking
RW	Reading and Writing
C	Communication
MF	Manipulation by fingers
PP	Pulling & Pushing
L	Lifting
KC	Kneeling & Crouching
BN	Bending
M	Movement
JU	Jumping
CL	Climbing

The above lists are subject to revision.

Nature & Period of Engagement

The appointment shall be purely on contract basis initially for a period of one year, extendable until completion of the assignment subject to mutual consent and satisfactory performance.

Note: The issue of offer of appointment will be subject to approval of CV by client.

Selected candidates shall be liable for posting anywhere in India as per Company requirements.

Remuneration

For all VC No. except VC No. 34/22

Pay, allowances and perks for the post would be as under:

Basic pay for Nil Work Experience	Allowances	Other perks
Rs. 15,400/- (1 to 3 % annual increment based on the performance)	70% in Non-metro cities 75% in Metro Cites other than Mumbai/Bangalore 80% for Mumbai/ Bangalore.	Medical & Accidental Insurance for self, Employer's contribution towards PF @ 12% would be borne by the company.

The Consolidated monthly Gross Emoluments including PF contribution of Employer for posting in Non – Metro city comes out to be ₹ 37,667/- which results in CTC of 4.52 LPA, for VC No. 28/22, 29/22 &43/22.

The Consolidated monthly Gross Emoluments including PF contribution of Employer for posting in Non – Metro city comes out to be ₹ 31,546/- which results in CTC of 3.78 LPA, for VC No. 42/22 & 44/22.

The Consolidated monthly Gross Emoluments including PF contribution of Employer for posting in Non – Metro city comes out to be ₹ 34,471/- which results in CTC of 4.13 LPA for VC No. 30/22,31/22,32/22, 33/22,35/22,36/22,37/22,38/22,39/22,40/22 & 41/22.

For VC No. 34/22

Pay, allowances and perks for the post would be as under:

Basic pay for Nil Work Experience	Allowances	Other perks
Rs. 22,000/- (1 to 3 % annual increment based on the performance)	70% in Non-metro cities 75% in Metro Cites other than Mumbai/Bangalore 80% for Mumbai/ Bangalore.	Medical & Accidental Insurance for self, Employer's contribution towards PF @ 12% would be borne by the company.

The Consolidated monthly Gross Emoluments including PF contribution of Employer for posting in Non – Metro city comes out to be ₹ 45,065/- which results in CTC of 5.40 LPA.

Remuneration mentioned above is only indicative. Actual remuneration shall depend upon place of posting and other terms & conditions of appointment.

Fees

The candidates will have to deposit the under mentioned amount of fees during online application:

Category	Fee

General/OBC Candidates	Rs. 600/- plus applicable taxes
EWS/ SC/ST/ PWD Candidates	Rs. 300/- plus applicable taxes

For any difficulty/ queries regarding fee payment, candidates may contact on following only:

Helpdesk No: 011 – 33557000 Extension Code - 13221
Helpdesk e-mail id: pghelpdesk@hdfcbank.com

Note:

a) Candidates should note that the fee submitted through any other mode except the mode specified, will not be accepted by RITES and such applications will be treated as without fee and will be summarily rejected.

b) Persons with disabilities are given concession in the fee provided they are otherwise eligible for appointment. A PWDs candidate claiming age relaxation/fee concession will be required to submit along with their Detailed Application Form, certified copy of the PWD certificate as per latest GOI format.

How to Apply

1. **Before applying candidates should ensure that they satisfy the necessary conditions and requirements of the position.**

2. Interested candidates fulfilling the above laid down eligibility criteria are required to apply online in the registration format available in the Career Section of RITES website, http://www.rites.com.

3. While submitting the online application; the system would generate 'Registration No.' on top of online form filled up by the candidate. Note down this "Registration No." and quote it for all further communication with RITES Ltd.

4. While filling up the required details, candidates are advised to carefully and correctly fill the details of "Identity Proof". Candidates are also advised to note the same and ensure the availability of the same Identity Proof as it will be required to be produced in original at later stages of selection (if called).

5. **After filling up the required details under the "Fill/ Modify Application Form", click on "Make payment". The payment details show the amount to be paid to the bank based on your category.**

   Applications without successful fee payment shall be treated as incomplete and shall be summarily rejected.

6. A copy of this online **APPLICATION FORM** containing the registration number is to be printed, signed, and furnished along with **SELF-ATTESTED COPIES** of the following documents in the given order only (from top to bottom) **At The Time Of Selection (If Called):**
   a. 2 recent passport size colour photographs
   b. High School certificate for proof of Date of Birth
   c. Certificates of Academic & Professional qualifications and statements of marks of all the qualifications for all semesters/years (Xth, XIIth, Diploma/ Graduation/ Post-Graduation as applicable)
   d. EWS/ SC/ST/OBC Certificate in the prescribed format by Govt. of India (if applicable)
   e. Proof of Identity & Address (Passport, Voter ID, Driving License, Aadhaar Card etc)
   f. PAN Card
   g. Proof of different periods of experience as claimed in the Application Form (if applicable)
   h. Any other document in support of your candidature
   i. PWD Certificate as per latest format (if applicable).

7. **No documents are to be submitted at present. Candidates may be asked to submit relevant documents at a later stage if so required.**

8. Please keep copies of experience certificates from your previous employment in respect of claims made by you in your application and are required to be produced at later stages of selection (if called). In respect of current employment, **experience certificate/ joining letter along with last months' salary slips, or, Form 16 and other documents** which clearly prove your continuity in the job are to be attached. In case your claim is not

established from the proofs submitted by you; your application is liable to be rejected. Please check your claims and certificates submitted by you carefully. Incomplete application, or, insufficient proof would entail rejection of your application. No claims would be entertained at a later stage.

9. For proof of CTC/ salary, candidates shall have to submit a copy of their last Form No. 16/ Earning Card/ salary slip/ Appraisal letter/ any other suitable document.

10. Community certificate (SC/ST/OBC NCL) should be in the format prescribed by Government of India only. OBC candidates included in the Central List with certificate not more than 12 months old (with clear mention of candidate not belonging to "Creamy Layer") in the GOI prescribed format only will be considered for the posts reserved for OBC. EWS certificate should also be as per Gov. of India format.

11. The candidates are also advised to keep a copy of Application Form with them and to carry the same at the time of the Interview (if called).

12. The **original testimonials/documents along with one self-attested copy** will have to be produced by the candidate(s) at the time of selection (if called).

13. Applications received after the last date of receipt of Application Form shall be rejected. RITES Ltd. does not bear any responsibility for any delay for any reason whatsoever.

14. Departmental candidates of RITES and candidates working in Government Departments/ PSU shall be allowed to join RITES only after being properly relieved from their parent organization.

15. Candidates not fulfilling the minimum laid down criteria advertised with respect to educational qualifications, age, and experience for selection to the respective post, would not be able to register online.

16. Candidates should submit only single online application for one vacancy and details once submitted in the application form cannot be altered. A valid e-mail ID is essential for submission of the online application. RITES will not be responsible for bouncing of any e-mail sent to the candidates.

17. If any claim made by a candidate is found to be incorrect, his/her candidature shall be summarily rejected.

Venue

S. No.	Selection Round	Venue
1	Written Test	**Rites Limited, Shikhar, Plot No. 1, Sector – 29, Gurgaon – 122001**
2	Interview (Subject to performance in Written Test)	**Rites Limited, Shikhar, Plot No. 1, Sector – 29, Gurgaon – 122001**

Exact Time and details of venue of the selection shall be communicated to shortlisted candidates.

General Instructions

1. Management reserves the right to cancel/ restrict/ enlarge/ modify/ alter the selection/ recruitment process at any stage, without issuing any further notice or assigning any reason thereafter.

2. The number of vacancies may vary.

3. Departmental candidates of RITES and candidates working in Government Departments/ PSU shall be allowed to join RITES only after being properly relieved from their parent organization.

4. Before applying, the Candidates must satisfy themselves about their eligibility for the post applied for.

5. In case it is detected at any stage of recruitment that a candidate does not fulfill the eligibility norms and/or that he/she has furnished any incorrect/false information or has suppressed any material fact (s), his/her candidature s liable for cancellation. If any of these shortcomings is/are detected even after appointment, his/her services are liable to be terminated.

6. The period of training/internship shall not be counted towards post qualification experience.

7. Legal jurisdiction will be Delhi in case of any dispute.

8. No train/bus fare / TA / DA shall be payable.

9. In case a candidate is found suitable for a lower post than for which he/she has applied, he/she shall only be considered for the post for which he/she has been found suitable by the selection committee

Communication with RITES

Any information regarding this recruitment process would be made available on the e-mail address provided by the candidate at the time of registration and/or shall be uploaded on RITES website. Candidates are advised to periodically check the Career section of RITES website for further updates.

Candidates are encouraged to go through the detailed advertisement and read the "Frequently Asked Questions (FAQs)" uploaded on RITES website under Career section to solve their queries.

Queries if remaining should be sent to rectt@rites.com only and contain the following particulars:

i. VC No.
ii. REGISTRATION/ROLL NO.
iii. NAME OF CANDIDATE IN FULL AND IN BLOCK LETTERS.
iv. Valid email address as given in the application

Communications not containing above particulars shall NOT BE ATTENDED TO.

Any query/ issue should be brought to notice of RITES well in advance of the due date. RITES will not be responsible for non-submission of application due to issues brought to notice at the last moment.

Queries related to information already provided in the advertisement shall not be attended to.

Syllabus for Written Test

SYLLABUS FOR WRITTEN TEST FOR THE POST OF SENIOR CONTRACT EXPERT & PLANNING PROCUREMENT ENGINEER FOR VC NO 28/22 & 30/22

Subject	Description
General	General Aptitude/General Knowledge/General Awareness/Latest events etc
Surveying	**Surveying :**- Types of leveling instruments, Temporary Adjustments, Booking and reducing of levels, Checking the leveling work, longitudinal section, Cross Sections, Error due to curvature and refraction.
	Total Station/ GPS Survey-Features of total station and GPS, Principles of working with GPS, adjustment of errors, Open and closed traverse and their application to engineering problems.
	Trigonometrically leveling heights and Distances, Geometrical Observations, Determination of Difference in Elevation.
	Triangulation Systems, Base Line Measurement, Calculations of Length of Base, Measurement of Horizontal Angles.
	Contours and Contour Interval, Methods of Locating Contours, Interpolation of Contours.
	Route Surveying-Elements of Reconnaissance Survey, Preliminary Survey, Final Location Survey, Construction Survey.
	Simple, compound, reverse and transition curves, Vertical curves for roads and railways, setting out curve by offset and by method of deflection angles, Length of curves calculation.

	Hydrographic survey-sounding, charting, cross section of streams and rivers and gauging of discharges.
	Principles and utility of Aerial photogrammetric and remote sensing, satellite data.
Geo Technical Engineering	Soil as a three phase system water content, density and unit weights, specific gravity, voids ratio porosity and degree of saturation, density index.
	Classification of soils, compaction, standard Procter test, water density relationship, modified proctor test, field compaction methods, field compaction control, calibration curve, factors affecting compaction
	Exploratory boring, depth of exploration, spacing and number of boring, method of sampling and types of samples, bore logs, core recovery, rock quality designation, field vane shear test, standard penetration test and its application, field plate load test and limitation, ultimate bearing capacity of shallow foundation, Plate load test, Elements of combined and raft foundation.
	Pile foundation- General considerations in pile foundation, types of piles, pile load test and use of relevant IS code.
Quantity Surveying, Contract & Tenders	Data required for Preparation of an estimate, Types of an estimates, Items of Work, Description of an items of work, Measurement of Works, Guidelines for Measurements, I.S. mode or Units of measurements, Plinth Area, Floor Area, Carpet and F.S.I.
	General procedure of measurement of works, Methods of taking out quantities various items of works, Prime Costs and Provisional Sums, Provisional Quantities, Contingencies, Work charged, Establishment, Centage Charges, Building Estimate Methods, Checks over Accuracy of Detailed Estimates.
	Analysis of Rates-quantities of Materials and labor Required for different items of Works, Approximate Rates of Equipment/ Machinery required for different items of Works. Transportation of Martials and cost. Rates specified for various categories of Laborers in Building Industry. Analysis of Rates of Principle items of Work in the Building Construction.
	Types of Specifications, Detailed Specifications, Standard Specification
	Types of tenders, components of tender document, preparation of tender document

Subject	Description
Design of Reinforced Concrete Structures	Method of Design- Working Stress Method, Ultimate Load Method, Limit State Method
	Singly and Doubly Reinforced Beams and slabs, columns
	Shear Stress, Diagonal Tension, Shear Reinforcement, Development length, Anchorage Bond, Flexural Bond
	Basic Concepts of Prestressed Concrete
Highway Engineering	Classification of highways, types of surveys, cross-section and profiles, soil investigation.
	Elements of right of way and standards, gradient, speed, sight distances, curves.
	Testing of aggregate, bitumen and cement, Field quality test for earthwork, concrete work, brick & stone masonry, Road work
	California bearing ratio method for design of flexible pavement.
	Design of concrete pavement, pavement joints, preparation of the sub-grade and sub-base
Railway Engineering	Types of alignment survey, parameters of speed, loading and permanent way for various classes of railway line, schedule of dimensions
	Curves, gradient, earthwork and permanent way-rails, sleepers, ballast, fastenings and fixtures, points and crossings, level crossing.
	Daily maintenance, periodical maintenance, maintenance of track alignment, maintenance of drainage, maintenance of track components, maintenance of points and crossings, maintenance of level crossings

SYLLABUS FOR WRITTEN TEST FOR THE POST OF SENIOR TRACK EXPERT FOR VC NO 29/22 .

Subject	Description
General	General Aptitude/General Knowledge/General Awareness/Latest events etc
	Surveying :- Types of leveling instruments, Temporary Adjustments, Booking and reducing of levels, Checking the leveling work, longitudinal section, Cross Sections, Error due to curvature and refraction.

Surveying	Total Station/ GPS Survey-Features of total station and GPS, Principles of working with GPS, adjustment of errors, Open and closed traverse and their application to engineering problems.
	Trigonometrically leveling heights and Distances, Geometrical Observations, Determination of Difference in Elevation.
	Triangulation Systems, Base Line Measurement, Calculations of Length of Base, Measurement of Horizontal Angles.
	Contours and Contour Interval, Methods of Locating Contours, Interpolation of Contours.
	Route Surveying-Elements of Reconnaissance Survey, Preliminary Survey, Final Location Survey, Construction Survey.
	Simple, compound, reverse and transition curves, Vertical curves for roads and railways, setting out curve by offset and by method of deflection angles, Length of curves calculation.
	Hydrographic survey-sounding, charting, cross section of streams and rivers and gauging of discharges.
	Principles and utility of Aerial photogrammetric and remote sensing, satellite data.
Geo Technical Engineering	Soil as a three phase system water content, density and unit weights, specific gravity, voids ratio porosity and degree of saturation, density index.
	Classification of soils, compaction, standard Procter test, water density relationship, modified proctor test, field compaction methods, field compaction control, calibration curve, factors affecting compaction
	Exploratory boring, depth of exploration, spacing and number of boring, method of sampling and types of samples, bore logs, core recovery, rock quality designation, field vane shear test, standard penetration test and its application, field plate load test and limitation, ultimate bearing capacity of shallow foundation, Plate load test, Elements of combined and raft foundation.
	Pile foundation- General considerations in pile foundation, types of piles, pile load test and use of relevant IS code.
Quantity Surveying, Contract & Tenders	Data required for Preparation of an estimate, Types of an estimates, Items of Work, Description of an items of work, Measurement of Works, Guidelines for Measurements, I.S. mode or Units of measurements, Plinth Area, Floor Area, Carpet and F.S.I.
	General procedure of measurement of works, Methods of taking out quantities various items of works, Prime Costs and Provisional Sums, Provisional Quantities, Contingencies, Work charged, Establishment, Centage Charges, Building Estimate Methods, Checks over Accuracy of Detailed Estimates.
	Analysis of Rates-quantities of Materials and labor Required for different items of Works, Approximate Rates of Equipment/ Machinery required for different items of Works. Transportation of Martials and cost. Rates specified for various categories of Laborers in Building Industry. Analysis of Rates of Principle items of Work in the Building Construction.
	Types of Specifications, Detailed Specifications, Standard Specification
	Types of tenders, components of tender document, preparation of tender document

Subject	Description
Highway Engineering	Classification of highways, types of surveys, cross-section and profiles, soil investigation.
	Elements of right of way and standards, gradient, speed, sight distances, curves.
	Testing of aggregate, bitumen and cement, Field quality test for earthwork, concrete work, brick & stone masonry, Road work
	California bearing ratio method for design of flexible pavement.
	Design of concrete pavement, pavement joints, preparation of the sub-grade and sub-base
Railway Engineering	Types of alignment survey, parameters of speed, loading and permanent way for various classes of railway line, schedule of dimensions

	Curves, gradient, earthwork and permanent way-rails, sleepers, ballast, fastenings and fixtures, points and crossings, level crossing.
	Daily maintenance, periodical maintenance, maintenance of track alignment, maintenance of drainage, maintenance of track components, maintenance of points and crossings, maintenance of level crossings

SYLLABUS FOR WRITTEN TEST FOR THE POST OF QS & BILLING ENGINEER, SECTION ENGINEERS (CIVIL), SECTION ENGINEERS (CIVIL) & SITE ENGINEER -QA/QC (LAB) FOR VC NO 33/22, 35/22,36/22 & 41/22

Subject	Description
General	General Aptitude/General Knowledge/General Awareness/Latest events etc
Surveying	**Surveying :**- Types of leveling instruments, Temporary Adjustments, Booking and reducing of levels, Checking the leveling work, longitudinal section, Cross Sections, Error due to curvature and refraction.
	Total Station/ GPS Survey-Features of total station and GPS, Principles of working with GPS, adjustment of errors, Open and closed traverse and their application to engineering problems.
	Trigonometrically leveling heights and Distances, Geometrical Observations, Determination of Difference in Elevation.
	Triangulation Systems, Base Line Measurement, Calculations of Length of Base, Measurement of Horizontal Angles.
	Contours and Contour Interval, Methods of Locating Contours, Interpolation of Contours.
	Route Surveying-Elements of Reconnaissance Survey, Preliminary Survey, Final Location Survey, Construction Survey.
	Simple, compound, reverse and transition curves, Vertical curves for roads and railways, setting out curve by offset and by method of deflection angles, Length of curves calculation.
	Hydrographic survey-sounding, charting, cross section of streams and rivers and gauging of discharges.
	Principles and utility of Aerial photogrammetric and remote sensing, satellite data.
Geo Technical Engineering	Soil as a three phase system water content, density and unit weights, specific gravity, voids ratio porosity and degree of saturation, density index.
	Classification of soils, compaction, standard Procter test, water density relationship, modified proctor test, field compaction methods, field compaction control, calibration curve, factors affecting compaction
	Exploratory boring, depth of exploration, spacing and number of boring, method of sampling and types of samples, bore logs, core recovery, rock quality designation, field vane shear test, standard penetration test and its application, field plate load test and limitation, ultimate bearing capacity of shallow foundation, Plate load test, Elements of combined and raft foundation.
	Pile foundation- General considerations in pile foundation, types of piles, pile load test and use of relevant IS code.
Quantity Surveying, Contract & Tenders	Data required for Preparation of an estimate, Types of an estimates, Items of Work, Description of an items of work, Measurement of Works, Guidelines for Measurements, I.S. mode or Units of measurements, Plinth Area, Floor Area, Carpet and F.S.I.
	General procedure of measurement of works, Methods of taking out quantities various items of works, Prime Costs and Provisional Sums, Provisional Quantities, Contingencies, Work charged, Establishment, Centage Charges, Building Estimate Methods, Checks over Accuracy of Detailed Estimates.
	Analysis of Rates-quantities of Materials and labor Required for different items of Works, Approximate Rates of Equipment/ Machinery required for different items of Works. Transportation of Martials and cost. Rates specified for various categories of Laborers in Building Industry. Analysis of Rates of Principle items of Work in the Building Construction.
	Types of Specifications, Detailed Specifications, Standard Specification
	Types of tenders, components of tender document, preparation of tender document

Subject	Description
Construction Supervision	Project Planning, Co-ordination, Billing of contractors, Quality assurance & Quality Control, Design, Inspection, Testing handling, storage, Delivery etc during construction through method

	statements, work procedures, Audit reports, Quality manual etc in construction of Railways / Metro and other Projects
Structural Analysis	Beam:- Types of Supports, Shear Force and Bending Moment, Shear Force and Bending Moment Diagram, Graphical Method of Plotting S.F. and B.M. Diagrams.
Design of Reinforced Concrete Structures	Method of Design- Working Stress Method, Ultimate Load Method, Limit State Method
	Singly and Doubly Reinforced Beams and slabs, columns
	Shear Stress, Diagonal Tension, Shear Reinforcement, Development length, Anchorage Bond, Flexural Bond
	Basic Concepts of Prestressed Concrete
Design of Steel Structures	Stress strain curve for mild steel, rolled steel section, loads, permissible stresses, working stresses, factor of safety minimum thickness of structural members, Design methods
	Compression Members-Effective length, Slenderness ratio, Column design, Types of sections, assumptions, Design of Axially loaded compression members.
	Tension Members-Net section area, Permissible stress, Design of axially loaded tension members.
	Welded joints, types of welds, design of fillet weld, design of butt weld.
Highway Engineering	Classification of highways, types of surveys, cross-section and profiles, soil investigation.
	Elements of right of way and standards, gradient, speed, sight distances, curves.
	Testing of aggregate, bitumen and cement, Field quality test for earthwork, concrete work, brick & stone masonry, Road work
	California bearing ratio method for design of flexible pavement.
	Design of concrete pavement, pavement joints, preparation of the sub-grade and sub-base
Railway Engineering	Types of alignment survey, parameters of speed, loading and permanent way for various classes of railway line, schedule of dimensions
	Curves, gradient, earthwork and permanent way-rails, sleepers, ballast, fastenings and fixtures, points and crossings, level crossing.
	Daily maintenance, periodical maintenance, maintenance of track alignment, maintenance of drainage, maintenance of track components, maintenance of points and crossings, maintenance of level crossings

SYLLABUS FOR WRITTEN TEST FOR THE POST OF DESIGN ENGINEER (CIVIL) FOR VC NO 34/22 IN RITES LTD.

Subject	Description
General	General Aptitude/General Knowledge/General Awareness/Latest events etc
Surveying	**Surveying :**- Types of leveling instruments, Temporary Adjustments, Booking and reducing of levels, Checking the leveling work, longitudinal section, Cross Sections, Error due to curvature and refraction.
	Total Station/ GPS Survey-Features of total station and GPS, Principles of working with GPS, adjustment of errors, Open and closed traverse and their application to engineering problems.
	Trigonometrically leveling heights and Distances, Geometrical Observations, Determination of Difference in Elevation.
	Triangulation Systems, Base Line Measurement, Calculations of Length of Base, Measurement of Horizontal Angles.
	Contours and Contour Interval, Methods of Locating Contours, Interpolation of Contours.
	Route Surveying-Elements of Reconnaissance Survey, Preliminary Survey, Final Location Survey, Construction Survey.
	Simple, compound, reverse and transition curves, Vertical curves for roads and railways, setting out curve by offset and by method of deflection angles, Length of curves calculation.
	Hydrographic survey-sounding, charting, cross section of streams and rivers and gauging of discharges.
	Principles and utility of Aerial photogrammetric and remote sensing, satellite data.
Geo Technical	Soil as a three phase system water content, density and unit weights, specific gravity, voids ratio porosity and degree of saturation, density index.
	Classification of soils, compaction, standard Procter test, water density relationship, modified proctor test, field compaction methods, field compaction control, calibration curve, factors affecting compaction

Engineering	Exploratory boring, depth of exploration, spacing and number of boring, method of sampling and types of samples, bore logs, core recovery, rock quality designation, field vane shear test, standard penetration test and its application, field plate load test and limitation, ultimate bearing capacity of shallow foundation, Plate load test, Elements of combined and raft foundation.
	Pile foundation- General considerations in pile foundation, types of piles, pile load test and use of relevant IS code.
	Stability of slopes, classical theory of earth pressure by Rankine and Coulomb, active and passive pressure against retaining walls, Railway formation.
	Differential method of improving soil characteristics at site, element of soil stabilization, sand drain, vibro flotation technique
Quantity Surveying, Contract & Tenders	Data required for Preparation of an estimate, Types of an estimates, Items of Work, Description of an items of work, Measurement of Works, Guidelines for Measurements, I.S. mode or Units of measurements, Plinth Area, Floor Area, Carpet and F.S.I.
	General procedure of measurement of works, Methods of taking out quantities various items of works, Prime Costs and Provisional Sums, Provisional Quantities, Contingencies, Work charged, Establishment, Centage Charges, Building Estimate Methods, Checks over Accuracy of Detailed Estimates.
	Analysis of Rates-quantities of Materials and labor Required for different items of Works, Approximate Rates of Equipment/ Machinery required for different items of Works. Transportation of Martials and cost. Rates specified for various categories of Laborers in Building Industry. Analysis of Rates of Principle items of Work in the Building Construction.
	Types of Specifications, Detailed Specifications, Standard Specification
	Types of tenders, components of tender document, preparation of tender document
Structural Analysis	Beam:- Types of Supports, Shear Force and Bending Moment, Shear Force and Bending Moment Diagram, Graphical Method of Plotting S.F. and B.M. Diagrams.

Subject	Description
Design of Reinforced Concrete Structures	Method of Design- Working Stress Method, Ultimate Load Method, Limit State Method
	Singly and Doubly Reinforced Beams and slabs, columns
	Shear Stress, Diagonal Tension, Shear Reinforcement, Development length, Anchorage Bond, Flexural Bond
	Basic Concepts of Prestressed Concrete
	Bridges, Tunnel, Station buildings, Earthwork, retaining structures, Design
Design of Steel Structures	Stress strain curve for mild steel, rolled steel section, loads, permissible stresses, working stresses, factor of safety minimum thickness of structural members, Design methods
	Compression Members-Effective length, Slenderness ratio, Column design, Types of sections, assumptions, Design of Axially loaded compression members.
	Tension Members-Net section area, Permissible stress, Design of axially loaded tension members.
	Welded joints, types of welds, design of fillet weld, design of butt weld.
	Bridges Design
Highway Engineering	Classification of highways, types of surveys, cross-section and profiles, soil investigation.
	Elements of right of way and standards, gradient, speed, sight distances, curves.
	Testing of aggregate, bitumen and cement, Field quality test for earthwork, concrete work, brick & stone masonry, Road work
	California bearing ratio method for design of flexible pavement.
	Design of concrete pavement, pavement joints, preparation of the sub-grade and sub-base
Railway Engineering	Types of alignment survey, parameters of speed, loading and permanent way for various classes of railway line, schedule of dimensions
	Curves, gradient, earthwork and permanent way-rails, sleepers, ballast, fastenings and fixtures, points and crossings, level crossing.
	Daily maintenance, periodical maintenance, maintenance of track alignment, maintenance of drainage, maintenance of track components, maintenance of points and crossings, maintenance of level crossings

Written test Syllabus for Assistant Safety and Health Expert: VC 42/22

- General Aptitude / General Knowledge / General Awareness/Latest events etc.
- General workers amenities for Construction sites.
- Housekeeping [Stacking of materials], P&M (Plants & Machineries), Various safety trainings, Audits & Safety Inspections
- while working in Urban Areas, Barricading, Utilities etc.
- Working at height, fall protection, platform, temporary structures, Access.
- Mobile Elevated working platform (MEWP).
- Lifting Appliances and Gear, means crane hoist machinery, derrick, winch, Hoist drum, Pulley block. Test and periodical examination of lifting appliances & Gears, ASLI (Automatic safe load Indication).
- Electricity, Assessment & Power Strength and capability of electrical equipment.
- **Distribution Systems**: 3 Phase and Single Phase and low voltage of 110 Volt for lighting Electrical protection System ELCB/RCCBs earthing of Electrical Equipment.
- **Industrial Cables:-** Working near H.T. Lines, Site illumination Near
- Welding, Gauging and Cuttings.
- Deep Excavations (More than 1.5 mtr)
- Works permit system, for Hot work heavy lifting permit.
- Entry to confined spaces, tendons lifting- Traffic Diversion / Traffic management PPEs (Personal Protective Equipment).
- Requirements of ISO 45001:2018

SYLLABUS FOR WRITTEN TEST FOR THE POST OF Drawing & Design Engineer/ Electrical, Section Engineer (Electrical), Section Engineer (Electrical), & Senior Resident Engineer/Electrical (Assistant Resident Engineer – Electrical (General & OHE) for VC NO 32/22, 37/22, 38/22 & 43/22 IN RITES LTD.

Unit-1 Electric Circuits and Fields :

Network graph, KCL, KVL, node and mesh analysis, transient response of Ac and Dc networks, sinusoidal steady-state analysis, resonance, basic filter concept, ideal current and voltage sources, Thevenin's Norton's and Superposition and Maximum Power Transfer theorems, two-port networks, three phase circuits, Gauss Theorem, electric field and potential due to point, line, plane and spherical charge distributions, Ampere's and Biot-Savart's laws, inductance, dielectrics, capacitance.

Unit-2 Signals and Systems:

Representation of continuous and discrete-time signals, shifting and scaling operation, linear, time-invariant and causal systems, Fourier series representation of continuous periodic signals, sampling theorem, Fourier, Laplace and Z transforms.

Unit-3 Electrical Machines:

Single phase transformer – equivalent circuit, phasor diagram, tests, regulation and efficiency, three phase transformers – connections, parallel operation, auto-transformer, energy conversion principles; DC machines – types, windings, generator characteristics, armature reaction and commutation, starting and speed control of motors, three phase induction motors – principles, types performance characteristics, starting and speed control, single phase induction motors, synchronous machines – performance, regulation and parallel operation of generators, motor starting characteristics and applications; servo and stepper motors.

Unit-4 Power Systems:

Basic power generation concepts; transmission line models and performance, cable performance, insulation, corona and radio interference, distribution systems, per–unit quantities, bus impedance and admittance matrices, load flow, voltage control, power factor correction, economic operation, symmetrical components,

fault analysis, principles of over-current, differential and distance protection, solid state relays and digital protection, circuit breakers, system stability concepts, swing curves and equal area criterion, HVDC transmission and FACTS concepts.

Unit-5 Control Systems:

Principles of feedback, transfer function, block diagrams; steady-state errors, Routh and Niquist techniques, Bode plots, root loci, lag, lead and lead-lag compensation, state space model, state transition matrix, controllability and observability.

Unit-6 Electrical and Electronic Measurements:

Bridges and potentiometers, PMMC, moving iron, dynamometer and induction type instruments, measurement of voltage, current, power, energy and power factor, instrument transformers, digital voltmeters and multimeters, phase, time and frequency measurement, Q-meters, oscilloscopes, potentiometric recorders, error analysis.

Unit-7 Analog and Digital Electronics:

Characteristics of diodes, BJT, FET, amplifiers – biasing, equivalent circuit and frequency response, oscillators and feedback amplifiers, operational amplifiers – characteristics and applications, simple active filters, VCOs and timers, combinational and sequential logic circuits, multiplexer, Schmitt trigger, multi-vibrators, sample and hold circuits, A/D and D/A converters, 8-bit microprocessor basics, architecture, programming and interfacing.

Unit-8 Power Electronics and Drives:

Semiconductor power diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs – static characteristics and principles of operation, triggering circuits, phase control rectifiers, bridge converters – fully controlled and half controlled, principles of choppers and inverters, basis concepts of adjustable speed Dc and Ac drives.

Unit-9 Application/utilization of Electrical Energy

Properties of Electrical System: Characteristics/properties of electrical systems/equipment/devices used in institutional building/commercial complexes/residential complexes/workshops/engineering industry etc. including General Electrification, Area Lighting, Sub-Station, DG Set, Solar system, Air-conditioning, Lifts, fire Alarm, Data Networking, EPBX, CCTV, PA System, Airport Runway lighting works etc.

Planning & Design of Electrical Works – Internal & External Works. Estimation, installation, testing and commissioning of such works.

Inspection and testing of electrical equipment, components, fittings, types of tests, sampling of components, test methods for different electrical equipment, components, cables, wires, insulators etc.

SYLLABUS FOR WRITTEN TEST FOR THE POST OF DRAWING & DESIGN ENGINEER/ S&T FOR VC NO 31/22

Section: A – General

1. Preparation of estimates.
2. S&T stores & procurement of materials.
3. Tender & Contracts
4. Rajbhasha

Section: B – Signalling

1. Basic concepts of signalling.
2. G&SR, Signal Engineering Manual, Schedule of dimension, BlockManual.
3. Concepts of Route Relay/ Panel Interlocking & Principles / Standard of Interlocking.
4. Different types of Track occupancy/clearance devices.
5. Requirement and types of Power supply System for signalling installations.
6. Different types of Block Proving Devices.
7. Special requirements of signalling/telecommunication for AC/DC traction.
8. Requirement, installation and maintenance practices of Point machines, signalling cable, power cables, signal lamps, Electrical/Mechanical lifting barrier & other signalling gears.

9. IBH / IBS
10. Centralized Traffic Control.
11. Electronic Interlocking.
12. ETCS / TPWS / AWS.

SYLLABUS FOR WRITTEN TEST FOR THE POST OF SECTION ENGINEER/S&T FOR VC NO 39/22

Section: A – General

1. Preparation of estimates.
2. S&T stores & procurement of materials.
3. Tender & Contracts
4. Rajbhasha

Section: B – Signalling

1. Basic concepts of signalling.
2. G&SR, Signal Engineering Manual, Schedule of dimension, BlockManual.
3. Concepts of Route Relay/ Panel Interlocking & Principles / Standard of Interlocking.
4. Different types of Track occupancy/clearance devices.
5. Requirement and types of Power supply System for signalling installations.
6. Different types of Block Proving Devices.
7. Special requirements of signalling/telecommunication for AC/DC traction.
8. Requirement, installation and maintenance practices of Point machines, signalling cable, power cables, signal lamps, Electrical/Mechanical lifting barrier & other signalling gears.
9. IBH / IBS
10. Centralized Traffic Control.
11. Electronic Interlocking.
12. ETCS / TPWS / AWS.

SYLLABUS FOR WRITTEN TEST FOR THE POST OF SECTION ENGINEER/ S&T FOR VC NO 40/22

Section: A – General

1. Preparation of estimates.
2. S&T stores & procurement of materials.
3. Tender & Contracts
4. Rajbhasha

Section: B – Telecommunication

1. Type of Railway Control Communication and TMS
2. Copper/Optical Fibre Cable for Railway applications.
3. Microwave Communication.
4. General concepts of digital transmission systems.

SYLLABUS FOR WRITTEN TEST FOR THE POST OF CAD Operator (Draftsman / CAD Operator) sFOR VC NO 44/22

1. General Intelligence & Reasoning, General Awareness, English Language.
2. Knowledge of P Way drawing preparation, Rail alignment including Geometric design Railway / Metro yards.

3. **Knowledge of CAD Software**
   (a) Conversant with latest CAD Software like Auto CAD 2018 onwards.
   (b) Setting up a drawing start from scratch, units, VCS etc.

4. **Starting with Sketching**
   (a) Drawing Lines
   (b) Creating Other 2D Objects
   (c) AutoCAD Polylines
   (d) Adding Points

5. **Working with Drawing Aids**
   a. Drawing Aids
   b. More Drawing Aids

6. **Editing Sketched Objects**
   a. Editing Sketched Objects
   b. Duplicating Objects
   c. Separating and Joining Sketched Objects
   d. More Editing Tools

7. **Layers**
   a. Working with Layers
   b. Layer Tools

8. **Editing Sketched Objects II**
   a. Object Properties
   b. Utilizing Grips

9. **Creating Text and Tables**
   a. Annotative Objects
   b. Creating Text
   c. Using Tables
   d. More Text Tools

10. **Dimensioning and Detailing Your Drawings**
    a. Dimensioning
    b. More Dimensioning
    c. Working with True Associative Dimensions
    d. Adding Leaders

11. **Editing Dimensions**
    a. Editing Dimensions Using Editing Tools
    b. Editing Dimensions Part 2

12. **Dimension Styles**
    a. Dimension Styles
    b. Using Dimension Styles

13. **Adding Constraints to Sketches**
    a. Constraints in a Sketch
    b. Dimensions, Parameters, and Equations

14. **Hatching Drawings**
    a. Hatching Basics
    b. Modifying Hatch Properties

15. **Paper Space**
    a. Paper Space Layouts
    b. Adding Viewports
    c. Working with Viewports
    d. Layout Tools Plotting Drawings Course Content, cont.

16. **Plotting Drawings In AutoCAD**
    a. Plot Styles and Page Setups
    b. Publishing to other File Types

17. **Template Drawings**
    a. Templates b. Customizing Templates

18. **Working with Blocks**
    a. Working with Blocks
    b. Inserting Blocks
    c. Changing Blocks

19. **Dynamic Blocks**
    a. Building Dynamic Blocks

20. **AutoCAD Sheet Sets**
    a. An Introduction to Sheet Sets
    b. Build a Sheet Set
    c. Sheet Set Views

Important Dates

S. No.	Particular	Date
1	Commencement of submission of online application	01.09.2022
2	Last date of submission of online application	14.09.2022
3	Date of written test	22.09.2022
4	Date of Interview	26.09.2022 onwards