

# ONLINE RECRUITMENT EXAMINATION FOR THE POST OF JR. ENGINEER ELECTRICAL - 2024

# **INFORMATION HANDOUT**

This handout contains details pertaining to various aspects of the online exam you are going to undertake and important instructions about related matters. You are advised to study the handout carefully as it will help you in preparing for the examination.

The on-line examination will comprise the following objective type multiple choice tests as stated below:

Part	Sr. No.	Sections	Number of Questions	Maximum Marks	Duration	Version
1		English Language	30	30		
Part A	2	Reasoning Ability	30	30	60 Minutes	Bilingual i.e. Hindi and English
Fart A	3	Quantitative Aptitude	15	15		
	4	General Knowledge	15	15		
Part B	Professional Knowledge (Domain specific as per job description)		60	60	60 Minutes	Ū
		TOTAL	150	150	120 Minutes	

#### Structure of the test for Jr. Eng. Electrical

The time for the exam is 120 minutes; however you may have to be at the venue for approximately 180 minutes including the time required for logging in, collection of the Call Letters, going through the instructions etc. Except test of English Language, all tests will be provided in Hindi and English. You can attempt any question within the allotted time to that part. All the questions will have multiple choices. Out of the five answers to a question, only one will be the correct answer. You have to select the most appropriate answer and 'mouse click' that alternative which you feel is appropriate/ correct. The alternative/option that you have clicked on, will be treated as your answer to that question. There will be penalty for wrong answers marked by you. For every wrong answer marked by you, 1/4<sup>th</sup> of the marks assigned to that question will be deducted as penalty.

The Scores of Online Examination will be obtained by adopting the following procedure:

- (i) Number of questions answered correctly by a candidate in each objective test is considered for arriving at the Corrected Score after applying penalty for wrong answers.
- (ii) The Corrected Scores so obtained by a candidate are made equivalent to take care of the minor difference in difficulty level, if any, in each of the objective tests held in different sessions to arrive at the Equated Scores\*

\*Scores obtained by candidates on any test are equated to the base form by considering the distribution of scores of all the forms.

(iii) Testwise scores and scores on total is reported with decimal points upto two digits.

Note: Cutoffs may be applied in two stages:

- (i) On scores in individual objective tests
- (ii) On Total Score of objective tests

Please note that the types of questions in this handout are only illustrative and not exhaustive. In the actual examination you will find questions of a higher difficulty level on some or all of these types and also questions on the types not mentioned here.

Some sample questions are given below.

## PART A

## **ENGLISH LANGUAGE**

This is a test to see how well you know English. Your English language ability would be tested through questions on grammar, vocabulary, sentence completion, synonyms, antonyms, comprehension of a passage, etc. Study and answer the sample questions given below :

Directions : Pick out the most appropriate word from amongst the words given below each sentence to complete it meaningfully.

Q.1.	. He quickly glanced			the book to find what it said about the Indian economy.					
	(1) at		through	(3)		(4)			over
Q.2.	The counsel urged (1) enact		court to enforce		down the cancel		s law. strike	(5)	declare
Q.3.	The local official (1) explained		th warned		of the situat apprised		told	(5)	intimated

Directions: Read each sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. The number of that part of the sentence is your answer. If there is no error, the answer is (5).

Q.4.	I am twenty / (1)	two years old / v (2)	when I first / (3)	joined the bar (4)	ık.	No error (5)
Q.5.	To the Hindus (1)	/ the Ganga is / (2)	/ holier than (3)	/ any other riv (4)	/er.	No error (5)
Q.6.	Of all the teach	hers / in our sch	ool / our clas	s teacher / v	vere very strict.	No error
	(1)	(2)		(3)	(4)	(5)

Directions : In each of the following questions, select from amongst the five alternatives, the word nearest in meaning to the word given in capitals.

Q.7.	LETHAL (1) light	(2)	dangerous	(3)	deadly	(4)	cruel	(5) thoughtless
Q.8.	CENTENARY (1) a guard (4) hundred runs			a hundred hundredt	d years n anniversary		(3)	a very old man
Q.9.	TRIUMPH (1) conquer	(2)	smash	(3) ea	arn (4)	brav	ve	(5) capture

#### **REASONING ABILITY**

This is a test to see how well you can think and also to judge your aptitude/ knowledge for working with computer. It contains questions of various kinds. Here are some sample questions.

Directions : In each of the following questions, there are five letter groups or words in each question. Four of these letter groups or words are alike in some way, while one is different. Find the one which is different.

Q.1. (1) black	(2) red	(3) green	(4) paint	(5) yellow
<b>Q.2</b> . (1) BC	(2) MN	(3) PQ	(4) XZ	(5) ST
Q.3. (1) Mango	(2) Apple	(3) Orange	(4) Guava	(5) Rose

**Directions**: In each of the following questions, there is a question mark in which only one of the five alternatives given under the question satisfies the same relationship as is found between the two terms to the left of the sign :: given in the question. Find the correct answer.

Q.4.	Foot : man :: ł (1) leg	noof:? (2)dog	(3) horse	(4) boy	(5) shoe
Q.5.	Day:Night:: (1) Dark	Kind:? (2) Bright	(3) Cruel	(4) Generous	(5) Gratitude

Q.6.	Hut: Mansion	:: Rabbit : ?	
	(1) Hole	(2) Carrot	(3) Elephant

(5) Rat

(3) above 36

- Q.7. If the letters in the word TOPS can be rearranged to form a meaningful word beginning with O, the last letter of that word is your answer. If more than one such word can be formed, M is the answer and if no such word can be formed, X is the answer. (5) X
  - (1) T (2) P (3) M (4) S
- Q.8. 'Some leaders are dishonest. Satyapriya is a leader.' Which of the following inferences definitely follows from these statements ?
  - Satyapriya is honest

(2) Satyapriya is dishonest

(4) Small

- (3) Some leaders are honest
- (4) Leaders are generally dishonest
- (5) Satyapriya is sometimes dishonest
- Q.9. If 'A " B' means 'add B to A', 'A ' B' means 'subtract B from A', 'A # B' means 'divide A by B' and 'A  $\otimes$  B' means 'multiply A by B; which of the following gives the average sales of two days where S<sub>1</sub> and S<sub>2</sub> are the sales of the first and the second day respectively ? (3)  $(S_1 " S_2 # 2)$ 
  - (1)  $(S_1 , S_2) # 2$ (2)  $2 \# (S_1 " S_2)$
  - (4)  $(S_1 \otimes S_2) \# (S_1 " S_2)$ (5) Other than those given as options
- Q.10. Every person above eighteen years of age who is registered as a voter, can vote. To find out whether Madhu, who was born twenty years ago, can vote, which of the following further information is needed ? (II) Whether Madhu is registered as a voter
  - (I) Madhu's date of birth (1) Only I
    - (4) Neither I nor II
    - (2) Only II (3) Either I or II (5) Both I and II

## QUANTITATIVE APTITUDE

This test is to measure how fast and accurate you are in dealing with numbers.

Q.1-3. Study the following table carefully and answer the questions given below \_

#### Distribution of 1000 candidates as regards their marks in written examination out of 300 and interview out of 100 in a selection examination

Written	INTERVIEW MARKS							
Examination Marks	Below 30	30-39	40-49	50-59	60-69	70 & above		
260 & above	8	18	26	18	26	4		
210 to 259	5	4	30	22	10	9		
160 to 209	16	10	45	56	18	9		
110 to 159	28	42	100	190	15	5		
60 to 109	35	115	20	8	7	5		
Below 60	32	32	20	4	6	2		

How many candidates did obtain more than 69 percent marks and above in both written examination and Q.1. interview?

(1) 22 (2) 49 (4) 9 (3) 13 (5) Other than those given as options

- Q.2. If approximately 325 candidates were to be qualified in the written examination, what should be the percentage of the qualifying marks?
  - (1) above 20 (4) above 63
    - (2) above 70 (5) Other than those given as options
- Q.3. About 42 percent of the candidates fall in which of the following ranges of the interview marks ?
  - (1) 110-159 (2) 110 & below (3) 50 to 70
    - (4) 50 & above (5) Other than those given as options
- At 10 paise each, how many paise will 6 lemons cost ? Q.4. (3) 60 (2) 10 (4) 61 (5) 610 (1) 6
- Which of the following can be exact multiple of 4? Q.5. (1) 27114 (2) 58204 (3) 48402 (4) 32286 (5) Other than those given as options
- Q.6-9. In each of the following questions one number is missing. The place where the number is missing is shown by a question mark (?). You have to find out which one of the answers shown against 1, 2, 3 and 4 can replace the

question mark. If none of these four can replace the question mark, you will indicate (5) i.e. 'Other than those given as options' as your answer.

<b>Q.6</b> .	42 + 73 + 13 (1) 352	37 = ? (2) 252	(3) 242	(4) 142	(5) Other than those given as options
<b>Q.7</b> .	$20 \times \frac{1}{2} = ?$ (1) 4	(2) 5	(3) 12	(4) 20	(5) Other than those given as options
Q.8.	0.7 × 0.5 = (1) 35	? (2) 0 <b>.</b> 35	(3) 0.0035	(4) 0.035	(5) Other than those given as options
<b>Q.9</b> .	15:25::6:? (1) 9	, (2) 10	(3) 30	(4) 15	(5) Other than those given as options

## **GENERAL KNOWLEDGE**

This test is intended to give an index of your awareness of people and events past and present in different walks of life.

- Q.1. Tarapore atomic power plant is located in \_\_\_\_\_\_
  (1) Bihar (2) Gujarat (3) Madhya Pradesh (4) Rajasthan (5) Other than those given as options
- Q.2. The total number of commercial banks nationalised so far is(1) 7(2) 14(3) 20(4) 24(5) Other than those given as options
- Q.3. To combat the menace of money laundering, which of the following financial institutions has introduced the 'Know Your Customer' Scheme ?
  (1) IDBI
  (2) RBI
  (3) NABARD
  (4) SIDBI
  (5) Other than those given as options
- Q.4. The famous Gomateshwar idol is in which of the following States ?
  (1) Maharashtra
  (2) Madhya Pradesh
  (3) Uttar Pradesh
  (4) Orissa
  (5) Karnataka
- Q.5.The famous Ayodhya temple is located on the bank of the river \_\_\_\_\_\_(1) Ganga(2) Godavari(3) Sarayu(4) Ban Ganga(5) Narmada

# PART B

# PROFESSIONAL KNOWLEDGE

Questions in this test will be relevant to the area of specialization based on (The syllabus for all subject is indicative and not exhaustive) the following topics:

Electrical Engineering Basic concepts, Circuit law, Magnetic Circuit, AC Fundamentals, Measurement and Measuring instruments, Electrical Machines, Fractional Kilowatt Motors and single-phase induction Motors, Synchronous Machines, Generation, Transmission and Distribution, Estimation and Costing, Utilization and Electrical Energy, Basic Electronic, Basic HVAC system, Basic Fire Protection & Fire Alarm system.

#### (A) Details of the On-line Examination Pattern:

- (1) The examination would be conducted on-line i.e. on a computer.
- (2) All tests except test of English Language, will be provided in English and Hindi.
- (3) All the questions will have multiple choices. Out of the five answers to a question only one will be the correct answer. The candidate has to select the most appropriate answer and 'mouse click' that alternative which he/ she feels is appropriate/ correct. The alternative/ option that is clicked on will be treated as the answer to that question. Answer to any question will be considered for final evaluation, only when candidates have submitted the answers by clicking on "Save & Next" or "Mark for Review & Next".
- (4) The clock has been set at the server and the countdown timer at the top right corner of your screen will display the time remaining for you to complete the test. When the clock runs out the exam ends by default you are not required to end or submit your exam.
- (5) The question palette at the right of screen shows one of the following statuses of each of the questions numbered:

- 1 You have not visited the question yet.
- 2 You have not answered the question.
- 3 You have answered the question.
- You have NOT answered the question, but have marked the question for review.
- 💼 The question(s) "Answered and Marked for Review" will be considered for evaluation.

The Marked for Review status simply acts as a reminder that you have set to look at the question again. *If an answer is selected for a question that is Marked for Review, the answer will be considered in the final evaluation.* 

- (6) To select a question to answer, you can do one of the following :
  - (a) Click on the question number on the question palette at the right of your screen to go to that numbered question directly. Note that using this option **does NOT save your answer** to the current question.
  - (b) Click on 'Save & Next' to save answer to current question and to go to the next question in sequence.
  - (c) Click on 'Mark for Review and Next' to save answer to current question, mark it for review, and to go to the next question in sequence.
- (7) To select your answer, click on one of the option buttons.
- (8) To change your answer, click another desired option button.
- (9) To save your answer, you MUST click on Save & Next.
- (10) To deselect a chosen answer, click on the chosen option again or click on the **Clear Response** button.
- (11) To mark a question for review click on **Mark for Review & Next**. *If an answer is selected for a question that is Marked for Review, the answer will be considered in the final evaluation.*
- (12) To change an answer to a question, first select the question and then click on the new answer option followed by a click on the **Save & Next** button.
- (13) Questions that are saved or marked for review after answering will ONLY be considered for evaluation.
- (14) Test name(s) will be displayed on the top bar of the screen. The test you will view will be highlighted.
- (15) The candidates are requested to follow the instructions of the "Test Administrator" carefully. If any candidate does not follow the instructions / rules, it would be treated as a case of misconduct/ adoption of unfair means and such a candidate would be immediately debarred to continue in the examination.
- (16) The candidates may ask the Test Administrator about their doubts or questions only before the commencement of the test. No query shall be entertained after the commencement of the examination.
- (17) You can attempt any question within the allotted time to that part.
- (18) After the expiry of time allotted to a particular test/group of tests the candidates will not be able to attempt any question or check their answers. The answers of the candidate would be saved automatically by the computer system even if he/ she has not clicked the "Submit" button.
- (19) Please note :
  - (a) Candidates will not be allowed to "finally submit" unless they have exhausted the actual test time.
  - (b) Under no circumstances should a candidate click on any of the 'keyboard keys' once the exam starts as this will lock the exam.

#### [B] General Instructions:

- (1) Please note date, reporting time and venue address of the examination given in the Call Letter.
- (2) You may visit the venue one day before the Online Examination to confirm the location so that you are able to report **on time** on the day of the examination. Late comers will not be allowed.
- (3) The Call Letter should be brought with you to the examination venue along with your recent passport size photograph duly pasted on it.

- (4) You must scrupulously follow the instructions of the Test Administrator and the IIMU Representative at the examination venue. If you violate the instructions you will be disqualified and will be asked to leave the examination venue.
- (5) No use of calculators (separate or with watch), books, note books or written notes, cell phones (with or without camera facility) or any other electronic device will be allowed during the examination.
- (6) Biometric data (thumb impression) and photograph will be captured before the start of examination at the examination venue. Decision of the Biometric data verification authority with regard to its status (matched or mismatched) shall be final and binding upon the candidates. Refusal to participate in the process of biometric data capturing / verification on any occasion may lead to cancellation of candidature. With regards to the same, please note the following:
  - (a) If fingers are coated (stamped ink/mehndi/coloured...etc), ensure to thoroughly wash them so that coating is completely removed before the examination day.
  - (b) If fingers are dirty or dusty, ensure to wash them and dry them before the thumb impression (biometric) is captured.
  - (c) Ensure fingers of both hands are dry. If fingers are moist, wipe each finger to dry them.
  - (d) If the primary finger (thumb) to be captured is injured/damaged, immediately notify the concerned authority in the test centre.

(Any failure to observe these points will result in non-admittance for the examination).

- (7) Please bring the call letter with your photograph affixed thereon, currently valid Photo identity proof in original and a photocopy of the same ID proof which you bring in original THIS IS ESSENTIAL. Please hand over the calletter alongwith photocopy of photo identity proof duly stapled together to the invigilator. Currently valid photo identity proof may be PAN Card/Passport/Driving License/Voter's Card with photograph/ Bank Passbook with photograph/Photo Identity proof issued by a Gazetted Officer on official letterhead /Photo Identity proof issued by a Gazetted Officer on official letterhead /Photo Identity proof issued by a People's Representative on official letterhead/Valid recent Identity Card issued by a recognised College/ University/Aadhaar/E-Aadhaar Card with a photograph/Employee ID/Bar Council Identity card with photograph. Please Note Ration Card and Learner's Driving License will NOT be accepted as valid ID proof for this exam. Please note that your name as appearing on the call letter (provided by you during the process of registration) should exactly match the name as appearing on the photo identity proof. Female candidates who have changed first/last/middle name post marriage must take special note of this. If there is any mismatch between the name indicated in the Call Letter and Photo Identity Proof you will not be allowed to appear for the exam. In case of candidates who have changed their name will be allowed only if they produce Gazette notification/their marriage certificate/affidavit in original and a copy.
- (8) Your responses (answers) will be analysed with other candidates to detect patterns of similarity of right and wrong answers. If in the analytical procedure adopted in this regard, it is inferred/concluded that the responses have been shared and scores obtained are not genuine/valid, your candidature may be cancelled. Any candidate who is found copying or receiving or giving assistance or engaging in any behaviour unbecoming of a candidate will not be considered for assessment. IIMU may take further action against such candidates as deemed fit by it.
- (9) You must bring a ball-point pen with you. You are allowed to bring your own ink stamp pad (blue/black) with you. A sheet of paper will be provided which can be used for rough work or taking down the question number you would like to review at the end of the test before submitting your answers. After the test is over you MUST hand over this sheet of paper to the Test Administrator before leaving the venue.
- (10) The possibility of occurrence of some problem in the administration of the examination cannot be ruled out completely which may impact test delivery and/or result from being generated. In that event, every effort will be made to rectify such problems, which may include movement of candidates, delay in test. The conduct of a reexam is at the absolute discretion of the test conducting body. Candidates will not have any claim for a re-test. Candidates not willing to move or not willing to participate in the delayed process of test delivery shall be summarily rejected from the process. IIMU reserves the right to postpone/cancel the Online Test or alter the date/time/venue of the Online Test at its discretion.
- (11) If the examination is held in more than one session, the scores across various sessions will be equated to adjust for slight differences in difficulty level of different test batteries used across sessions. More than one session is required if the nodes capacity is less or some technical disruption takes place at any centre or for any candidate.
- (12) Anyone found to be disclosing, publishing, reproducing, transmitting, storing or facilitating transmission and storage of test contents in any form or any information therein in whole or part thereof or by any means verbal or written, electronic or mechanical or taking away the papers supplied in the examination hall or found to be in unauthorised possession of test content is likely to be prosecuted.
- (13) Instances for providing incorrect information and/or process violation by a candidate detected at any stage of the selection, process will lead to disqualification of the candidate from the selection process and he/she will not be allowed to appear in any IIMU recruitment process in the future. If such instances go undetected during the current selection process but are detected subsequently, such disqualification will take place with retrospective effect.

- (14) Candidates are advised to take note of "The Public Examinations (Prevention of Unfair Means) Act, 2024".
- (15) Please read instructions related to Social Distancing given below.

# WISH YOU GOOD LUCK!