



METRO LINK EXPRESS FOR GANDHINAGAR AND AHMEDABAD (MEGA) COMPANY LIMITED

ON-LINE EXAMINATION - RECRUITMENT OF MAINTAINERS

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 :

Sr.No.	Test	No. of Questions	Marks	Duration
Part 1	Technical Knowledge	50	125	120 Minutes
	Gujarati Language	20	20	
	Logical Ability & Reasoning	20	20	
	General English	10	10	
	Quantitative Aptitude	5	5	
	Total	105	180	

The time for the test 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. You can attempt any question at any point of time within these 120 minutes. 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 tests of Technical Knowledge, Logical Ability & Reasoning, Quantitative Aptitude and General English. For every wrong answer marked by you, 1/4 of the marks assigned to that question will be deducted as penalty. There will be NO penalty for test of Gujarati Language.**

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

- 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.
- 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.

Note : Cutoffs may be applied in two stages :

- On scores in individual tests (Only candidates scoring minimum 60% marks (50% for SC/ST/OBC) in part-1 (Gujarati language) will be considered eligible)
- On Total Score

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.

SAMPLE QUESTIONS
TECHNICAL KNOWLEDGE

Questions may be based on indicative areas as given below.

1. For Fitter Trade -

1. Safety
2. Marking and Marking Tools
3. Hand Tools
4. Measurement and Measuring Tools
5. Metals
6. Cutting Tools and Operations
7. Forging
8. Heat Treatment
9. Sheet Metal Work
10. Soldering
11. Riveting
12. Welding
13. Lathe Construction
14. Lathe Accessories
15. Laths Tools
16. Screw Threads
17. Drilling and Reaming
18. Grinding
19. Preventive Maintenance

2. For Electrician Trade -

1. Various safety measures involved in the Industry.
2. Identification of Trade
3. Fundamental of electricity.
4. Solders, flux and soldering technique.
5. Ohm's Law and Kirchhoff's law
6. Concepts of circuits types of circuits
7. Chemical effects of electric current
8. Rechargeable dry cells
9. Lead acid cells
10. Magnetism
11. Resistance
12. Working principal and circuits of common domestic equipments and appliances
13. D.C. Machines
14. Armature
15. D.C. Motors
16. Insulating materials
17. Elementary first Aid.

3. For Electronics Trade

1. Hand Tools and their uses
2. Basics of AC Electrical Cables
3. Cell and Batteries
4. Passive Components
5. Transformers
6. AC and DC Measurements
7. Soldering & De-soldering and switches
8. Rectifiers
9. IC Regulators
10. Computer Hardwares, OS, MS Office networking
11. Transistor
12. Amplifier
13. Wave shaping circuits
14. Power Electronic Components
15. MOSFET & IGBT
16. Opto Electronics
17. Basic SMD
18. Basic Gates
19. Combinational Circuits
20. Flip Flogs
21. Electronic circuit simulation software
22. Counter & Shift Registers
23. Op-Amp & Timer 555 Applications
24. Digital Storage Oscilloscope
25. SMD Soldering and De-soldering
26. PCB Rework
27. Protection devices
28. Electrical control circuits
29. Electronic Cables & Connectors
30. Communication electronics
31. Microcontroller (8051)
32. Sensor, Transducers and Applications
33. Analog IC Applications
34. Digital IC Applications
35. Fibre optic communication
36. Digital panel Meter
37. SMPS
38. UPS
39. Solar Power
40. Cell phones
41. LED Lights
42. LCD and LED TV

GUJARATI LANGUAGE

પ્ર.1-2. નીચેના વાક્ય વાંચો અને જુઓ કે એમાં કોઈ વ્યાકરણ / શબ્દવ્યયન વગેરેની ભૂલ છે. જો કોઈ ભૂલ હશે તો વાક્યના કોઈ એક ભાગમાં હશે. ભૂલવાળા ભાગને ઉત્તર રૂપે દર્શાવો. જો કોઈ ભૂલ ન હોય તો આપના ઉત્તરમાં 'ભૂલ નથી' એમ જણાવો. (વિરામચિહ્ન સંબંધી કોઈ ભૂલ હોય તો એને જતી કરો)

(1) બંધારણમાં ફરજોના પ્રકરણાં સહિષ્ણુ નો, / સમાવેશ થવો જોઈએ, આ ફરજનું યોગ્ય પાલન થાય,
(1) (2)
/ તો લોકોના દષ્ટિકોણમાં બદલાવ, / આવશે અને પરિણામે સમાજમાં,
(3) (4)
/ શાંતિ અને એકતાનું વાતાવરણ સ્થપાશે.
(5)

(2) અસીમ પ્રેમની આનંદપૂર્વક, / અકાંક્ષામાં રત હું, / અવિરત ગીતો ગાતા,
(1) (2) (3)
/ આમતેમ ભટકું છું સાથે, / દરેક વૃક્ષોમાં પ્રેમદેવતાની શોધ કરું છું.
(4) (5)

પ્ર.3-4. નીચેના વાક્યમાં બે સ્થાન ખાલી છે, જેથી કંઈ ખૂટે છે એવી ખબર પડે છે. આ બંને ખાલી સ્થાન ભરવા માટે પૂર્ણ રીતે વાક્યના અર્થને શ્રેષ્ઠ રીતે બંધ બેસે એવા બે શબ્દ શોધો.

3) જે વ્યક્તિ પરિવર્તન નો સ્વીકાર કરે છે. એનામાં _____ નો ગુણ હોય છે તેથી એ નવી અને ખાસ કરીને કઠિન પરિસ્થિતિમાં તરત _____ કરી શકે છે.

(1) લવચિકતા, અનુકૂલન (2) પ્રશંસા, અનુકૂળતા (3) ઉદારતા, સ્વીકાર
(4) નમ્રતા, પરિવર્તન (5) વિવેક, પારખાં

4) નવલકથામાં વૈવિધ્યપૂર્ણ પાત્રસૃષ્ટિ વાચકને _____ રાખે છે, પણ કથામાં લેખકની કલમ સોળે કળાએ _____ હોય તો શંકરના પાત્ર નિરૂપણમાં છે.

(1) પકડી, ખુલી (2) જકડી, ખીલી (3) સાંકળી, પ્રાપ્ત
(4) મજબુત, પર્યાપ્ત (5) નિયંત્રિત, જડાયેલી

QUANTITATIVE APTITUDE

- Q.1.** At 10 paise each, how many paise will 6 lemons cost ?
(1) 6 (2) 10 (3) 60 (4) 61 (5) 610
- Q.2.** Which of the following can be exact multiple of 4 ?
(1) 27114 (2) 58204 (3) 48402 (4) 32286 (5) Other than those given as options
- Q.3-6.** 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.
- Q.3.** $42 + 73 + 137 = ?$
(1) 352 (2) 252 (3) 242 (4) 142 (5) Other than those given as options
- Q.4.** $20 \times \frac{1}{2} = ?$
(1) 4 (2) 5 (3) 12 (4) 20 (5) Other than those given as options
- Q.5.** $0.7 \times 0.5 = ?$
(1) 35 (2) 0.35 (3) 0.0035 (4) 0.035 (5) Other than those given as options
- Q.6.** $15 : 25 :: 6 : ?$
(1) 9 (2) 10 (3) 30 (4) 15 (5) Other than those given as options

(A) Details of the On-line Examination Pattern

- (1) The examination would be conducted on-line i.e. on a computer.
- (2) Tests of Technical Knowledge, Logical Ability & Reasoning, Quantitative Aptitude, General English will be in English. Test of Gujarati Language will be in Gujarati
- (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 exam. 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:



You have not visited the question yet.



You have not answered the question.



You have answered the question.



You have NOT answered the question but have marked the question for review.



You have answered the question but marked it for review.

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) Sections will be displayed on the top bar of the screen. Questions in a section can be viewed by clicking on the section name. The section you will view will be highlighted.
- (15) After clicking the **Save & Next** button on the last question for a section, you will automatically be taken to the first question of the next section.
- (16) You can move the mouse cursor over the section names to view the status of the questions for that section.
- (17) You can shuffle between sections and questions anytime during the examination as per your convenience.
- (18) 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 liable for debarment from appearing for examinations for a period as decided by MEGA.
- (19) 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.
- (20) After the expiry of 120 minutes, 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.
- (21) 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, 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** (as printed on the call letter) 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. (Preferably the same photograph as was as uploaded).
- (4) You must scrupulously follow the instructions of the Test Administrator and MEGA 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) 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 call-letter alongwith photocopy of photo identity proof duly stapled together to the invigilator. Currently valid photo identity proof may be PAN Card/Passport/Driving Licence/Voter's Card/Bank Passbook with photograph/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/Aadhar/E-Aadhar Card with a photograph/Employee ID/Bar Council Identity card with photograph. **Please Note - Ration Card will NOT be accepted as valid ID proof for this project.** 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.
- (7) 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. MEGA may take further action against such candidates as deemed fit by it.
- (8) You should bring with you a ball-point pen. 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.
- (9) 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 problem, which may include movement of candidates, delay in test. Conduct of a re-exam is at the absolute discretion of 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.
- (10) 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 are required if the nodes capacity is less or some technical disruption takes place at any centre or for any candidate.
- (11) 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.
- (12) 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 recruitment process of MEGA in the future. If such instances go undetected during the current selection process but are detected subsequently, such disqualification will take place with retrospective affect.

IMPORTANT POINTS TO REMEMBER

You are advised to bring with you the following:

- (i) Call letter with photo affixed thereon and photo ID card in **Original** and photocopy as mentioned in point 6 above.
- (ii) One Ball point pen.

WISH YOU GOOD LUCK