



INFORMATION HANDOUT

ONLINE EXAMINATION FOR RECRUITMENT OF IT SPECIALIST OFFICERS IN BANK OF BARODA (IT – ACoE) IN SCALE II & III (ADVERTISEMENT DATED 16.11.2021)

SR. NO.	NAME OF THE POST	GRADE/SCALE
1	Data Scientist	MMG/S - II
2	Data Scientist	MMG/S - III
3	Data Engineer	MMG/S – II
4	Data Engineer	MMG/S – III

INTRODUCTION

This booklet contains details pertaining to various aspects of the online examination you are going to take and important instructions about related matters. **The answers will be indicated online, hence you should carefully read instructions regarding the method of indicating answers.** You are advised to study this booklet carefully as it will help you in preparing for the examination.

Before appearing for the online examination you should strictly ensure yourself that you fulfill the eligibility criteria stipulated in the advertisement in all respects.

Please note that since this is a competitive examination, mere passing is not adequate. You have to obtain a high rank in the order of merit to get eligibility for future selection process. You should, therefore, put in best efforts in the examination.

ONLINE EXAMINATION

In the online examination there will be following objective test :

Sr. No.	Name of the Tests	No. of Qs.	Maximum Marks	Duration	Version
1	Reasoning	25	25	150 Minutes	Bilingual
2	English Language	25	25		English
3	Quantitative Aptitude	25	25		Bilingual
4	Professional Knowledge	75	150		Bilingual
	TOTAL	150	225		

Section 1, 2 & 3 are qualifying in nature and marks secured in these sections will not be reckoned for final result. The minimum qualifying marks/percentage of marks in each of the section would be 40% for General Category and 35% for Reserved Category. However, the Bank reserves the right to change the minimum qualifying criteria at its sole discretion.

Marks in Section 4 i.e. Professional Knowledge shall be reckoned for shortlisting the candidates for participation in further selection process and drawing the rank list. **There will be penalty for wrong answers in this section (i.e. section 4). For each question for which a wrong answer has been given by the candidate, 0.25 of the marks assigned to that question will be deducted as penalty to arrive at corrected score.** If a question is left blank, i.e. no answer is given by the candidate; there will be no penalty for that question.

SAMPLE QUESTIONS

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.

REASONING

Q.1-5. Read the information given below and answer the questions.

Six plays A, B, C, D, E and F of a famous playwright are to be staged one on each day from Monday to Saturday. The schedule of the plays is to be in accordance with the following.

- (1) A must be on the immediately previous day of the on which E is staged.
- (2) C must not be staged on Tuesday.
- (3) B must be on a day which immediately follows the day on which F is staged.
- (4) D must be staged on Friday only and should not be immediately preceded by B.
- (5) E must not be staged on the last day of the schedule.

Q.1. Which of the following is the schedule of plays, with the order of their staging from Monday ?

- (1) E A B F D C (2) A F B E D C (3) A F B C D E
(4) F A B E D C (5) Other than those given as options

Q.2. Play C cannot definitely be staged on which of the following days in addition to Tuesday ?

- (1) Monday (2) Wednesday (3) Thursday (4) Friday (5) Saturday

Q.3. Play D is between which of the following pairs of plays ?

- (1) C and E (2) E and F (3) A and E (4) B and E (5) C and F

- Q.4.** Which of the following plays is on Monday ?
 (1) E (2) A (3) F (4) B (5) C
- Q.5.** Which of the following plays immediately follows B ?
 (1) F (2) E (3) D (4) C (5) A

ENGLISH LANGUAGE

Q.1-6. In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

The true (1) of rights is duty. If we all (2) our duties, rights will not be (3) to seek. If leaving duties unperformed we run (4) rights, they will (5) us like an elusive person. The more we pursue them, the farther (6) they fly.

- Q.1.** (1) end (2) source (3) joy (4) purpose (5) power
- Q.2.** (1) deny (2) devote (3) discharge (4) imagine (5) fulfill
- Q.3.** (1) far (2) close (3) easy (4) against (5) common
- Q.4.** (1) as (2) after (3) at (4) from (5) for
- Q.5.** (1) hold (2) grab (3) fight (4) escape (5) chase
- Q.6.** (1) off (2) can (3) did (4) could (5) towards

QUANTITATIVE APTITUDE

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 Examination Marks	INTERVIEW 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

- Q.1.** How many candidates did obtain more than 69 percent marks and above in both written examination and interview ?
 (1) 22 (2) 49 (3) 13 (4) 9 (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 (2) above 70 (3) above 36
 (4) above 63 (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
- Q.4-5. Directions :** Given below is a table showing percentages out of a total of 700 employees ranking six attributes that help promotion. Rank I is the highest. Study the table carefully and answer the questions that follow :

Attribute	% of Employees Giving Different Ranks					
	I	II	III	IV	V	VI
Seniority	32	17	22	19	5	5
Perseverance	14	19	17	9	27	14
Efficiency	15	19	21	14	14	17
Intelligence	10	14	10	14	17	35
Honesty	24	17	7	9	27	16
Sociability	5	14	23	35	10	13

- Q.4.** Which attribute for promotion has received the highest rank ?
 (1) Perseverance (2) Seniority (3) Honesty (4) Sociability (5) Efficiency
- Q.5.** How many employees gave rank III to intelligence ?
 (1) 119 (2) 98 (3) 77 (4) 70 (5) 10

PROFESSIONAL KNOWLEDGE

DATA SCIENTIST – SCALE II

- Q.1.** _____ function in R is used to create a vector for multiple parameters.
 (1) c() (2) par() (3) param() (4) rm() (5) list()
- Q.2.** Which module in Python supports Regular Expressions?
 (1) RegEx (2) PyReg (3) re (4) pyRegEx (5) RegExp

DATA SCIENTIST – SCALE III

- Q.1.** Which collection is ordered, mutable, and allows duplicate members?
 (1) SET (2) LIST (3) TUPLE (4) DICTIONARY (5) STRING
- Q.2.** Related to R, In Barplot:
 > barplot(H,xlab,ylab,main, names.arg,col)
 H is _____
 (1) Vector or matrix (2) Horizontal bar (3) Dimension of barplot
 (4) Title of graph (5) Name appearing under each bar

DATA ENGINEER – SCALE II

- Q.1.** _____ is the primary interface for a user to describe a MapReduce job to the Hadoop framework for execution.
 (1) Map Parameters (2) Memory Conf (3) Partitioner (4) Output Collector (5) Job Conf
- Q.2.** _____ has the world's largest Hadoop cluster.
 (1) Amazon (2) Apple (3) Microsoft (4) Google (5) Facebook


DATA ENGINEER – SCALE III


- Q.1.** According to analysts, for what can traditional IT systems provide a foundation when they're integrated with big data technologies like Hadoop?
 (1) Data warehousing and business intelligence (2) Big data management and data mining
 (3) Management of Hadoop clusters (4) Collecting and storing unstructured data
 (5) Data Science and Architect
- Q.2.** Hadoop is a framework that works with a variety of related tools, whereas the cohorts include: _____
 (1) MapReduce, Hive and Cassandra (2) MapReduce, Heron and Trumpet
 (3) MapReduce, Hive and HBase (4) MapReduce, Hummer and Iguana
 (5) MapReduce, MySQL and Google Apps


DETAILS OF THE ONLINE EXAMINATION PATTERN


- Total duration of examination is 150 minutes. [20 minutes compensatory time for every 60 minutes (1 hour) of the examination time for candidates with disability eligible for compensatory time.]
- The clock will be set at the server. The countdown timer in the top right corner of screen will display the remaining time available for you to complete the examination. When the timer reaches zero, the examination will end by itself. You will not be required to end or submit your examination.


3. The Question Palette displayed on the right side of screen will show the status of each question using one of the following symbols:

 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.

 The question(s) "Answered and Marked for Review" will be considered for evaluation.

The Marked for Review status for a question simply indicates that you would like to look at that question again. *If a question is answered and Marked for Review, your answer for that question will be considered in the evaluation.*

4. You can click on the “>” arrow which appears to the left of question palette to collapse the question palette thereby maximizing the question window. To view the question palette again, you can click on “<” which appears on the right side of question window.
5. You can click on your “Profile” image on top right corner of your screen to change the language during the exam for entire question paper. On clicking of Profile image you will get a drop-down to change the question content to the desired language.
6. You can click on  to navigate to the bottom and  to navigate to the top of the question area, without scrolling.

Navigating to a Question:

7. To answer a question, do the following:
- Click on the question number in 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.
 - Click on **Save & Next** to save your answer for the current question and then go to the next question.
 - Click on **Mark for Review & Next** to save your answer for the current question, mark it for review, and then go to the next question.

Answering a Question :

8. Procedure for answering a multiple choice type question:
- To select your answer, click on the button of one of the options
 - To deselect your chosen answer, click on the button of the chosen option again or click on the **Clear Response** button
 - To change your chosen answer, click on the button of another option
 - To save your answer, you MUST click on the **Save & Next** button
 - To mark the question for review, click on the **Mark for Review & Next** button. *If an answer is selected for a question that is Marked for Review, that answer will be considered in the evaluation.*
9. To change your answer to a question that has already been answered, first select that question for answering and then follow the procedure for answering that type of question.
10. Note that ONLY Questions for which answers are saved or marked for review after answering will be considered for evaluation.

Navigating through sections:

11. Sections in this question paper are displayed on the top bar of the screen. Questions in a section can be viewed by clicking on the section name. The section you are currently viewing is highlighted.
12. Candidate can view the corresponding section summary as part of the legend that appears in every section above the question palette.

Submitting the exam:

13. After the expiry of time the candidates will not be able to attempt any question or check their answers. On completion of test time, answers of the candidates would be saved automatically by the computer system even if they have not clicked the "Submit" button.
14. Please note :
 - a) Candidates will not be allowed to "finally submit" unless they have exhausted the actual test time of the examination.
 - b) Under no circumstances should a candidate click on any of the 'keyboard keys' during the test once the exam starts as this will lock the exam.

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 Examination to confirm the location so that you are able to report **on time** (as printed on the call letter and/or communicated via SMS & email) 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 uploaded).
- (4) You must scrupulously follow the instructions of the Test Administrator and Bank 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, a photocopy of photo identity proof stapled with it and same (currently valid) photo ID in original - **THIS IS ESSENTIAL**. Please submit the call-letter along with photocopy of photo identity proof duly stapled together by putting it in the designated drop box. Currently valid photo identity proof may be PAN Card/Passport/Permanent Driving License/Voter's Card with photograph/Bank Passbook with photograph/Photo Identity proof with photograph issued by a Gazetted Officer or People's Representative along with a photograph (on official letterhead)/Valid recent Identity Card issued by a recognised College/University/Aadhar Card/E-Aadhar Card with a photograph/Employee ID in original/Bar Council Identity card with photograph). **Please Note - Ration Card and Learner's Driving License will NOT be accepted as valid ID proof.** 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 examination. In case of candidates who have changed their name will be allowed only if they produce Gazette notification/their marriage certificate/affidavit. Photo ID should be valid as on the day of the examination.
- (7) Do not leave your seat unless you are allowed.
- (8) Travelling Allowance not admissible. No travelling allowance or other expenses in connection with the examination will be paid.
- (9) Bank would be analyzing the responses (answers) of individual candidates with other candidates to detect patterns of similarity of right and wrong answers. If in the analytical procedure adopted by Bank in this regard, it is inferred/ concluded that the responses have been shared and scores obtained are not genuine/ valid, Bank reserves right to cancel the candidature of the concerned candidates without any notice and the result of such candidates (disqualified) will be withheld. No objection in this regard shall be entertained.
- (10) You should bring with you a ball-point pen, ink stamp pad and glue. Sheets 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** submit these sheets of paper by putting them in the designated drop box before leaving the venue. You must write your Registration Number and Roll No. on the rough sheets.
- (11) 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-examination is at the absolute discretion of Bank. Candidates not willing to move or not willing to participate in the delayed process of test delivery shall be summarily rejected from the process.

- (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 recruitment process of the Bank 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) The PWBD candidates, who want to use facility of scribe, are required to submit a Declaration form (Scribe declaration form) that can be downloaded from Bank's website.
- (15) Following items will not be allowed inside the examination hall (Lab) :
- Any stationery item like textual material (printed or written), bits of papers, Geometry/Pencil Box, Plastic Pouch, Calculator, Scale, Writing Pad, Pen Drives, Log Table, Electronic Pen/Scanner, Any communication device like Mobile Phone, Bluetooth, Earphones, Microphone, Pager, Health Band etc. Other items like Goggles, Handbags, Hair-pin, Hair-band, Belt, Cap, Any watch/Wrist Watch, Camera, Any metallic item, Any eatable item opened or packed, water bottle (only transparent water bottle is allowed), Any other item which could be used for unfair means for hiding communication devices like camera, bluetooth devices etc. Any candidate who is found either copying or receiving or giving assistance will be disqualified.
- You are advised to avoid wearing ornaments like Ring, Earrings, Nose-pin, Chain/Necklace, Pendants, Badge, brooch etc.
- After AarogyaSetu status display at the entry gate, candidates will be required to switch off their mobile phones, and deposit it at the designated location, to be collected while exiting.
- (16) Candidates should not furnish any particulars that are false, tampered, fabricated and should not suppress any material information while submitting online application. At the time of examination or in a subsequent selection procedure, if a candidate is (or has been) found guilty of – (i) using unfair means or (ii) impersonating or procuring impersonation by any person or (iii) misbehaving in the examination hall or disclosing, publishing, reproducing, transmitting, storing or facilitating transmission and storage of contents of the test(s) or any information therein in whole or part thereof in any form or by any means, verbal or written, electronically or mechanically for any purpose or (iv) resorting to any irregular or improper means in connection with his/ her candidature or (v) obtaining support for his/ her candidature by unfair means, or (vi) carrying mobile phones or similar electronic devices of communication in the examination hall – such a candidate may, in addition to rendering himself/ herself liable to criminal prosecution, be liable :
- to be disqualified from the examination for which he/ she is a candidate
 - to be debarred either permanently or for a specified period from any examination conducted by Bank

IRIS Scan

Photograph and IRIS will be captured at the examination venue. The photo captured will be matched with the photo uploaded by the candidate in the application. You must NOT change your appearance from the photo uploaded by you.

IRIS capture will be done before the commencement of the examination and verification will be done at the end of examination. Decision of the IRIS 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 IRIS scanning / verification on any occasion may lead to cancellation of candidature. With regards to the same, please note the following:

(a) 'LEFT EYE (IRIS)' will be captured for all the candidates.

(b) Candidates should remove Contact Lenses and Spectacles while capturing IRIS. Candidates are advised to avoid wearing contact lenses and prefer spectacles.

(c) There is no touch involved in IRIS scanning. Half feet distance between scanner and eye will be maintained.

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

For VI candidates, Biometric capture of right thumb impression will be done. If fingers are coated (stamped ink/mehndi/coloured...etc.), ensure to thoroughly wash them so that coating is completely removed before the examination day. (Any failure to observe these points will result in non-admittance for the examination). **Decision of the Biometric verification authority with regard to its status (matched or mismatched) shall be final and binding upon the candidates.**

SOCIAL DISTANCING MODE CONDUCT OF EXAM RELATED INSTRUCTIONS

- 1 Candidate is required to report at the exam venue strictly as per the time slot mentioned in the Call Letter AND/OR informed via SMS/Mail on their registered mobile number/mail prior to exam date. It is expected that candidate strictly adhere to this time slot – as entry into the exam venue will be provided based upon the individual's time slot ONLY. Late comers will not be allowed to take the test.
- 2 Mapping of 'Candidate Roll Number and the Lab Number' will NOT be displayed outside the exam venue, but the same will be intimated to the candidates individually at the time of entry of the candidate to the exam venue.
- 3 Items permitted into the venue for Candidates
Candidates will be permitted to carry only certain items with them into the venue.
 - a. **Mask (WEARING A MASK is COMPULSORY)**
 - b. **Gloves**
 - c. **Personal transparent water bottle (Candidates should bring their own water bottle)**
 - d. **Personal hand sanitizer (50 ml)**
 - e. **A simple pen, ink stamp pad and glue**
 - f. **Exam related documents (Call Letter and Photocopy of the photo ID card stapled with it, same ID Card in Original.) The name on the ID and on the Call Letter should be exactly the same.**
 - g. **In case of Scribe Candidates - Scribe form duly filled and signed with Photograph affixed.****No other Items are permitted inside the venue.**
- 4 Candidate should not share any of their personal belonging/material with anyone.
- 5 Candidate should maintain safe social distance with one another.
- 6 Candidate should stand in the row as per the instructions provided at venue.
- 7 If candidate is availing services of a scribe, then scribe also should bring their own Gloves, N95 Mask, sanitizer (50ml) and transparent water bottle. Wearing a mask is compulsory. Both candidate and Scribe will require to be wearing N95 Mask.
- 8 A Candidate must have AarogyaSetu App installed on his mobile phone. The AarogyaSetu status must show candidate's risk factor. A candidate will have to display this status to the Security Guard at the entry into the exam venue. In case a candidate does not have a smart phone, he/she will have to bring in a signed declaration to this effect (declaration is provided along with Call Letter) and show the same to the Security Guard at the entry into the exam venue. Candidates with Moderate or High Risk Status on AarogyaSetu App will not be allowed entry. In case any of the responses in declaration suggest COVID 19 infection/symptoms, the candidate will not be permitted inside the exam venue. (If candidate is availing services of a Scribe, then Scribe should also follow the same instructions.)
- 9 After AarogyaSetu status display at the entry gate, candidates will be required to switch off their mobile phones, and deposit it at the designated location, to be collected while exiting
- 10 All candidates (and Scribe, if applicable) will be checked with Thermo guns at the entry point for temperature. In case, any person is observed to be having above normal temperature (> 99.14° F) or displaying any symptoms of the virus, they will not be allowed entry into the venue.
- 11 In candidate registration :
 - a. **Candidate registration will be done through photo capture and IRIS Scan. (Biometric capture of Right thumb impression for VI candidates). Photo captured will be matched with the photo uploaded by you in the application. You must NOT change your appearance from the photo uploaded by you.**
 - b. **Photograph and IRIS capture will be done while candidate is standing.**
 - c. **Seat number will be given to the candidate.**
- 12 Rough sheet, call letter and ID proof management
 - **Rough sheet(s) kept at each candidate desk will be used by candidate.**
 - **Candidate must follow the instructions related to dropping the call letter with the ID proof copy in the boxes provided at the exit of lab/venue while leaving or at the designated place. Those candidates who avail the services of Scribe should submit Scribe form also along with the Call Letter and ID proof copy**
 - **Candidate must drop the rough sheets, call letter, ID proof copy in the boxes provided at the exit of lab/venue while leaving or at the designated place indicated by Exam officials.**
- 13 Post Examination Controls
 - On completion of examination, IRIS verification (Right Thumb Biometric verification for VI candidates) will be done for each candidate.
 - The candidates will be permitted to move out in an orderly manner one candidate at a time. Please wait for instructions from invigilator and do not get up from your seat until advised.

WISH YOU GOOD LUCK