



BUREAU OF INDIAN STANDARDS

ON-LINE EXAMINATION - RECRUITMENT OF SCIENTIST-B

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 Question	Marks	Time
1.	Reasoning	50	50	Composite time of Two Hours
2.	English Language	50	50	
3.	Technical Knowledge in concerned discipline	50	50	
4.	Quantitative Aptitude	50	50	
	Total	200	200	

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. All the tests except Test of English Language will be made available in English and Hindi. Test of English Language will be made available only in English. You can attempt any question from 1 to 200 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 every wrong answer marked by you, 1/4th of the marks assigned to that question will be deducted as penalty.**

Candidates will have to pass in each of the objective tests.

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.

- Testwise scores and scores on total is reported with decimal points upto two digits.

Note : Cutoffs may be applied in two stages :

- On scores in test of Technical Knowledge in concerned discipline
- 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.

REASONING

This is a test to see how well you can think. It contains questions of various kinds. Here are some sample questions.

- Q.1.** 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.
(1) T (2) P (3) M (4) S (5) X
- Q.2.** Some leaders are dishonest. Satyapriya is a leader. Which of the following inferences definitely follows from these two statements ?
(1) Satyapriya is honest (2) Satyapriya is dishonest
(3) Some leaders are honest (4) Leaders are generally dishonest
(5) Satyapriya is sometimes dishonest
- Q.3.** If the letters of the following alphabet interchange positions, so that A takes the place of Z and Z takes the place of A; B takes the place of Y and Y takes the place of B and so on, what will be the 13th letter from the right ?
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
(1) M (2) N (3) O (4) L (5) Other than those given as options
- Q.4.** If the first and the second letters in the word 'DEPRESSION' were interchanged, also the third and the fourth letters, the fifth and sixth letters and so on, which of the following would be the seventh letter from the right ?
(1) R (2) O (3) S (4) I (5) Other than those given as options
- Q.5.** In a row of girls, if Seeta who is 10th from the left and Lina who is 9th from the right interchange their seats, Seeta becomes 15th from the left. How many girls are there in the row ?
(1) 16 (2) 18 (3) 19 (4) 22 (5) Other than those given as options
- Q.6-10.** 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.6.** 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.7.** 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.8.** 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.9.** Which of the following plays is on Monday ?
(1) E (2) A (3) F (4) B (5) C
- Q.10.** Which of the following plays immediately follows B ?
(1) F (2) E (3) D (4) C (5) 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, synonyms, antonyms, sentence completion, comprehension of a passage etc.

- Q.1-2.** Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is 'No error'. (Ignore the errors of punctuation, if any).
- Q.1.** Most of the third world / country are experiencing / the ethnic or communal problem/
(1) (2) (3)
in varying degrees. / No error.
(4) (5)

- Q.2.** The regaining of freedom / as we well know has given rise for / many dormant issues /
 (1) (2) (3)
 and conflicts in our society. No error.
 (4) (5)
- Q.3-4.** Pick out from the words given below each sentence the word which would complete the sentence correctly and meaningfully.
- Q.3.** Continuous unemployment has induced in the people a kind of _____ which is most depressing.
 (1) laziness (2) encouragement (3) satisfaction (4) anger (5) awakening
- Q.4.** He wants me to look _____ his garden during his absence.
 (1) at (2) over (3) after (4) into (5) from
- Q.5-10.** 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 (5) of rights is duty. If we all (6) our duties, rights will not be (7) to seek. If leaving duties unperformed we run (8) rights, they will (9) us like an elusive person. The more we pursue them, the farther (10) they fly.
- Q.5.** (1) end (2) source (3) joy (4) purpose (5) power
Q.6. (1) deny (2) devote (3) discharge (4) imagine (5) fulfill
Q.7. (1) far (2) close (3) easy (4) against (5) common
Q.8. (1) as (2) after (3) at (4) from (5) for
Q.9. (1) hold (2) grab (3) fight (4) escape (5) chase
Q.10. (1) off (2) can (3) did (4) could (5) towards

TECHNICAL KNOWLEDGE IN CONCERNED DISCIPLINE

Questions in the Technical Knowledge in concerned discipline Test will be based on the subject of specialisation.

QUANTITATIVE APTITUDE

This test is designed to measure how fast and accurate you are in dealing with numbers, viz. computation, quantitative reasoning, interpretation of tables and graphs.

Directions : 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.1.** $42 + 73 + 137 = ?$
 (1) 352 (2) 252 (3) 242 (4) 142 (5) Other than those given as options
- Q.2.** $20 \times \frac{1}{2} = ?$
 (1) 4 (2) 5 (3) 12 (4) 20 (5) Other than those given as options
- Q.3.** If the profit made by selling a pen for Rs.10 is as much as its cost, what is the cost price of the pen ?
 (1) Rs.3/- (2) Rs.5/- (3) Rs.10/- (4) Rs.20/- (5) Other than those given as options

Also, there may be some questions based on graphs and tables.

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 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
- Q.6.** Which attribute is considered the least important for promotion ?
 (1) Honesty (2) Intelligence (3) Perseverance (4) Efficiency (5) Sociability

(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 will be 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 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 Bureau of Indian Standards.
- (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 Bureau of Indian Standards 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 or post office Passbook with photograph/Valid recent Identity Card issued by a recognised College/University/Aadhar Card with a photograph/Employee ID/Bar Council Identity Card with photograph. **Please Note - Ration Card and E-adhar 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. The Bureau of Indian Standards 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) Please note that a candidate is allowed to appear only once in the online examination. Multiple appearance in online examination will result in cancellation of candidature. In case more than one call letter has been generated, candidates are advised to appear only once on the date and at the time mentioned on the respective call letter. All other call letters are to be surrendered.
- (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 Bureau of Indian Standards 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 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.
- (ii) One Ball point pen

WISH YOU GOOD LUCK