



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान भोपाल

Indian Institute of Science Education and Research Bhopal

भर्ती अनुभाग / Recruitment Section

Recruitment Methodology

- 1) All the positions are filled up through Direct Recruitment against regular positions with initial contract in lieu of separate probation / Tenure / Deputation / Promotion through selection under limited departmental quota of upto 50% vacancies (upto the entry level Group A positions) at each instance, against sanctioned vacancies.
- 2) If applicants are not available on direct recruitment, the posts may be filled-up on Short-term Contract / Transfer-on-absorption basis, wherever required and advertised so.
- 3) **Shortlisting at Level -1 for all the posts**

Screening of the applications received will be done by an Institute level committee to shortlist the candidates to be called for screening test/skill test/written test/computer skill test at level -2. At this level, the committee at its own discretion may restrict the maximum number of candidates to be shortlisted for participating in Level-2 screening. However, short-listing may be done duly deciding higher cut-offs to restrict the number of candidates at each level. If the sufficient/enough number of eligible candidates as per advertisement are not available, the committee may go for a relaxed criteria in terms of the age, percentage of marks, and number of years of experience etc. Therefore, the candidates are advised to apply furnishing all details of qualifications and experience.

The Shortlisting Committee shall devise its own criteria for shortlisting the candidates and optimize the number for inviting them for Screening Test followed by interview. The decision of Shortlisting Committee is final in terms of shortlisting criteria. The shortlisted candidates shall be conveyed by speed post or email for attending the selection process.

In the event of number of applications being large, the short-listing committee of the Institute will adopt a short-listing criteria to restrict the number of candidates to be called for Screening Test and or interview to a reasonable number by one or more of the following methods:

- (i) On the basis of higher educational qualifications than the minimum prescribed in the advertisement.
- (ii) On the basis of higher experience in the relevant field than the minimum prescribed in the advertisement.
- (iii) On the basis of desirable qualifications and / or desirable experience.
- (iv) By counting experience before and / or after the acquisition of essential qualifications.
- (v) Experience gained in relevant posts under Central Government Educational and Research Institutes on regular basis against sanctioned positions.
- (vi) Rejecting the incomplete applications.
- (vii) By holding a Screening Test of qualifying nature only for shortlisting the candidates.

A. Selection Procedure for Group ‘A’ positions:

Selection by interview only: The shortlisted candidates will be called for screening test (optional, only for shortlisting the candidates without any weightage for interview, in case of large number of applications shortlisted) and or personal interview before the selection committee on a given date and time conveying through e-mail and speed post only. There will not be any request entertained for change of date of screening test/interview by the individual candidates under any circumstances. The selection committee will make a panel of selected and waitlisted candidates based on performance in the interview on common consensus basis for approval of recommendations by the appointing authority. The results of the interview will be notified to the selected candidates in writing after approval of the competent/appointing authority. No correspondence will be entertained during the process of the selection.

The interview-cum-personal discussion/presentation by the shortlisted candidates will be the decisive point for selection of the candidate. The selection committee at its own discretion may also arrange for a group discussion of the candidates invited for interviews, besides asking them to make a Power Point Presentation (PPT) before the selection committee. However, the committee may dispense with the Power Point Presentation (PPT) and or the group discussion, at its own discretion and conduct the interview alone.

The selection committee shall make its recommendations to the Chairperson, Board or Director as the case may be with the names of the selected candidates being arranged in order of merit.

If need be, the selection committee also may draw a waiting list with sufficient number of eligible candidates from each category who may be given the offer of appointment subject to their meeting/fulfilling all eligibility requirements only in case the selected candidates refuse or fail to join within the stipulated time, which may be upto 6 months in normal circumstances. The waitlist will stand ceased, once all the selected candidates have accepted and joined the positions offered. The waitlist is not a panel of candidates for filling the future vacancies arising out of resignations/ removals/ retirements/ promotions etc. after the interviews/selections are completed against each advertisement.

The activation of waiting list will not be automatic but subject to approval of the competent authority/as per Institute requirements and valid only for six months from the date of announcement of interview.

B. Selection Procedure for Group B and C Positions:

1. Shortlisting of the applications (Level – 1):

The applications received shall be shortlisted by a committee of experts to shortlist the candidates based on the qualifications and experience advertised. Such candidates will be invited for attending a Screening Test of qualifying nature only followed by qualifying / skill / physical standards test for qualifying the people for interview duly short-listing the candidates, if the number of people to be interviewed is proportionately large, as detailed under the selection process.

2. Shortlisting at Level – 2

At this level the Institute may conduct computer based descriptive / objective Screening Test/computer skill tests of qualifying nature only for all candidates shortlisted in Level-1 screening to further shortlist the candidates and bring them on a common platform. However, no weightage shall be passed on to the next level that is Level-3. The screening test of any nature would be of qualifying type only and is independent in itself. To ensure availability of required number of candidates from reserved category (SC/ST/OBC/PwD etc.) a relaxed criteria with lower cut-off marks (SC/ST:10%, OBC/PwD: 5%) may be applied.

The qualifying test will be used only for the purpose of optimising the number of candidates attending the interview and the same would be of qualifying nature to short-list at least three people for each position available. If sufficient number of candidates are not available for attending the interview after short-listing at level-2, the selection committee may decide to invite all the people present in the qualifying test for personal discussion-cum-interview, in order to encourage more participation in the final level of selection process.

The suggested methodology along with suggestive syllabus for computer based descriptive / objective Screening Test / Physical Standard Test / Computer Skill Test of qualifying nature with minimum cut-off marks for each category may be as follows:

[I] Computer based Screening Test of composite and qualifying nature for drawing a shortlist of candidates for interview:

S. No	Name of the Test	Suggestive description of contents of Test	Upto a Maximum Marks of	Maximum duration
<u>PART-I</u>				
1	General Intelligence	Computer based Objective / Descriptive / Demonstrative test to know the general intelligence of the candidate in : (1) English and / or Hindi (2) Quantitative Ability (3) General Studies / current affairs / G.K. (4) Logical / Verbal Reasoning / Qualitative aptitude (5) IT / Computer Software and Hardware (6) Any other relevant area.	100	1 Hr. to 3 Hrs. duration per session
2	Domain Knowledge	Theoretical Objective / Descriptive / Demonstrative type of Screening Test to assess the theoretical domain knowledge of the candidate in the relevant area specific to the job. For Example: (1) Govt. of India Rules for ministerial / administrative jobs. (2) Instrumentation / Lab. Systems for scientific jobs / Technical jobs. (3) Civil / Electrical / other areas of Engineering for engineering positions.		
<u>PART-II (Optional)</u>				
3	Practical / Descriptive domain based Experimental Test	1. Practical / Experimental / Analytical / Model / Prototype Development / Descriptive and domain based.	50	1 Hr. to 3 Hrs. duration per session

[II] Computer / Skill Test of qualifying nature without any weightage for assessment:

S. No.	Name of the Test	Suggestive description of contents of Test	Maximum duration
1	Computer Skill Test	Objective / Descriptive / Demonstrative type: 1. General computer processing ability in MS-Office like Word processing, Excel, Power points PPTs etc., Operating Systems. Both in Hindi and English. 2. Professional software / hardware systems relevant to the post such as CAD / CAM / Lab VIEW / MATLAB / Tally etc. 3. Any other relevant area specific to the post. * The test may be repeated within 30 days for those clearing the Screening Test, before offering the appointment.	1 Hr. to 3 Hrs. duration per session
2	Group Discussion / PPTs [Optional]	1. Analysis of given problem through Group discussion / PPTs case analysis. The test will be from one or more or from all the above areas, wherever applicable.	
3	Physical Standards Test	Test for Physical Standards as per the requirements of the post, wherever applicable.	

Trade Test is optional, subject to the decision of the selection committee after conducting the screening test. The selection committee at its own discretion may conduct a Trade Test and evaluate the performance in a combined fashion to shortlist the candidates for attending the computer skill test followed by interview. However, computer skill test may be dispensed with, if the Screening Test / Trade Tests are conducted on computer system itself. The marks / Grades obtained in the screening test / trade test / computer skill test at each level shall not be passed on to the next level, since they are meant for shortlisting the candidates through elimination process and optimize the candidates to be interviewed by the selection committee. No claims for giving cumulative weightage for the (a) Higher academic qualifications (b) Length of experience (c) performance in the preliminary / advanced level screening / trade tests / computer skill tests etc. shall be entertained at any level.

[III] Indicative Syllabus for all Group A, B & C positions (Descriptive / Objective in Hindi / English):

- a) **General Intelligence & Reasoning:** It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic

number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. the topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, coding & decoding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/pattern-folding & unfolding, Figural Pattern – folding and completion, indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thing, Emotional Intelligence, Social Intelligence, Other sub-topics, if any.

- b) **General Awareness:** Questions in this component will be aimed at testing the candidate's general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining History, Culture, Geography, Economic Scene, General Policy & Scientific Research.
- c) **Quantitative aptitude:** The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals, fractions and relationships between numbers, Percentage. Ration & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & Work, Basic algebraic identities of School Algebra & Elementary surds, Graphs of Linear Equations, Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons, Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square base, Trigonometric ration, Degree and Radian Measures, Standard Identities, Complementary angles, Heights and Distances, Histogram, Frequency, polygon, Bar diagram & Pie chart.
- d) Government of India Rules and Institute's Act / Statutes / Rules.
- e) Domain area / trade related subjects as per the area of expertise required.
- f) The medium of examination for Screening Test shall be English only. However, in order to test the knowledge of candidate in Hindi, suitable provisions will be made for translation of given texts from Hindi to English and vice-versa. The candidates should answer the questions asked in the respective language only. Example: If the question is devised in English, the answer should be in English only. In the similar fashion, if the question is devised in Hindi, the answer should be in Hindi only.

IV. The minimum qualifying Criteria:

- 1) The minimum Cut off percentage in the Composite type of Screening Test mentioned at item No. I above is 50% UR category, 45% for OBC and 40% for SC/ST. The cut-off for PwD will be as applicable to the respective vertical category such as UR / OBC (NCL) / SC / ST, as the case may be. Only those securing marks above the minimum cut off percentage of marks shall be eligible for attending the qualifying type of Computer / Skill Test.
- 2) Computer Skill Test is of qualifying nature without any weightage for assessment.
- 3) However, the appointing authority may relax the cut-off / minimum qualifying % for each category of posts based on the requirements of the post and also to ensure availability of sufficient number of candidates, if there is any shortage in any category like UR/OBC (NCL)/SC/ST/PwD etc.

3. Selection by interview only

The 1st Statutes of IISERs which received the assent of the Hon'ble President of India on August 6, 2014 vide Statutes No. 16.10 states that *“The Selection Committee shall examine the credentials of all persons who have applied and may also consider other suitable names suggested, if any, by a member of the Selection Committee or brought otherwise to the notice of the Committee. The Selection Committee may interview any of the candidates, as it thinks fit, and shall, at the discretion of its Chairperson, cause a written test or tests including an oral presentation to be held for all or some of the candidates as the Chairperson may think fit, and shall make its recommendations to the Chairperson, Board or the Director, as the case may be, with the names of the selected candidates being arranged in order of merit.”*

Therefore, the screening tests of general nature are only for the purpose of shortlisting the candidates for interview and optional at the discretion of the Selection Committee. The screening tests are purely of qualifying nature without any composite weightage, purely in order to reduce the number of candidates to be invited for the interview based on which selections are made.

Therefore, all the selections are made through the recommendations of the Selection Committee based on performance in interview which is intended to test various aspects of personality quotient, domain knowledge and suitability of the candidates for ready deployment for job / assignment with relevant experience, following non-availability of long term induction training or job internships or apprenticeship / probationary training. At all levels the candidates with suitable experience only shall be shortlisted, unlike selection of fresher through competitive exams. Therefore, the selection is termed as “Direct Recruitment on all India basis otherwise than by Open Competition.”

The shortlisted candidates from the level 1 and 2, will be called for personal interview before the selection committee on a given date and time conveying in writing through e-mail and speed post only. There will not be any request entertained for change of date of screening test/interview by the individual candidates under any circumstances. The selection committee shall draw a panel of selected and waitlisted candidates based on the performance in the interview on common consensus basis in the order of merit for all Groups A, B & C positions. The results of the interview will be notified in writing to the selected candidates after approval of the competent/appointing authority. No correspondence will be entertained during the process of the selection.

The interview-cum-personal discussion/presentation by the shortlisted candidates from Level-1 or Level-2 (Optional) will be the decisive point for selection of the candidate. The selection committee at its own discretion may also arrange for a group discussion of the candidates invited for interviews, besides asking them to make a Power Point Presentation (PPT) before the selection committee. However, the committee may dispense with the Power Point Presentation (PPT) and or the group discussion, at its own discretion and conduct the interview alone.

The selection committee shall draw a list of the selected candidates in the order of merit in the interview from each category. If required, the selection committee also may draw a waiting list with sufficient number of eligible candidates from each category who may be given the offer of appointment subject to their meeting/fulfilling all eligibility requirements only in case the selected candidates refuse or fail to join within the stipulated time, which may be upto 6 months in normal circumstances. The waitlist will stand ceased, once all the selected candidates have accepted and joined the positions offered against the position announced in the advertisement. The waitlist is not a panel of candidates for filling the future vacancies arising out of resignations/ removals/ retirements/ promotions etc. after the interviews/selections are completed against each advertisement.

The activation of waiting list will not be automatic but subject to approval of the competent authority/as per Institute requirements and valid for 6 months only from the date of interview.
