Meeting with Exam Conducting Agencies (ECA) for conduct of Computer Based Tests

Introduction

There are 21 Railway Recruitment Boards (RRBs), having pan-India presence, undertake recruitment of various categories in Group 'C' posts on Indian Railways. They are under the control of the Railway Recruitment Control Board (RRCB), which was set up in the Ministry of Railways to coordinate and streamline the working of RRBs.

RRBs have completely switched over to digital mode and almost all the recruitment processes which involve calling applications, conduct of examinations, evaluation of candidates, verification of documents and formation of panel of eligible candidates are Computer Based. The Computer Based Tests (CBTs) are conducted in 15 languages namely Hindi, English, Assamese, Bengali, Gujarati, Kannada, Konkani, Marathi, Manipuri, Malayalam, Odia, Punjabi, Tamil, Telugu and Urdu.

Considering that Indian Railways is the biggest employer in the country, each Centralised Employment Notification (CEN) attracts huge number of applications.

### Examination Details of notifications issued since 2018-19

<table>
<thead>
<tr>
<th>CEN</th>
<th>No of vacancies</th>
<th>Number of applications received</th>
<th>Computer Based Test Stage-I</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEN 1/2018</td>
<td>64,371</td>
<td>47,58,218</td>
<td>Max candidates/ shift</td>
</tr>
<tr>
<td>CEN 2/2018</td>
<td>62,907</td>
<td>1,89,82,719</td>
<td>1,62,179</td>
</tr>
<tr>
<td>CEN 3/2018</td>
<td>13,487</td>
<td>24,92,554</td>
<td>1,64,026</td>
</tr>
<tr>
<td>CEN 1/2019</td>
<td>35,208</td>
<td>1,26,30,885</td>
<td>78,269</td>
</tr>
<tr>
<td>CEN 2/2019</td>
<td>1,923</td>
<td>4,47,593</td>
<td>61,123</td>
</tr>
<tr>
<td>CEN 3/2019</td>
<td>1,663</td>
<td>1,02,940</td>
<td>9</td>
</tr>
<tr>
<td>CEN RRC 1/2019</td>
<td>1,03,769</td>
<td>1,15,67,248</td>
<td>86/224</td>
</tr>
</tbody>
</table>

For CEN 1/2018 & CEN 3/2018 there were additional stages of Computer Based Tests (CBTs) where the number of candidates and shifts were lesser than Stage-I. CBTs for CEN 01/2019, 03/2019 and RRC-01/2019 are yet to be conducted.

It may be seen from the above, flawless conduct of CBTs for RRBs require the Examination Conducting Agency (ECA) to undertake meticulous planning, large scale mobilisation of resources and efficient capturing, handling and processing of data. The examination software (version) used should be certified and thoroughly tested for ensuring integrity of the examination. Adopting certified technological security measures in protecting and transmitting sensitive data is another very important requirement.
Activities
Major activities to be undertaken by ECA for safe conduct of CBTs under multiple shifts are as under:

I. Pre Examination

1. Identification, selection and preparation of adequate number of standard venues in major cities and towns for the conduct of Computer Based Tests within stipulated time. These examination centers should have a robust LAN with state of the art networking devices and sufficient power back up to ensure an uninterrupted exam. These examination centers should be within city municipality limits with good road connectivity and meet the parameters set by RRBs.

2. Scheduling of candidates to ensure uniform distribution for multiple shifts and generation of E-Call letters. Special care is required for scheduling of Persons with Benchmark Disability (PwBD) candidates to PwBD friendly venues at accessible locations.

3. Pre-audit of all examination venues for parameters such as Zero-Black spot CCTV coverage, mock testing of the system at full load covering all aspects to avoid failures during examination due to delay in downloading of Question Paper(QP) to primary sever and candidate nodes, buffering issues, taking over by secondary server in case of problem in primary server, interruption in power supply, re-login issues of computer nodes, etc.

4. Sending communications to the candidates by e-mail and/or SMS at various stages and providing helpdesk facilities for the candidates.

5. Maintain a robust question bank with correct translations and options/answer keys in a safe and secure manner for preparation of adequate number of question sets and automated encrypted administration just before the start of a shift. Further, as scores of candidates are ‘Normalized’, the difficulty level of QPs in various shifts has to be maintained uniformly.

II. During Examination

End-to-End support including technical, operational, logistic and manpower related for various activities like:

a. Security & frisking of Candidates

b. Invigilation in labs

c. Capturing Biometric of Candidates (photo& thumb impression)

d. Establishment of a control room at Railway Board and at 21 RRB offices with robust dashboards for real-time monitoring of examinations
e. Ensure a seamless, secure conduct of examination

f. Depending on the posts and examination scheme there may be multiple stages of examination some of which are specialized such as Computer Based Aptitude Test, Typing Skill Test, Stenography Test etc.

g. Storage and transmission of examination logs and other documents in a safe and secure mode within prescribed time frame

III. Post Examination

a. Processing the objections received from candidates with regard to questions/answer keys

b. Timely submission of examination result to RRBs as per the approved merit list preparation Protocol

c. Support RRBs during Document Verification as regards biometric validation, candidate documents etc.

d. For the entire exam process, supplying the requisite information to RRB for replying to RTI queries, Court cases etc. related to questions/answer keys and other activities performed by them on behalf of RRBs.

Meeting Agenda
Before inviting open tender for finalization of ECA, it is proposed to have an interaction with the prospective bidders to know about their credentials and methodology of conducting CBT on 25th September 2019 at 10.30 Hrs. in the Ministry of Railways, Conference Hall, 2nd Floor, Railway Board, Rail Bhawan, New Delhi.

Every company will be given a slot of 10 minutes only. They will be called one after the other in alphabetical order for Power-Point presentation covering the following aspects very briefly:-

1. Introduction of Bidder Company, Strength and Capability of Bidder for conduct of Computer Based Tests (CBTs).

2. Experience of conducting CBTs in the past.

3. Quality, Information Safety and Security certifications available for the:-
   a. Organization,
   b. Data centre (owned/hired) and for the
   c. Examination Software proposed to be deployed.

4. CBT conducting application, Software testing methodology (In house/External):-
a. How are the Software Change Management processes including version control managed?
b. What are the Risk Identification/Mitigation Strategies adopted?
c. Also the system used to conduct the exam must be tested for Performance, Security, Usability, High-Availability, Business Continuity, and Disaster-Recovery

5. Strategy for Question Repository Development

6. Methodology for hiring exam centers with impeccable integrity record, Robust Network and Power supply availability and how is redundancy of the network ensured.

7. Background Checks conducted while hiring Personnel engaged for the conduct of exam and their training thereafter.

8. Methodology for the conduct of Mock Test. Are all Parameters which are involved in the conduct of actual CBT simulated?


10. Handling of Post Exam activities e.g. Answer Keys, Candidate objection handling, result processing, transferring of exam related data.

The soft copy shall be loaded in the PC before the commencement of the presentation by the prospective bidders. One hard copy of the presentation should be given to the representative of the Ministry of Railways. Only two persons per company are requested to attend this meeting. The following details may please be emailed to rrb.eca01@gmail.com by 23rd September 2019:

   (a) Name(s) of the participants
   (b) Mobile No.
   (c) Name of the organization
   (d) Brief details of the organization

Emails received beyond 23.09.2019 will not be considered.

RAILWAY RECRUITMENT BOARDs