



**Request for Proposal (RFP)
Terms of Reference
Version II (Volume-II)**

**Selection of Service Provider for Online
Examination (Computer Based Test) for Board of
Secondary Education, Odisha**

RFP No. 157/ Date: 11/03/2019

**Board of Secondary Education, Odisha,
Bajrakabati Road, Cuttack
Odisha, 753001**

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1 About the Board of Secondary Education, Odisha

The Board of Secondary Education, Odisha is an autonomous body constituted under the Odisha Secondary Education Act, 1953. It regulates, controls and develops mainly the Secondary Education in the state of Odisha. It provides varied courses in order to equip students for various occupations as well as for higher studies. Board is functioning with Head Office at Cuttack along with the six zonal offices. The President, Board of Secondary Education, Odisha is the Administrative Authority for Secondary Schools under the School and Mass Education Department, Government of Odisha. There are about 9088 number of Secondary Schools affiliated to B.S.E., Odisha.

Service provider may view and study this tender document containing the detailed terms & conditions from the website www.bseodisha.nic.in. The bids are to be submitted as per procedure given in the RFP document.

2 Objective

Board of Secondary Education, Odisha proposes to engage a service provider to conduct **Online Examination for Teacher Eligibility Test** in two papers.

The scope of work of the service provider is broadly divided into three categories i.e. **(a) Pre-Examination (b) Examination (c) Post-Examination.**

Following table shows the district wise number of candidates who have applied for Odisha Teacher Eligibility Test, 2018. It is expected that the number for this examination will be more than this.

SL. NO.	DISTRICT CODE	DISTRICT NAME	PAPER 1	PAPER 2	TOTAL
1	AA	CUTTACK	3619	2035	5654
2	AB	JAGATSINGHPUR	1940	1267	3207
3	AC	KENDRAPARA	2501	2014	4515
4	AD	JAJPUR	2779	2351	5130
5	AE	ANGUL	2192	911	3103
6	AF	DHENKANAL	1640	821	2461
7	BA	PURI	2769	2841	5610
8	BB	KHURDA	3026	2381	5407
9	BC	NAYAGARH	1805	1253	3058
10	CA	BALASORE	4507	4028	8535
11	CB	BHADRAK	2908	2279	5187
12	CC	KEONJHAR	2766	1955	4721
13	CD	MAYURBHANJ	4961	2013	6974
14	DA	GAJAPATI	1414	1265	2679
15	DB	GANJAM	3413	3420	6833
16	DC	BOUDH	1444	483	1927
17	DD	KANDHAMAL	1518	673	2191
18	EA	KALAHANDI	3474	1386	4860
19	EB	NUAPADA	1749	783	2532
20	EC	BARAGARH	2290	1451	3741
21	ED	SAMBALPUR	1631	489	2120
22	EE	DEOGARH	1193	342	1535
23	EF	JHARSUGUDA	781	375	1156
24	EG	BOLANGIR	3079	1312	4391
25	EH	SUBARNAPUR	1643	563	2206
26	EK	SUNDARGARH	3229	820	4049
27	FA	KORAPUT	1799	913	2712
28	FB	MALKANGIRI	901	321	1222
29	FC	NABARANGPUR	1951	631	2582
30	FD	RAYAGADA	1679	740	2419
GRAND TOTAL			70601	42116	112717

3 Scope Overview

Board Secondary Education, Odisha, desires to adopt "Online Examination System" for Teacher Eligibility Test in two papers i.e. Paper-I & II. with objective type questions and an automated solution for the entire exam processing cycle right from invitation of application for the examination to publication of result with minimum human intervention and high security measures. The applicability and eligibility for appearing at the Odisha Teacher Eligibility Test is furnished below.

a) **APPLICABILITY-**

As per Resolution No.14302/SME, Bhubaneswar, dated the 04/06/12 of the Government of Odisha, Department of School and Mass Education and Corrigendum No.- SME-EL2-EL2-0063-2018-23082/ SME, Bhubaneswar, dated 22/10/2018, OTET is applicable to all candidates who possess requisite academic and training qualifications with requisite percentage of marks and to all candidates pursuing the final year of the teacher training courses before the date of publication of advertisement for conducting OTET who aspire to become teachers for Classes-I to VIII in the schools of the State Govt., private aided schools and private unaided schools in the State of Odisha. However, the candidates intending to seek employment as teachers in private un-aided schools shall also have the option of appearing at Central Teacher Eligibility Test (CTET) conducted by Central Govt. through CBSE, if they so desire. The candidates after being qualified in OTET can also apply for further improvement.

b) **ELIGIBILITY-**

(l) Persons having the following minimum qualification shall be eligible for appearing in OTET :-

(i) **Category – A**

Higher Secondary (or its equivalent) with at least 50% marks and 2 year Diploma in Elementary Education (CT or D.El.Ed.).

OR,

Higher Secondary (or its equivalent) with at least 45% marks and 2 year Diploma in Elementary Education (by whatever name known), in accordance with the NCTE (Recognition Norms and Procedure) Regulations, 2002.

OR,

Higher Secondary (or its equivalent) with at least 50% marks and 4 year Bachelor of Elementary Education (B.El.Ed.).

OR,

Higher Secondary (or its equivalent) with at least 50% marks and 2 year Diploma in Education (Special Education).

OR,

Graduation and two year Diploma in Elementary Education (by whatever name known).

OR,

Graduation with at least 50% marks and Bachelor of Education (B.Ed.), on the condition that who has acquired the qualification of Bachelor of Education from any NCTE Recognised Institution shall be considered for appointment as a teacher in classes I to V provided the person so appointed as a teacher shall mandatorily undergo a six month Bridge Course in Elementary Education recognized by the NCTE, within two years of such appointment as primary teacher.

(ii) **Category – B**

Graduation and 2 year Diploma in Elementary Education (by whatever name known).

OR,

Graduation with at least 50% marks and 1 year bachelor in Education (B.Ed.).

OR,

Graduation with at least 45% marks and 1 year Bachelor in Education (B.Ed.) in accordance with the NCTE (Recognition Norms and Procedure) Regulations issued from time to time in this regard.

OR,

Higher Secondary (or its equivalent) with at least 50% marks and 4 year Bachelor in Elementary Education (B.El.Ed.).

OR,

Higher Secondary (or its equivalent) with at least 50% marks and 4 year B.A./ B.Sc, Ed or B.A. Ed./ B.Sc. Ed.

OR,

Graduation with at least 50% marks and 1 year B.Ed. (Special Education).

Provided that relaxation of 5% minimum qualifying marks in Higher Secondary or graduation level, as the case may be, shall be allowed to the candidates belonging to SC, ST, SEBC & PWD category.

Provided further that candidates having minimum marks in Higher Secondary or graduation level, as the case may be, prescribed at the time of admission in teacher education courses are also eligible to appear in OTET.

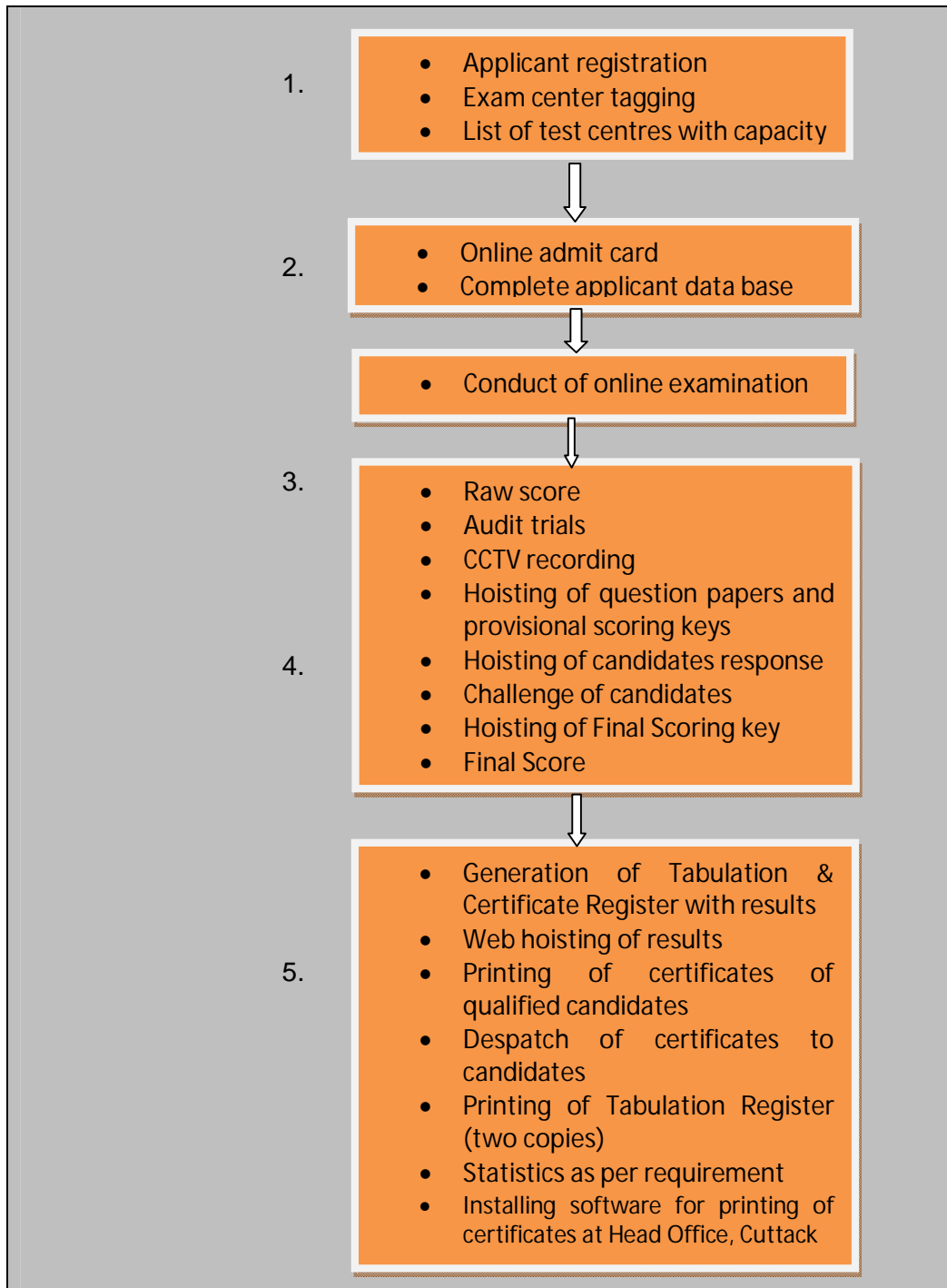
- (II) Persons having D.Ed. (Special Education) or B.Ed (Special Education) qualification shall undergo, after appointment, an NCTE recognized 6 month Special Programme in Elementary Education.
- (III) Persons having qualification or pursuing final year of any of the teacher education courses (recognized by the NCTE or by the RCI, as the case may be) can appear in the respective category for which he/ she is eligible.
- (IV) Persons declared eligible by the State Govt./ NCTE/ Govt. of India from time to time.
- (V) Eligibility for appearing in examination papers for persons covered under Para- 2 (III) will be notified by the Govt. after declaration of their eligibility.

c) EXAMINATION PAPER :-

- (I) There shall be two papers of the OTET viz- Paper-I and Paper-II.
 - (II) Total duration of the test in each paper shall be 2½ hours.
 - (III) All questions will be Multiple Choice Questions (MCQ), each carrying one mark with four alternatives out of which one answer is correct.
 - (IV) The question papers in non-language subjects shall be bilingual i.e. in Odia and English.
 - (V) Following languages shall be offered in Language – I:- Odia, Hindi, Telugu, Urdu, Bengali. The candidate has to choose any one of the above languages for Language-I subject.
 - (VI) Language-II subject shall be English for all candidates.
 - (VII) There shall be no negative marking.
- d) Online examination will be conducted in multiple shifts in all 30 Districts of Odisha on multiple days.
- e) The service provider will deploy adequately qualified resources of different skills having experience in similar job along with necessary computer infra to support the Project Management Unit in office of the Board of Secondary Education, Odisha, Cuttack.
- f) The service provider must create test centres (wholly owned/ rented) in all Districts in the State of Odisha having required capacity so as complete the examination of all candidates tagged to those centres within maximum of 8-10 days, subject to condition not more than 2 sittings/ sessions shall be conducted on a day.
- g) The service provider will prepare robust & comprehensive Question Bank for different papers. Depending on the student's strength, there shall be different sets of questions per shift.
- h) Carry/ demonstrate complete System Test Run (STR) with test data to the Board of Secondary Education, Odisha before implementation of the software. The Service provider should also be able to demonstrate click by click audit trail for any type of enquiry.
- i) Application server should be able to capture all errors, warnings and exceptions that are generated in applications along with the time at which they occurred.
- j) **Special arrangement should be made for differently abled candidates as per Physically Disabled Act (PDA). One (1) shift per day shall be kept for differently abled candidates.**
- k) Joint Venture or consortium or sub-contracting is not allowed for entire scope of work.
- l) **Service provider will bear all the expenses for conducting the online examination which includes salary of the staff engaged for this job and incidental charges.**
- m) The centre tagging logic should be vetted by the service provider

- n) Data sharing between Board of Secondary Education and the service provider should be done in the format which is mutually agreed.

4 Overall Process Flow



5 Scope of Work and Deliverables

5.1 Pre Examination Phase

5.1.1 Design/Development of Application Software

- a) The service provider will design and develop a online application portal of Board of Secondary Education.

- b) The service provider will have the sole responsibility to design, develop / customise, implement and maintain, web based software and provide online services, for all activities related to the examination process.
- c) The Application Software should be capable of publication of various notifications from time to time, receipt of on line application along with scanned documents from candidates, storage & retrieval of the application data as well as uploaded documents, integration with payment gateway to receive fees online, preparation of database of candidates, sending SMS /intimation/alerts to candidates, scrutinisation of eligible of applicants, generation of various MIS report as per the requirement of client, Mock-test students etc. for smooth conduct of exam. Online publication of final result as per the requirement of Board of Secondary Education, Odisha is also the responsibility of the service provider.
- d) The service provider will also deploy technically qualified experienced adequate manpower to manage the entire command centre of Board of Secondary Education, Odisha along with necessary computer hardware and software.
- e) In co-ordination with Board of Secondary Education, Odisha
 - **Setting up a helpdesk with a dedicated E mail and telephone support for assistance in 3 languages such as Odia, English and Hindi. The support need be provided during working hours 10 AM to 5 PM.**
 - Facilitate Online registration of Candidates
 - Receipt of on line applications from candidates (i.e. registration for examination, receipt of e- payment, transfer of application fees to Board of Secondary Education, Odisha, providing online support for technical issues if any, etc)
 - Allotment of Examination Centre to applicants
 - Generation of Roll numbers and issuing online Admit Card to the applicants
 - Maintaining data base of all candidates including mobile number & email etc on the basis of information furnished in the online application.
 - Any other related task.

5.1.2 Setting up of Test Centres

- a) Arrange sufficient number of test centres across the State of Odisha to ensure smooth conduct of online examination. The Test Centre should be adequately equipped with necessary computing and civil infrastructure so as to accommodate **required number of candidates tagged to a center** in a shift. The Test Centres list should be finalized in consultation/co-ordination with Board of Secondary Education, Odisha within a time period to be specified by the Secretary, Board of Secondary Education, Odisha. The location of examination should be centrally located within the City limits and must be accessible and suit to special needs of differently abled candidates. Sufficient parking place shall be available in examination centre to park vehicles of candidates.
- b) Special arrangement should be there for differently abled candidates as per Physically Disabled Act (PDA). One (1) shift per day shall be kept for differently abled candidates.
- c) The Online Examination in a Test Centre will be conducted in an intranet environment so that conduct of Examination will not be hampered in case of disruption in internet connectivity. Hence, the Service provider is required to set up computing infrastructure with LAN Connectivity, Desktop/Nodes, Server, and Internet Connectivity to server, required software and other required civil infrastructure. The Service provider must set up proper power back up (Generator, UPS etc.) to ensure uninterrupted conduct of examination even if there is a power failure.
- d) The Service Provider shall carry periodic audit at Examination Centres for:
 - Hardware, Operating System, Processor Speed, RAM, Network and internet connectivity, Key Boards etc.
 - Software - Screen resolution, bandwidth for internet and LAN connectivity, Browser.
 - Working condition of UPS and Generator.
- e) In order to meet the exigencies, 10% of buffer nodes must be available in each Test Centre.
- f) Periodic checking of all nodes, network equipment, electrifications and other active /passive devices should be done by the Service provider to ensure smooth functioning of all equipment in a Test Centre. More specifically, the checking of all equipment in a Test centre must be done one or two days prior to the scheduled date of examination.

- g) Ensure clean drinking water, fans/ tube lights, separate toilets for male/ female/ PH candidates, first aid etc. as per requirement to be assessed on the basis of number of candidates tagged to a centre.
- h) Preparation of online examination centre allocation sheet, examination centre checklist and fill out the details of each examination centre (seating capacity, number of nodes and other required facility). Format as per **Appendix-1**
- i) Final inspection / testing of the Servers installed at all Test Centres and Connectivity to be done at-least one hour prior to the commencement of examination.
- j) The Service provider shall arrange/provide adequate displays and provide required instructions/ information to the candidates appearing for exam at exam centres.
- k) To arrange Video Surveillance (CCTV) at all examination centres. CCTV Surveillance with recordings has to be submitted after its proper sealing. The Command Centre (described later) at Board of Secondary Education, Odisha shall be monitoring the CCTV for all the examination centres and the service provider shall provide the CCTV footage of all the examination centres on regular basis as and when asked by the Board of Secondary Education, Odisha.
- l) Facility for sending Bulk/individual SMS & Email
- m) Soft Copy of Examination Centre Master having complete address with contact information along with centre administrator details (name, mobile & email) and capacity of the examination centre.

5.1.3 Mock Test

Deploy Sample Test paper / Mock Trial at given website / link at least 15 days prior to the scheduled date of examination to allow the eligible candidates to practice on the "Sample Online Test / Mock Trial". The mock test should be a replica of the examination. The service provider should inform in advance about the Schedule of Mock Test so that the candidates can be sent SMS/Email alert in advance.

5.1.4 Candidate Handling Process

- a) The service provider shall ensure that the Signature of the candidate is taken in the attendance sheet and Verification of the signature in attendance sheet is done vis-à-vis the signature in the admit card.
- b) The service provider shall also have provision to capture biometric/ thumb impression of differently-abled candidates during the examination.**

5.1.5 Question Paper Management

- a) The service provider is required to have suitable provision for storing, transmitting and downloading the question papers in a highly secured environment.
- b) The service provider will create and manage examination question paper with various difficulty levels securely along with scoring key as per the following details in consultation with Board of Secondary Education, Odisha. Complete security of the content created will be with the service provider. Following are the details of Syllabus Structure for preparation of examination question paper:

SYLLABUS STRUCTURE

PAPER-I

Area	Section	Number of Questions	Type of Questions	Mark	Remarks
Child Development & Pedagogy	I	30	MCQ	30	30 question on Child Development & Pedagogy In each subject area 20 questions will be set form contents & 10 questions from Pedagogy. All 150 questions shall be of multiple choice type with four choices. Only one answer is to be chosen by the candidate.
Language-I, Odia/ Urdu/ Hindi/ Telugu/ Bengali	II	30	MCQ	30	
Language-II (English)	III	30	MCQ	30	
Mathematics	IV	30	MCQ	30	
Environment Studies	V	30	MCQ	30	

(Paper – II)
Compulsory

Area	Section	Number of Questions	Type of Questions	Mark	Remarks
Child Development & Pedagogy	I	30	MCQ	30	30 question on Child Development & Pedagogy In each subject area 20 questions will be set form contents & 10 questions from Pedagogy. All 150 questions shall be of multiple choice type with four choices. Only one answer is to be chosen by the candidate.
Language-I, Odia/ Urdu/ Hindi/ Telugu/ Bengali	II	30	MCQ	30	
Language-II (English)	III	30	MCQ	30	

OPTIONAL

Either A or B

Area	Section	Number of Questions	Type of Questions	Mark	Remarks
A- Mathematics & Science	IV	60 (30 questions from Mathematics and 30 questions from Science)	MCQ	60	In each subject area 20 questions will be set from contents & 10 questions from Pedagogy.
B - Social Studies.	V	60 (30 questions from History & Political Science & 30 questions from Geography).	MCQ	60	In each subject area 20 questions will be set form contents & 10 questions from Pedagogy.

The detailed scheme and syllabus will be provided by the Secretary, Board Secondary Education Odisha to the Qualifying Bidder (Vendor/Farm).

Questions will be set to assess the candidate's ability to analyze interpret and apply his/ her knowledge on the subject. As per NCTE guideline, the questions in the paper-I will be based on the topics of the Prescribed syllabus of the state for Class-I to V but their difficulty standard as well as linkages could be up to the secondary stage.

The questions in the paper-II will be based on the topics of the prescribed syllabus of the state for Class-VI to VIII but their difficulty standard as well as linkages could be up to senior secondary/ higher secondary/ +2 stage.

5.1.6 Establishment of Command Centre (State Project Monitoring Unit (PMU))

In order to centrally manage the entire activities under Online Examination System and smooth conduct of the examination, the Service provider will set up a Command Centre. The Command Centre shall be at Board of Secondary Education, Odisha premises with proposed technical resource:

- Command Centre Manager (position-one)
- System Administrator –Network (position-one)
- System Administrator – Network Security (position-one)
- Technical Executive /Technical Support –CCTV (position-Four)
- Technical Executive /Technical Support –Application (position-Four)

The above resource shall be provided by the selected Service provider. Board of Secondary Education may depute one resource person to head the Command Centre to check their performance and day-to-day activities. The sitting arrangement of Command Centre Manager & System Administrator-Network shall be provided by Board of Secondary Education, Odisha. However, the sitting arrangement of System Administrator – Network Security, Technical Executive/ Technical Support –CCTV, Technical Executive /Technical Support –Application shall be done on their own by the service provider.

5.2 Examination Phase

5.2.1 Management of Examination Centre

The service provider shall provide adequately trained manpower as per the ratio mentioned below to manage each examination centre. Each examination centre should have a minimum number of personnel, as described below, deployed by the service provider:

Skill	Remarks
Exam Centre Administrator	One (1) regular employee of the service provider per center
IT Manager	One (1) regular employee of the service provider per center
Invigilators	One (1) per 25 systems with a minimum of 2 in a room
Support Staff	Minimum one (1) per 100 students (Suitability need to be justified with centres) and locations
Security Guards	Minimum one (1) per 100 students (Suitability need to be justified with centres)
Peon	Minimum two (2) per 100 students

The above staff should be increased proportionately on the basis of size of the centre in terms of nodes for exam.

5.2.2 Conduct of Examination

- a) Test will be conducted only over the intranet at a Test Centre and the candidates will access the test through a computer.
- b) The Conduct of examination would be multidisciplinary / multiple subject/ multilingual as per scheme of examination.
- c) The Examination shall be computer based with the questions being provided onscreen on a random basis with multiple choice answers, without any manual intervention.
- d) Sufficient time of 15-20 minutes shall be allotted before the exam for providing orientation to the candidates on the structure of the exam, time limits and guidelines for answering the question papers.
- e) The question paper shall contain 150 questions to be answered in 150 minutes. However, differently abled candidates shall be given 20 minutes extra time to complete their test. **There should also be provision of seating arrangement for a scribe with the PH Candidate.**
- f) Computer based exam software should support standard features such as automatic calculation of test score, time left, flag questions for review, navigation to unanswered questions and prompt for submission.
- g) Leakage of question paper at any level shall be considered as breach of contract to perform on the part of the service provider.
- h) Required number of servers for a centre must be provided by the Service provider for assured performance. Additional equivalent and suitable servers for backup and minor services will need to be provided by the Service provider.
- i) While exam will be conducted on local LAN, data of test progress should be transferred to central server every 15 minutes for monitoring purposes. Service provider should provide reports to Board of Secondary Education, Odisha to view the test progress.
- j) The Service provider shall maintain audit trails of all activities of the candidate (click by click) during the course of the examination.
- k) The Service provider shall obtain candidate's feedback through online Feed Back Form, after the examination is over.
- l) The Service provider shall provide blank paper sheet/s to the candidates as per requirement.

- m) The Service provider shall have a contingency plan for Student management/Shifting in case of any emergency.
- n) The Service provider shall monitor and supervise Exam Centre activities on monitoring console to be installed by the Service provider in Board of Secondary Education, Odisha. The data should be real time data generated from each Exam Centre during the examination.
- o) The online exam shall stop automatically after expiry of the scheduled examination duration.
- p) Scheduling Backup Server to take continuous backup from Main Server at each Test Centre and availability of continuous Back-Up and restoration facility for Business Continuity Planning / Disaster Recovery purpose.
- q) Restart / Resume of Test (in case of node / power / network / application failure etc.)
- r) In case of Machine, Power or Network Failure, software shall be able to retrieve candidates attempted questions and its responses entered by the candidate fully along with creation of incident report and system audit trail (downtime details, additional time taken by the candidate and issue recorded etc.).
- s) Service provider should ensure that, at the end of examination, the candidates should be able to see his/her score along with statistics before leaving the examination hall.

5.2.3 Infrastructure Services & Support

- a) The service provider will deploy technically qualified, experienced, adequate manpower to manage the examination process at each exam centre. There should be at-least one technical person directly from the Service provider's Organisation managing LAN (server) and one person as Centre In-charge at the Examination centre.
- b) The selected service provider has to identify the examination centres at the locations decided by /in consultation with Board of Secondary Education, Odisha.
- c) The selected service provider will obtain necessary connectivity, provide the same to Examination centres across the State and manage them. Service provider will be responsible for establishing Examination Centres in allocations with necessary IT Infrastructure and Manpower e.g., computer hardware / software, Firewall, Anti-Virus Software, Examination Superintendents, IT Support staff, Invigilators, Peons, Security etc. for conduct of the Computer-Based examination. Cyber Café will not be accepted for Examination Centre.

5.3 Post Examination Phase

- a) The service provider shall calculate marks obtained by each candidate as per requirement of the Board of Secondary Education, Odisha.
- b) The candidate's responses, photograph, audit trails, CCTV recording should be uploaded automatically from the local server to Service provider's data centre in a secured manner. There should not be any traces of any data pertaining to candidate whatsoever post uploads left on the exam server. CCTV recording footage must be provided to Board of Secondary Education, Odisha.
- c) The service provider must submit the raw responses/data (answers) to Board of Secondary Education, **same day within 2 hours** of last sitting (after the candidate's response is uploaded from local exam server). The software should have capability to take the answer key during post examination. The service provider must also provide the final score to Board of Secondary Education, Odisha.
- d) The set wise question papers, provisional answer keys and candidates response shall be web hoisted inviting objections if any from the candidates.
- e) Final answer keys shall be hoisted along with hoisting of final results.
- f) **Test Data Archiving & Handover:** The service provider shall submit both soft copy & hard copy of all question papers & responses day wise, shift wise & centre wise to the Secretary, Board of Secondary Education, Odisha. The soft copy should be submitted in CD/DVD format. The hard copy is to be submitted after being duly signed by authorised person with company seal **within 3 days of completion of online Test in each phase.**
- g) The service provider shall ensure Generation of Tabulation Register based on the result of the examination, validation shared by Board of Secondary Education, Odisha and share the final result. The format of final score shown in the tabulation register shall be mutually agreed upon.

- h) The service provider will provide technical solution for the following activities and assist the Secretary in handing the same as well as generation of different reports/ lists as required of the same as per requirement, such as :-
- i. Generation of Tabulation Register.
 - ii. Generation of Certificate Register.
 - iii. Web hoisting of results.
 - iv. Printing of Tabulation Register.
 - v. Printing of Certificates of qualified candidates.
 - vi. Despatch of certificates to candidates.
 - vii. Statistics as per requirement.
- i) The service provider shall provide documented inputs and support for handling.
- Candidates queries
 - RTI queries
 - Court Cases
- j) **MIS generation / Customized reports:** The Service provider shall provide adequate information to the Board of Secondary Education through various MIS reports.
- k) The service provider shall provide software for printing of certificates in small quality at the Head Office, Cuttack which may be required due to correction of data during the period of post publication of results.

6 Security Provisions

- a) Keeping in view the criticality, confidentiality & Sensitivity of such system, the Service provider is responsible for ensuring utmost security at all stages/levels, like Physical Security, Information Security, Server Security & Network Security.
- b) The service provider shall ensure utmost security for IT Infrastructure - Servers, Networks, Application and Data Storage and Transmission, Examination processes being followed at various levels as per the plan drawn in consultation with Board of Secondary Education, Odisha.
- c) The service provider should provide full-proof information security in computer based online examination as per the provisions of Information Security.
- d) **Data Encryption and Decryption:** The service provider should provide a minimum of 256 bytes encryption for data transfer and the system to decrypt the data at examination centres without any loss or damage.
- e) PKI (Public Key Infrastructure) encrypted question set to be uploaded in Exam Application.
- f) The system should maintain a highly secured data repository for storing hash values of datasets generated at various levels as well as archiving examination records after completion of examination process.
- g) Alert through SMS and emails should be sent to the prescribed authorities for any attempt of change in system database.
- h) Access Controls must be provided to authorised users to ensure that the databases are not tampered or modified by the system operators.
- i) The bidder should take all necessary precautions for prohibition of any leakage of question papers.

7 Project Timeline

Sl.#	Milestones	Timeline
a)	Deployment of resources in Command Centre (State PMU)	Within 5 days from the date of issue of work order
b)	Demonstration of complete System Test Run (STR) with test data	Within 15 days from the date of issue of work order
c)	Submission of complete list of examination centres	Within 20 days from the date of issue of work order
d)	Making the Online registration platform live	Within 25 days from the date of issue of work order
e)	Closing of online registration	Within 20 days from date of starting of online Registration.
f)	Setting up of Test Centre	Within 7 days from the date of closing of online registration

Sl.#	Milestones	Timeline
g)	Preparation of admit card for download	Within 7 days from the date of closing of online registration
h)	Mock test	Within 10 days from the date of closing of online registration.
i)	Conduct of online examination	Within 7 days from the mock examination
j)	Raw score submission	Within 2 hours from end of last examination sitting on a day
k)	Generation of Tabulation & Certificate Register with results	Within 7 days from the date of raw score submission
l)	Web hoisting of results & generation of statistics	Within 7 days from the date of raw score submission
m)	Printing of certificates of qualified candidates	Within 10 days from the date of publication of the results
n)	Despatch of certificates to candidates	Within 15 days from the date of publication of the results
o)	Printing of Tabulation Register (two copies)	Within 25 days from the date of publication of the results

8 Payment Terms

Sl. No.	Milestones
a)	70% payment will be done after Generation of Tabulation & Certificate Register with results
b)	Balance 30% payment will be done after receipt of Tabulation Register
c)	No advance payment shall be made under any circumstances.

9 Penalty

Depending on the criticality and severity of the application, the following penalty shall be imposed on the vendor due to delay in providing services:

Sl. No.	Services	Penalty
a)	Delay in setting up of Test Centre	Rs. 5000/- per center per day
b)	Delay in conducting Mock Test	Rs. 10000/- per day
c)	Unavailability of manpower in exam center during each shift of exam day	Rs. 2000/- per person per shift
d)	If exam could not be conducted due to lack of performance of Service Provider /delivery by Service Provider as per Scope of Work	Rs. 5,00,000/- per center per day
e)	Delay in Submission of Raw Scores	Rs. 10000/- per day

The admissible time period for above activities shall be decided by the President, Board of Secondary Education, Odisha. The penalty shall be recovered for delayed services from the payment due post submission of candidate wise final score as per the format. The service provider shall be considered as Black-listed /Fraud company/service provider, if the service provider withdraws the work at any time during the contract with/without notifying Board of Secondary Education, Odisha. The maximum liquidated damage at any point of time and for any period should not exceed 10% of total project cost as per the Financial Bid submitted by the Service Provider. If the liquidated damage exceeds this amount, Board of Secondary Education reserves the right to terminate the contract.

Appendix-1

Sl. No.	District Name	City Name	Name of the Examination Center	Total No. of Lab	Total No. of Computer Nodes
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