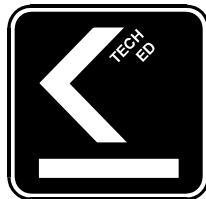


TENDER DOCUMENT

FOR

**COMPUTER BASED/INTERNET BASED ONLINE
EXAMINATION**

<https://eproc.punjab.gov.in>



Rs. 1000/-

**THE PUNJAB STATE BOARD OF TECHNICAL
EDUCATION AND INDUSTRIAL TRAINING (PSBTE&IT)**

PHONE NO.0172-2612262, 2622586

Section I

1	Tender No./RFT Reference No.	PSBTE&IT/OBCAB-2020/110
2	Total pages	17
3	Description	Computer Based / Internet Based Online Examination (Computer Based Testing(CBT)/ Internet Based Testing(IBT))
4	EMD	Rs 10 lacs/-
5	Sale of E-Tender Document	11.06.2020 3.00 pm
6	Tender document cost	Rs 1000/-
7	Last Date of Submission of online tender	18.06.2020 11:00 am
8	Date of Opening of Technical bid	18.06.2020 3:00 pm
9	Bidder shall upload bids on the website	https://eproc.punjab.gov.in
10	The tender document shall also be available on the Board's website	www.punjabteched.com & www.punjabteched.net
11	Opening of Commercial Bid	To be intimated later
12	If the date of opening of e-tenders happens to be a holiday then the e-tenders will be opened on the next working day at the same time. Bidders must ensure that their Digital Signature must be valid at the time of tender evaluation	
13	The Punjab State Board of Technical Education and Industrial Training, Chandigarh shall not be responsible for any failure in uploading of the tender documents.	
14.	Documents to be uploaded along with Technical Bid of the tender: <ol style="list-style-type: none"> 1. Experience Certificate as per Section IV(Clause-15) 2. Performance Certificate as per Section IV(Clause-14) 3. Balance sheet of previous three FY(2016-17, 2017-18 and 2018-19) showing Annual Turnover of previous three FY(2016-17,2017-18,2018-19) 4. ITR of the last three FY (2016-17,2017-18,2018-19) 5. PAN No. and GST Registration Certificate 6. Undertaking of not being Blacklisted as per Section IV(Clause-10) 7. Tender Document fully signed on all pages. 	

Section II
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Section III
General Conditions

1. The Punjab State Board of Technical Education and Industrial Training (PSBTE & IT), Chandigarh invites bids for Conducting “Computer Based/Internet Based Online Examination (CBT/IBT)” for Students through e-tendering. Bidders are advised to study the tender document carefully. Submission of Tender shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications
2. Bids are to be submitted online. A Valid Digital Signature Certificate(DSC) is mandatory to participate in the e-tendering process which may be procured from any of the authorized Certifying Authority (CA), such as; MTNL, TCS, emudhra, N-code, Sify. For participating in the e-tendering process, the Bidder shall have to get themselves registered with <https://eproc.punjab.gov.in> and get user ID, Password. For any clarification/difficulty regarding e-tendering process e-Procurement helpdesk may be contacted 0172-2970263 / 2970284
3. Interested Bidders can download the e-tender documents online from website <https://eproc.punjab.gov.in>
4. E-tender document fee as given in Section I (page 2) as applicable shall be strictly paid through online mode. Other mode of payment will not be considered.
5. The Bidders will have to deposit Earnest Money deposit (EMD)/(Bid Security Refundable) as given in Section I (page 2) which is to be paid through online mode. Other mode of payment will not be considered.
6. E-tender processing fee (Non-Refundable) as applicable shall be paid strictly through online mode. Other mode of payment will not be considered.
7. Corrigendum / Addendum / Corrections, if any will be published on the website <https://eproc.punjab.gov.in>
8. This tender document is not transferable.
9. All bids are to be submitted online and no manual receipt of bids shall be entertained.
10. Tenders which are not on the prescribed tender form will be rejected straightway. Telegraphic quotations will not be accepted.
11. Tenders not meeting specifications as per the tender document will be ignored.
12. The E-tender document fee/ E-tender processing fees shall not be refundable under any circumstances
13. The successful Bidder will have to deposit a security amount as specified in this document
14. Secretary, The Punjab State Board of Technical Education & Industrial Training, Chandigarh, reserves the right to amend the bid documents or extend the deadline for submission of bids.
15. The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Board in no case will be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.
16. The Bidder shall upload all the relevant documents on the e-tendering portal.

Section IV

CONDITIONS GOVERNING THE TENDER

FOR COMPUTER BASED ONLINE EXAMINATION/INTERNET BASED TESTING

1. The Board intends to select a bidder with previous relevant experience in Conducting “Computer Based/Internet Based Online Examination(CBT/IBT)”, in any State/Central Board, University, Deemed University and Educational Institutes formed under relevant Central/State Government Act, or any national examination conducted by examining bodies under centre/state government control to execute Computer Based/Internet Based Online Examination(CBT/IBT). The bidder’s **average** turnover during last three years (i.e. 2016-17, 2017-18 and 2018-19) should be more than Rs. 15 Crores per year alongwith the **affidavit/self-declaration** that turnover is related to Computer Based/Internet Based Online Examination(CBT/IBT) only related work such as online examination. Only Tenders received as per schedule given in section I (Page 2) will be eligible for consideration as per Tender Notice and shall be further subject to the following terms and conditions.
2. The bidder must have ISO 9001, ISO 27001 and CMMI (Capability Maturity Model Integration) **Level 3/Level 5** Certification and the software should have been developed under CMMI level 5 certification.
3. Firm/company/bidder not registered with GST (Goods and Service tax) will not be eligible to participate in the e-tender. The bidder should be registered with appropriate tax authorities such as Income Tax and should submit the certificate of registration with these authorities. The registration number of the firm along with the GST and Income Tax registration number (PAN) along with TAN no. should be attached along with the Technical Bid.
4. Each e-tender should be accompanied with Earnest Money as given in Section I (page 2), which is to be paid through online mode. Other mode of payment will not be considered as mentioned in Section III(5). No concession/ exemption regarding deposit of earnest money will be given on any ground, what so ever and tenders not accompanied with Earnest Money will be rejected straightway.
5. Online Technical bids will be opened first as per schedule given in Section I (page 2) in the presence of those bidders who may wish to be present. The Commercial Bids of only those bidders will be opened, who are found to qualify as per “Technical Bid”. Officers of the Board may inspect the premises of the bidder in order to verify the particulars mentioned in the Technical Bid. Commercial Bids will be opened after finalizing the Technical Bids.
6. Work of Computer Based/Internet Based Online Examination(CBT/IBT) is to be done as per the specifications indicated in this tender document.
7. Rate should be quoted for the complete work (Admit Card Generation, Question Paper Generation, Venue /Exam Center booking, Conduct of Exam and Subject-wise Result Declaration) of each student of “Commercial Bid”, inclusive of all expenditure and taxes, freight/ GST/ Toll taxes etc. as may be applicable at any time during the execution of the work.
8. The successful bidder will have to deposit 10% of value of work order allotted as security for the due performance of the contract, in the form of bank guarantee (irrevocable and unconditional)

or fixed deposit for duration of e-tender duly pledged in favour of the Secretary, Punjab State Board of Technical Education and Industrial Training, Chandigarh within 7 days from the date of issue of work orders failing which earnest money received with the tender will be forfeited and work will be entrusted to any other Service Provider without any notice. Tender once submitted will not be allowed to be withdrawn, altered, or cancelled in part or in whole. In case of forfeiture of earnest money, the decision of the Secretary of the Board shall be final. Amount of Earnest Money for successful bidder will be adjusted towards 10% security amount.

9. The successful bidder is advised to attach any additional information, which he thinks is necessary in regard to his capabilities to establish that the bidder is capable in all respects to successfully complete the envisaged work. Bidder should not attach superfluous information. No further information will be entertained after tender document is submitted through e-tender.
10. The successful bidder should not have been Debarred/ Blacklisted by the Central Government/ State Government/ Government Departments/ Central and State Universities/ Central and State Boards/ Educational Institutions/ Organisations/ Corporation etc. Even though bidder may satisfy the qualifying criteria, it is liable to disqualification if it comes to the notice of the Board from its Clients that the bidder has record of poor performance or not able to undertake the complete work or black listed earlier by any institutions in any earlier projects. An affidavit/ self declaration in this regard should be attached.
11. All the documents required should be submitted online along with the Technical Bid of the tender only.
12. The bidder should be a company/Trust/society registered in India under Indian Company Act, 1956/ The Partnership Act 1932/ Society Registration Act, 1860 and having undertaken similar operation of conducting online examinations in India. The bidder should participate as a single entity, no consortium or group companies will be allowed.
13. The bidder should have successfully executed atleast three CBT/IBT projects with online examination/assessment in a single shift for 10,000 candidates at 60 - 70 locations for 20 different subjects OR two CBT/IBT projects with online examination/assessment in a single shift for 15,000 candidates at 60 – 70 locations for 20 different subjects OR one CBT/IBT projects with online examination/assessment in a single shift for 30,000 candidates at 60 – 70 locations for 20 different subjects during last seven years in India for Govt. Central or State University/ School Boards/ State Boards/ Public service Commission. Assignments of similar nature must include the major activities such as pre-examination work, organizing exam centers, conduct of computer based/internet based online examination , creation of question bank, evaluation of result, providing the data to the Govt. Central or State University/ School Boards/ State Boards/ Public service Commission in both soft and hard copy.
14. The successful bidder shall give successful Performance Certificates as applicable in clause given above of earlier similar Computer Based/Internet Based Online Examination(CBT/IBT) completed successfully. The bidder shall also give undertaking that the work carried out by him was completed fully and was never left in between. Bidder shall also specify the client name and their contact details.
15. The bidder should have experience of CBT/IBT online examination for at least 2 years or more.

Work Orders from clients with authorized signatures showing the date of award along with contact details of the client should be attached.

16. The bidder should have signed contract /MoU with exam centers across India. Copy of signed contract /MoU to be submitted (in case of own centres , proof of engaging the same for an exam should be submitted) for the nodes between 10,000 - 15,000. **A self-declaration in this regard may be submitted**
17. Overall staff strength at the time of submission of bids should be (Project management/ Development/Quality Assurance /Implementation/Operations) should be between 300-500. The bidder should submit certification of Overall staff strength at the time of submission of bid. Officers of the Board may inspect the premises of the bidder in order to verify the particulars.
18. Successful Bidder may be asked to arrange for technical demonstration (Proposed methodology, technical support, user friendliness of the software, content management tool, administrative tool, database design, backup, security, training etc.) of Computer Based/Internet Based Online Examination(CBT/IBT) at any stage of tendering process.
19. No advance shall be made to the bidder. Statutory taxes like T.D.S. etc. shall be deducted at source as per provisions of the Income tax Act or any other Act applicable and certificate of such deduction made in each year shall be furnished to the bidder.
Payment will be made as per following schedule:
 - a) 20% amount of the total order value shall be paid within 30 days after successful completion of first 10 days of Computer Based/Internet Based Online Examination(CBT/IBT)examination
 - b) 20% amount of the total order value shall be paid within 30 Days after successful completion of next 10 days of Computer Based/Internet Based Online Examination(CBT/IBT)examination
 - c) 30% amount of the total order value shall be paid within 30 Days after successful completion of of Computer Based/Internet Based Online Examination(CBT/IBT)examination
 - d) Balance 30% amount of the total order value shall be paid after successful evaluation of subject wise result.
 - e) Payment shall be released on receipt of the original bills.
20. The rates for conducting Computer Based/Internet Based Online Examination(CBT/IBT) shall remain valid upto one year from the date of issuance of acceptance letter issued by the Board.
21. The Board reserves the right to accept/reject the lowest tender or all the tenders without assigning any reason.
22. In case a bidder surrenders the work after accepting the same, a penalty @25% of the work order value will be imposed on the amount of surrendered work and bidder shall be black listed and performance security will be forfeited after following due procedure.
23. This examination is to be conducted for approximately 2 lacs examination papers of students. Overall number of students may vary by $\pm 25\%$. Exam may be conducted in a single shift for 10,000 to 30, 000 candidates at 60 - 70 locations for 20 different subjects.
24. The time schedule shall have to be strictly adhered to for the execution of the Computer Based/Internet Based Online Examination(CBT/IBT). In case of delay, a penalty of Rs. 5000/- per day will be imposed subject to a maximum penalty of 10% of the amount of the Bill.

25. The Firm should be responsible to make all arrangements for conducting Computer Based/Internet Based Online Examination(CBT/IBT)and to ensure complete security, secrecy and safe custody of all forms of data.
26. Upon completion of work, the Firm shall furnish an undertaking that test data shall not be given/transferred to any person/firm/agency. In case any discrepancy/ breach is noticed by the Board, the firm will be blacklisted and appropriate befitting penalty/action in court of law including criminal proceedings shall be initiated by the Board.
27. Data of examinees for current examination will be provided by the Board, successful bidder will do pre-examination activity and evaluate the feasibility of CBT/IBT for each student as per their current location within one week of issue of order to the firm. While doing this evaluation mobile number/email address of all students should also be taken. All pre-examination phase processes shall be carried out by the selected bidder in consultation with PSBTE&IT.
28. Duration of examination will be of three hours consisting of one or more subjects. Data for combining subject semester -wise, trade- wise will be provided by PSBTE & IT.
29. The successful bidder shall provide a link on their web site to students for practicing mock test in offline/online mode during the entire process of online examination. The mock test should be a replica of the examination software. Intimation regarding mock test link should be continuously sent to students through SMS and e-mail.
30. The successful bidder shall securely install and implement Question Bank in English language for mock test.
31. PSBTE&IT shall provide 'Question Bank' to bidder for each trade in excel format. Name of trade, subject and chapter shall be defined along with each question. This question Bank will be in English language only. The successful bidder shall enable their software to create question paper for each trade/ subject on an on-demand basis. The software shall be able to create question paper by randomly selecting questions/options from 'Question Bank' for applicable trade/ subject. The number of questions to be included for the trade subject shall be provided by PSBTE&IT. The examination software/ system must generate and display question paper for the desired trade/ subject from the question bank provided by PSBTE&IT. While selecting the questions from the question bank, system should ensure that questions selected for various examinations shifts are in randomized manner to minimize duplicity of the questions in question paper.
32. The bidder must have owned/managed Primary Data Centre infrastructure with Disaster recovery infrastructure site for Data Security. Both Data Centers should be located in India in different seismic zones. The data center must be Tier III, ISO and Cert-in Certified as per Government of India Guidelines.
33. At the end of the exam, transfer/export of student response and audit trails shall be done by the successful bidder through secured mode of communication from local server to Central server of the successful bidder within 24 hour from each exam center. Other data such as attendance sheet, photograph, seating plan etc. (if any) should be sent to PSBTE&IT within 10 days of conclusion of the examination.

34. The successful bidder shall calculate marks obtained by each student in respective exam as per the answer key provided by PSBTE&IT. The software should have capability to import/enter the subject wise answer key post examination. The data also need to be uploaded to a server at the Master Control Facility of service provider.
35. The successful bidder's software must have provision for elimination of any incorrect/ out of syllabus questions while evaluation. PSBTE&IT shall provide/ facilitate for listing such questions post examination. The system must also be able to normalize marks and accommodate for providing moderation marks as per limits set by PSBTE&IT.
36. The candidate's responses, audit trails should be uploaded automatically from the local server to the selected bidder's data center in a secured manner. There should not be any traces of any data pertaining to candidate whatsoever post uploads left on the exam server/ local server/ or exam machines.
37. The successful bidder should be able to record and backup each candidate's response after the examinations. The successful bidder shall archive the result and other examination data **for six months from the date of declaration of result**. The successful bidder should be able to hand over the responses/data/ subject wise result of students / responses marked by student for each subject/ subject wise attendance of each student to PSBTE&IT immediately (same day) after the candidate's response upload from local exam server.
38. The successful bidder shall provide documented inputs and support for handling Candidate's queries , RTI queries , Court Cases etc.
39. Successful bidders should take care of Physical Security, Information Security, Server Security, Network Security for each step while implementing CBT/IBT mode of online examination
40. The successful bidder shall prepare and provide Standard Operating Procedure (SOP) for all processes for safe and secure conduct of examination along with rules for contingency and exception handling/ emergency procedures.
41. The proposed software solution must have been developed in house by the bidder and the bidder shall own the complete source code of the software being used for conducting the Online Examination. The software should have role based security mechanism. Bidder will have to make customized modification in the software as per the requirement of the Board.
42. The selected bidder will have to carry/ demonstrate Complete Test Run (CTR) with test data to PSBTE&IT before implementation of the software. The selected bidder should also be able to demonstrate click by click audit trail for any type of enquiry. The selected bidder should also be able to demonstrate Application server logs to capture all errors, warnings and exceptions that are generated in applications along with the time at which they occurred. Network Failure Test during demonstration and its handling i.e Exam should resume without Manual Intervention. Software should be capable of handling any security breach and should have alert system on candidate screen.
43. The successful bidder shall provide consulting, training and manpower support to handle the entire Examination.
44. No conditional tender will be accepted.

45. All the disputes shall be subject to the jurisdiction of the Chandigarh.
46. Any deviation from these conditions will be liable to disqualify the bidder.

COMPUTER BASED TESTING- Conditions

The successful bidder is expected to draw the examination plan and implement the design of the examination processes as required by PSBTE&IT Broadly, the requirements will be as follows:

47. The successful bidder shall develop a comprehensive examination schedule / plan taking into account the total number of trades, subjects, locations, Covid19 guidelines (**Social distancing/Thermal Scanning/ Covid App /Hand Sanitisers etc.**) issued by Centre Government /State Government and students enrolled for CBT mode of examination. The bidder shall ensure that each student get sufficient time between two examinations, and students should be allotted exam centers in each district of Punjab in such a way that each student shall have to travel locally or to a reasonable distance for appearing in the exams. In states other than Punjab no. of exam centers will depend upon the strength of students in that state or adjoining state.(Please note that any exceptions shall be agreed to upon and approved by PSBTE&IT). The successful bidder shall issue admit cards with detailed required instructions/ information to the students appearing for exam at Exam Centers through online portal (printable and downloadable), for all students as per the format approved by PSBTE&IT. Intimation regarding examination should also be sent to students through SMS and email one day prior to the examination.
48. Seating arrangement at exam center should be done randomly. Validation, verification of student's identity and attendance handling at exam center along with Machine/seat allocation and its security parameters will be the responsibility of successful bidder. The successful bidder shall ensure checking of admit card of the students, and photo-ID of students i.e. Government Issued photo ID or registration card with photo issued by PSBTE & IT at the entrance gate of the examination center. The Attendance sheet must have photograph of student for validation at exam center.
49. The successful bidder should have its own or leased infrastructure in computers, appropriate technology, hardware and software, trained staff, adequate security measures and due diligence. The required Hardware, Software, networking shall be installed by the successful Bidder on lease/rent basis, whose cost would be covered under the commercial bid. However, all operations related to conducting examination at the centers, shall be liability of the successful bidder. Each of the identified centers will be vetted and certified by authorized PSBTE &IT personnel and the successful bidder. The selected bidder, as per the requirements and directives from PSBTE&IT, shall setup systems at the required Exam Centers across the state of Punjab as well as outside the state of Punjab ensuring that at least 10% extra systems are available as backup per shift. Also each examination center should be sanitized as per Covid19 guidelines issued by Centre Government /State Government after every shift of examination.
50. **Requirement for every student** shall be provisioned with one individual computer node for appearing in the examination. The detailed specifications of user computer node is provided in table below:

Processor	CPU Speed should be 1.5 GHz or above
RAM	2 GB or higher
Screen Resolution	1024X768 or better
Operating System	Linux/Windows 10 or equivalent or higher version with appropriate Service Pack
Browser and Browser Setting	Internet Explorer 7.0 or above as supported by above Operating Systems Java Script enabled Pop-up blocker disabled Proxy disabled (Direct Internet) USB disabled
Performance and Security Criteria	<ul style="list-style-type: none"> • Must support examination portal without any perceivable degradation in performance • Response time for question/page loading must be less than one second • All responses to be acted upon in real time • Necessary settings must be done to disable access to any outside content/ web browsing or medium for malpractices during examination

51. The successful bidder shall provide specifications for Hardware and Software of required Devices and systems to be used for authentication and audit trail mechanisms required for Exam. The successful bidder shall ensure that all Exam Centers have the prescribed Hardware, Software and LAN connectivity for conducting Examination.
52. The successful bidder shall ensure that required UPS facilities and Generator facility are available at each Exam Centre for un-interrupted power. Uninterrupted power should be made available for the period of each session and for 30 minutes prior to and after each session on the day of examination. The selected bidder shall carry periodic audit at Exam Centers to ensure specifications of user computer node and working condition of UPS & Generator as mentioned above. Any change in the system requirement has to be approved by PSBTE&IT prior to examination schedule.
53. The successful bidder shall ensure suitable drinking water and separate toilet facilities for both Boys and Girls at each examination center.
54. All Examination Venues shall be installed with CCTV surveillance system. CCTV camera must capture Examination Venue activities from 30 minute before the examination to 30 minutes after the completion of examination. CCTV surveillance must be made functionally available in such a way that all candidates are covered under the surveillance setup. CCTV footage shall get recorded to a central system and the recording must be kept safe for at least 6 months from the

date of examination. CCTV footages, CCTV live streams and other relevant data shall be submitted/ provided by the bidder upon request from PSBTE&IT.

55. Pre-examination audit of all examination venues along with its processes, hardware/software, security, manpower etc. shall be done on parameters such as CCTV coverage, testing of Examination software/ application with multi-threading/multi-user testing on full load.
56. The successful bidder shall make necessary arrangements, in consultation with PSBTE&IT, for providing adequately trained manpower as per the requirements mentioned below:

Staff Type	Nos. deployed (per shift)
Exam Center Administrator	01 per center
IT Manager	01 per center/ 01 for every 100 candidates
Invigilators	01 for every 50 candidates
Support Staff	02 for every 50 candidates
Security Guards	02 or more per center

The above staff should be increased proportionately on the basis of size of the center in terms of nodes for exam. In addition, service provider should provide a Regional/ District Head for each of the locations of examination.

57. The Examination shall be computer based with the questions being provided onscreen on a random basis, without any manual intervention. 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.
58. The system shall display clear instructions as applicable for the examination upon starting of the test. Computer based exam software should support standard features such as display of details of student i.e. display of student's photograph, registration number of student, and name of trade/ subject for the entire duration of the online examination. The duration of the exam shall be displayed at commencement of exam in the instructions sections. The start-time and time remaining counter shall be displayed at all time during the examination .The software must provide a summary of questions attempted by student, remaining questions, and flagged questions. It should allow the student to easily navigate to a particular section or answered/un-answered question.
59. The questions and the answers should be randomized/ jumbled for each student appearing in the same subject and same shift. The system must ensure that options such as 'All of the above' in multiple choice questions are correctly sequenced and not jumbled.
60. System must ensure that references in questions such as 'In the table below' or 'in the image above' are consistent across the question paper and displayed appropriately. Examination software must have 'Exam Resume' functionality, whereby candidates' examination progress will not be lost in-case of system or power failures. Examination software must use standard or proprietary fonts in a manner that does not degrade the readability of the question paper. Software must allow user to zoom the examination screen to enlarge fonts/ screen content.

61. Examination software must disable other system feature such as usage of internet browser, pen drive, file sharing through LAN or any other means of malpractices/ cheating.
62. The successful bidder shall provide for any other raw materials required such are paper, and pencil for calculation etc.
63. The successful bidder shall have a contingency plan for candidate management/Shifting in case of any emergency.

INTERNET BASED TESTING

64. The successful bidder shall issue admit cards with detailed required instructions/ information to the students appearing for exam from their home through online portal (printable and downloadable), for all students as per the format approved by PSBTE&IT. Intimation regarding examination should also be sent to students through SMS and email one day prior to the examination.
65. The software should be secured and compatible for Laptops / Desktop with web camera and microphone. It should have mobile based apps for Android/iOS.
66. Questions in any examination should be provided on a random basis, without any manual intervention.
67. Software should be capable of Automated Facial Validation using cognitive services photo will be verified with the image captured during candidate registration of exam. Photo verification would be done before exam start and during exam at a regular interval of time. Candidate's images, screen images and audio files should be captured / stored for any future verification.
68. Software should be capable of Remote Proctoring. Students can write exam from any location and can be monitored remotely.
69. Software must have inbuilt features as below:
 - System should take pictures of user assessment screens to detect any anomalies during the exam and these pictures should be part of logs and submitted to department.
 - On selection Proctor should be able to hear audio of the entire duration of the exam.
 - Live exam progressive streaming of student should be done.
 - Head movement detection should also be captured.
 - Geo Location of Candidates Identification should be made.
 - System should have virtual invigilation.
70. A Candidate should be able to see only the exam screen and all other commands should get locked and they shall not be able to visit any other site till the exam is completed. Dual screen should also get blocked along with blocking of all ports.
71. Proposed solution should have all the features to curb malpractices and at the same time its speed should not be compromised.
72. System should take pictures of user assessment screens to detect any anomalies during the exam and to counter any candidate allegations later. Third party body / face detection during exam should also be captured.

Annexure -I

WORK EXPERIENCE

S.No	Name of the client	Name of examination/ assignment	Nature of Services Provided	Details /Brief Scope	Date of Award of Contract	No of Identities/ Subjects for which examination was conducted	No of Locations / Exam centers	No. of Exam Center /vendors (Attach proof of MOU or self-declaration)	No of Students appeared/s cheduled in lakhs	Name and Address /Telephone No / Email of officer to whom reference may be made
1										
2										
3										

Supporting documents such as copies of Work Order/contracts/completion certificate/ Client letter, etc. to be attached. Assignments which are not supported by documentary evidence shall not be considered for evaluation.

Signature and seal of the Bidder :

Telephone/Mobile:

E-mail:

PROFORMA FOR TECHNICAL BID

Name of work: Computer Based / Internet Based Online Examination (CBT/IBT)

- 1. Name of Service Provider:
- 2. Name of proprietor/Director
- 3. (i) Full Address of Regd. Office:.....
.....
(ii) Full Address of Office (near Chandigarh (if any)):.....
.....
- 4. Telephone No:..... FAX No:.....
Mobile No.....
- 5. E-Mail Address.....
- 6. License No. & Registration details with documentary Proof
.....
.....
- 7. PAN/GIR No..... (Upload attested copy)
- 8. GST Registration No.: (Upload attested copy)
- 9. Please specify whether the firm is a Sole proprietorship or Partnership also specify the name, address and Telephone nos. of Directors/partners of the Firm (upload attested copy):
.....
.....
- 10. List of major clients (Government/Autonomous/PSU/Pvt) with a separate sheet for the list and proof of the same must be uploaded):
.....
.....
.....

11. Details of Earnest Money Deposit: Amount Rs. 10,00,000/- (Rs Ten Lac only).
 NEFT/RTGS..... Date of transfer.....
 OTC..... Net Banking/IPG.....
 Transaction ID / UTR Number.....
12. Upload certified copies of Annual turnover of the last 3 financial years with balance sheets and also must Upload the income tax returns of three years as mentioned below.

Financial) Year	Amount (Rs. crores)	Remarks (if any)
2016-2017		
2017-2018		
2018-2019		

13. Certify that the bidder has not been blacklisted/ debarred by any Govt. Department / PSU or any criminal case is registered against the bidder / Service Provider or its owner/ partner anywhere in India. (Attach copy of affidavit/self declaration)

DECLARATION

14. I.....son/daughter/wife of Shri..... authorised signatory of the agency/firm Mentioned above is competent to sign this declaration and execute this tender document.

(Signature of Tenderer)

15. I have carefully read and understood all the terms and conditions of the tender and undertake to abide by them.
16. The information/documents furnished along with the above application are true /authentic to the best of my knowledge and belief. I/we am/are well aware of the fact that furnishing of any false information/fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

Date:

Signature of authorized person

Place:

Full Name:

Seal:

PROFORMA FOR COMMERCIAL BID

Name of work: Computer Based / Internet Based Online Examination (CBT/IBT)

S.No	Item Description	Per student per Exam Cost including all Taxes (INR)
1	Examination Charges per student per exam paper(inclusive of all services provided under the scope of the Project) for CBT (Computer based Testing) Mode	
2	Examination Charges per student per exam paper(inclusive of all services provided under the scope of the Project) for IBT (Internet Based Testing) Mode	

Note: i) No cost other than quoted in the commercial bid shall be claimed separately.

ii) Rates are inclusive of cost of pre-examination work, organizing exam centers, conduct of computer based/internet based online examination, creation of question bank, Evaluation of result, cartage, toll taxes, GST, freight and other incidental charges (if any).

Declaration by the Bidder:

It is certified that I/we before signing this tender document have read and fully understood all the terms and conditions and undertake myself/ourselves to abide by them. I fully agree and accept the present rate, all taxes as per government norms and terms and conditions of the Punjab State Board of Technical Education and Industrial Training.

Date:.....

Place:.....

Signature and seal of the Bidder

Name:.....

Designation: (Seal).....

Address:.....

.....

Phone No.(O)

Mobile No

Email Address:.....