Request for Proposal for the Procurement & Implementation Of Digital Institute

At

Kendrapara Autonomus College, Kendrapara

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RFP for Digital Institute

OFFICE OF THE PRINCIPAL

Kendrapara Autonomous College, Kendrapara

No. 2746 /Dt. 14.12.19

Notice Inviting Tender

Potential bidders from reputed & registered Software Development Agencies having experience in IT Solutions i.e., Implementation of Digital Institute Management system inclusive of smart class rooms and smart exam centers are invited to bid using sealed tenders in a three bid system (Pre-bid, Technical bid &Commercial bid). Tenders must be submitted in a sealed envelope to the Principal, Kendrapara Autonomous College, Kendrapara, through Registered Post or Speed post on or before 10.01. 26 2 during working hours. No bid will be accepted after the above mentioned date and time. Kendrapara Autonomous College will not be responsible for any postal delay. Tenders received late or without EMD will be rejected automatically. Any subsequent corrigenda/clarifications will be made available on the website. Details may be downloaded from our website http://www.kac.edu.

Kendrapara Autonomous College

Kendrapana al Kendrapara Autonomous College KENDRAPARA

1. Introduction & Background

1.1. Executive Summary

The following RFP (Request for Proposal) document comprises our client's functional and technical requirements, bidding process and execution timeline. The information in this document is not to be disclosed except for the evaluation of technical and commercial proposal.

1.2. Institute Overview

Kendrapara Autonomous College is a co-aid non-government aided autonomous college located in town of Kendrapara, Odisha. The autonomous college was established in the year 1959 and is one of the premier institutions in Kendrapara district. In the year 2005 UGC granted this college its autonomous status to run its undergraduate educational curriculum. The college got its accreditation by NAAC with grade A certification in the year 2005. The autonomous college offers students three years of regular undergraduate courses in degree of Arts (B.A), (B.A. Hons), Commerce (B.Com, B.Com. Hons) and Science (B.Sc.) (B.Sc. Hons) and P.G. in Sociology. In addition to degree courses, it also has +2 courses for arts, science & commerce. It also has few self financing courses running by various departments.

1.3. Digital Institute Objective

The objective is to create one of the first digital Institutes in India. It will be an instrument for providing 21st century IT enabled learning, research, teaching, examination, writing and communicating experience of a learning community. This digital Institute infrastructure will run on a self-sustaining mode for the first three years of operation through Institute investment. KAC envisages the creation and establishment of an Information and Communication Technology framework for improving the efficacy of the delivery of its services to all its stakeholders — the student community, the teaching faculty, the administrative staff and the general student base at large. To achieve this objective, KAC is considering selecting a suitable implementing partner for the automation of the various functions of digital Institute on Managed Services based on Build, Own, Operate and Transfer (BOOT) model.

2. Bidding Process

2.1. General Outline

The bidding process will be carried out as follows:-

SI#	Item Description	Date	Remarks
1	Issue of RFP	16-12-2019	
2	Pre-Bid Questionnaires submission date	23-12-2019	
3	Pre-Bid meeting	26-12-2019	
4	Submission of bids	10-01-2020	
3	Technical Evaluation	17-01-2020	
5	Presentation by Selected Vendor(s)	20-01-2020	
6	Opening of Commercial bids	20-01-2020	
7	Price negotiation & award of contract	22-01-2020	
8	Commencement of Phase-1	04-02-2020	

2.2.

2.3. Bid Qualification Criteria

SI#	Parameter	Qualification Criteria	Evidence Required		
1	Consortium	The Bidder can be either a Single entity . No			
		Consortium allowed.			
2	Legal	Bidder should be	1. Copy of Certificate of		
		• A company incorporated in India under the	Incorporation /Copy of		
		Companies Act, 1956 and	Registration Certificates		
		subsequent amendments	2. Copy of GST Certificate		
		 registered with the GST Authorities 	3. Copy of PAN		
		 Should have been operating for the 			
		past five years.			
3	Sales	Bidder should have had an average turnover of	Audited financial statements		
	Turnover	at least INR 1 Crores (FY 2016-17, 2017-18,	for the last three Financial		
		2018-19) from system integration services,	years. Certificate from the		
		software development & Implementation .	Statutory Auditor		
4	Net Worth	Bidder should be profit making as per the	Audited financial statements		
		audited consolidated financial statements in	for the last three Financial		
		the last 3 financial years (FY 2016-17, 2017-18,	years Or		
		2018-19). The company should have positive net worth.	Certificate from the		
		net worth.	Statutory Auditor		
5	Certificates	Bidder should have ISO 9001:2008/ CMMI-3 or	ISO/CMMI certificates		
	00101110000	higher certificate at the time of submission of	1307 CIVIIVII CEI LIIICALES		
		bid.			
6	Blacklisting	Bidders should not have been blacklisted by	Self-certificate letter		
		Govt. of India/Central PSU/State Govt. in the	undertaking to this effect on		
		last 5 years preceding the date of submission	company's letterhead signed		
		of the bid.	by company's authorized		
			signatory.		
7	Experience	Bidder should have the experience of	Complete Certificates from		
		implementing/operating an e-Governance	the client work Order of last		
		(Institute management) platform/Digital	3 years.		
		Institute of at least 5 organizations in India or			
		abroad, out of which three should be			
		Central/State government Institutes.			
		,			
8	Strength	One of the work orders related to education	Work Order or Client		
		from central govt./state govt./central or state	certificates		
		govt. trust should be worth Rs. 20 lakhs two			
		work orders of Rs. 10L each in last three years			
9	EMD	All bids must be accompanied with Bank draft	DD/BG/NSIC certificate		
		of Rs.25,000(Twenty fife thousand) in favor of	Principal		
		Principal Kendrapara Autonomous College,	Kendrapara Autonomous		
		Kendrapara, payable at Kendrapara or Bank	College, Kendrapara		
		Guarantee – format attached in Appendix B.	Payable-Kendrapara		
		Vendor with NSIC registration are exempted from the EMD.			
10	Power of	Special written power of attorney on a stamp	Special Written power of		
10	Attorney	paper authorizing the representative of the bid	attorney on a stamp paper		
	= = 2	paper additionizing the representative of the bid	accornicy on a scamp paper		

to sign the bid against this TENDER

2.4. Instruction of Submission of Bids

This tender is proposed to have a three-bid system.

- ✓ Pre-Qualification bid in first envelope
- ✓ Technical Bid in second envelope.
- ✓ Commercial Bid in third envelope.
- a) The tenderer must place all their three bids in separate envelopes, with the complete address of the bidder, super-scribed with separate BID titles as follows.
 - ✓ Pre-qualification bid for implementation of digital institute
 - ✓ Technical bid for implementation of digital institute.
 - ✓ Commercial bid for implementation of digital institute

All three envelopes should be sealed separately and put together in a separate envelope, which

Shall be sealed and superscripted with "TENDER FOR IMPLEMENTATION Of Digital Institute".

- b) Pre-Qualification Bid should contain all the document required as mentioned in Pre-Qualification and will be opened first.
- c) Technical Bid of only those tenderers shall be opened who qualify the Pre-Qualification stage. Technical bid will contain technical proposal and methodologies of execution. Technical Bid should contain detailed Technical proposal with Solution details, Solution architecture, Platform/technology details, Work plan, Development and Implementation methodology
- d) Commercial Bid of only those tenderers shall be opened who score the qualifying marks in technical bid.
- e) Prices should not be indicated in the technical bid or pre-qualification bid and should be quoted only in the commercial bid.
- f) The bids, received after the last date and time for receipt of bids prescribed in the tender document shall be rejected.
- g) Tenders need to be sent through registered post or courier or can be dropped at project office. Tenders made by fax or email or those received late shall not be entertained.
- h) Tenders should be typewritten or handwritten but there should not be any overwriting or cutting. Correction, if any, shall be made by neatly crossing out, initialing, dating and rewriting. The name and signature of bidder's authorized person should appear on each page of the application. All pages of the tender document shall be numbered and submitted as a package along with the forwarding letter on the agency's letter head.
- i) Bidders are not allowed to submit multiple bids or propose joint bids to participate in the tender. In case found otherwise, their bid is liable to be rejected.
- j) The KAC management reserves the right to award the work/cancel the award without assigning any reason if any.
- k) The tenderer shall bear all costs associated with the preparation and submission of its bid, including cost of presentation for the purpose of clarification of the bid, if so desired by the Institute and Institute shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.
- I) The tenderer is expected to carefully examine all instructions, forms, terms and specifications in the tender document. Failure to furnish all information required in the document or submission of a bid not substantially responsive to the tender document in every respect shall be at the tenderer's risk and may result in the rejection of the bid.

m) A prospective tenderer requiring any clarification of the tender document may notify the Institute in writing at the Institute mailing address as mentioned in the Appendix-A. The Institute shall respond in writing to any request for clarification of the tender document as mentioned. A prospective tenderer requiring any clarification of the bidding documents must submit their queries in writing; only queries submitted in the following format will be considered for clarification.

SI#	Clause Reference	Reference page	Clarification Sought

Queries not adhering to the above-mentioned format shall not find any response.

- n) At any time up to the last date for receipt of bids, the Institute, may, for any reason, whether at his own initiative or in response to a clarification requested by prospective tenderers modify the tender document by an amendment.
- o) The amendment shall be notified in writing on Institute website.
- p) In order to offer perspective tenderers reasonable time or otherwise for any other reasons, in which to take the amendment into account in preparing their bids, the Institute may at its discretion, extend the last date for receipt of Bids.

2.5. Evaluation of Bids

The Proposal Evaluation Committee, constituted by KAC, will evaluate the responses of the bidders and all supporting documents/documentary evidences. Inability to submit requisite supporting documents/documentary evidence may lead to rejection.

- (a) The decision of the Proposal Evaluation Committee in the evaluation of proposals shall be final.
- (b) No correspondence outside the process of evaluation will be entertained by the Committee.
- (c) The Proposal evaluation Committee may ask for meetings with the bidders to seek clarification or conformations on their proposal.
- (d) The Proposal evaluation Committee reserves the right to reject any or all proposals. Each of the responses shall be evaluated as per the criteria and requirements specified in this tender.
- (e) Subsequently, the bids will be examined for fulfillment of eligibility criteria as given in prebid. Bids which do not fulfill the eligibility criteria will not be considered for further evaluation.
- (f) Bids which fulfill the eligibility criteria will be examined for fulfillment of technical specifications by a 'Technical Evaluation Committee (TEC).
- (g) A technical presentation will be called for by the TEC during the process of evaluation. Bidders must be prepared for the same.
- (h) The representatives of the firms which fulfill technical specifications will be invited for opening of commercial bids.
- (i) After the opening of commercial bids, the bids would be evaluated in full for final scores.
- (j) The final selection of the bidder will be based on QUALITY AND COST BASED SELECTION (QCBS) procedure. There will be 80 % weightage for Technical Evaluation and 20 % for Commercial Evaluation

2.6. Evaluation Criteria

The steps for evaluation are as follows:

Stage 1:Pre-Qualification

✓ KAC shall validate the Set 1 "Tender document fee & Earnest Money Deposit (EMD)" and all documents required as per pre-bid criteria.

- ✓ In case the Bidder does not meet any one of the conditions, the bid will be disqualified.
- ✓ Bidders would be informed of their qualification/disqualification based on the Pre-Qualification criteria through Email.
- ✓ The EMD and the Unopened Technical & Commercial Bids will be returned to the respective disqualified Bidders after the submission of Bank Guarantee by the successful Bidder.

Stage 2: Technical Evaluation

- ✓ Set 2 "Technical bid" will be evaluated only for the bidders who qualified in Stage 1.
- ✓ KAC will review the technical bids of the short-listed bidders to determine whether the technical bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at KAC discretion.
- ✓ The bidders' technical solutions proposed in the bid document will be evaluated as per the requirements specified in the tender and technical evaluation framework as mentioned below
- ✓ Each Technical Bid will be assigned a technical score out of a maximum of 100 marks. Only the bidders who get a technical score of 60% or more (prior to normalization) will qualify for commercial evaluation stage. Failing to secure minimum score shall lead to the technical rejection of the Bid and Bidder.
- ✓ Bidder should also score at least 50% of the same of the section as listed in technical evaluation table of Technical Evaluation Framework.

The Final Normalized technical score of the Bidder shall be calculated as follows:

- ✓ The guidelines for evaluation have been designed to facilitate the objective evaluation of the Technical & Commercial bids submitted by the bidder. The evaluation process would rank the bidders based on their composite score computed as weighted average of the Technical and Commercial scores in the manner prescribed below. There will be a weight age of 80% for Technical Bid and 20% for Commercial Bid.
- ✓ The evaluation process would comprise two stages Technical and Commercial evaluation.
- ✓ Technical evaluation of the bidders will be done based on the criteria and points system as specified below.

The Final Normalized technical score of the Bidders shall be calculated as follows:

Normalized Technical Score of a Bidder = {Technical Score of that Bidder/Score of the Bidder with the highest technical score}* 100 (adjusted to 2 decimals)

SI#	Bidders	Tech score	Calculation	Normalized Tech Score
1	Bidder-1	88	(88/95)*100	92.6
2	Bidder-2	90	(90/95)*100	94.7
3	Bidder-3	95	(95/95)*100	100

Technical Evaluation Framework

The Bidder's technical solution proposed in the Technical Evaluation bid document will be evaluated as per the evaluation criteria mentioned in the following in table.

\$1 #	Evaluation Criteria	Total Marks	Minimum Qualification Marks	Detail
1	Experience	10	5	Bidder should have the experience of implementing/ operating a e-Governance (Institute management) platform/Digital Institute in at least at 3 govt. institutes (5 marks). For any additional government institutes add 1 mark (max to 10 marks)
2	Strength	10	5	Largest work order amount to Rs 50 Lakhs as (5 marks) and add 1 mark for Rs 25 Lakhs extra work (maximum to 10 marks).

3	Education ERP Platform	20	5	Bidder should have their own education ERP platform and have implemented the same in at least at one institute. For each additional institute 1 marks will be given
4	Implemented Smart Academics Management System	10	0	Has implemented Academics management system at a higher education institute (5 marks); 10 marks for 2 or more institutes.
5	Library Implementation	10	0	Library Implementation at 1 institute (5 marks) and (10 marks) for more than one institute
6	Technical Presentation	40	10	

Stage 3: Commercial Bid Evaluation

The commercial bids of only technically successful bidders will be opened. KAC is not bound to select the bidder on lowest cost basis.

The evaluation will be carried out if Commercial bids are complete and computationally correct. Lowest Commercial bid (denoted by symbol "F (m)") will be allotted a Commercial score of 100 marks. The Commercial score will be denoted by the symbol "S(r)". The Commercial score of other bidders will be computed by measuring the respective Commercial bids against the lowest proposal.

These Commercial scores will be computed as: S(r) = 100 * (F (m) / F) where F is the Commercial bid of the bidder whose Commercial score is being calculated. The Commercial score shall be out of a maximum of 100 marks.

Normalized Commercial Score of a Bidder = {Commercial Score of the lowest Bidder/commercial Score of that Bidder}* 100 (adjusted to 2 decimals)

Sl#	Bidders	Price	Calculation	Normalized Comm
		Quote		Score
1	Bidder-	20,00,000	(20,00,000/20,00,000)*100	100
	1			
2	Bidder-	30,00,000	(20,00,000/30,00,000)*10	66.67
	2			
3	Bidder-	25,00,000	(20,00,000/25,00,000)*100	80
	3			

Stage 4: Computing the final Score

The composite score is a weighted average of the Technical and Commercial Scores. The weight age of the Technical vis-à-vis the Commercial score is (0.80) of the Technical score and (0.20) of the Commercial score. The composite score (S) will be derived using following formula:

$$S = (S (t) * 0.80) + (S (r) * 0.20)$$

Thus the composite score shall be out of a maximum of 100 marks.

S1#	Bidders	Tech	Comm.	Final Score	Final
		score	Score	formula	Score
1	Bidder- 1	92.6	100	=0.8*92.6+0.2*100	94.08
2	Bidder- 2	94.7	66.67	=0.8*94.7+0.2*66.7	89.1

3	Bidder-	100	80	=0.8*100+0.2*80	96
	3				

2.7. Offer Validity Period

The bidder for the project shall remain open for acceptance for a period of three months from the date of submission of the price bid.

2.8. Payment Terms

The payment will be made on the terms and conditions accepted during Price Negotiations with selected vendor.

3. Requirements

3.1. Requirements Overview

KAC team wants to setup a digital Institute that will run on the BOOT model (Build, Operate, and Own Transfer) in a phased manner. The selected vendor will run the system in BOOT mode for 3 years. The digital Institute will have the following modules in a phased manner. This proposal is limited for phase-1 only and that can be extended for additional phases.

Phase-1 (Need of the hour)

- 1. **Smart Library Management System There** will be a complete online library management system. The scope includes catalogue creation to book entry of nearly 80,000 books.
- Smart Academics Management There will be a complete Online Academics management system. This includes course planning to time table management. This includes student entry to exit process.
- 3. **Smart Feedback Management System** This will integrate with academics management system to collect feedback.
- 4. **Question Bank Management System** This will be a complete question bank management system where faculties can create their subject wise question bank.
- 5. **Exam Management & Result Publication** This will be required for mark entry to result publication process.
- 6. Student Self Service Portal This will be required for student self service from his/her mobile app

Phase-2 (Can be looked after Phase-1)

- 7. **LMS Portal** There will be Digital Institute Extended Learning Management System portal in the KAC website. This will have the online content management system, lecture notes, assignment management, and assessment modules. Faculties will be able to build, review and deliver content using this platform.
- 8. **Smart Examination Centre** Plan to develop a 100-seat, Computer Based Test (CBT) center phase wise. KAC will build 50 seats first year.
- 9. **Smart Learning Centre** There will be 30 seats in the learning center and will have expected to have 3 learning centers one for arts, commerce & science.
- 10. **Smart Class Rooms** There will be smart class rooms, at least one for each department; which can be further extended for all class rooms.

Phase-3 (Can be looked after Phase-1 & Phase-2

11. **Extended ERP** – There will be backend ERP modules like HRMS, Finance, Store, Procurement, Library, Hostel, etc. This will be done in Phase-1 & phase-2.

3.2. Functional Requirements (Phase-1)

3.2.1. Library Management System

SI No	Feature Details	Complia	nce	
		100% Met	Not Met	Can be customized
	Budgeting Module:- This module shall help library to internally allocate budgets to different departments of the institute which shall be used for purchases via library throughout the year.			
1.	It shall enable user to capture year wise, department wise budgeted amount.			
2.	It shall enable user to carry-forward Non-Committed funds of previous F.Y. to current F.Y. by marking the flag as "Yes" and show it in the current F.Y. budgetary details as Opening Balance.			
3.	It shall enable user to either carry forward the entire amount or in-part.			
4.	It shall enable departments to spend the money committed in the previous F.Y. in current F.Y. i.e. essentially carry forward the committed but un-spent funds from previous F.Y. to current F.Y.			
5.	It shall communicate with all databases in library module to retrieve details of expenses made by the department.			
6.	At any given point in time, it shall show committed expense, balance, actual expense, previous committed amount and previous actual amount to user in library and it user interfaces of HOD & DLC.			
7.	It shall push budgetary details entered and posted by the user to the user interfaces of respective HOD(s) & DLC and enable them to enter remarks for changes in the budget, if any.			
8.	It shall enable alterations to be approved on the workflow by Librarian.			
9.	It shall enable users, based on role level access & authentication, to access this database for reference or reporting or updating purposes with a search option on departments, F.Y. etc.			
	Acquisition Module – Indent for Books & Series:- This module shall serve the purpose of managing indents placed by faculty members for books and series.			
10.	It shall enable faculty members to fill an online form for placing indent for books/series through their user interface.			
11.	It shall communicate with Faculty database to auto-fill designated fields in the online form.			
12.	It shall verify the book/series title entered by the faculty member in the online form with the Online Public Access Catalogue (OPAC) database and intimate faculty member about availability of the book/series title in library circulation along with details like			

	call number, accession number.		
13.	It shall verify the book/series title entered by the faculty member		
13.	in the online form with the purchase standing instructions		
	(maintained by library) and intimate faculty member about		
	details of standing instructions like date of execution of standing		
	instructions, number of copies ordered under purchase		
	instructions etc.		
14.	It shall communicate with Head Academics database to verify the		
	course id entered by the faculty member with the approved		
	course module in Head Academics and retrieve number of		
	students registered in the course in current semester.		
15.	It shall not allow faculty member to input any course id which is		
	not available in approved course module in Head Academics.		
16.	It shall enable faculty member to put an indent for as many		
	books as 10:1 ratio between students registered and books		
	required i.e. 1 books can be indented for 10 students.		
17.	If the book or standing instruction already exists, and faculty		
	member is placing an indent then this module shall calculate 10:1		
	ratio by taking into account number of books already available in		
	circulation in library and number of books placed under standing		
	instructions.		
18.	It shall generate unique reference number on successful		
	submission of the indent form.		
19.	It shall enable entire approval process of the indent to flow		
	online through the workflow.		
20.	It shall communicate with the budgeting module and enable HOD		
	& DLC to view the balance available in the department budget		
	allocated by library as against the amount of the indent.		
21.	It shall not allow HOD & DLC to approve any indent with amount		
	greater than the balance available in the department budget		
	allocated by library.		
22.	It shall allow a Library staff to check the availability of the book		
	on the OPAC system.		
23.	It shall allow a second Library staff (apart from the initial Library		
	staff) to cross verify the availability of the book on the OPAC		
	system.		
24.	It shall show relevant remarks to the Librarian, if the book/series		
	indented is already present or placed under standing instructions		
	along with details like call number, accession number, number of		
25	copies in standing instructions etc.		
25.	It shall commit the indent amount in the department budget		
	allocated by the library as soon as HOD/DLC approves the indent.		
	This money shall remain blocked for any other usage until the request is cancelled.		
26.	Commitment of funds shall be temporary and virtual. As soon as		
20.	the bill is processed by the acquisition cell of library, system shall		
	over-write the commitment of funds with the debit entries in the		
	account equivalent to the bill amount.		
27.	Upon processing of bills, if bill amount is lesser than committed		
۷1.	amount then it shall release the remaining committed amount		
	basis the indent reference number.		
28.	In case of multiple payments from the committed amount i.e.		
	2222 of managed payments from the committee difficult field		

	payment in parts, it shall shave reducing helpings and of		
	payment in parts, it shall show reducing balance out of		
	committed amount every time a bill is processed against the		
	same indent reference number.		
29.	It shall generate a PO with a unique reference number to be		
	generated. This shall be available in a printable format, for quick		
	print / import and dispatch for the processing.		
30.	Upon processing of bills, if bill amount is higher than the		
	committed balance, it shall show pop-up box to user for special		
	approval and auto-raise special approval request to Head –		
	Library with unique reference number in the workflow.		
31.	It shall enable users, based on role level access & authentication,		
	to access this database for reference or reporting or updating		
	purposes with a search option on indent reference number,		
	department, name and unique number of the indenter.		
	Technical Module:- This module shall serve the purpose of		
	managing technical section of the library.		
	,		
32.	It shall communicate with the acquisition database and generate		
	a list of all purchases.		
33.	It shall enable user to update receipt of purchases from		
	acquisition section in the list.		
34.	It shall enable user to allocate books for inspection to various		
	team members and other team in-charges by assigning books		
	against their user ids in this module.		
35.	It shall allow books to be processed (classified & catalogued) and		
	release a weekly list of new additions for public display.		
	Periodicals Module - Indent for Periodicals: - This module shall		
	serve the purpose of managing periodical requests by		
	departments of the institute. It shall retrieve periodicals budget		
	allocated to departments in the budgeting module, Periodical		
	budgeting		
36.	It shall enable user to push list of department periodicals of		
	previous year to respective HOD/DLC user's interface.		
	previous year to respective 1100/010 dser's interface.		
37.	It shall enable HOD/DLC to also view periodicals purchased by		
	other departments in form.		
38.	It shall enable HOD/DLC to share the list with faculty members of		
	the department through the workflow.		
39.	It shall enable faculty members of the department to provide		
	their preference for purchasing periodicals from the given list and		
	add/delete any new periodicals, if required.		
40.	It shall aggregate preferences given by the faculty members of		
	the department in the user interface of HOD/DLC and enable		
	HOD/DLC to recommend the aggregate list as-it-is or after		
	modification.		
41.	It shall enable HOD/DLC to add other departments as fellow		
71.	indenters to one or many periodicals and define % contribution		
	for each department, thus making it a combined order. It shall be		
	the responsibility of periodical cell to verify and take consent on		
	combined orders.		
	Combined orders.		

42.	It shall generate a unique reference number for the		
	recommended request of each department.		
43.	The activity is time-bound and this module shall enable periodical		
	cell to define timelines within which HOD/DLC has to provide the		
	list. It shall enable periodical cell to define frequencies for auto-		
	generating reminders to HOD/DLC for pending lists, till the		
	response is not received. Librarian shall have the power to		
	extend the timelines for a department on a case-on-case basis, if		
	required.		
44.	It shall push the approved list to periodical cell in the library and		
	aggregate lists of all the departments to display total periodicals		
	requested by all departments including the common ones		
	between two or more departments.		
45.	It shall communicate with budgeting module and enable		
	periodical cell to view the available balance in the department		
	budget while forwarding the aggregated request to Librarian.		
46.	It shall enable Librarian to simultaneously view, approve or reject		
	or modify one or multiple department's request through the		
	workflow.		
47.	It shall push the list approved by Librarian in the user interface of		
	HOD/DLC.		
48.	It shall enable Librarian to view the balance available in the		
	department budget and not allow him/her to approve any		
	request with amount greater than the balance in department		
	budget.		
40	It shall something indept amount in the department budget		
49.	It shall commit the indent amount in the department budget		
	allocated by the library as soon as Librarian approves the request.		
	This money shall remain blocked for any other usage until the request is cancelled.		
50.	Commitment of funds shall be temporary and virtual. As soon as		
50.	the bill is processed by the acquisition cell of library, system shall		
	over-write the commitment of funds with the debit entries in the		
	account equivalent to the bill amount.		
51.	Upon processing of bills, if bill amount is lesser than committed		
J1.	amount then it shall release the remaining committed amount		
	basis with the indent reference number.		
52.	In case of multiple payments from the committed amount i.e.		
32.	payment in parts, it shall show reducing balance out of		
	committed amount every time a bill is processed against the		
	same indent reference number.		
53.	Upon processing of bills, if bill amount is higher than the		
	committed balance, it shall show pop-up box to user for special		
	approval and auto-raise special approval request to Librarian		
	with unique reference number in the workflow.		
54.	It shall enable periodical cell to maintain database of periodicals		
	with date and frequency of arrival of periodical once, the order is		
	placed to the publisher.		
55.	It shall enable user to maintain track of receipt of periodicals.		
56.	It shall release a list of periodicals received to all, on weekly basis.		

57.	It shall enable users, based on role level access & authentication,		
	to access this database for reference or reporting or updating		
	purposes with a search option on periodical reference number,		
	department, F.Y. etc.		
58.	It shall trigger intimations in form of email and/or sms as		
	applicable in the process.		
	Circulation Module:-		
	✓ This module shall serve the purpose of managing various		
	requests received at library viz. book issuance, book return,		
	library membership, book not found, book lost, etc.		
	✓ It shall enable requester to fill an online form for		
	aforementioned request through his/her user interface.		
	✓ It shall communicate with variations database to retrieve		
	information about the requester and auto-fill designated		
	fields in the online form.		
	✓ It shall generate a unique reference number on successful		
	submission of the online form.		
	✓ It shall enable entire approval process of the request to flow		
	online through the workflow.		
	✓ It shall push status of the request to the user interface of the		
	requester and enable him/her to track the status of the		
	request on his/her user interface.		
	✓ It shall allow the Librarian to approve of the membership		
	request of retired institute members, once they have		
	submitted a duly filled library membership application form		
	along with the receipt of a refundable fee (presently		
	Rs.2000/-) paid in cash at the cash branch. ✓ For book lost, it shall retrieve the book cost from the		
	✓ For book lost, it shall retrieve the book cost from the acquisition database and show the same to requester.		
	✓ It shall calculate the cost to be recovered on the basis of the		
	following prevalent rules. Enable user to modify these rules,		
	as required.		
	✓ Publisher price, plus 20% handling charges in case of foreign		
	books or 5% handling charges in case of domestic books, plus		
	Dues pending as per delay of returning of books.		
	✓ For book lost, it shall integrate with the electronic payment		
	gateway module to pay the required amount.		
	✓ For book not found, it shall enable circulation cell to update		
	status of book as "Found" as and when the required book is		
	located in the library.		
	✓ It shall enable user to renew books online within constraints		
	as defined by Librarian.		
	✓ It shall enable user to reserve books online within constraints		
	as defined by Librarian and intimate the requester whenever		
	the book becomes available.		
	✓ It shall enable user to issue "reserved section" books to		
	requester. Such books can only be issued for maximum 2		
	hours after which the requester has to "renew" the book or		
	pay fine @ Rs.2 per hour. This module shall enable user to		
	track such issuance and fine.		
	✓ Ability to view the analysis on number of times the fine		
	amount is charged in the past for the student		
	✓ It shall enable users, based on role level access &		

authentication, to access this database for reference or		
reporting or updating purposes with a search option on		
request reference number, name of requester etc.		

3.2.2.Academics Management System

3.2.2.1. Student profile Management

SI No	Feature Details	Compliance		
		100% Met	Not Met	Can be customized
1.	Able to manage profile like academics, parent, address, communication detail, achievements & etc			
2.	Able to search & view students profile data			
3.	Able to enroll students to a class and section			
4.	Able to promote student from one class to other			
5.	Able to drop a student from one class			

3.2.2.2. Academic Planning /Course Management

Acade	mics Planning				
SI No	Feature Details	Compliar	Compliance		
		100% Met	Not Met	Can be customized	
1.	Provision to define Academic Calendar with Events, Holidays and Vacations.				
2.	This module shall serve the purpose of managing academic registration planning at the beginning of new semester. Academic registration is a time-bound process hence it shall enable Head Academic office to define start date and end date of the process.				
3.	At the start date of the process, it shall automatically update status of all pre-registered students as "Registered" except: ✓ students, who have failed in courses of the previous semester ✓ students, whose branch change requests have been granted, ✓ students, who have appeared in Academic Probation(AP) list, ✓ students, who have appeared in the Terminated list, ☑ Students, who are manually marked for non-registration				

	by Head Academics office.		
4.	It shall highlight those courses in the pre-registration form of		
	such students in which either he/she has failed or whose		
	prerequisite (that he/she was enrolled in last semester) he/she		
	has not been able to clear.		
5.	At the start date of the process, it shall automatically allow		
	following students to apply for registration		
	✓ who have not done pre-registration but now allowed by		
	Head Academics office		
	✓ who have been reinstated after termination		
	✓ who have failed in courses of the previous semester,		
	✓ whose branch change requests have been granted,		
	✓ who have appeared in Academic Probation (AP) list		
	 ✓ who have returned from semester drop ✓ who have returned from student exchange program 		
	✓ who have returned from student exchange program✓ who have returned from leave		
6.	It shall enable students to apply for courses in the similar manner		
υ.			
	as pre-registration module with the exception that these		
	requests shall neither flow to instructors nor to management		
7.	It shall generate the registration form of such students in the		
	specified format and allow them to save and print the same.		
	Within the form, it shall differentiate between courses as:		
	✓ Courses which were earlier approved during pre-		
	registration		
	✓ Courses which are newly applied and manually		
	signed/approved by instructors		
8.	It shall enable Head Academic office to validate this physical form		
	with online request form of the student and make changes, if		
	required.		
9.	It shall auto-update status of students whose forms are validated		
	by Head Academic office as "Registered".		
10.	It shall auto-replace/modify/update details in the graduating		
	course template as mentioned in the pre-registration process		
	with any changes made during academic registration process.		
11.	It shall enable users, based on role level access & authentication,		
	to access this database for reference or reporting or updating		
	purposes with a search option on semester, department, roll		
	number and course id etc.		
12.	It shall trigger intimations in form of email and/or sms as		
	applicable in the process.		
13.	Provision to configure curriculum Subjects, subject type, subject		

	group combination per academic session/semester for a course.		
14.	Provision to define Syllabus of subjects with user level definition of Table of contents in terms of Unit, Sub-Units, Chapters, Topics		
15.	Ability to define Upload-able Content, quiz, assignment for a Subject		
16.	Provision to Upload & map Assignment, Quiz, Content with respect to a timetable period as well after creation of timetable.		
17.	Provision to define credit points of subjects for every course & academic session as per the curriculum.		

3.2.2.3. Student Timetable & Attendance Management

SI No	Feature Details	Complia	nce	
			Can be customized	
1.	Program Course Template: It shall enable Head Academics office to create department wise program course templates for structuring courses in each semester for every program into core courses, department compulsory courses, department electives, open electives, PG courses and/or any other courses offered.			
2.	It shall retrieve Lecture-Tutorial-Practical attributes of the courses from the approved course module.			
3.	It shall able to set credits for every semester and overall program.			
4.	It shall enable Head Academics office to define minimum and maximum number of credits required for graduation in the program overall and within categories of courses.			
5.	It shall communicate with core course and department timetable modules to reflect which courses shall be offered in which semesters.			
6.	It shall reflect the program course template in the HOD/ Various Academic Committee/Faculty Member/Student's user interface.			
7.	Slot Master: It shall enable Head Academics office to create slots in various time slots viz. Slot 1, Slot 2, Slot 3 for core courses, OE slots for open electives, DE slots department electives, PG slots for PG courses etc.			
8.	Ability to generate time-table template for a week structure at a			

	Batch and Academic Session level.		
9.	It shall enable Head Academics office to assign days along with time intervals for each slot e.g. Slot 1 = MWF 9:00 – 10:15 AM		
10.	It shall push these slots in the core course and department timetable.		
11.	It shall allow only Head Academics office to edit these slots, if required.		
12.	Core Course Timetable: Ability to enable Head Academic office to prepare timetable in combinations of even and odd semesters for each program in every department. Ability to retrieve course ids from the approved course module.		
13.	It shall retrieve slots from the slot master. It shall enable Head Academic office to assign core courses as per slots for Lecture-Tutorial-Practical attributes. It shall enable Head Academic office to mark slots for department courses in the timetable. Allotment of students in these sections shall be done by Head Academic office after completion of registration process i.e. when exact numbers of students are known. This module shall enable Head Academic office to either auto-allocate students in these sections based on user defined algorithm or manually assign or re-assign students in these sections.		
14.	It shall enable Head Academic office to generate exam schedule on the basis of the approved timetable.		
15.	It shall push the approved timetable along with exam schedule on the user interfaces of faculty members and the students.		
16.	It shall push the approved timetable in the facilities booking module for assigning lecture halls.		
17.	It shall enable users, based on role level access & authentication, to access this database for reference or reporting or updating purposes with a search option on semester, department and course id etc.		
18.	It shall trigger intimations in form of email and/or sms as applicable in the process.		
19.	Department Timetable Module: This module shall serve the purpose of managing department timetable for the semester, once core course timetable is fixed by Head Academic office.		
20.	It shall assign a unique reference number to the department		

	timetable for the semester.		
21.	It shall float the timetable to faculty members/HOD/stream wise convener for filling up the courses and slots.		
22.	It shall retrieve course ids of the department from the approved course module and enable faculty members/HOD/stream wise convener of the department to select courses, individually for the semester in different categories i.e. UG Department Elective, UG Open Elective, UG Minors and PG Courses.		
23.	It shall retrieve predefined OE, DE and PG slots from the slot master and enable faculty members/HOD/stream wise convener to select these predefined slots for the chosen course.		
24.	It shall retrieve Lecture-Tutorial-Practical attributes of the course from the approved course module to facilitate faculty members in choosing appropriate slots.		
25.	It shall enable faculty members/HOD/stream wise convener to choose slots separately for Lecture and Tutorial. It shall enable faculty members/HOD/stream wise convener to view last timetable for reference purpose.		
26.	It shall enable faculty members/HOD/stream wise convener to manually input time-slots for laboratories (for practical classes) in consultation with timetable in-charge of the department.		
27.	It shall not allow faculty members/HOD/stream wise convener to add any slots other than pre-defined OE, DE and PG slots against the courses except for seminar, project courses and laboratories		
28.	It shall enable faculty members/HOD/stream wise convener to give remarks for modifying the pre-defined slots against the courses, they have chosen. Such remark shall be visible to entire approval hierarchy of the department and pushed to Head Academics office, after the department timetable is approved.		
29.	It shall enable faculty members/HOD/stream wise convener to provide tentative course strength for their courses.		
30.	It shall aggregate inputs of faculty members/HOD/stream wise convener in the department and reflect the aggregated department timetable to the department timetable committee.		
31.	It shall reflect the approved department timetable to Head Academic module and enable Head Academics office to make changes in it, if feasible.		

32.	It shall not allow department to make any changes in the		
	timetable, once it is approved by the department approval		
	hierarchy and pushed to Head Academic module.		
33.	It shall push approved department timetables in the pre-		
	registration module for student to choose courses by avoiding		
	clashes.		
34.	It shall enable Head Academic office to add new courses, which		
	department may want to offer even during pre-registration		
	period and reflect the same instantly in pre-registration module.		
35.	It shall enable users, based on role level access & authentication,		
	to access this database for reference or reporting or updating		
	purposes with a search option on timetable reference number,		
	course type etc.		
36.	It shall trigger intimations in form of email and/or sms as		
	applicable in the process.		

3.2.2.4. Add/Drop Course Module -Subject Change

SI	Feature Details	Complia	nce	
No		100% Met	Not Met	Can be customized
1.	It shall enable "Registered" students to add and drop courses from their MANAGEMENT approved registration forms.			
2.	It shall enable students to apply for adding courses in the same manner as pre-registration process. It shall enable students to replace any course in the MANAGEMENT approved registration by "approved" courses in the pre-registration list that he/she didn't add to his/her registration form while submitting the same for MANAGEMENT approval.			
3.	It shall enable students to add "Audit" courses, which are over and above the maximum limit of credit registration as defined in the pre-registration process. It shall constraint student to provide choice of grading the audit courses as letter grade i.e. A to F or S/X grade. Such courses shall appear in the extra course list and not accounted for SPI/CPI calculation.			
4.	It shall enable students to apply for dropping subjects through the workflow and instructors to approve / reject the request.			
5.	It shall have same rules as defined for minimum and maximum credit registration in pre-registration process, hence for a student to add a new course; he/she may have to drop a course first if he/she has reached the maximum credit registration limit.			
6.	Over-load and under-load conditions and functionalities shall remain the same as in pre-registration process.			
7.	Once the students finalize their course after adding and/or dropping, it shall enable them to submit their forms to MANAGEMENT in the same manner as defined in pre-registration process.			

8.	It shall have same functionalities as of pre-registration process		
	with same privileges for students, instructors, HOD,		
	MANAGEMENT except that add/drop shall have no phases and		
	students shall be able to apply for dropping courses online.		
9.	It shall auto-replace/modify/update details in all templates and		
	lists including the graduating course template as mentioned in		
	the pre-registration process with any changes made during		
	add/drop process.		
10.	It shall enable users, based on role level access & authentication,		
	to access this database for reference or reporting or updating		
	purposes with a search option on semester, department, roll		
	number and course id etc.		
11.	It shall trigger intimations in form of email and/or sms as		
	applicable in the process.		

3.2.2.5	5. Academics Reports Module			
SI No	Feature Details	Complian	ice	
		100% Met	Not Met	Can be customized
1.	It shall enable HOD and MANAGEMENT to view various specified and dynamic reports in their user interfaces and also create various filters, parameters and rules to view data as per their need.			
2.	It shall enable Head Academics office to share data fields which shall be available for HOD and MANAGEMENT to view and generate reports.			
3.	How many students are registered in the department?			
4.	How many students are registered in the course run by faculty members of the department?			
5.	How many students are graduating, who is guide for which student, roll list of students?			
6.	How many students have not done compulsory courses?			
7.	How many students have course back-logs?			
8.	How many students have "E" and "F" grade in subjects?			
9.	What is the course performance summary?			
10	All such reports shall have filters for academic year, department, semester, course, student roll number, faculty member name, course title, course id etc.			

3.2.3. Student Feedback Management

Student Feedback Management				
SI No	Feature Details	Compliance		
		100%	Not	Can be

		Met	Met	customized
1.	Ability to enable for student to give online feedback to department head regarding faculty teaching, and if any difficulties are faced in terms of pace of various courses. This information can also be viewed by the administrative stake holders, Director, Registrar on the desired action taken.			
2.	Ability to enable students to inform the warden/assistant warden regarding food quality, cleanliness of washrooms, dispensary/medicines requirement or special persons required to help physically handicapped students. This information can also be viewed by the administrative stake holders, Director, Registrar on the desired action taken.			

3.2.4. Student Self Service (Interface) Portal/App

SI No	Feature Details	Complia	nce	
31 140	reature betains			T
		100% Met	Not Met	Can be customized
1.	Every student shall have his/her own secured interface protected			
1.	by a user id and password to log-in and access information.			
2.	Various request forms related to student's life cycle in the			
	institute shall be embedded in his/her interface.			
3.	Designated fields in these forms shall be auto-filled by existing databases linked to his/her roll number or any other unique identifier.			
4.	This interface shall queue tasks to be completed by the student			
	as a result or outcome of another task or request completed or			
	initiated in any other process by him/her or any other individual			
	e.g. task of subject registration to be done by the student. This			
	task queue shall also include those tasks, which require his/her			
	approval as per the approval hierarchy in a given process.			
5.	This interface may be divided into sections, which can be			
	accessible over internet and intranet networks on desktop or			
	mobile or hand-held devices.			
6.	This interface shall create a central ledger to track all financial			
	transactions related to the student, which are pushed from			
	multiple processes executed in departments of the institute			
	including but not limited to fee, dues, scholarship, honorarium,			
	fellowship, monetary awards and rewards, medical			
	reimbursements, travel advances and grants, research grants,			
	thesis grant, department grants etc.			
7.	Information available in his/her interface shall include but not be			
	limited to the following:			
	✓ Personal Information			
	✓ Family Information			
	✓ Academic Information			
	✓ Student Activities Information			
	✓ Student Placement Information			

✓	Student Counseling Information		
✓	Attendance Information		
✓	Any other related information		

3.2.5. Question Bank Management System (QBMS)

SI No	Feature Details	Compliar	Compliance	
		100% Met	Not Met	Can be customized
1.	Able to create question bank course, subject & chapter wise			
2.	Able to upload question in a predefined format			
3.	Able to format question & enter scientific questions			
4.	Able to create multiple question sets manually or automatically			
5.	Able to set likely answer tips			
6.	Able to give weight age to questions			
7.	Able to have workflow to approve questions			
8.	Able to create random question sets			
9.	Able to keep MCQ , sort & long questions			
10.	Able to keep questions in multiple language			
11.	Able to keep questions in encrypted form			

3.2.6. Exam Management

3.2.6.1. Pre Exam Management

SI No	Feature Details	Compliar	nce	
		100% Met	Not Met	Can be customized
1.	Able to dynamically set up exams			
2.	It shall retrieve courses for each program under each department from the timetable modules and enable Head Academic office to set the exam timetable schedule of the students.			
3.	It shall enable Head Academic office to choose number of days and dates for scheduling exams.			
4.	It shall enable Head Academic office to choose slots for scheduling exams on the pre-defined dates.			
5.	Exam scheduling shall happen with respect to slots defined by Head Academic office during timetable preparation and also checked once again after academic registration for changes, if any.			

6.	It shall show exam clashes of students while scheduling exams.	
7.	It shall show consecutive exam schedules of students.	
8.	It shall show more than 2 exams in a day schedules of students.	
9.	It shall provide Head Academic office an interface where they can select, subjects to slots during and across days. While executing this process, it shall highlight exam slots facing problems of clashes, consecutive exams or more than 2 exams in a day or any other parameter set by Head Academic office.	
10.	To facilitate above, it shall enable Head Academic to set filters, rules and parameters for checking exam schedule for various issues.	
11.	It shall enable Head Academic office to generate and print exam schedules of each department/program separately. Also reflect same in user interfaces of student, instructor, HOD, MANAGEMENT, etc.	
	It shall enable users, based on role level access & authentication, to access this database for reference or reporting or updating purposes with a search option on semester, department, roll number and course id etc.	
12.	It shall trigger intimations in form of email and/or sms as applicable in the process.	

3.2.6.2. Exam Conduct

SI No	Feature Details	Compliance			
		100% Met	Not Met	Can be customized	
1.	Able to allocate room				
2.	Able to allocate students to room				
3.	Able to order students seating				
4.	Able to map invigilators				
5.	Able to map centre superintendents				
6.	Able to take exam attendance				
7.	Able to generate attendance reports				
8.	Able gave question bank to attendance mappings				

3.2.6.3. Grading Module

SI No	Feature Details	Compliance		
		100% Not Met Can be		Can be
		Met		customized

1.	Only faculty members will have access to this. It shall retrieve the			
	list of approved courses offered in the semester from the core-			
	course and department course timetable, for the faculty member			
	in his/her user interface.			
2.	It shall enable faculty members to create an evaluation program			
	for specified the course i.e. create number of quizzes, number of			
	tests, number of exams, number of practical, number of tutorials,			
	number of lectures, attendance, etc. and assign weight-age to			
2	each of the parameters in the final grade calculation.			
3.	It shall enable faculty members to edit this evaluation program at			
4	any point in time, if required.			
4.	It shall enable faculty members to assign initiation and			
	submission deadlines to various parameters in the evaluation			
	program and notify students enrolled in the course. It shall			
	communicate with the finalized registration form to retrieve list			
5.	of students registered in the specified course. It shall enable faculty members to update evaluation of the			
ی.	parameters set for course evaluation in either grade or marks or			
	% format.			
6.	It shall enable faculty to define the formula for grade calculation			
U.	and calculate the grade of the student by itself.			
7.	It shall enable faculty member to import and export excel files for			
/.	updating of marks/grades/% in the parameters sets for course			
	evaluation.			
8.	It shall enable faculty members to track the student performance			
0.	via visually aided analytics (bar charts, pie charts etc.) in the			
	parameters set for course evaluation and share the same with			
	the student in their user interfaces.			
9.	It shall enable faculty members to freeze the grades, when			
	finalized. Post finalization, it shall push details to Head Academic			
	office and not allow faculty members to make any modifications.			
	For project courses/seminars and thesis courses, MANAGEMENT			
	shall also have rights to update and freeze grades.			
10.	It shall not allow faculty members to freeze the grades unless			
	grades have been awarded to all students.			
11.	It shall enable faculty members to keep "I" – Incomplete grade at			
	the time of freezing grades.			
12.	It shall enable Head Academic office to generate reminders to			
	faculty members who have given "I" grade to their students and			
	reflect list of such students in the user interface of faculty			
	members to update.			
13.	It shall enable Head Academics office to auto-convert all "I"			
	grades to "F" grades on a specified date.			
14.	It shall enable Head Academics office to tag exceptions to			
	aforementioned auto-conversion of "I" grades. This exception			
	tagging shall not be allowed for thesis courses.			
15.	It shall enable Head Academics office to release finalized grades			
	of the student to different stakeholders in partial or full either			
	through emails or reflecting grades on user interfaces of			
	students/faculty members/MANAGEMENT/ counseling service			
16.	etc. It shall enable grade submission in encrypted and secured way.			
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It shall maintain audit trail for changes in grades at any point in			
time with old and new data and user log-in credentials.			
It shall facilitate GPA/ CGPA calculation based on the			
mathematical formulae defined by the user.			
It shall enable such calculations to be done for a particular			
student, a particular semester, a particular department, a			
particular batch or program or for all the students, etc.			
It shall enable user to roll back and re-calculate, if required. Roll			
back and re-calculate option shall also be available in various			
ways, as illustrated above.			
It shall handle cases of back and forth migration of UG students			
to PG programs.			
It shall enable users, based on role level access & authentication,			
to access this database for reference or reporting or updating			
purposes with a search option on semester, department, roll			
number and course id etc.			
It shall trigger intimations in form of email and/or sms as			
applicable in the process.			
	It shall facilitate GPA/ CGPA calculation based on the mathematical formulae defined by the user. It shall enable such calculations to be done for a particular student, a particular semester, a particular department, a particular batch or program or for all the students, etc. It shall enable user to roll back and re-calculate, if required. Roll back and re-calculate option shall also be available in various ways, as illustrated above. It shall handle cases of back and forth migration of UG students to PG programs. It shall enable users, based on role level access & authentication, to access this database for reference or reporting or updating purposes with a search option on semester, department, roll number and course id etc. It shall trigger intimations in form of email and/or sms as	time with old and new data and user log-in credentials. It shall facilitate GPA/ CGPA calculation based on the mathematical formulae defined by the user. It shall enable such calculations to be done for a particular student, a particular semester, a particular department, a particular batch or program or for all the students, etc. It shall enable user to roll back and re-calculate, if required. Roll back and re-calculate option shall also be available in various ways, as illustrated above. It shall handle cases of back and forth migration of UG students to PG programs. It shall enable users, based on role level access & authentication, to access this database for reference or reporting or updating purposes with a search option on semester, department, roll number and course id etc. It shall trigger intimations in form of email and/or sms as	time with old and new data and user log-in credentials. It shall facilitate GPA/ CGPA calculation based on the mathematical formulae defined by the user. It shall enable such calculations to be done for a particular student, a particular semester, a particular department, a particular batch or program or for all the students, etc. It shall enable user to roll back and re-calculate, if required. Roll back and re-calculate option shall also be available in various ways, as illustrated above. It shall handle cases of back and forth migration of UG students to PG programs. It shall enable users, based on role level access & authentication, to access this database for reference or reporting or updating purposes with a search option on semester, department, roll number and course id etc. It shall trigger intimations in form of email and/or sms as

3.3. Technical Requirements

- ✓ Role based security, high security implementation, and multi level security logins.
- ✓ Access through both Internet and Intranet.
- ✓ Workflow based.
- ✓ Transaction based automatic emailing & SMS.
- ✓ Open Source Technology.
- ✓ Archival support.
- ✓ Auto backup /incremental backup facility.
- ✓ Multi user in nature etc.
- ✓ Mobile interface Android.
- ✓ Cloud hosted

3.4. PMU Requirements

- ✓ A PMU will be set up at Kendrapara Autonomous College, Kendrapara
- ✓ Project Manager and data entry operator will be provided by the vendor as per need basis in the pre-approved rates.

4. Scope

The project will run on BOOT (Build, Operate, Own & Transfer) model. The project will be developed and technical operation will be done by the vendor. The source code and technical knowhow will be transferred to KAC after 3 years. Vendor will also provide PMU team members if required by Kendrapara Autonomous College. All H/W will be provided by Kendrapara Autonomous College.

4.1. S/W and Overall Program Management

Phase-1: Requirement gathering, development & Implementation of priority-1 modules.

Phase-2: Requirement gathering, development & Implementation of priority-2 modules. (Not in scope now)

Phase-3: Requirement gathering, development & Implementation of priority-3 modules. (Not in scope now)

NB: The selected vendor will run the system in BOOT model for three years.

4.2. H/W & Networking Activities

The scope of the work includes assistance to procurement of H/W, OS, Desktop, Server or Networking equipment related to smart class room, smart exam center and library. However, the H/W procurement will be done by Kendrapara Autonomous College through separate tender.

4.3. Cloud Server

We expect our system; excluding the exam management system will be hosted at cloud server in India. We expect our students & faculty to access the content and academics management system anytime from anywhere.

4.4. Support & Maintenance

The system will run in BOOT model for three years for all technical activities.

4.5. Scope-Exclusions

✓ Anything not exclusively defined in the inclusion section.

5. Proposed Tool & Technology

✓ The S/W should be open source and license free. If any vendor provides its own S/W, they need to give it license free for lifetime.

6. Deployment Architecture

- ✓ We will recommend putting these external applications at Indian based cloud servers, if possible.
- ✓ We will run the examination Centre from the local server.

7. Performance Tuning & Security Measures

7.1. Cyber Security Auditing

The application after development will be hosted in the staging server. The same would undergo cyber security auditing. The developer would compile any flaws found in the auditing process. After the site is fully cleared by cyber security, the web application would be finally hosted in the live server. The vendor needs to provide the following security measures including security audit from Cert-IN authorities.

- ✓ Content Security-policy
- ✓ X-Frame-Options
- ✓ Anti-CSRF cryptographic
- ✓ DAL (data/database access layer)
- ✓ SSL, cookies with secure flags, cookies with http only and STS
- ✓ Security frameworks
- ✓ Cert-IN certified security audit

7.2. Performance Tuning

- ✓ Load balancing
- ✓ Caching static files

- ✓ Data Compression
- ✓ Tune database queries

8. Expected Work Schedule

The 1st phase of the project needs to be completed in 2 months prior other than data entry.

SI#	Description	Start Date (in Month)	End Date (in Month)
1	Requirement Gathering & SRS (Phase-1 Modules)	M-0	M-1
2	Library Management System S/W	M-0	M-1
3	Academics Management System S/W	M-0	M-1
4	Feedback Management System S/W		
5	Question Bank Management System S/W	M-0	M-2
6	Exam Management System	M-0	M-2
7	Student Self Service portal	M-0	M-2
6	Running the system in BOOT (phase-1)	M-3	M-36

NB: The scope & timelien for Phase-2 and Phase-3 will be decided by KAC committee based on Phase-1 performance.

Appendix-A: Contact Information

For any further clarifications/enquiries, you may please contact:

Your Point of Contact for this document			
Name	Prof. Ranjeet Kumar Das		
Title	Reader in Physics		
Contact Address Kendrapara Autonomous College, Dept of Physics			
Email ranjeetdas.1316@rediffmail.com			
Phone-Landline 06727-220215			
Mobile	9437604408		

Appendix-B: Cloud Servers

✓ The Cloud Service Provider, as a single legal entity, must be incorporated and registered in India under the Indian Companies Act 1956 or as a Limited Liability Partnership (LLP)

- registered under the LLP Act 2008 or Indian Partnership Act 1932 and should have been in operation in India for minimum of three years.
- ✓ The Cloud Service Provider, as a single legal entity or its holding company, must have a positive net worth of Rs. 1000 Crores in each of the last three financial years.
- ✓ The Cloud Service Provider, as a single legal entity or its holding company, must have minimum annual revenue of INR 500 Crores from the Data Centre or cloud related service for each of the last two financial years (2015-16 and 2016-17) either in India or Globally.
- ✓ The Data Center Facility must be within India, should be currently operational and have a minimum capacity of 250 Racks owned or contracted. Cloud Service Provider should present a self-signed certificate in case the data center facility is owned or provide data center facility vendor signed certificate for contacted capacity to be more than 250 racks. This certificate should be provided for all facilities in the scope of service.
- ✓ The proposed cloud platform should have been contracted by at least 10 government entities from India in last two years. A copy of contract, either direct or through partner or MoU/PO between government and bidder or partner, should be submitted as evidence of the 3 government contracts.

Appendix-C: Commercial BID Template

Detail about the Tender/Bidding Document Fee And Bid Security (Earnest Money Deposit)

Bidding Document Fee of Rs. 1000/- (non-refundable)		
Value		
Mode of Payment		
Demand Draft Number with Date		
Name and Branch of the Bank		
Bid Secu	urity (Earnest Money Deposit) of Rs. 1 Lac	
Value		
Mode of Payment		
Demand Draft/Bank Guaranty or any other reference Number with Date		
Name and Branch of the Bank		
Details of Certificate in case claiming for EMD exemption.		

For Seal:

Authorization Letter of Authorized Signatory

To

The Principal, Kendrapada Autonomous College, Kendrapada

Reference: Ref. No.

Sub: Authorization Letter of Authorized Representative for the above mentioned detail Bid.

Dear Madam/Sir,

With Reference to your above mentioned BID, We <BIDDER>is hereby authorized to sign relevant documents on behalf of the company. He is also authorized to attend meetings and submit Technical and Commercial information as may be required by you in the course of processing above said Bid.

We will be glad to assist In case you need any further clarification, please feel free to contact us.

Thanking you and assuring you of our best services, We remain.

For Seal:

BID FORM / COVERING LETTER

Date

To

The Principal,
Kendrapada Autonomous College,
Kendrapada.

Dear Sir/Madam,

Having examined the Bidding Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver Procurement & Implementation of Digital Institute (MIS)as per the requirement, scope of work, technical specifications and features specified in the Tender Document.

We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements. If our bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to **10% percent** of the Contract Price for the due performance of the Contract, in the form prescribed by the Purchaser.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery. We clarify/confirm that we comply with the eligibility requirements as per the bidding documents.

Dated this **December 2019**.

Duly authorized to sign Bid for and on behalf of

BID INDEX (Check List)

Note: Please attach all the required documents in the given order with your Technical Bid

SNo	Description	Supporting Document Attached (Yes/No)	Bid Page No
1.	Bid Form / Covering Letter		
2.	Profile of the Bidder (Plz refer the format)		
3.	Detail about the Tender Document Fee and Bid Security (Earnest Money Deposit)		
4.	Copy of Company Incorporation Certificate		
5.	Copy of GST Registration Certificate and PAN Card.		
6	Relevant certificates of CMMi Level 3 OR ISO 9001:2015 and ISO 27001:2013 certified should be enclosed.		
7.	Undertakings from the Bidder(s) regarding blacklisted/ debarred of their firm should be enclosed.		
8.	Copies of the audited balance sheets and profit and loss account for last 3 financial years to ascertain annual turnover		
9.	Duly certified and signed statement by the authorized CA be enclosed as indicating that the firm is having positive net worth.		
10.	Bidder's Individual response /Technical proposal with company profile.		

Bidder Name:	Seal:

PRICE SCHEDULE

PROFORMA COMMERCIAL BID

We hereby quote our commercial offer as given below and duly understand that quote on any other format or any other way shall not be evaluated by Kendrapara College and will be summarily rejected. The bidders are advised to quote in INR only.

1. Technical & Functional Charges- Subscription Model

S	Description of goods as per proposed	Gross Base	GST + other	TOTAL Price to be paid
No	specifications and scope of work mentioned in the document (a)	Price in (b)	levies, as applicable in (c)	including GST and any other levies in (b) + (c)
A)	Basic cost of ERP/MIS application software	-	-	-
1.	Smart Library Management System			
2.	Smart Academics Management			
3.	Smart Feedback Management System			
4.	Question Bank Management System			
5.	Exam Management & Result Publication			
6.	Student Self Service Portal			
	Total (A) –Yearly Subscription fee uding Implementation fee			
B)	Cloud Hosting Charges –Yearly			
Tota	al Cost (A+B) For one year			
Sub	scription Charges for (05 years)			

Note:

Vendor needs to provide yearly subscription charges. However the bid contain subscription charges for 05 years.

OFFICE OF THE PRINCIPAL KENDRAPARA AUTONOMOUS COLLEGE, KENDRAPARA-754211

Letter No_ 2745 __/ Date_ 14 · 12 · 19__/

To,

The Advertisement Manager, The SAMBAD, Bhubaneswar.

Subject: Publication of Quotation/Tender Call notice

Sir,
Please find the attached quotation/Tender call notice to be published in your daily newspaper, The Sambad, in an economical price with low font size.

Kendrapara Autonomous College

Kendrapara Autonomous College KENDRAPARA

OFFICE OF THE PRINCIPAL Kendrapara Autonomous College, Kendrapara

No. 2746 /Dt. 14.12.19 /

Notice Inviting Tender

Potential bidders from reputed & registered Software Development Agencies having experience in IT Solutions i.e., Implementation of Digital Institute Management system inclusive of smart class rooms, smart library etc. are invited to bid using sealed tenders in a three bid system (Pre-bid, Technical bid &Commercial bid). Tenders must be submitted in a sealed envelope to the Principal, Kendrapara Autonomous College, Kendrapara, through Registered Post or Speed post on or before 10.01. 220 during working hours. No bid will be accepted after the above mentioned date and time. Kendrapara Autonomous College will not be responsible for any postal delay. Tenders received late or without EMD will be rejected automatically. Any subsequent corrigenda/clarifications will be made available on the website. Details may be downloaded from our website http://www.kac.edu.in

Principal 12-12-14 Kendrapara Autonomous College

Kendrapara Principal

Kendrapara Autonomous College KENDRAPARA