

**TECHNICAL EDUCATION QUALITY IMPROVEMENT  
PROGRAMME Phase II Sub Component 1.1**



**4<sup>th</sup> MEETING OF  
THE BOARD OF GOVERNORS**

**DETAILED AGENDA NOTES**

**Date: 27-05-2014**

**Time: 10.00 am**

**Venue: College of Engineering Karunagappally**

**COLLEGE OF ENGINEERING KARUNAGAPPALLY  
THODIYOOR P.O., KOLLAM-690523, KERALA**

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## Background:

The meeting of Board of Governors is convened regularly to monitor the progress of TEQIP-II activities at CE Karunagappally, under Sub component 1.1, with emphasis to procurement and academic activities, and to accord necessary approvals and clearances for the ongoing activities. The 4<sup>th</sup> meeting of the BoG is being convened on 27<sup>th</sup> of May, 2014.

The agenda items are given below.

## Agenda Items

### Part 1-Procedural

Sl. No	Items	Page Number
1.1	Confirming the Minutes of the 3 <sup>rd</sup> Meeting of the Board of Governors held on 18-12-2013 at College of Engineering Karunagappally	5
1.2	Report on the action taken/action pending on the pertinent decisions in the Minutes of the 3 <sup>rd</sup> Meeting of the Board of Governors held on 18-12-2013 at College of Engineering Karunagappally	6

### Part 2-Ratifications and Approvals

Sl. No	Items	Page Number
2.1	Expenditure incurred for procurement of goods, and price revisions of various completed and committed packages	9
2.2	Approval of various NCB Packages	12
2.3	Expenditure incurred for completed civil works packages and status of other Civil packages	17
2.4	Ratification of cancelled packages	18
2.5	Approval for the new packages	18
2.6	Approval of the various Academic programs conducted/attended by faculty and staff.	19
2.7	Ratification/Approval of Reimbursement of fee for PhD	23

2.8	Approval of the In-house and outstation programmes for faculty and staff for the next three months	24
2.9	Report of IIIC Activities and Approval	28
2.10	Report of R & D Activities and Approval of Research Seed Money	30
2.11	Report of programmes under EAP	32
2.12	Ratification of fees paid for Accreditation and Report on SAR	35
2.13	Report of Governance Development Plan	36
2.14	Expenditure incurred under IOC-Ratification	36

### **Part 3-Reports**

<b>Sl. No</b>	<b>Items</b>	<b>Page Number</b>
3.1	Summary of expenditure as on 30-04-2014	41
3.2	Faculty position as on 10-03-2014	42
3.3	Report on Visit of Mentor	42
3.4	Status of IRG Accounts	43

### **Part 4- Any other item with the permission of the chair**

<b>Sl. No</b>	<b>Items</b>	<b>Page Number</b>
4.1	<b>Other Items</b>	

### **Part 5-Annexures**

<b>Sl. No</b>	<b>Items</b>	<b>Page Number</b>
1.	Annexure I Minutes of the third BOG meeting held on 18.12.2013	45
2.	Annexure II Bid Evaluation Report Desktop Computers	54
3.	Annexure III Minutes of Research Guidance Committee	74

4.	Annexure IV Performance Indicators	81
5.	Annexure V Accreditation fee Acknowledgement	82
6	Annexure VI SAR Marks for EC nad CS	84
7	Annexure VII Governance Development Plan	94
8	Annexure VIII Report of Mentor	107

# **Part 1**

## **Procedural Items**

### **1.1 Confirmation of the Minutes of the 3<sup>rd</sup> Meeting of the Board of Governors held on 04-12-2013 at CE Karunagappally**

The Minutes of the 3<sup>rd</sup> Meeting of Board of Governors of TEQIP Phase II of CE Karunagappally held on 18-12-13 was sent to the Chairman for his approval and upon his approval copies were circulated among the other members of the BoG. A copy of the Minutes is appended as **Annexure 1** for confirmation.

**Action sought:** BoG may consider the Minutes for approval.

## 1.2 Report on the action taken/action pending on the pertinent decisions in the Minutes of the 3<sup>rd</sup> Meeting of the Board of Governors held on 18-12-2013 at CE Karunagappally

The decisions taken by the Board as recorded in the Minutes of the 3<sup>rd</sup> Meeting of the Board of Governors of the TEQIP Phase II held on 18-12-2013 have been noted and actions have been initiated. A report on the action taken and actions pending is presented in the Table 1.2.1 given below

**Table 1.2.1**

Sl. No.	Decision Taken	Action Taken
1	To add the wordings ' <i>as per TEQIP norms</i> ' in all the decisions reported in the minutes of second BOG meeting.	The second BOG minutes has been changed accordingly
2	To include the action taken report in the agenda notes as one of the items from the next BOG meeting	Action taken report is included in the present meeting
3	Suggested to speed up the procurement activities and to include the reasons for the price variations, cancelation or addition of any item for which ratification is sought in the agenda.	Procurement activities have been augmented and the agenda note has been prepared accordingly.  All the five NCBs are finalised.
4	Decided to collect proposals from <b>15</b> staff members for Research Seed Money and the same can be awarded after discussing in Research Guidance Committee. Also decided to conduct a talk or workshop on R& D activities.	8 staff members have been granted seed money at the tune of Rs.100000 lakh each and a Workshop on Research Methodology has been planned which would be conducted during July 14.
5	Decided to conduct the academic activities as planned.	Conducted 6 in-house programmes for the faculty during the period.  The faculty members are de-motivated by the response received from out side Institutions. Also, due to the shortage of staff members, it was difficult for the staff members to attend the in-house programmes fully during academic hours.  39 Faculty members and 6 staff members

		attended outside programmes.  4 Senior faculty attended IMC Development Programme.
6	CS Department was asked to revise the IIC activities.	Revised plan has been prepared.
7	More realistic IIC programmes are to be conducted.	Different Programmes are conducted under IIC. 2- Expert Lectures, 5 Expert tutoring, 7 industrial visits, 1 short term programme, 1 workshop and 5 MoUs signed.
8	Decided to include a member from industry	Name of the industrial expert to be sent to Govt..
9	Decided to publish short resume of all BOG members and the finance details of the institution in the college web site	Under preparation
10	Suggested to conduct a course on Ancient Indian Mathematics	Planned to conduct the course during July 2014.

## **Part 2**

### **Discussion, Ratification and Approval**



## 2.1 Expenditure incurred for procurement of goods, and price revisions of various completed and committed packages

The packages completed and committed, post the third BOG meeting are detailed below

### a. Details of Completed Packages Post the 3<sup>rd</sup> BOG meeting

Sl No	Package No	Package Name	Mode of purchase	Firm	Estimated Amount (Rs)	Actual Amount (Rs)	% Variation
1	TEQIP II/KL1G18 /158	Accounting Software Tally	Direct Contract		18,000	17,900	0.56
2	TEQIP II/KL1G18 /5	Adobe Software	Shopping		3,40,000	3,14,204	7.59
3	TEQIP II/KL1G18 /16	Bread Board	Direct Contract		24,000	17,826	25.73
4	TEQIP II/KL1G18 /124	CC TV camera Surveillance	Shopping		86,000	87,675	-1.95
6	TEQIP II/KL1G18 /19	DC Power supply	Shopping		6,48,000	6,96,733	-7.52
7	TEQIP II/KL1G18 /23	Digital IC Tester	Shopping		60,000	33,300	44.50
8	TEQIP II/KL1G18 /29	Digital IC Trainer kit	Shopping		2,00,000	1,17,000	41.50
9	TEQIP II/KL1G18 /120	E- Journal Elsevier	Direct Contract		4,59,459	4,59,459	0.00
10	TEQIP II/KL1G18 /162	e journal IEEE	Direct Contract		3,71,000	3,72,780	-0.48
11	TEQIP II/KL1G18 /117	E-Journal Springer	Direct Contract		2,06,080	2,05,620	0.22
12	TEQIP II/KL1G18 /10	Equipment for Smart class room	Shopping		5,65,406	5,30,738	6.13
13	TEQIP II/KL1G18 /92	Fire Extinguisher	Shopping		2,75,300	2,80,239	-1.79
14	TEQIP II/KL1G18 /163	Fitting shop tools	Shopping		3,86,100	4,35,855	-12.89
15	TEQIP II/KL1G18 /12	FPGA Trainer kits	Shopping		3,25,000	3,49,205	-7.45

16	TEQIP II/KL1G18 /20	Function Generator	Shopping		9,50,000	9,81,703	-3.34
17	TEQIP II/KL1G18 /135	Furniture Seminar Hall	Shopping		3,39,000	3,41,554	-0.75
18	TEQIP II/KL1G18 /68	Language Laboratory Software	Shopping		1,10,000	1,15,000	-4.55
19	TEQIP II/KL1G18 /161	Laptop Computer	Shopping		8,75,000	9,96,975	-13.94
20	TEQIP II/KL1G18 /109	Library CS	Shopping		6,69,762	5,97,512	10.79
21	TEQIP II/KL1G18 /114	Library EEE	Shopping		4,22,800	2,60,611	38.36
22	TEQIP II/KL1G18 /111	Library IT	Shopping		6,47,291	5,70,494	11.86
23	TEQIP II/KL1G18 /32	Mac System	Shopping		2,42,300	3,01,984	-24.63
24	TEQIP II/KL1G18 /31	Measuring Instruments I	Shopping		1,34,400	1,21,013	9.96
25	TEQIP III/KL1G1 8/38	Measuring Instruments II	Shopping		73,600	77,860	-5.79
26	TEQIP II/KL1G18 /123	Microsoft OVS- ES agreement	Shopping		2,10,000	1,78,383	15.06
27	TEQIP II/KL1G18 /27	Open Hardware	Shopping		1,24,000	1,38,390	-11.60
28	TEQIP II/KL1G18 /22	ORCAD	Direct Contract		2,50,000	2,62,500	-5.00
29	TEQIP II/KL1G18 /59	Photocopier machines	Direct Contract		2,04,054	2,04,054	0.00
30	TEQIP II/KL1G18 /62	Printer and scanner	Shopping		2,80,200	2,81,142	-0.34
31	TEQIP II/KL1G18 /151	PROTEUS PCB Design Software	Direct Contract		3,20,000	3,41,250	-6.64
32	TEQIP II/KL1G18 /60	Rheostats	Shopping		2,32,400	2,39,342	-2.99
33	TEQIP II/KL1G18 /9	Server Computer	Shopping		8,69,000	7,71,481	11.22

34	TEQIP II/KL1G18 /63	Universal Software Radio Perpheral	Direct Contract		6,00,000	5,10,300	14.95
35	TEQIP II/KL1G18 /35	Vaccum Cleaner	Direct Contract		11,000	10,280	6.55
36	TEQIP II/KL1G18 /17	Voltage Stabilizer	Shopping		1,08,000	96,489	10.66
37	TEQIP II/KL1G18 /46	Water Dispensor	Direct Contract		22,600	24,580	-8.76
38	TEQIP II/KL1G18 /159	Wifi Dongle and Screen for Projectors	Direct Contract		24,500	24,709	-0.85
39	TEQIP II/KL1G18 /153	Workstation Computer	Shopping		2,45,000	1,56,015	36.32

**Action sought:** The BoG may kindly ratify the completed procurements, approve the committed items and approve the price revisions.

## 2.2 Approval of various National Competetive Bid (NCB) packages.

There are five NCB Packages in the approved Procurement/Minor Civil Works Plan of CE Karunagappally. The present status of the NCB packages is summarized as below.

Sl No	Package No	Package Name	Estimated Amount (Rs)	Eligible Lowest Quoted Firm	Quoted amount (Rs)	% Difference	Status
1	TEQIP II/KL/KL1G 18/128	Campus networking	24,99,400	Techsor Power Solutions , Kochi	20,34,576	18.60	Waiting for BOG Approval
2	TEQIP II/KL/KL1G 18/13	Desktop Computer	88,56,000	Smartsoft, Kochi	94,06,608	-6.22	Waiting for BOG Approval
3	TEQIP II/KL/KL1G 18/21	Digital Storage Oscilloscope	27,85,000	Innovative Instruments, Thiruvananthapuram	19,78,276	28.97	Waiting for BOG Approval
4	TEQIP II/KL/KL1G 18/125	Unitized sub-station	21,39,704	V S Associates, Karunagappally	24,49,024	-14.46	Waiting for BOG Approval
5	TEQIP II/KL/KL1G 18/87	UPS	32,70,000	IGA Tech Industrial Electronics (P) Ltd	27,23,383	16.72	Waiting for BOG Approval

Nationwide advertisements in National Daily (The Hindu, 08 December 2013,) and state wide advertisement in Regional daily (Malayala Manorama, 08 December 2013) were given for all the five NCB packages. For the Desktop Computers, extension notifications were published in The Hindu and the regional daily Mathrubhumi on 17.01.2014. The same was also published on the college website.

The details of the five NCB Packages are given below.

#### **1. Campus Networking: TEQIP-II /KL/KL1G18/128**

The pre-bid meeting for the package was held on 18.12.2013, following which it was decided that qualification criteria and the technical specifications will be retained as such. One firm participated in the pre-bid meeting. The bids were opened on 13.01.2014 at 3.00 PM. Two firms, Wintech Systems & Services, Karunagappally and Techser Power Solutions Pvt. Ltd submitted bids. Both firms have submitted document charges and Security deposit along with the bid. Representatives from both firms were present during the opening time. All the documents were sealed and found to be duly signed by the authorized signatory.

Wintech Systems & Services, Karunagappally, submitted a bid for Rs. 1630327/- exclusive of all taxes. Techser Power Solutions Pvt. Ltd Cochin submitted a bid for Rs. 1914659/-

exclusive of all taxes. In order to verify the performance of some of the important items such as core switches, the Procurement Committee asked the firms to conduct demo for that items. Techser Power Solutions Pvt. Ltd Cochin successfully conducted the demo where as Wintech Systems & Services, Karunagappally did not even respond to the letter sent to them. Further, a letter from Wintech Systems & Services, Karunagappally cancelling the bid and requesting to refund the Security deposit, was received. The Procurement Committee found that both the bids were commercially responsive and the bid submitted by Wintech Systems & Services, Karunagappally was technically non-responsive where as the bid submitted by Techser Power Solutions Pvt. Ltd Cochin was technically responsive as well. Hence the Procurement Committee recommends that the contract be awarded to the eligible lowest quoting firm Techser Power Solutions Pvt. Ltd Cochin, for Rs. 19,14,659/- (Without Tax) and 20,34,576/- (Rupees Twenty Lakh Thirty Four Thousand Five Hundred and Seventy Six only) inclusive of all taxes. This amount is lesser than the budgeted amount of Rs. 24,99,400/- (Rupees Twenty Four Lakh Ninety Nine Thousand Four Hundred only) by Rs 4,64,824/- (18.6%).

**Action Sought:** It is requested that the BOG may kindly give its approval for the purchase of the package Campus Networking –TEQIP-II/KL/KL1G18/28 from the eligible lowest quoting firm Techser Power Solutions Pvt. Ltd Cochin, for Rs. 20,34,576/- (Rupees Twenty Lakh Thirty Four Thousand Five Hundred and Seventy Six only) inclusive of all taxes. It is further requested to give the approval to refund the security amount to Wintech Systems & Services, Karunagappally.

## **2. Desktop Computers : TEQIP-II/KL/KL1G18/13**

The pre-bid meeting for the package was held on 17.12.2013. Representatives from three firms participated in the pre-bid meeting. At the end of the pre-bid meeting it was decided that the qualification criteria and the technical specifications would be retained as such. The bids were scheduled to be opened on 10.01.2014 at 12.00 Noon. However it was not opened, as only one firm, Smartsoft, Cochin, supplied the bid. Hence it was decided to extend the bid opening date by the Procurement Committee after consulting with the SPFU. In consultation with the SPFU and as per TEQIP guidelines, the date of opening of the bid was extended up to 27.01.2014. The extension of the bid opening date was advertised nationwide through the National Daily “The HINDU” (17.01.2014), state wide (17.01.2014) through the regional daily “Mathrubhumi” and through the college website. The bids were opened on 27.01.2014 at 12.00 Noon. Two firms, Smartsoft, Cochin, the Manufacturer Authorized Firm (MAF) for

Dell and Wintech Systems and Services, Karugappally, the MAF for HP submitted bids. Smartsoft Kochi submitted a bid for Rs. 94,06,608/- inclusive of all taxes. Wintech Systems and Services, Karugappally submitted a bid for Rs. 1,31,88,966/- exclusive of all taxes. Both bids were found to be technically and commercially responsive by the Procurement Committee. The Procurement Committee recommends that the contract be awarded to the eligible lowest quoting firm Smartsoft Kochi, who is the MAF for Dell, for an amount of Rs. 94,06,608/- (Rupees Ninety Four Lakh Six Thousand Six Hundred and Eight only) inclusive of all taxes. This amount is higher than the estimated amount of Rs. 88,56,000/- (Rupees Eighty Eight Lakh Fifty Six Thousand only) by Rs. 5,50,608/- (-6.22%). The Bid Evaluation Report for the package Desktop Computers: TEQIP-II/KL/KL1G18/13 is shown as Annexure II.

**Action Sought:** It is requested that the BOG may kindly give its approval for the purchase of the package Desktop Computers, TEQIP-II/KL/KL1G18/13 from the eligible lowest quoting firm Smartsoft Kochi, who is the MAF for Dell, for an amount of Rs. 94,06,608/- (Rupees Ninety Four Lakh Six Thousand Six Hundred and Eight only) inclusive of all taxes.

### **3. Digital Storage Oscilloscope: TEQIP-II /KL/KL1G18/21**

The pre-bid meeting for the package was scheduled on 17.12.2013. No firm participated in the pre-bid meeting. Two bids were received till the time of opening. Two firms, Innovative Instruments, Thiruvananthapuram and Convergent Technologies, Bangalore submitted original and duplicate bid documents. The bids were opened on 13.01.2014 at 12.00 noon. Both firms have submitted Document charge and Security deposit along with the bid. Representatives from both firms were present during the opening time. All the documents were sealed and found to be duly signed by the authorized signatory.

The bid submitted by Innovative Instruments, Thiruvananthapuram was for Rs. 18,84,072/- (Rupees Eighteen Lakh Eighty Four Thousand and Seventy Two only) exclusive of all taxes. The bid submitted by Convergent Technologies, Bangalore was for Rs. 26,75,179/- (Rupees Twenty Six Lakh Seventy Five Thousand One Hundred and Seventy Nine only) exclusive of all taxes. The bids submitted by both the firms were found to be technically and commercially responsive by the Procurement Committee. The Procurement Committee recommends that the contract be awarded to the eligible lowest quoting firm Innovative Instruments, Thiruvananthapuram for Rs. 18,84,072/- without tax and Rs. 19,78,276/- (Rupees Nineteen Lakh Seventy Eight Thousand and Two Hundred and Seventy Six only)

inclusive of all taxes. This amount is lesser than the budgeted amount of Rs. 2785000/- (Rupees Twenty Seven Lakh Eighty Five Thousand only) by Rs. 8, 06,724/- (28.97%).

**Action Sought:** It is requested that the BOG may kindly grant the approval for the purchase of the package Digital Storage Oscilloscope –TEQIP-II/KL/KL1G18/21 from the the eligible lowest quoting firm Innovative Instruments, Thiruvananthapuram for Rs. 19,78,276/- (Rupees Nineteen Lakh Seventy Eight Thousand Two Hundred and Seventy Six only) inclusive of all taxes.

#### **4. Unitized Sub-station: TEQIP-II /KL/KL1G18/125**

The pre-bid meeting for the package was scheduled on 20.12.2013. One firm participated in the pre-bid meeting. Two bids were received till the time of opening. The two firms, SK Electrical and Infrastructures, Thiruvananthapuram and V S Associates, Karunagappally submitted original and duplicate bid documents. The bids were opened on 15.01.2014 at 12.00 noon. Both firms have submitted Document charge along with the bid, but the Firms M/s SK Electrical and Infrastructures, Thiruvananthapuram has not submitted Security deposit. Representatives from both firms were present during the opening time. All the documents were sealed and found to be duly signed by the authorized signatory.

The bid submitted by SK Electrical and Infrastructures, Thiruvananthapuram was for Rs. 28,34,330/- (Rupees Twenty Eight Lakh Thirty Four Thousand and Three Hundred and Thirty only) inclusive of all taxes. The bid submitted by V S Associates, Karunagappally was for Rs. 23,54,831/- (Rupees Twenty Three Lakh Fifty Four Thousand Eight Hundred and Thirty One only) exclusive of all taxes. Since the firm SK Electrical and Infrastructures, Thiruvananthapuram had not furnished the Security deposit at the time of opening of bids, their bid was invalidated by the Procurement Committee. The bid submitted by V S Associates, Karunagappally was found to be technically and commercially responsive by the Procurement Committee. The Procurement Committee recommends that the contract be awarded to the eligible quoting firm V S Associates, Karunagappally for Rs. 23,54,831/- without tax and Rs. 24,49,024/- (Rupees Twenty Four Lakh Fourty Nine Thousand and Twenty Four only) inclusive of all taxes. This amount is higher than the budgeted amount of Rs. 21,39,704/- (Rupees Twenty One Lakh Thirty Nine Thousand Seven Hundred and Four only) by Rs. 3,09,320/- (-14.46%).

**Action Sought:** It is requested that the BOG may kindly grant the approval for the purchase of the package Unitized Sub-station-TEQIP-II/KL/KL1G18/125 from the the eligible quoting

firm V S Associates, Karunagappally for Rs. 24,49,024/- (Rupees Twenty Four Lakh Fourty Nine Thousand and Twenty Four only) inclusive of all taxes.

## **5. UPS: TEQIP-II /KL/KL1G18/87**

The pre-bid meeting for the package was held on 17.12.2013, following which it was decided that qualification criteria and the technical specifications will be retained as such. Two firms participated in the pre-bid meeting. The bids were opened on 10.01.2014 at 3.00 PM. Four firms, IGA Tech Industrial Electronics (P) Ltd Thiruvananthapuram, Novateur Eelctrical and Digital systems Pvt. Ltd. Cochin, Supra Hi-Tech Electro Equipments Pvt. Ltd, Cochin and Hykon India Pvt. Limited submitted bids. All the firms were Original Equipment Manufacturers (OEM).

IGA Tech Industrial Electronics (P) Ltd Thiruvananthapuram submitted a bid for Rs.23,78,500/- without tax. Novateur Electrical and Digital Systems Pvt. Ltd Cochin submitted a bid for Rs. 26,68,416/- exclusive of tax. Supra Hi-Tech Electro Equipments Pvt. Ltd, Cochin, submitted a bid for Rs. 3651550/- exclusive of tax. Hykon, Thrissur submitted a bid for Rs. 3778896.60/- exclusive of tax. All the four bids were found to be technically and commercially responsive by the Procurement Committee. The Procurement Committee recommends that the contract be awarded to the eligible lowest quoting firm IGA Tech Industrial Electronics (P) Ltd Thiruvananthapuram for Rs.23,78,500/- without tax and Rs.27,23,383/- (Rupees Twenty Seven Lakh Twenty Three Thousand Five Hunred only) inclusive of all taxes. This amount is lesser than the budgeted amount of Rs. 3270000/- (Rupees Thirty Two Lakhs Seventy Thousand only) by Rs 5, 46,617/- (16.72%).

**Action Sought:** It is requested that the BOG may kindly give its approval for the purchase of the package UPS: TEQIP-II /KL/KL1G18/87 from the eligible lowest quoting firm IGA Tech Industrial Electronics (P) Ltd. Thiruvananthapuram for Rs. 27,23,383/- (Rupees Twenty Seven Lakh Twenty Three Thousand Five Hunred only) inclusive of all taxes.

## **2.3 Expenditure incurred for completed civil works packages and status of other Civil packages**



Out of the six civil works packages of CE Karunagappally as per the approved Procurement/Minor Civil Works Plan, three are completed and other packages are expected be completed within 45 days. The payment of all the three completed civil works have been made based on the actual measurements entered in the M-book and by the completion certificate provided by the Asst. Executive Engineer of IHRD and after deducting all taxes as per TEQIP II norms.

Sl No	Package Number	Package Name	Mode	Estimated Amount (Rs)	Actual Amount (Rs)	Status
1	TEQIP II / KL/KL1G18/133	Ceiling work of Computer lab	Shopping	2,00,000	1,75,927	Completed
4	TEQIP II/ KL/KL1G18/131	Foundations for Machines	Shopping	2,00,000	1,67,767	Completed
6	TEQIP II/KL/KL1G18/132	Refurbishment work of labs	Shopping	7,10,617	6,15,131	Completed
2	TEQIP II / KL/KL1G18/160	College electrical work	Shopping	12,66,996	--	50% Completed
3	TEQIP II / KL/KL1G18/130	Extension of Generator Room	Shopping	14,75,000	--	25% Completed
5	TEQIP II/ KL/KL1G18/127	Partitioning work	Shopping	11,40,000	--	75% Completed

**Action Sought:** It is requested that the expenditure incurred for the completed civil works may kindly be ratified by the BOG.

## 2.4 Ratification of cancelled packages

The details of cancelled packages post the third BOG meeting and the reasons for cancellation are given below.

Sl No	Package No	Package Name	Mode	Reason for Cancellation	Estimated Cost (Rs)
1	TEQIP II /KL /KL1G18/155	Carpentry Tools for ME Workshop	Shopping	The firm quoted least has not supplied the items	43,600
2	TEQIP II /KL/KL1G18/110	EPBAX System	Shopping	Quoted amount was 25% more than the estimated. The firms have quoted more amounts for cable laying. Since Campus networking work is under consideration, the charges for cable laying are not included in the package	2,00,000
3	TEQIP II /KL/KL1G18/57	Fitting tools	Shopping	The firm quoted least has not supplied the items	3,68,775
4	TEQIP II /KL/KL1G18/95	Foundry tools	Shopping	The firm quoted least has not supplied the items	96,010
5	TEQIP II /KL/KL1G18/100	General Engineering Tools	Shopping	The firm quoted least has not supplied the items	1,45,515
6	TEQIP II /KL/KL1G18/84	Laptop System	Shopping	Quoted amount was above shopping limit due to the misinterpretation of specification of an item by the firms	8,75,000
7	TEQIP II /KL/KL1G18/51	Servo motor	Direct Contract	Quoted amount was above Direct Contract limit	20000

**Action sought:** It is requested that the cancellation of the packages may kindly be ratified by the BOG.

## 2.5 Approval for the new packages

The seven packages cancelled are combined to form new six packages with revised package names and numbers along with revised estimate except for the serial numbers 5 and 6 are as given below. The first four packages have been initiated with the new package names and the other two are yet to be added as new packages.

Sl	Package No	Package Name	Mode	Revised
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No				Estimated Cost (Rs)
1	TEQIP II /KL /KL1G18/164	Carpentry and General Engineering Toolsr	Shopping	1,61,155
2	TEQIP II /KL/KL1G18/167	EPBAX	Shopping	2,00,000
3	TEQIP II /KL/KL1G18/163	Fitting shop tools	Shopping	3,86,100
4	TEQIP II /KL/KL1G18/161	Laptop Computer	Shopping	8,75,000
5	TEQIP II /KL/KL1G18/	Foundry shop tools	Shopping	1,10,000
6	TEQIP II /KL/KL1G18/	Servo motor	Direct Contract	50,000

**Action sought:** The BOG may kindly ratify the revisions made in the first four packages and approve the changes made in the last two packages.

## 2.6 Approval of the various Academic programs conducted/attended by faculty and staff.

The tables below summarize the in-house and out-station training programmes, as well as conferences attended by the faculty and staff of the institute, post the last BOG meeting.

### 1. Faculty Development Programme – In-house

Sl. No.	Title of the Programme	Department	Duration & date	Co-ordinator	Expenditure (Rs.)
1.	Expert talk on Data Mining	CS/IT	11.12.2013	Smitha P	8767
2.	Expert talk on Fundamentals of Spectral Estimation	EC	21-22, Dec 13	Bence Paul	12406
3.	Expert lecture on Open GL	CS	22.11.2013	Diana Mathew	7575
4.	Visual Instrumentation	EC	16-20, Dec13	Sylish S.V	92262
5	Expert Lecture in Introduction to linux	CS	03.4.14	Remya R.S	6622

6	Advanced communication technologies	EC	24.2.14-1.3.14	Anuja V Nair	78643
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## 2. Faculty Development Programme attended outstation by faculty

Sl.No	Name of Faculty	Title of the programme	Dates Attended	Institution	Amount (Rs)
1	Shaji L	Data Mining Techniques	2-4, Dec 13	CE Kidangoor	2719.00
2	Sylish S V	Training Programme – Research issues in Heterogeneous wireless networks	2-6. Dec 13	Pondichery Engg College	8857.00
3	Vinod R	Training Programme – Research issues in Heterogeneous wireless networks	2-6. Dec 13	Pondichery Engg College	8857.00
4	Santhini Paul	Advance Database management systems	9-11 Dec 13	CE Perumon -	4202.00
5	Deepa A K	Advanced research and development	18-20 Dec 13	Bangalore	30091.00
6	Remya R S	Advanced research and development	18-20 Dec 13	Bangalore	29476.00
7	Reshmi V S	STTP – Emerging in trends power sector	18-19 Dec 13	PRS CE & T, TVM	2488.00
8	Sabeena K	STTP – Emerging in trends power sector	18-19 Dec 13	PRS CE & T, TVM	2488.00
9	Vinod S	STTP – Emerging in trends power sector	18-19 Dec 13	PRS CE & T, TVM	2488.00
10	Remya R S	Research document preparation using latex	18-20Dec 13	CET	2690.00
11	Sheela R	Linear Algebra at	9-13 Dec 13	LBS, Tvm	2910.00
12	Meharuniza Nazeem	Linear Algebra at LBS, Tvm	9-13 Dec 13	LBS, Tvm	2036.00
13	Anilkumar A	Application development using Java	27-27 Nov 13	TKM	2427.00
14	Sabeena K	Application development using Java	27-27 Nov 13	TKM	2252.00
15	Rethikumary S	Modern display devices based on Nano Technology	7 Dec 13	CE Adoor	279.00
16	Dr. Hari V S	- STTP on Advanced techniques for satellite image analysis	10-14 Feb, 2014	IIT Bombay	24015.00

17	Reji Thankachan	STTP on Advanced techniques for satellite image analysis	10-14 Feb, 2014	IIT Bombay	23601.00
18	Jyothi R L	STTP on Advanced techniques for satellite image analysis	10-14 Feb, 2014	IIT Bombay	23434.00
19	Sylish S V	STTP on Advanced techniques for satellite image analysis	10-14 Feb, 2014	IIT Bombay	23569.00
20	Deepa V S	STTP on Advanced techniques for satellite image analysis	10-14 Feb, 2014	IIT Bombay	23884.00
21	Seena Jojith	STTP – Number theory and Cryptography,	11-13 Dec 13	LBS TVM	1636.00
22	Sreelekshmi M	STTP – Number theory and Cryptography	11-13 Dec 13	LBS TVM	1636.00
23	Alkha Mohan	STTP – Number theory and Cryptography,	11-13 Dec 13	LBS TVM	1636.00
24	Aiswarya S Kumar	STTP – Number theory and Cryptography,	11-13 Dec 13	LBS TVM	1636.00
25	Sree S Bhagya	STTP – Topics on Information Security	4-6 Dec 13	LBS TVM	1636.00
26	Seena Jojith	STTP – Topics on Information Security	4-6 Dec 13	LBS TVM	1636.00
27	Remya R S	- WPLP – National workshop on effective teaching and learning pedagogy	5-7 Feb 2014	ISTE, TVM	31712.00
28	Anuja V Nair	ISTE – WPLP – National workshop on effective teaching and learning pedagogy	5-7 Feb 2014	ISTE, TVM	31712.00
29	Deepa T R	ISTE – WPLP – National workshop on effective teaching and learning pedagogy	5-7 Feb 2014	ISTE, TVM	31712.00
30	Sabeena K	ISTE – WPLP – National workshop on effective teaching and learning pedagogy	5-7 Feb 2014	ISTE, TVM	31712.00
31	Deepa V S	Workshop on speech processing,	9-10 Dec 13	RIT	3029.00
32	Deepa A K	Workshop on speech processing	9-10 Dec 13	RIT	3029.00

33	Anuja V Nair	National Workshop on accreditation & Autonomy	6-8 Jan 2014	ISTE, Knyakumari	31894.00
34	Shiny C	National Workshop on accreditation & Autonomy	6-8 Jan 2014	ISTE, Knyakumar	32094.00
35	Sheela R	National Workshop on accreditation & Autonomy	6-8 Jan 2014	ISTE, Knyakumar	32094.00
36	Rethikumary S	National Workshop on accreditation & Autonomy	6-8 Jan 2014	ISTE, Tknyakumar	32094.00
37	Remya R S	National Workshop on accreditation & Autonomy	6-8 Jan 2014	ISTE, Knyakumar	31894.00
38	Premakumary K R	Research promotion workshop on - Introduction to graph and geometric Algorithms	23-25 Jan 14	IIIMK TVM	2269.00
38	Jyothi R Rl	Research promotion workshop on - Introduction to graph and geometric Algorithms	23-25 Jan 14	IIIMK TVM	2062.00
39	J Jayadeep Kumar	Modern Trends in energy Environment & Green Technology	21-25 April 14	CUSAT	5533.00

### 3. Paper presented by Faculty in Conferences

Sl. No	Name of Faculty	Name of Conference	Date	Institution	Amount (Rs)
1	Reji Thankachan	National Conference RETREW(Recent Trends in Electronics World)	17-03-2014	TKM Institute of Technology	4669
2	Shiny C	1 <sup>st</sup> International Conference on Intelligent Engg. Systems	04-04-2014	EASA College of Engg. & Technology,Coimb atore	---
3	Shiny C	National Conference on Emerging Trends in Engg & Technology NCETE14	03-04-2014	Younus Kunju College of Engg & Technology	2000
4	Deepa A K	National Conference RETREW(Recent Trends in Electronics World)	17-03-2014	TKM Institute of Technology	2669
5	Deepa V S	National Conference on Emerging Trends in Engg & Technology NCETE14	03-04-2014	Younus College of Engg & Technology	2000

### 4. Management Capacity Development Programmes attended by Faculty

Sl. No	Name of Faculty	Title of the programme	Dates Attended	Institution	Amount (Rs)
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1	Dr. Hari V S	National Workshop on accreditation & Autonomy	6-8 Jan 2014	ISTE Kanyakumari	32094
2	Dr. Hari V S	Making TEQIP Institutions more Effective, strategic planning and good governance	17-18 March 14	CET	15189
3	Dr. Ajil Kumar A	Making TEQIP Institutions more Effective, strategic planning and good governance	17-18 March 14	Out station - Attended	15189
4	Prof. Manoj Ray D	Making TEQIP Institutions more Effective, strategic planning and good governance	17-18 March 14	Out station - Attended	15189

#### 5. Staff development Programme attended outstation

Sl.No	Name of Staff and Designation	Title of the programme	Dates Attended	Institution	Amount (Rs)
1	VINOD KUMAR Head Clerk	National workshop on personality development and capacity building	28-30 Jan 14	ISTE, Kochi	21418.00
2	VIDYA J Head Clerk	National workshop on personality development and capacity building	28-30 Jan 14	ISTE, Kochi	20748.00
3	SANDHYA MURALI Head Clerk	National workshop on personality development and capacity building	28-30 Jan 14	ISTE, Kochi	20748.00
4	JINCY WILIAM Librarian	Workshop on Dspace digital library software	2-4 March 14	TKM, Kollam	1217.00
	JINCY WILIAM Librarian	Workshop on E-Resouce Learning	25-27 April 14	CE Vadakara	Not settled
5	HASEENA K Librarian	Workshop on Dspace digital library software	2-4 March 14	TKM, Kollam	1217.00
6	HASEENA K Librarian	KOHA - Library Management system - TKM	5-7 Jan 14	TKM	717.00

**Action Sought:** It is requested that the exact amounts spent for various Faculty/Staff/Managenet Development programmes conducted/attended by the staff members of the institution after the last BOG meeting may kindly be ratified by the BOG.

## **2.7 Ratification/Approval of Reimbursement of fee for PhD.**

**2.7.1** Smt. Smitha P, Assistant Professor in Computer Science and Engineering submitted a request for the reimbursement of course fee for PhD programme at Anna University for an amount of Rs. 18,000/-. The Academic committee that met on December 12, 2013 had approved the proposal subject to the approval by BOG.

**Action sought:** The BOG may consider the request and grant necessary approval.

**2.7.2** Dr. Hari.V.S., Principal of the college has requested to reimburse the expenditure incurred for printing of his PhD thesis amounting Rs. 13850/-. The Academic and Finance committees recommended to pay the amount to Dr.Hari V.S subject to ratification by BOG and accordingly the amount was paid to him.

**Action sought:** The BOG may ratify the payment.

## **2.8 Approval of the In-house and outstation programmes for faculty and staff for the next three months**

### **2.8.1 In-house training Programmes planned for the next three months**

The detailed proposal of in-house training programmes planned for the next 3 months is shown in the following table.

<b>Sl. No</b>	<b>Name of Coordinator</b>	<b>Training Programme</b>	<b>Tentative date</b>	<b>Type</b>	<b>Duration in Days</b>	<b>Participation expected</b>	<b>Approx. Expenditure (Rs)</b>
1	Remya.R.S	Research Document Preparation using Latex	June 2014	Training	3	30	75000
2	Manoj Ray D	Random Process	June 2-4	Training	3	30	75000
3	Vinod R	Simulation of computer Networks Algorithms	Aug 2014	Training	2	30	50000



4	Anuja V Nair Mili Roseline	Open Source Tools	July 2014	Training	3	30	60000
5	Gopakumar C	Mobile Technology	July 2014	Seminar	1	20	20000
6	Reji Thankachan	DSP PROCESSORS	June 2014	Training	5	30	100000
7	Deepa A K	Restructuring of Engineering Curriculum in the perspective of Globalized Economy	Aug 2014	Seminar	1	30	10000
8	Mili Roseline & Deepa AK	Technical Communication and Writing	Aug 2014	Seminar	1	30	10000
9	Dr. AjilKumar A Libi A Deepa V S	Student Guidance & Counseling	June 2014	In house Training from NITTTR	5	30	200000
10	Jayadeep Kumar, Ravikumar Thampy	Modern Teaching Methods	Aug 26-30	In houseTrain ing from NITTTR	5	30	200000
12	Manoj Ray D Kuriachan T D	Open Hardware	July 10-14, 2014	Workshop	2	30	40000
13	Kuriachan T D, ECE Dept AnilKumar, EEE Dept	PCB Design & Manufacuring	Aug 2014	Workshop	3	30	60000
14	Premnath, Rethykumari	Ancient Indian Mathematics	June 24 -27 , 2014	Training	3	30	60000
15	Libi A Raju	Control Systems	Aug 2014	Training	5	30	100000
16	Shiny C, AP,EC	Expert Talk on Audio &Speech Compression	May 22-23, 2014	Seminar	2	20	20000
17	Smitha P	Research Methodology	July 14	FSD	4	25	80000
18	Vinodh Kumar & Sandhya (Office)	Office Automation	June 2014	Workshop	3	20	50000
19	Jincy william , Librarian	workshop on Koha(Advanced)	July 2014	Workshop	2	30	40000
<b>Total</b>							<b>1250000</b>

### 2.8.2 Outstation training Programmes planned for the next three months

The detailed proposal of outstation training programmes planned for the next 3 months is shown in the following table. The list is prepared based on the courses available in the web site of various Institutions.

Department : Computer Science & Engineering/ IT						
No	Name	Course	Tentative date	Duration in Days	Institution	Approx Expenditure (Rs)
1	Jyothi R L	Cyber security and computer forenics	Aug 6-8	3 Days	ESCI Hyderabad	40000
2	Remya R S	STTP on pattern analysis and Information Security	Jun 30-July 4	5 days	NIT Goa	40000
		Cyber security and computer forenics	Aug 6-8	3 Days	ESCI Hyderabad	40000
		Parallel Computing Architecture and Applications	Jun16-20	5 days	IIT Bombay	40000
		Parallel Computing Architecture and Applications	Jun16-20	5 days	IIT Bombay	40000
3	Manoj Ray D	Parallel Computing Architecture and Applications	Jun16-20	5 days	IIT Bombay	40000
4	Smitha P	Parallel Computing Architecture and Applications	Jun16-20	5 days	IIT Bombay	40000
5	Vinod R	Parallel Computing Architecture and Applications	Jun16-20	5 days	IIT Bombay	40000
5	Vinod R	Telecommunication Networks	July1-8	9 days	IIT Kharagpur	30000
6	Anil kumar.A	Parallel Computing Architecture and Applications	Jun16-20	IIT Bombay	5	40000
7	Shaji L	Cyber security and computer forenics	Aug6-8	ESCI Hyderabad	3	40000
		Sttp on Advances in cell and molecular Biology	Jun 24-26	IIT Gwahat hy	3	40000

<b>Department :Electronics &amp; Communication Engineering</b>						
<b>No</b>	<b>Name</b>	<b>Course</b>	<b>Tentative date</b>	<b>Duration</b>	<b>Institution</b>	
1	C V Anilkumar	Mechatronics, Mems & Microfabrication	July 7-11, 2014	5 days	IIT,Indore	30000
2	Deepa V S	Advanced DSP Design Techniques	June 10-14,2014	5 days	IIT Kharagpur	30000
3	Sylish S V	Telecommunication Networks	July1-8	9 days	IIT Kharagpur	30000
4	Reji Thankachan	Telecommunication Networks	July1-8	9 days	IIT Kharagpur	30000
5	Deepa A K	Advanced DSP Design Techniques	June 10-14,2014	5 days	IIT Kharagpur	
7	Dr.C Gopakumar	Advanced DSP Design Techniques	June 10-14,2014	5 days	IIT Kharagpur	30000
8	Anuja V Nair	Advanced DSP Design	June 10-14,2014	5 days	IIT Kharagpur	30000
9	Dr. Hari V S	Advanced DSP Design Techniques	June 10-14,2014	5 days	IIT Kharagpur	30000
<b>Department :Electrical &amp; Electronics Engineering</b>						
1	Libi A	Advanced DSP Design Techniques	June 10-14,2014	5 days	IIT Kharagpur	30000
2	Raju	Control & Instrumentation	June 2014	3 Days	Engg Staff College, Hyderabad	30000
<b>Other Supporting Departments</b>						
1	Jayadeep Kumar, AP, Mechanical Engg	Mechatronics, Mems & Microfabrication	July 7-11, 2014	5 days	IIT,Indore	30000
2	Ravikumar Thampy	Mechatronics, Mems & Microfabrication	July 7-11, 2014	5 days	IIT,Indore	30000
3	Jincy william (Librarian)	National Workshop on Koha(Advanced)	May 23-24	2 days	University of Calicut	3500
						<b>763500</b>

**Action sought:** It is requested that the proposals for the in-house and outstation programmes for the next three months may kindly be approved by the BOG.

## 2.9 Report of IIC Activities and Approval

**2.9.1 IIC Activities Conducted:** The following table shows the activities conducted for the students by the IIC. The activities are expert lecture, expert tutoring, industrial visit, workshop etc.

Sl No	Activity	Title	Department	Target/No /days/Date	Amount (Rs)
1	Expert Lecture	Prepare to become an Industry Professional	IIC Cell	S6 EC & EEE/ 117/1/19-2-14	9062
2	Expert Lecture	Expert Lecture on Open Hardware	Electronics & Communication	Staff EC//1/ 19-03-14	9523
3	Expert Tutoring	Industrial Tutoring In PIC programming	Electronics & Communication	S8 EC/39 /2/19-02-14	18417
4	Expert Tutoring	Industrial Tutoring in PHP	Computer Science & Engineering	S6 CS & IT/ 70/2/3-1-14	16562
5	Expert Tutoring	Industrial Tutoring in C++	Computer Science & Engineering	S6 CS & S8CS & IT/ 50/2/18-1-14	6404
6	Expert Tutoring	Industrial Tutoring in JSP	Computer Science & Engineering	S6 IT/21 /2/14-02-14	14425
7	Expert Tutoring	Industrial Tutoring in Java-Net Beans	Computer Science & Engineering	S8 CS/ 34/2/8-2-14	6872
8	Industrial Visit	Visit to RTTC ,kaimanam,TVM	Electronics & Communication	S8EC/66 S+3 F/1/25-2-14	14000
9	Industrial Visit	Visit to ITI,Palakkad	Electronics & Communication	S4 EC/57 S+3 F/1/15-2-14	29986
10	Industrial Visit	Visit to Keltron Karakulam TVM	Electronics & Communication	S6 EC/66S + 3F/1/6-2-14	15000
11	Industrial Visit	Visit to Spectrum Softech Solutions ,Kochi	Computer Science & Engineering	S4 CS/52 S +2F/1/8-2-14	15684
12	Industrial Visit	Visit to 220KV Substation Edappon	Electrical & Electronics	S6 EEE/56S +4F/1/30-1-14	7759
13	Industrial Visit	Visit to Moozhiyar Power Station	Electrical & Electronics	S6EEE/56 S + 4F/1/1-3-14	14832
14	Industrial Visit	Visit to Poriyalkuthu Power Station	Electrical & Electronics	S4EEE/57 S+ 4F/1/15-2-14	23334
15	Short Term Programme	Interactive Workshop on	Computer Science &	S8CS/57/5days	46224

		Documenting and presenting project reports using LATEX	Engineering	/21-2-14	
16	Workshop	Machine dismantling Interactive workshop	Electronics & Communication	S8EEE/157/1 day/4-2-14	2234

### 2.9.2 MoUs Signed by the Institute

The Institute has signed 5 MoUs with the following Industry/Institute.

Sl No	Name of the Industry	Department	Date of MoU	Scope of MoU
1	Zyxware Technologies Private Limited,Tvm	Electronics & Communication	1-1-2014	Student project & Training Staff training Joint Research
2	Early Bird Security and Automation(P) Ltd,TVM	Electronics & Communication	1-1-2014	Student and Staff Training, Student project, Internship
3	Seaview Support Systems Pvt Ltd,Tvm	Computer Science & Engg	1-3-2014	Student and Staff Training, Internship
4	Softex Digital Pvt Ltd,Tvm	Computer Science & Engg	1-3-2014	Student and Staff Training, Internship
5	Regional Cancer Centre Tvm	Computer Science & Engg	1-3-2014	Joint Research

**Action sought:** It is requested that the expenditure incurred under IIIC activities may kindly be ratified by the BOG.

### 2.9.3 IIIC activities planned for the next 3 months

Sl No	Branch	Name of Program	Type of program	Industry Name / Instn Name	Date	No of days	No. of Student Participants	Actual / Planned Expenditure (Rs.)
1	EEE	Two day Training-KEL Kundara	Industrial Training	KEL Kundara	Jul 14	2	56	20000
2	EEE	High Voltage D.C. Transmission	Expert Lecture	KSEB	Jul 14	1	56	15000
3	EEE	Energy Saving for Domestic Equipments	Expert Lecture	ANERT	Jul 14	1	60	15000
4	EEE	Power Trading and Management	Seminar		Aug-14	1	56	15000

5	EC	Microprocessors, Micro Cnottrollers and Embedded Systems	Expert Lecture	IIT Madras	Jul-14	1	120	25000
6	EC	Moden Communication Technology	Expert Lecture	BSNL	Aug-14	1	120	15000
7	EC	Microwave Engg, Signal Processing for Antenna Arrays	Expert Lecture	IISc Bangalore	Aug-14	1	120	15000
8	EC	Signal Processing and Trends	Expert Lecture	NesT /CDAC	Jul-14	1	120	15000
9	EC	Advanced Microprocessors and Digital Signal Processors	Expert Lecture	IIT Madras	Sep-14	1	120	25000
10	EC	Use of HFSS in Antenna Design	Expert Lecture	CUSAT , Kochi, & Delphi	Sep-14	1	120	25000
11	CS	An insight to computer networking	Expert Lecture	RLAB, Kollam	Jul-14	1	50	15,000
12	CS	Advanced Datamining Techniques	Expert Lecture	CUSAT	Jul-14	1	24	20,000
13	CS	Image Forensics	Expert Lecture	CDAC Tvm	Aug-14	1	24	20,000
14	IT	Current Software Trends	Expert Lecture	Technopark, TVM	Aug-14	1	50	20,000
15	IT	Advanced Communication Techniques	Expert Lecture	BSNL Trivandrum	Sep-14	1	50	20,000
16	EC	ITI,Palakkad	Industrial Visit		Jul 14		61	15000
17	EC	ITI,Palakkad	Industrial Visit		Aug 14		66	15000
18	EC	BSNL,Trivandrum	Industrial Visit		Sept 14		48	10000
19	EC	BSNL,Trivandrum	Industrial Visit		Sept 14		66	10000
20	EC	SCTIMST,Trivandrum	Industrial Visit		Sept 14		48	10000
21	EC	SCTIMST,Trivandrum	Industrial Visit		Sept 14		67	10000
22	EC	O E N	Industrial Visit		Aug 14		67	12000
23	EC	O E N	Industrial Visit		Aug 14		67	12000
24	EEE	Kerala Electricals & Allied Engineering Co Ltd,kollam	MOU		Jul 14			0

	374000
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**Action sought:** The BOG may kindly approve the action plan under IIIC cell for the next three months.

## 2.10 Report of R & D Activities and Approval of Research Seed Money

The first meeting of the Research Guidance Committee (RGC) for TEQIP II of CE Karunagappally was held on 22.2.2014 under the Chairmanship of Senior Research Advisor of the Institution, Dr. Gopinathan E, Former Director of NIT Kozhikode. The external members of the Committee Dr. Rajkumar Choudhary, Scientist, Space Physics Laboratory, VSSC and Sri. Shajahan M, Scientist, Space Physics Laboratory, VSSC Thiruvananthapuram also were present in the meeting. The Committee scrutinised the applications received for research seed money and commented that all the eight applications were of good quality. After first level scrutiny, the applicants were asked to present their proposals before the RGC. All the proposals were critically evaluated by the RGC during the presentations made by the investigators. After the evaluation the committee decided to grant the amounts requested by each Principal Investigator as per the Table shown below. The minutes of the first meeting of RGC is attached as **Annexure-3**. Based on the decisions of the RGC, seed money at the tune of Rs. 1,00,000/- per Principal Investigator was paid for the eight proposals strictly adhering to the rules and regulations framed for granting the seed money.

**Table: Seed money granted to the Investigators**

Sl. No.	Name of the Principal Investigator	Title of the project proposal	Amount requested (Rs)	Amount Sanctioned (Rs)
1.	Dr. Hari V.S	Automated Detection of Alzheimer's Disease using QVF	100000	100000
2.	Deepa A.K	Image Processing Techniques for Breast Image Analysis	100000	100000
3.	Remya R.S	Video Tampering Detection – An application to video forensics	100000	100000
4.	Smitha P	Automated Cancer Detection and Grading of Breast Microscopy Images	100000	100000
5.	Shajy L	Early Lung Cancer Detection	100000	100000

		Through Extraction And Analysis Of Sputum Cell Images		
6.	Jyothy R.L	Handwritten character recognition from manuscripts written in ancient Grantha scripts	100000	100000
7.	Remya R.S	Detection of Acute Lymphocytic Leukemia	100000	100000
8.	Jyothy R.L	Handwritten character recognition of various ancient and current Malayalam fonts	100000	100000

**Action sought:** It is requested that the Research Seed Money granted to the eight Principal Investigators at the tune of Rs. 1,00,000/- may kindly be ratified by the BOG.

## 2.11 Report of programmes under EAP

### 2.11.1 Remedial classes from January 14 to March 14

Remedial classes for various subjects were conducted for the academically weak and SC/ST students. The total duration of classes (all together) was 70 hours and the total number of students participated (in entire programme) was 569. Number of SC/ST beneficiaries was 27.

The following is the list of remedial programmes conducted post the third BOG meeting.

#### **Remedial Classes Conducted From Jan 2014- March 2014**

SEM/BRANCH	SUB: CODE	NO: of students attended		HRS:ENGAGED	TOTAL HRS:
		TOTAL	SC/ST		
S1EC	1101	25	1	1	7
		30		3	
		10		3	
S1EC	1104	11		1	1
SIEC/CS/EE		24	2	1	1
S1EC	1108	13		1	4
		15		1	
		15		1	
		26		1	
SI CS/IT	1105	30	5	3	3
S4EE	1402	6		1	
		7		1	



		4		1	10
		3		1	
		4		1	
		3		1	
		6		1	
		5		1	
		8		1	
		5		1	
S4EE	1403	7		2	4
		7		2	
S4EC	1402	28		3	3
S4CS	1404	21	2	1	8
		18		1	
		22	3	1	
		20	2	1	
		16	2	1	
		11	1	2	
		8	1	1	
S6EE	602	28	1	1	5
		30		1	
		13		3	
S6CS	605	22	2	2	2
S6EC	404SUPPLY	16	2	1.5	1.5
S6CS/EC/IT	401SUPPLY	22	3	3	6
S6EC/CS	401SUPPLY	8		3	
S8CS/IT	401SUPPLY	7		1	8
S8CS	401SUPPLY	5		3	
		7		1	
		3		3	

The softskill training programme conducted for the students' post the third BOG is given below:

PROGRAMME	BATCH	NO: OF DAYS
Quantitative reasoning	S8EC/CS/IT	4
Resume And Interview Tips	S8EC	1
Resume And Interview Tips	S8CS/IT	1
Orientation Programme	S1EC	1
Orientation Programme	S1EE	1
Orientation Programme	S1CS/IT	1
Communication Skill	S8EC/CS/IT	1

**Action sought:** BOG may kindly approve the remedial classes and the softskill training programme conducted

## 2.11.2 Action Plan for the Programmes Under EAP Cell for the next 3 months

### A. Soft Skill Training Programmes During June-Aug' 2014

PROGRAMME	SEMESTER	MONTH
Induction Training	First Year	August '14
Personalitydevelopment	Secondyear	July '14
Language Lab	Thirdyear	July '14
Aptitude Test Training	Finalyear	August '14

### B. Bridge Course For Lateral Entry Students During June-Aug' 2014

BRANCH	SUBJECT	HRS:
S3EC	ENGG:MATH	10
S3EE	ENGG:MATH	10
S3CS/IT	ENGG:MATH	10
<b>Total Expected Expenditure</b>		<b>18000</b>

### C. Remedial Classes During June-Aug'2014

BRANCH	SUBJECT	HRS:
S3EC/EE/CS/IT	1301	5
	1302	5
	1303	5
	1304	5
	1305	5
	1306	5
S5EC/EE/CS/IT	1501	5
	1502	5
	1503	5
	1504	5
	1505	5
	1506	5
S7EC/EE/CS/IT	701	5

	702	5
	703	5
	704	5
<b>Total Expected Expenditure</b>		<b>Rs. 96000</b>

#### **D. Action Plan for Placement Training for the next three months**

<b>Sl No</b>	<b>Programme</b>	<b>Year/Semester</b>	<b>Planned date</b>	<b>No of days</b>	<b>No of batches</b>	<b>Estimated Cost</b>
1	Employability Skills	Final Yr	Jun-14	5	4	198500
2	Placement Orientation	Third Yr	Jul-14	3	4	100000
3	Pattern Practice	Final Yr	Jul-14	2	4	70000
4	Personality development	Second Yr	Aug-14	3	4	100000
5	Presentation Skills	Mtech	Aug-14	2	1	35000
6	Orientation Program	First Yr	Aug-14	3	4	100000
<b>Total</b>						<b>603500</b>

**Action sought:** BOG may kindly approve the action plan for remedial classes and the softskill training programme planned for the next three months.

## **2.12 Ratification of fees paid for Accreditation and Report on SAR**

### **2.12.1. Ratification for Accreditation fees paid**

As per the TEQIP II norms, all the TEQIP Institutions are required to meet a set of 8 performance indicators. One of the performance indicators is obtaining NBA accreditation for the eligible UG and PG programmes. The performance indicators in respect of CE Karunagappally as on 31.3.2014 which has been sent to NPIU is attached as **Annexure 4**. As per the direction from NPIU and SPFU all the Institutions should apply for accreditation before 30 April 2014. Hence CE Karunagappally has applied for accreditation of the two eligible UG programmes- Computer Science & Engineering and Electronics & Communication Engineering. The Registration fee of Rs. 1,12,360/- and the Accreditation fee of Rs. 7,86,520/- have been paid to National Board of Accreditation on 19.11.2013 and 30.4.2014 respectively. Hence a total amount of Rs.8,98,880/- was paid for accreditation. The acknowledgement receipt of the fee paid is attached as **Annexure-5**.

**Action sought:** It is requested that the total amount of Rs. 8,98,880/- paid as accreditation fees may kindly be ratified by the BOG.

### **2.12.2. Self Assessment Report (SAR) - Status Report**

A Self Assessment Report has to be uploaded in the NBA web site based on which the Accreditation team will visit the campus for assessing the institution. Hence a preliminary SAR has been prepared as directed by the SPFU. The SARs prepared by the two departments are given as **Annexure-6**

**Action sought:** The BOG may discuss the report and give suggestions.

### **2.13 Report of Governance Development Plan**

All the TEQIP Institutions are asked by the NPIU to conduct Governance Self Review and formulate an initial Governance Development Plan for the successful implementation of TEQIP II. Accordingly, a preliminary Governance Development Plan was prepared and sent to SPFU and NPIU which is attached as **Annexure-7**.

**Action sought:** The BOG may discuss the plan and give suggestions.

### **2.14 Expenditure incurred under IOC-Ratification**

The expenditure incurred under IOC post the third BOG meeting is Rs. 9,20,793/-. This amount is due to Salaries of TEQIP staff, Consumables purchased for TEQIP cell and other departments, and Operation and Maintenance charges. All the amounts have been paid as per TEQIP II norms. The details are given in the tables below.

#### **A) Salaries for TEQIP Staff**

Sl. No	Month	Amount (Rs)
1	Jan 2014	46000
2	Feb 14	43200
3	March 14	41800

#### **B) Operation and Maintenance Charges**

Sl No:	Date of Settlement	Name of Staff	Purpose	Amount (Rs)
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1	19/12/2014	Dr. Hari V S	Attended Workshop On Assessment Of IIIC Activities	1487.00
		Dr. Ajil Kumar A	Attended Workshop On Assessment Of IIIC Activities	1706.00
		Premakumari K R	Attended Workshop On Assessment Of IIIC Activities	1487.00
		Baiju V	Attended Workshop On Assessment Of IIIC Activities	1706.00
2	19/12/2014	Dr. Ajil Kumar A	Attended Cluster Level Meeting Of IIIC Cells	1529.00
	19/12/2014	Baiju V	Attended Cluster Level Meeting Of IIIC Cells	1529.00
3	19/12/2014	Dr. Hari V S	Attended Discussion Meeting	1612.00
		Dr. Ajil Kumar A	Attended Discussion Meeting	2792.00
		Manoj Ray D	Attended Discussion Meeting	1987.00
4	28/12/2014		Advertisement	380928.00
5	31/01/2014	Dr. Ajil Kumar A	Conducted 3 <sup>rd</sup> Bog Meeting	39121.00
6	28/2/2014		Advertisement	99216.00
7	28/2/2014	Dr. Hari V S	Attended Review Meeting	1705.00
		Dr. Ajil Kumar A	Attended Review Meeting	1705.00
		Manoj Ray D	Attended Review Meeting	1705.00
		Deepa V S	Attended Review Meeting	1705.00
		Premakumari K R	Attended Review Meeting	1705.00
		Sheela R	Attended Review Meeting	1705.00
		Baiju V	Attended Review Meeting	1705.00
		Premnath G	Attended Review Meeting	1705.00
		Shaji L	Attended Review Meeting	1637.00
8	27/3/2014		Courier Charges	200.00
9	27/3/2014		Service Charges For Photostat Machine	5000.00
10	27/3/2014	Manoj Ray D	Procurement Co - Ordinators Meeting	1644.00

11	31/3/2014	Dr. Ajil Kumar A	Conducted Data Audit	5614.00
12	17/5/2014	Dr. Ajil Kumar A	Conducted Performance Audit	59526.00
13	17/5/2014	Dr. Ajil Kumar A	Meeting	1505.00
14	17/5/2014	Baiju V	Meeting	1505.00
15	17/5/2014	Manoj Ray D	Meeting	1505.00
16	17/5/2014	Jayadeep Kumar J	Meeting	1505.00
17	17/5/2014	Deepa V S	Meeting	1505.00
18	17/5/2014	Premakumari K R	Meeting	1505.00
19	17/5/2014	Libi A	Meeting	1505.00
20	17/5/2014	Hari V S	Meeting	1505.00
21	17/5/2014	Jayadeep Kumar J	MIS Evaluation Camp	1769.00
22	17/5/2014	Rijo George	MIS Evaluation Camp	1311.00
23	17/5/2014	Dr. Ajil Kumar A	Discussion About MoU	1654.00
24	17/5/2014	Manoj Ray D	Discussion About MoU	1654.00
25	17/5/2014	Anilkumar A	Discussion About MoU	1654.00
				<b>642443.00</b>

### C) Expenditure incurred for Consumables

Sl No:	Date of Settlement	Department	Amount (Rs)
1	30/12/2013	Mechanical Workshop	10740.00
2	30/12/2013	TEQIP Office	19912.00
3	01-02-2014	TEQIP Office	525.00
4	15.01.2014	Library	22750.00

5	31.01.2014	Installation of Projectors	12800.00
6	31.01.2014	TEQIP Office	1530.00
7	28.02.2014	Lab and Office	3805.00
8	31.03.2014	TEQIP Office	2800.00
9	31.03.2014	Various Labs	18489.00
10	31.03.2014	CE Lab	12894.00
11	04.04.2014	Project Lab	5706.00
12	04.04.2014	Micro processor Lab	7900.00
13	04.04.2014	Digital Electronics Lab	13898.00
14	04.04.2014	Communication Engg. Lab	12669
15	30/4/14	Exam Cell	932
<b>Total</b>			<b>147350.00</b>

**Action sought:** The total expenditure incurred, Rs.9,20,793/- for Salaries of TEQIP staff, Consumables and charges for Operation and Maintenance may kindly be ratified by the Board.

# **Part 3**

## **Reports**



### 3.1 Summary of Expenditure as on April 2014

The summary of expenditure as on 20.05.2014 is as below.

Sr.No.	Expenditure Name	Expenditure Upto Dec 2013	Expenditure From Jan-April 2014	Cumulative Expenditure upto April, 2014
1	Procurement	5338876	11481056	16819932
2	Providing Assistantships for Increased enrolment in existing and new PG Programmes in Engineering Disciplines	1116000	696000	1812000
3	Enhancement of Research and Development and Institutional Consultancy Activities	0.00	837355	837355
4	Faculty and staff development for improved competence based on Training Needs Analysis(TNA)	1683797	823414	2507211
5	Enhanced Interaction with Industry	37125	209561	246686
6	Institutional Management Capacity enhancement	206603	77661	284264
7	Implementation of Institutional reforms	112360	786520	898880
8	Academic support for weak students	271577	71360	342937
9	Incremental Operating Cost	595864	920793	1516657
9.1	Salaries	171348	131000	302348
9.2	Consumables	79638	147350	226988
9.3	Operation and Maintenance	344878	642443	987321.00
<b>Total</b>		<b>93,62,202</b>	<b>1,59,03,720</b>	<b>2,52,65,922</b>

### 3.2 Faculty Position as on 10.03.2014

The faculty position as on 10.3.2014 is given below. Mr. Anilkumar C.V, Associate Professor and two Assistant Professors, Dr. Gopakumar and Ms. Mili Roslin Mathew have joined in the Department of Electronics and Communication. Mr. Ravikumaran Thampi, Assistsnt Professor in ME has joined in the General Engg Dept. Mr. Raju, Assistsnt Professor in EEE has joined the Electrical Dept. The regular faculty strength has now increased to 33 against total faculty strength of 57. The number of regular faculty on campus is 27 at present.

#### Faculty Status (Regular/On-Contract Faculty as on 10<sup>th</sup> March 2014)

Faculty Rank	No. of Sanctioned Regular Posts	Present Status : Number in Position by Highest Qualification												Total Number of regular faculty in Position	Total Vacancies	Total Number of contract faculty in Position
		Doctoral Degree				Masters Degree				Bachelor Degree						
				Other Disciplines		Engineering Disciplines		Other Disciplines		Engineering Disciplines		Other Disciplines				
		R	C	R	C	R	C	R	C	R	C	R	C			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15= (3+5+7+9+11+13)	16= (2-15)	17= (4+6+8+10+12+14)
Prof	3	-	-	-	-	-	-	-	-	-	-	-	-	0	3	0
Asso Prof	11	1	-	-	-	3	-	-	-	-	-	-	-	4	7	0
Asst Prof	41	2	-	1	-	18	12	4	3	4	8	-	-	29	12	23
Lec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	55	3	-	1	-	21	12	4	3	4	8	-	-	33	22	23

Prof = Professor, Asso Prof = Associate Professor, Asst Prof = Assistant Professor, Lec=Lecturer, R=Regular, C=Contract

### 3.3 Report on visit of Mentor

The mentor Dr. Sudheer K.P, Professor, IIT Madras visited the campus on 12.8.2013 for mentoring the institution. He interacted with the TEQIP Coordinators, faculty, technical and office staff and UG and PG students. The report of the mentor has been received recently only which is attached as **Annexure: 8**.

### **3.4 Status of the IRG Accounts**

As of date, an amount of Rs 33,000/- has been deposited equally in the four TEQIP-IRG Accounts of the college.

## **Part 4**

**Any Other item with the permission of the chair**

## ANNEXURE 1

# College of Engineering Karunagappally

## Minutes of Third Meeting of Board of Governors

Presided by

**Hon'ble Chairman:** Prof. V.P.N. Nampoori

**Venue:** Office of Principal

**Date:** 18 Dec 2013

**Time:** 9.15

AM

### **Members Present**

1. Prof (Dr) V.P.N Nampoori, Chairman
2. Mr. M Sherif, Addl Sec., H.Edn, Government of Kerala (State Govt Nominee)
3. Mr. James Joseph, Jt. Sec. Finance, Government of Kerala (State Govt Nominee)
4. Dr. Sam Thomas, CUSAT (University Nominee)
5. Dr. SureshKumar.P, Principal, College of Engineering Chertala
6. Dr. Hari V S, Principal
7. Dr. AjilKumar.A, HOD, ME, Member
8. Prof. Manoj Ray D, HOD CS, Member
9. Prof Gopakumar, Director, SPFU (Special invitee)

Also present

1. Prof. Deepa V S HOD Electronics and Communication
2. Prof. Smitha P HOD Information Technology
3. Prof. Libi A HOD Electrical and Electronics Engineering
4. Prof. Baiju V IIICell Coordinator
5. Prof. Premakumari K.R, EAP Coordinator

The following members of the BOG conveyed their inability to attend the meeting.

1. Prof. (Dr) V P Devassia, Principal, Model Engineering College
2. Prof. (Dr) P S Sreejith, Director, IHRD

## **Agenda**

### **Item No1/BOG3: Procedural Items**

- 1.1 Welcome Address by the Principal
- 1.2 Approval of the minutes of the previous BOG meeting
- 1.3 Report on the action on the decisions

### **Part 2 Discussion, Consideration and Ratification**

Item No2.1/BOG3: Statement of expenditure

Item No2.2/BOG3: Discussion and ratification of Procurement activities

- 2.3 Procurement for QEEE activities
- 2.4 Advertisement for National Competitive Bids

### **Item No.3/BOG:3: Review of Academic activities**

- 3.1 Review of academic activities conducted
  - 3.1.1 Reimbursement of course fee for PhD
- 3.2 Quality enhancement in Engineering Education(QEEE)
- 3.3 Activities under the III Cell
- 3.4 Equity Action plan
  - 3.4.1 Bridge courses

### **Item No.4/BOG:3: Pilot review of BOG**

### **Item No.5/BOG 3: Any other item**

The Meeting started at 9.15.AM under the presidency of the Hon'ble Chairman with a silent prayer followed by a Welcome Address by the Principal.

### **PART 1** **PROCEDURAL**

### **Item No 1.1 / BOG 3: Welcome Address by the Principal and reporting about the College**

Principal Prof Hari V S welcomed all the members and special invitees. A brief report was made by the Principal on the various activities related to TEQIP and development in college as the impact of these activities. He also provided a brief report about the agenda of the meeting.

### **Item No 1.2 / BOG 3: Approval of the minutes of the 2<sup>nd</sup> BOG meeting held on 30.10.2013**

Minutes of the second BOG meeting held on 30.10.2013 was circulated to the BOG members for confirmation. The BOG members reviewed and commented certain corrections that should be incorporated in the minutes.

- Dr Sureshkumar suggested that the wordings 'as per TEQIP norms' should be appended with each and every decision written in the minutes.
- Dr. Gopakumar commented that format of the minutes should be changed and the suggestions and decisions of the BOG meetings should be separately mentioned in the minutes. He opined that the format adapted by Govt. Engineering College Idukki in the preparation of minutes can be followed.

*Based on the discussions, the BOG approved the minutes of the BOG meeting held on 30.10.2013 after adding the wordings 'as per TEQIP norms' in all the decisions reported in the minutes.*

**Item No 1.3 / BOG 3: Report on the action on the decisions in the minutes of the 2<sup>nd</sup> BOG meeting held on 30.10.2013**

The Item No. 1.3 was included based on the suggestion made by Dr.Gopakumar that the action taken report on the pertinent decisions taken in the last BOG meeting should be presented in the BOG meeting. Hence the Principal presented briefly the action taken report on the apposite decisions taken in the previous meetings.

In the discussions, the following suggestions were made by the BOG members regarding the preparation of agenda notes and BOG minutes.

- Dr. Gopakumar advocated the inclusion of the action taken report on the decisions taken in the last meeting in agenda notes. He also suggested that contents page should be added in the agenda notes.
- Mr. James Joseph opined that first draft of the BOG minutes should be submitted to the Principal immediately after the BOG meeting

*BOG asked the Principal to include the action taken report in the agenda notes as one of the items from the next BOG meeting.*

**PART 2**

**DISCUSSION, CONSIDERATION AND RATIFICATION**

**Item No 2.1 / BOG 3: Ratification of Expenditure**

The Principal presented the expenditure incurred till date under various components as given in Annexure 1. All the members reviewed the expenditure incurred under various components and BOG ratified the expenditure incurred till date. All the members pointed out to augment the activities and utilise the full amount in efficient manner.

**Item No 2.2 / BOG 3: Discussion and ratification of Procurement activities**

BOG reviewed the procurement activity that is being progressed based on the plan approved by the earlier BOG meetings and made certain suggestions regarding the revision in procurement plan based on the clarifications put forward by Dr. Ajilkumar A, TEQIP Coordinator and Prof. ManojRay D, Procurement Coordinator.

- Dr. Gopakumar commented that the final date of procurement activity is 31.03.2014 and further extension of the same can not be expected. Hence the procurement process needs to be speeded up. He also suggested that the costs of items are increasing day by day and if the final price of an item exceeds 25% of the estimated expenditure then the purchase should be cancelled as per TEQIP norms.
- Dr Ajilkumar explained that slowing in procurement is due to the limited amount that has been released from SPFU. He also said that certain procurement activities

(purchase of certain machineries) can only be completed after the completion of related civil works.

- Dr Gopakumar reverted that the entire amount of 3 crores are there for the initial implementation of the project but only after spending 60% of the released amount SPFU can request to MHRD for release of next installment. He also said that if the performance of the college is poor then the sanctioned amount would be transferred to other better performing colleges.
- Prof Manoj Ray, Procurement Coordinator confirmed that all procurement activities will be completed by March, 2014.
- Mr. James Joseph suggested speeding up the civil works to avoid the lapse in sanctioned amount. He also pointed out that there is no clarification in the preparation of agenda regarding the procurement activities and plan. He suggested that all tabulation should be incorporated with supporting documentation and clarification.
- Dr Gopakumar enquired about book purchase. Dr.Ajil kumar explained about the difficulties faced during procurement of books through PMSS based on TEQIP norms.
- Dr.Ajilkumar explained about the difficulties faced in the purchase of e-journals through PMSS. He said that the e-journals subscription can only be activated after the payment of advance amount but there is no advance payment option in PMSS. Dr.Gopakumar suggested to consider the invoice from the authorised enterprises as bill and issue the draft.
- Dr Gopakumar enquired about utilization of the procured items. Prof. Manoj Ray provided the clarification regarding the enquiry.

*Based on the discussions made and the explanations given by the TEQIP and Procurement Coordinators, the BOG ratified the procurement activities done till date as given in Annexure-A in the agenda note. BOG insisted the Principal to make the agenda notes elaborately showing the reasons for the price variations, cancelation or addition of any item. BOG also asked the TEQIP cell to speed up the procurement activities so that everything could be finished before the permitted time. The BOG also decided to consider the invoice from authorised dealers of journals as bill and pay the amount.*

### **Item No 2.3 / BOG 3: Procurement of equipments for QEEE activities**

TEQIP Coordinator, Dr Ajilkumar explained the details of Quality Enhancement in Engineering Education (QEEE) programme, originated by MHRD to improve the quality of technical education in the country. The programme is based on three pronged approach targeting students, faculties and management. The first approach called Direct-to students program consists of live-lectures, remote tutorials, remote labs, open courses,



e-books and remote quizzes amongst others. These modules will be handled by eminent professors of IITs and the live classes will be telecasted to the selected colleges. He also explained the equipments required to be procured for conducting the programme.

Dr.Sam Thomas asked about relevance of the program in maintaining the equity in students. Dr.Ajilkumar clarified that best Professors from IIT's who can handle the different levels of students are been selected as the part of QEEE project. Mr.James Joseph suggested recording of the programmes for further utilization purpose. Dr.Gopakumar enquired about the existence of furnished seminar hall for the conduct of these programmes.

***The BOG commented that students will be highly benefited by such a programme and approved the proposal for procurement of equipments for QEEE activities through PMSS.***

#### **Item No 2.4 / BOG 3: Advertisement for National Competitive Bids**

Prof Manoj Ray. D, Procurement Coordinator explained about the advertisements for 5 NCBs given in the Hindu and Malayala Manorama dailies. He reported that the approximate expenditure expected for the advertisements would be Rs. 400000/- (Rupees four lakhs only). He also explained about the pre-bid meeting conducted regarding the NCBs and elaborated the discussions made with the representatives of different firms participated in the pre-bid meeting. He enquired whether any relaxation in green certification standard should be made in bid documents, as requested by some of the representatives during pre-bid meeting, for Desktop Computers to support the firms. Dr.Gopakumar asked about the green certifications standards put forward by the institute in the Bid invitation. Prof Manoj Ray said that green certification standard for minimum of 5 points of OEM have been specified in the specification for Desktop computer. Dr.Gopakumar said that if there are sufficient suppliers (OEM) who can provide the items based on the specifications, then no need to make any relaxation in the specification put forward.

***The BOG ratified the advertisements given in the Hindu and Malayala Manorama dailies and approved for payment of the amount.***

#### **Item No. 3/BOG3: Review of Academic activities**

##### **3.1 Review, ratification and approval of Academic activities**

Prof. Deepa V.S, the Academic Coordinator explained about the academic activities conducted so far for ratification and presented the faculty and staff development plan for the next six months for approval. Dr. Ajil kumar informed that the institute had only a limited period of one and half month after the last BOG. Due to the University exams and poor permanent staff strength only a few number of academic activities has been undergone during this period. The BOG reviewed the academic activities conducted and the plan for the next six months and made valid suggestions.

- Dr. Sureshkumar sought clarification for the approximate expenditure stated in the agenda note for the programmes conducted for which ratification of the BOG had been requested. The academic coordinator explained about the expenditure and the error in the agenda note was corrected.

- Dr.Gopakumar enquired about the relevance of three outstations programmes selected by Prof. Smitha.P regarding Matlab. Prof.Smitha.P explained that the three courses on Matlab are special certificate courses conducted by the developers of Matlab software and confirmed that these courses are useful for her handling MTech projects. Sri. James Joseph commented that if the courses are certified courses then the faculty should be permitted to attend the courses.

***Prof.Smitha.P is permitted to undergo the courses requested by her if the courses are certificate courses.***

- Mr Sherif suggested that all staff members undergoing training programmes should discuss the details of the course with other colleagues in the college. He also suggested that the institute should be benefited from the faculties undergoing out station programmes.
- To the enquiry of Dr.Gopakumar about the number of MTech students availing PG scholarship, Dr.Ajilkumar informed that a total of 51 students are selected for PG scholarship.
- Dr.Gopakumar emphasised about the necessity for strengthening R & D activities. He opined that atleast 15 proposals should be submitted by the faculties of EC and CS for Research Seed Money since there are two M.Tech courses in the Institution. Mr James Joseph said that as technical education is a competing one, staff members should pay more attention in quality improvement. Prof.Nampoori said that Principal should call a staff meeting or conduct a workshop to promote R & D activities. Dr.Sam Joseph said that proper guidelines to be given to staff to enhance R& D activities.

***It has been decided to collect proposals from 15 staff members for Research Seed Money and the same can be awarded after discussing in Research Guidance Committee. It has also been decided to conduct a talk or workshop on R& D activities.***

- Prof. Deepa V.S enquired whether B.Tech projects for which consumables are requested to be purchased under IOC could be submitted to get Seed Money under R & D. Dr. Gopakumar replied that the same project can be submitted under R & D provided the same consumables can not be purchased by utilising money under different heads. He also mentioned that any equipment or consumable purchased under R & D project should be an asset for the College.
- Prof. Deepa also enquired about attending outstation FSD programmes and Conferences in India for the Contract faculty and staff.

***The BOG unanimously decided that the expenses for presenting a paper in a National Conference for regular/contact faculty can be advanced/reimbursed. In the case of attending a National Conference only regular faculty members are permitted.***

### **3.1.1 Reimbursement of course fee for PhD**

The request of Mr.Shaji. L, System Analyst /Lecturer in Computer Applications for the reimbursement of PhD course fee (Rs 18,000) has been placed for approval by BOG. Dr.Gopakumar opined that as per TEQIP norms, course fee reimbursement can only be provided for teaching faculty. He also said that there may be some audit problems if sanctioned. *Hence the BOG have not made a final decision regarding the request and kept the same for further clarification from SPFU.*

### **Item No 3.2 / BOG 3: Quality enhancement in Engineering Education(QEEE)**

*The BOG reviewed the activities under QEEE that has been kept as a part of Agenda and gave sanction for the conduct of the activities.*

### **Item No 3.3 / BOG 3: Activities under the III Cell**

Mr.Baiju.V, IIIC Coordinator explained about various activities conducted under III Cell. He enquired about the internship that can be provided for the students. BOG made valid suggestions regarding the conduct of the III Cell activities.

- Dr. Gopakumar implied that internship that leads to employment can only be encouraged. He also suggested that there is no provision to provide finance support for internship since internship always has some sort of assistantship. The faculty members should undergo training in companies and in turn the faculties should provide training to students. He counseled to make the activities planned under III Cell more realistic and acute. He also propounded to make the industrial visit more specific and relevant. Industrial visit with no relevant and specific target should not be encouraged.
- Regarding MoU, Dr. Gopakumar said that MoU can only been signed between the industry and college only if such collaboration seems to be useful for the college. Those companies with only self motivation should not be promoted. Revenue generation of the institute can be promoted by enabling students to participate in industrial projects.
- Mr Baiju V explained about the details of Industry meet to be held at Kottayam. To the query made by Mr. Baiju regarding the stalls to be made in the meet, Dr.Gopakumar said that posters of industrial efficient projects and gadgets can be exhibited in the stall.

*Based on the presentation by Mr. Baiju and the discussions made, the BOG approved the activities planned by different departments except CS Dept. The CS department is asked to revise the action plan for IIIC activities. The BOG also ratified all the activities conducted by IIIC.*

### **Item No 3.4 / BOG 3: Equity Action plan**

Principial Dr.Hari V.S explained that remedial classes were conducted based on the registration collected by the staff advisor from academically weak students. He also said that subject for remedial classes were selected based on feedback collected from students. The BOG reviewed the Equity Action Plan and made valid decisions and suggestions.

- Equity action plan should be carried out not only for academically weak students but with the view to reduce the number of failure in a subject.
- Dr.Gopakumar said that there should be proper criteria for the selection of students for different remedial classes. He suggested maintaining a record of SC/ST students attending the remedial classes in view of further correspondence with SC/ST department.
- Mr.Sherif said that minimum of 10 hours should be conducted for remedial class of a single subject.
- Dr.Sam Thomas said that teachers handling different remedial classes should be selected in a proper manner. He also suggested reducing the number of students attending the remedial classes in order to increase the efficiency of the classes. Further, remedial classes should be carried in between the semester classes and not at the end period of the semester.
- Mr.James Joseph said that remedial classes should be conducted in such a way that, it should provide individual attention to academically weak students. Approach of the class should be different for different range of students. He also said that remedial classes should give more emphasis on weak students.
- The members suggested that a class wise parents meeting should be held to inform the parents of weak students regarding the conduct of remedial classes.
- Dr SureshKumar said that if the number of weak students is very low for a particular remedial class then other students can be encouraged.
- MTech students can also be allowed to engage remedial classes
- BOG suggested giving light refreshments to students who attend remedial classes in evening.
- Dr.Gopakumar said that there no clarity in EAP plan. There the concerned Staff-in – Charge should take more care regarding the preparation of plan.

#### **3.4.1 Bridge courses**

The Principal presented about the bridge courses conducted in Maths, Computer Programming, Physics and English for the first year students and the ***BOG reviewed the details and ratified the expenditure incurred for the same.***

#### **Item No.4/BOG 3: Pilot review of BOG**

Dr. Ajilkumar, TEQIP Coordinator explained that SPFU had forwarded a mail of NPIU on November 20, 2013 directing the institution to conduct a self review of current Governance practice and to prepare a own governance guide. A self review of the governance has been done as per template and the same has been forwarded to SPFU and NPIU. The self review report is placed before BOG for further discussion and approval. BOG discussed about the report and made the following comments.

- BOG discussed about various assessment values assigned under different heads of the self review and asked to change some of the assigned assessment values.
- Mr.James Joseph affirmed to publish an annual report on the performance of the institute for this current academic year. He suggested publishing a short resume of all BOG members in the website. He also proposed to publish entire finance details of the institution in the web site.
- Dr.Gopakumar and Mr.James Joseph pointed out that there should be atleast one person from industry in the BOG. ***Hence the BOG decided to include a member from industry and entrusted the Principal to give a request to Govt to include a person from industry in the BOG.***
- Dr.Gopakumar advocated that the performance improvement of the institution and Governing body should be in such a way that by December, 2014, all the assessment values should be changed to 1.

***It has been decided to publish short resume of all BOG members and the finance details of the institution in the college web site.***

**Item No 5 / BOG 3: Any other item**

- Prof.Nampoori suggested conducting a workshop on R& D projects.
- Mr.James Joseph suggested that agenda with self speaking documentation should be prepared.
- Dr.Suresh Kumar proposed that details regarding the mode of purchase should be included along with the document preparation for procurement.
- Prof.Nampoori suggested conducting a workshop on Indian Mathematics in the institute.

The meeting adjourned at 1.00PM.

Chairman

Prof.V.P.N. Nampoori

Principal

## **ANNEXURE II**

**Bid Evaluation Report**

**TEQIP-II/KL/KL1G18/13**

**Desktop Computer**



**College of Engineering, Karunagappally, Thodiyoor, Kollam**  
Thodiyoor P O, Karunagappally, Kollam Dist. Kerala State, Pin:  
690523

**SUGGESTED FORMAT OF BID EVALUATION REPORT FOR GOODS & EQUIPMENT (National Competitive Bidding [NCB])**

- Scope of contract and approximate cost:

Sr. No	Item Name	Quantity
1	Desk top High end system , Intel i7	26
2	Desktop Desktop Computer, i5 3 <sup>rd</sup> Generation with graphics card	24
3	Desktop system Intel i5 3rd generation	158

Furnish estimated cost at the time of appraisal : **88,56,000.00**

and the actual cost for the proposed contract : **89,58,674.00/- (Without Tax) , 94,06,608/- (Including Tax)** .

- Bidding document :

Briefly discuss and indicate:

- Details of approval by World Bank/Govt. Approved by Principal CE Karunagappally dated 05-Oct-2013
- Variations from the approved document, if any : No
- Specifications (approval reference, if any) : Section VI, Technical specification, (Page 37 of bid document)
- Requirement of accessories/spares, if any
- Delivery requirements : Section V page no. 36 of bid document
- Important bidding conditions such as:  
(Do not repeat the conditions: Briefly refer to them)
  - . Price adjustment
  - . Loading for:
    - (a) Delivery schedule - ITB Clause 26.5 (b) (i)
    - (b) Payment schedule -
    - (c) Performance and productivity -
    - (d) Operating and maintenance costs -
- Domestic preference shall not
- 

[Enclose copy of bidding documents and amendments if any, if not sent earlier (Annexure I)]

- Bid invitation process: Furnish the following details :

- Date of publication of general procurement notice 05-Dec-2014
- 
- Bid invitation advertisement in national News papers & dates of publication
  - 1. National Daily-The Hindu : 08-Dec-2013 and 17-Jan 2014 (Extension)



2. Regional Daily- Malayala Manorama : 08-Dec-2013 and 17-Jan 2014 (Extension)

- Period in which the bidding documents were made available for sale Dec 10 2013 12:00AM to Jan 27 2014 10:00AM
- Number of firms who purchased the bidding documents & their nationality

Sr No.	Bidder Name	Nationality
1	Smart Soft	India
2	Wintech Systems & Services	India

- Date of closing and extensions, if any 27-Jan-2014, extended upto Jan 27 2014 11:00AM
- Pre-bid conference, minutes of meeting & resulting amendments, if any 17-Dec-2013  
**minutes of meeting attached in Annex III and has no amendments**
- Date and time of public bid opening, attendance, highlights of the bid opening meeting 27-Jan-2014 12:00PM. Two firms submitted original and Duplicate bid document. Both firms have submitted Document charge and Security deposit along with the bid. Representatives from both firms were present during the opening time. All the documents were sealed and was found to be duly signed by the authorized signatory

[Enclose copies of bid invitation, Prebid minutes, Copy of Amendments issued and minutes of bid opening (Annexure II, III, IV, and V).]

4. Bid response:

- State number of offers received and the nationality 2
- Furnish details of offers received along with comments on Bidders Clarification of Bid:-
  - (i) In time - 2
  - (ii) Late - Nil
  - Total - 2
- Comment on the response:
- Convert bid price into Indian Rs.(Annex VI) 88,56,000
- Furnish Table of bid prices as read out at bid opening (in ascending order):

Sr No.	Bidder Name	Nationality	Bid Price as Read Out	Remarks
1	Smart Soft	Indian	89,58,674	Without Tax
2	Wintech Systems & Services	Indian	1,31,88,966	Without Tax

5. Clarification obtained, if any after bid opening

6. Preliminary examination of bids:

- a. Discuss preliminary examination for eligibility (ITB Clause 2), arithmetical errors, completeness, legal validity (has been properly signed and has submitted power of attorney etc), bid validity, bid security and substantial responsiveness to commercial and technical aspects of bidding documents.

**In the preliminary examination all 2 bids were found eligible, legally valid with proper bid security, without any arithmetic mistake and responsive.**

- b. List arithmetical errors and corrected bid prices

- c. Furnish details of all bids in Annexure VII
- d. List the bids rejected as non-responsive at this stage.

7. Evaluation of substantially responsive bidders;

- a. State evaluation criteria, methodology cross-referencing to bid document, assumptions, if any, made in evaluation (Annexure VIII)

Sr No.	Questions	Bidder 1 Smartsoft, Kochi	Bidder 2 Wintech Systems and Services
1	Are the Payment Terms Agreed?	Yes	Yes
2	Comments	Nil	Nil
3	Delivery Period	42 days	60 days
4	Essential Accessories price included?	NA	NA
5	Evaluated Price	89,58,674	1,31,88,966
6	Is Cross Discount applicable?	No	No
7	Is Technically Responsive?	Yes	Yes
8	Is Testing/ Commissioning/ Installation included?	Yes	Yes
9	Is the Place of Delivery as specified?	Yes	Yes
10	Is there any Price Adjustment?	No	No
11	Is Training Included?	NA	NA
12	Is Warranty as Specified?	Yes	Yes
13	Optional Spares Accessories included?	NA	NA
14	Quantity as specified?	Yes	Yes
15	Reason(s) for Price Adjustment	NA	NA

- b. Discuss briefly offers and adjustment, if any, for:

Commercial aspects	: Nil
Omissions	: Nil
Inland transportation	: Nil
Delivery schedule	: Nil
Deviation in payment schedule	: Nil
Spare parts	: Nil
Operation and maintenance	: Nil
Performance and productivity etc	: Nil
Technical criteria	: Nil
Efficiency	: Nil
Productivity	: Nil
Training etc	: Nil

- c. Prepare evaluation table showing all adjustments and ranking as under:

Sr No.	Bidder Name	Bid Price as Read Out	Brief Reason
1	Smart Soft	89,58,674	L1 bidder, commercially and technically responsive
2	Wintech Systems & Services	1,31,88,966	L2 bidder, commercially and technically responsive

(Details in Annexure IX)

- d. Brief discussion of offers
- e. Determination of the lowest responsive bidder

**Name : Smart Soft**

**Address : 44/19B, Ambelipadam Road, Vytilla Janatha,Kochi,Kerala ,682019**

**Evaluated Price : 89,58,674**

8. Post qualification:

- a. State criteria, if any, outlined in the bid document

Sr No.	Questions
1	The bidder should be a manufacturer (OEM) who must have manufactured, tested and supplied the equipment(s) similar to the type specified in the “schedule of requirements” up to at least 5 times the quantity required in any one of the last 3 years. The equipments offered for supply must be of the most recent series models incorporating the latest improvements in design. Further, bidder should be in continuous business of manufacturing products similar to that specified in the schedule of requirements during the last three years prior to bid opening
2	i. The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per GCC and SCC; and ii. The bidder, as authorized representative, has supplied, installed and commissioned satisfactorily at least 3 times. of the quantity similar to the type specified in the Schedule of Requirements in any one of the last three years which must be in satisfactory operation for at least six months on the date of bid opening and must be providing annual maintenance services for the above equipment installations in at least three centers in the country for over one year.
3	The bidder should have a minimum financial turnover of atleast <b>Rs. 1000 lakhs</b> in one of the last three years excluding current financial year
4	The bidder should furnish a brief write-up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for the manufacture and supply of the required system and equipments within the specified time of completion after meeting all their current commitments.
5	Details of Service Centres and information on Service support facilities that would be provided after the warranty period [in the Service Support Form given in Section XV/2] Bidder should have established support centre & registered office in Kerala from more than 5 years
6	Reports on financial standing of the bidder such as profit and loss statements, balance sheets and auditor’s report for the past three years, bankers certificates, etc
7	The bidder should furnish a conformity statement of the goods and services in the Price Schedule with the Purchaser’s Technical specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications with brand name/Product no/Catalog No. per ITB clause 14, in the Format given in Section XV/3 with the documentary evidence of conformity of the goods and services to Bidding Document
8	Have registered office in Kerala
9	Is Minimum Financial Turnover met in at least once of the last three years excluding current financial year?
10	Satisfactory delivery of similar goods/items of value not less than 80% of estimated contract value in less than 3 years.
11	VAT Number

- b. Discuss actual qualification of selected bidder to demonstrate whether the selected lowest evaluated response bidder is qualified to satisfactorily perform the contract. (If the

determination is negative, lowest bid will have to be rejected and the next lowest evaluated bid considered for a similar determination of bidder's capability to perform satisfactorily)

(Details in Annexure X)

9. Recommendations:

a. Furnish important features of recommended bid such as:

Bidders Name : **Smartsoft, Kochi**

Model :

i) **Desk top High end system Intel i7 : Dell Optiplex 7010MT**

ii) **Desktop Computer i5 3rd Generation with graphics card: Dell Optiplex 7010**

iii) **Desktop system Intel i5 3rd generation Dell Optiplex 7010**

Total Quantity

i) **Desk top High end system Intel i7 : 26**

ii) **Desktop Computer i5 3rd Generation with graphics card : 24**

iii) **Desktop system Intel i5 3rd generation :158**

Basic Machine Price

i) **Desk top High end system Intel i7 : 14,23,682**

ii) **Desktop Computer i5 3rd Generation with graphics card : 11,24,616**

iii) **Desktop system Intel i5 3rd generation :64,10,376**

Total cost as quoted : **89,58,674.00/- (Without Tax) , 94,06,608/- (Including Tax)**

List of tools : Nil

List of special accessories : Nil

List of 3 years AMC after warranty : Nil

Other Services : Nil

Total Bid Value : **89,58,674.00/- (Without Tax) , 94,06,608/- (Including Tax)**

. Source of origin

❖ Payment terms

❖ Agency commission

❖ Delivery

❖ Inspection

❖ Insurance

❖ Freight

❖ Performance security : **5 % of Rs 89,58,674.00/- ie Rs 4,47,934/-**

❖ Specifications

❖ Other important terms and conditions

- Date of expiry of validity of the selected bid -

(Enclose contract information sheet of selected bidders, Annexure XI) –

Signature of Evaluating Office

Signature of competent

Authority

(Enclosure (enclose only those which were not forwarded earliest)

1. Copy of the bidding document (Annex I)
2. Copy of the bid invitation and press advertisement (Annex II)
3. Pre-bid Minute (Annex III)
4. Copies of Amendments issued (Annex VI)
5. Minutes of Bid Opening (Annex V)
6. Currency exchange rate as published by the competent authority (Annex VI)
7. Detail of assessment of Bids (Annex VII)
8. Assumption made in evaluation (Annex VIII)
9. Evaluated Bid price offers (Annex IX)
10. Detail of post qualification (Annex X)
11. Contract information of selected Bidder (Annex XI)

#### **Annex VII/1**

##### **Assessment of Bids**

Sl. No.	Particulars	Name of Bidder 1 Smartsoft Kochi	Name of Bidder 2 Wintech Systems and Services
1.	Manufactured by	Dell India Pvt Ltd, Bangalore	Hewlett-Packard India Sales Pvt Ltd, Bangalore
2.	Country of Origin	India	India
3.	Indian Agent	-	-
4.	Classification (Group A / B / C) Have you verified and established that bids claiming domestic preference do meet the criteria stipulated in ITB Clause 10.2 [If yes, attached details]	-	-
5.	Model Offered	i) Desktop High end system Intel i7 : <b>Dell</b> ii) Desktop Computer i5 3rd Generation with graphics card: <b>Dell</b> iii) Desktop Computer i5 3rd Generation : <b>Dell</b>	i) Desktop High end system Intel i7 : <b>HP</b> ii) Desktop Computer i5 3rd Generation with graphics card : <b>HP</b> iii) Desktop Computer i5 3rd Generation : <b>HP</b>
6.	Model Number	i) Dell Optiplex 7010MT ii) Dell Optiplex 7010MT iii) Dell Optiplex 7010MT	i) HP Compaq Elite 8300 MT ii) HP Compaq Elite 8300 MT iii) HP Compaq Elite 8300 MT
7.	Total Bid Price and Currency	89,58,674/-	1,31,88,966
8.	FOB Value/ Ex-Works Currency		
9.	CIF Valued in bid currency (foreign) and in Indian rupees	In Foreign Currency	
		In Indian Rupees	

10.	Cost per unit as per Bid Document in Indian rupees	i) Desk top High end system Intel i7 : 14,23,682 ii) Desktop Computer i5 3rd Generation with graphics card : 11,24,616 iii) Desktop system Intel i5 3rd generation : 64,10,376	i) Desk top High end system Intel i7 : 22,30,800 ii) Desktop Computer i5 3rd Generation with graphics card : 16,87,200 iii) Desktop system Intel i5 3rd generation : 92,70,966
11.	Credentials ..... Letter of Authorization	Letter of authorization from Dell India Pvt Ltd	Letter of authorization from Hewlett-Packard India Pvt Ltd
12.	Commercial Assessment*	Responsive	Responsive
13.	Technical Assessment *	Responsive	Responsive
14.	Decision on Responsiveness	Responsive	Responsive

\* For details see attachment.

## Annex VII/2

**EVALUATION OF THE BIDS**  
Commercial Analysis for Responsiveness of Bid:

Sl. No.	Particulars and Clause Reference			Name of Bidder 1 Smartsoft Kochi	Name of Bidder 2 Wintech Systems and Services
1.	Model Offered			i) Desktop High end system Intel i7 : <b>Dell</b> ii) Desktop Computer i5 3rd Generation with graphics card: <b>Dell</b> iii) Desktop Computer i5 3rd Generation : <b>Dell</b>	i) Desktop High end system Intel i7 : <b>HP</b> ii) Desktop Computer i5 3rd Generation with graphics card: <b>HP</b> iii) Desktop Computer i5 3rd Generation : <b>HP</b>
2.	Model No.			i) Desktop High end system Intel i7 : <b>Dell Optiplex 7010MT</b> ii) Desktop Computer i5 3rd Generation with graphics card: <b>Dell Optiplex 7010MT</b> iii) Desktop Computer i5 3rd Generation : <b>Dell Optiplex 7010MT</b>	i) Desktop High end system Intel i7 : <b>HP Compaq Elite 8300MT</b> ii) Desktop Computer i5 3rd Generation with graphics card: <b>HP Compaq Elite 8300MT</b> iii) Desktop Computer i5 3rd Generation : <b>HP Compaq Elite 8300MT</b>
3.	Manufd. By			Dell	HP
4.	Country of Origin	ITB	2	India	India
5.	Bid Security Form of Bid Security Bank and Branch  Expiry Date Amount	ITB	15	Demand Draft AXIS Bank, Vytilla, Kochi  3 months from 9/1/14 2,65,680 DD encashed	Demand Draft SBT, Karunagappally  3 months from 27/1/14 2,65,680 DD encashed
6.	Validity of Bid	ITB	16	90 days + 45 days	90 Days
7.	Letter of Authorization	ITB	13.3 (a)	Yes	Yes
8.	Bid Form	ITB	9.1	Yes	Yes
9.	Exceptions to:				
	Delivery;	ITB	26.5 (b)		
	Payment Terms; and	ITB	26.5 (c)	As per our condition	As per our condition
	Others				
10.	Bid Currency	ITB	12	Indian	Indian
11.	Performance Statement	ITB	13.3 (b)	Satisfactory	Satisfactory
12.	Decision on commercial Responsiveness			Responsive	Responsive

Note: Add parameters as required to suit the item under procurement and as specified in your bidding document.

Annex VII/4 - 1  
Technical Evaluation of the Bids:  
Desktop High end system Intel i7

Sl. No.	Particulars	Technical Clause Reference	Name of Bidder 1 Smartsoft, Kochi	Name of Bidder 2 Wintech Systems and Systems
1.	Model No.		Dell Optiplex 7010MT	HP Compaq Elite 8300MT
2.	Mfd. By		Dell India Pvt Ltd	Hewlett-Packard India Pvt Ltd
3.	Model Type	Desktop High end system Intel i7	Desktop High end system Intel i7	Desktop High end system Intel i7
4.		Processor: Intel Core i7-3770 Processor (8M Cache, up to 3.90 GHz) or Higher, Chipset: Intel Q77 Chipset or better, Video: Integrated Intel HD Graphics 2500 or better Memory: DDR3 8 GB (2 x 4GB) Non-ECC DDR3 1600MHz SDRAM Memory Networking: Integrated 10/100/1000 NIC Ports: Minimum 2 USB 3.0 and 6 External USB ports and 2 Internal USB , 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line-out Hard Drives: 1 TB 7200RPM SATA or Higher DVD: 16 X DVD +/- RW or higher Power Supply Unit : Standard 250 W or higher PSU 250W up to 90%, Efficient PSU with Active PFC Monitor: 21" Full HD resolution 1920 x 1080 at 60 Hz Monitor with LED Backlight or better Keyboard :USB Keyboard with rupee symbol Mouse :Optical Mouse Security :Data Protection Access, I/O Interface Security, Chassis lock slot support, Chassis Intrusion SwitchOS Certifications Linux and Microsoft	Processor: Intel Core i7-3770 Processor (8M Cache, up to 3.90 GHz) or Higher, Chipset: Intel Q77 Chipset or better, Video: Integrated Intel HD Graphics 2500 or better Memory: DDR3 8 GB (2 x 4GB) Non-ECC DDR3 1600MHz SDRAM Memory Networking: Integrated 10/100/1000 NIC Ports: Minimum 2 USB 3.0 and 6 External USB ports and 2 Internal USB , 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line-out Hard Drives: 1 TB 7200RPM SATA or Higher DVD: 16 X DVD +/- RW or higher Power Supply Unit : Standard 250 W or higher PSU 250W up to 90%, Efficient Monitor: 21" Full HD resolution 1920 x 1080 at 60 Hz Monitor with LED Backlight or better Keyboard :USB Keyboard with rupee symbol Mouse :Optical Mouse Security :Data Protection Access, I/O Interface Security, Chassis lock slot support, Chassis Intrusion SwitchOS Certifications Linux and Microsoft <b><i>Greenpeace 4.6 rating whereas energy star rating is 5.2 which is above the required rating</i></b>	Processor: Intel Core i7-3770 Processor (8M Cache, up to 3.90 GHz) or Higher, Chipset: Intel Q77 Chipset or better, Video: Integrated Intel HD Graphics 2500 or better Memory: DDR3 8 GB (2 x 4GB) Non-ECC DDR3 1600MHz SDRAM Memory Networking: Integrated 10/100/1000 NIC Ports: Minimum 2 USB 3.0 and 6 External USB ports and 2 Internal USB , 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line-out Hard Drives: 1 TB 7200RPM SATA or Higher DVD: 16 X DVD +/- RW or higher Power Supply Unit : Standard 250 W or higher PSU 250W up to 90 % Monitor: 21" Full HD resolution 1920 x 1080 at 60 Hz Monitor with LED Backlight or better Keyboard :USB Keyboard with rupee symbol Mouse :Optical Mouse Security :Data Protection Access, I/O Interface Security, Chassis lock slot support, Chassis Intrusion SwitchOS Certifications Linux and Microsoft Warranty 3 Year onsite Comprehensive Warranty for parts and Labour  Greenpeace rating 3.1
5	Warranty	3 Year Warranty	3 Year Warranty	3 Year Warranty



6	Decision of Technical Responsiveness		Responsive	Responsive
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List the mandatory and optional features which are checked and compared as detailed in your technical specifications to determine on conformity to technical specifications.

This should also cover all deviations listed by bidder in response to Clause 14.3(c) of ITB.

Annex VII/4 - 2

Technical Evaluation of the Bids:

Desktop Computer i5 3rd Generation with graphics card

Sl. No.	Particulars	Technical Clause Reference	Name of Bidder 1 Smartsoft, Kochi	Name of Bidder 2 Wintech Systems and Systems
1.	Model No.		Dell Optiplex 7010MT	HP Compaq Elite 8300MT
2.	Mfd. By		Dell India Pvt Ltd	Hewlett-Packard India Pvt Ltd
3.	Model Type		Desktop Computer i5 3rd Generation with graphics card	Desktop Computer i5 3rd Generation with graphics card

4.	<p>CPU :Core(TM) i5-3470 Processor (6M Cache, up to 3.60 GHz) or better  MEMORY :8GB (1x4GB) DDR3 1600MHz SDRAM Memory or higher  MOTHER BAORD: Intel Q77 Chipset or better  KEYBOARD &amp; MOUSE: USB Keyboard with Optical Mouse.  HARD DISK: 1 TB 7200RPM SATA Hard Drive  DVD DRIVE: 16X DVD+/-RW Drive or higher  PORTS: Minimum 3.0 USB Port, Minimum 6 External USB ports and 2 Internal USB , 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line- out  NETWORKING: Integrated 10/100/1000 NIC  MONITOR: 18.5" Monitor with LED Backlight ( TCO '05 certified for Energy is desirable) or better  GRAPHICS CARD 1GB AMD RADEON HD 7470,FH,with DVI-VGA Adapter or better  POWER SUPPLY Standard 250 W or above PSU, up to 90% Efficient PSU with Active PFC.  Security : Data Protection Access ,I/O Interface Security, Chassis lock slot support, Chassis Intrusion Switch or equivalent  OS Certifications Linux and Microsoft Mandatory.</p>	<p>CPU :Core(TM) i5-3470 Processor (6M Cache, up to 3.60 GHz) or better  MEMORY :8GB (1x4GB) DDR3 1600MHz SDRAM Memory or higher  MOTHER BAORD: Intel Q77 Chipset or better  KEYBOARD &amp; MOUSE: USB Keyboard with Optical Mouse.  HARD DISK: 1 TB 7200RPM SATA Hard Drive  DVD DRIVE: 16X DVD+/-RW Drive or higher  PORTS: Minimum 3.0 USB Port, Minimum 6 External USB ports and 2 Internal USB , 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line- out  NETWORKING: Integrated 10/100/1000 NIC  MONITOR: 18.5" Monitor with LED Backlight ( TCO '05 certified for Energy is desirable) or better  GRAPHICS CARD 1GB AMD RADEON HD 7470,FH,with DVI-VGA Adapter or better  POWER SUPPLY Standard 250 W or above PSU, up to 90% Efficient PSU with Active PFC.  Security : Data Protection Access ,I/O Interface Security, Chassis lock slot support, Chassis Intrusion Switch or equivalent  OS Certifications Linux and Microsoft Mandatory.  <b>Greenpeace 4.6 rating whereas energy star rating is 5.2 which is above the required rating</b></p>	<p>CPU :Core(TM) i5-3470 Processor (6M Cache, up to 3.60 GHz) or better  MEMORY :8GB (1x4GB) DDR3 1600MHz SDRAM Memory or higher  MOTHER BAORD: Intel Q77 Chipset or better  KEYBOARD &amp; MOUSE: USB Keyboard with Optical Mouse.  HARD DISK: 1 TB 7200RPM SATA Hard Drive  DVD DRIVE: 16X DVD+/-RW Drive or higher  PORTS: Minimum 3.0 USB Port, Minimum 6 External USB ports and 2 Internal USB , 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line- out  NETWORKING: Integrated 10/100/1000 NIC  MONITOR: 18.5" Monitor with LED Backlight ( TCO '05 certified for Energy is desirable) or better  GRAPHICS CARD 1GB AMD RADEON HD 7470,FH,with DVI-VGA Adapter or better  POWER SUPPLY Standard 250 W or above PSU, up to 90% Efficient PSU with Active PFC.  Security : Data Protection Access ,I/O Interface Security, Chassis lock slot support, Chassis Intrusion Switch or equivalent  OS Certifications Linux and Microsoft Mandatory.</p>
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5	Warranty	3 Year Warranty	3 Year Warranty	3 Year Warranty
6	Decision of Technical Responsiveness		Responsive	Responsive

List the mandatory and optional features which are checked and compared as detailed in your technical specifications to determine on conformity to technical specifications.

This should also cover all deviations listed by bidder in response to Clause 14.3(c) of ITB.

Annex VII/4 - 3  
Technical Evaluation of the Bids:  
Desktop Computer i5 3rd Generation

Sl. No.	Particulars	Technical Clause Reference	Name of Bidder 1 Smartsoft, Kochi	Name of Bidder 2 Wintech Systems and Systems
1.	Model No.		Dell Optiplex 7010MT	HP Compaq Elite 8300MT
2.	Mfd. By		Dell India Pvt Ltd	Hewlett-Packard India Pvt Ltd
3.	Model Type	Desktop Computer i5 3rd Generation	Desktop Computer i5 3rd Generation	Desktop Computer i5 3rd Generation

4.		<p>Processor :Core i5 -3470 intel 3.20 GHz 6M Cache or better Chipset :Intel Q77 Chipset or better Video: Integrated Intel HD Graphics 2500 or better Memory: 4GB DDR3 or Higher Networking: Integrated 10/100/1000 NIC Ports: Minimum 2 USB 3.0 ports, Minimum 6 External USB ports and 2 Internal, 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line-out Hard Drives: 500GB 7200RPM or above Power Supply Unit Standard 250 W or above Monitor: 18.5" Monitor with LED Backlight or higher, TCO '05 certified for Energy efficiency Keyboard : USB Keyboard Mouse :Optical Mouse Security: Data Protection Access, I/O Interface Security, Chassis lock slot support, Chassis Intrusion Switch DVD: 16 X DVD +/- RW or higher Environmental, Ergonomic &amp; Regulatory Standards OS Certifications Linux and Microsoft</p>	<p>Processor :Core i5 -3470 intel 3.20 GHz 6M Cache or better Chipset :Intel Q77 Chipset or better Video: Integrated Intel HD Graphics 2500 or better Memory: 4GB DDR3 or Higher Networking: Integrated 10/100/1000 NIC Ports: Minimum 2 USB 3.0 ports, Minimum 6 External USB ports and 2 Internal, 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line-out Hard Drives: 500GB 7200RPM or above Power Supply Unit Standard 250 W or above Monitor: 18.5" Monitor with LED Backlight or higher, TCO '05 certified for Energy efficiency Keyboard : USB Keyboard Mouse :Optical Mouse Security: Data Protection Access, I/O Interface Security, Chassis lock slot support, Chassis Intrusion Switch DVD: 16 X DVD +/- RW or higher Environmental, Ergonomic &amp; Regulatory Standards OS Certifications Linux and Microsoft</p>	<p>Processor :Core i5 -3470 intel 3.20 GHz 6M Cache or better Chipset :Intel Q77 Chipset or better Video: Integrated Intel HD Graphics 2500 or better Memory: 4GB DDR3 or Higher Networking: Integrated 10/100/1000 NIC Ports: Minimum 2 USB 3.0 ports, Minimum 6 External USB ports and 2 Internal, 1xRJ-45, 1xVGA, Front Panel Mic-in, Headphone out, Mic-in/Line-in, Line-out Hard Drives: 500GB 7200RPM or above Power Supply Unit Standard 250 W or above Monitor: 18.5" Monitor with LED Backlight or higher, TCO '05 certified for Energy efficiency Keyboard : USB Keyboard Mouse :Optical Mouse Security: Data Protection Access, I/O Interface Security, Chassis lock slot support, Chassis Intrusion Switch DVD: 16 X DVD +/- RW or higher Environmental, Ergonomic &amp; Regulatory Standards OS Certifications Linux and Microsoft</p>
5	Warranty	3 Year Warranty	3 Year Warranty	3 Year Warranty
6	Decision of Technical Responsiveness		Responsive	Responsive

List the mandatory and optional features which are checked and compared as detailed in your technical specifications to determine on conformity to technical specifications.

This should also cover all deviations listed by bidder in response to Clause 14.3(c ) of ITB

Brief details of Assumptions made in Evaluation

Annex VIII

a)

b)

c)

d)

Comparative Statement of Responsive Offers

Items		Price	
(Groups A and B separately)		Name of Bidder 1 Smartsoft Kochi	Name of Bidder 2 Wintech Systems and Services
Cost per unit (in Rs.)			
1.	Ex-factory/ ex-showroom/ ex-warehouse or Off-the-Shelf prices	i) Desk top High end system Intel i7 : 14,23,682 ii) Desktop Computer i5 3rd Generation with graphics card : 11,24,616 iii) Desktop system Intel i5 3rd generation :64,10,376	i) Desk top High end system Intel i7 : 22,30,800 ii) Desktop Computer i5 3rd Generation with graphics card : 16,87,200 iii) Desktop system Intel i5 3rd generation :92,70,966
2.	Excise duty (if quoted separately)	Inclusive	Inclusive
3.	Packing & forwarding charges	Inclusive	Inclusive
4.	Inland freight	Inclusive	Inclusive
5.	Insurance	Inclusive	Inclusive
6.	Other charges, if any	Nil	Nil
	TOTAL		
7.	Discounts, if any	Nil	Nil
8.	Total unit cost as quoted	i) Desk top High end system Intel i7 54757 *26 = 14,23,682 ii) Desktop Computer i5 3rd Generation with graphics card : 46859*24= 11,24,616 iii)Desktop system Intel i5 3rd 40572*158= 64,10,376	i) Desk top High end system Intel i7 85800*26=22,30,800 ii) Desktop Computer i5 3rd Generation with graphics card 70300*24=16,87,200 iii)Desktop system Intel i5 3rd generation 58677*158=92,70,966
9.	No. to be supplied	i) Desk top High end system Intel i7 : 26 ii) Desktop Computer i5 3rd Generation with graphics card : 24 iii) Desktop system Intel i5 3rd generation :158	i) Desk top High end system Intel i7 : 26 ii) Desktop Computer i5 3rd Generation with graphics card : 24 iii)Desktop system Intel i5 3rd generation :158
10.	Total cost as quoted	89,58,674/-	1,31,88,966
11.	Delivery period offered		
12.	Delivery period loading	Nil	Nil
13.	Payment terms loading	Nil	Nil
14.	Other loadings	Nil	Nil
15.	Total evaluated price with loading	89,58,674/-	1,31,88,966
16.	Ranking	1	2

Items		Price Converted to Indian Rupees		
Group C		Bidder's Name and Country	Bidder's Name and Country	Bidder's Name and Country
Cost per unit (in Rs.)				
1.	a) CIF including agency commission as quoted per machine			
	b) Ex-factory price (for items supplied locally from India)			
2.	Port clearance & incidentals			
3.	Inland Freight			
4.	LC charges, if any			
5.	Other charges per unit, if any			
	TOTAL			
6.	Discounts, if any			
7.	Total unit cost			
8.	No. to be supplied			
9.	Total cost			
10.	Delivery period offered			
11.	Delivery period loading			
12.	Payment term loading			
13.	Other loadings			
14.	Total evaluated price with loading			
15.	Loading for domestic preference [The amount of customs duty and other import taxes as applicable or 15% of 1 (a) above, whichever is lower]			
16.	Total evaluated price after loading for domestic preference			
17.	Ranking			

## Post Qualification

Criteria as specified in the bidding document*		Bidder 1 Smartsoft Kochi	Bidder 2 Wintech Systems and Services
1	The bidder should be a manufacturer (OEM) who must have manufactured, tested and supplied the equipment(s) similar to the type specified in the “schedule of requirements” up to at least 5 times the quantity required in any one of the last 3 years. The equipments offered for supply must be of the most recent series models incorporating the latest improvements in design. Further, bidder should be in continuous business of manufacturing products similar to that specified in the schedule of requirements during the last three years prior to bid opening	Yes	Yes
2	i. The manufacturer furnishes authorization in the prescribed format assuring full guarantee and warranty obligations as per GCC and SCC; and ii. The bidder, as authorized representative, has supplied, installed and commissioned satisfactorily at least 3 times. of the quantity similar to the type specified in the Schedule of Requirements in any one of the last three years which must be in satisfactory operation for at least six months on the date of bid opening and must be providing annual maintenance services for the above equipment installations in at least three centers in the country for over one year.	Yes	Yes
3	The bidder should have a minimum financial turnover of atleast <b>Rs. 1000 lakhs</b> in one of the last three years excluding current financial year	Yes	Yes
4	The bidder should furnish a brief write-up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for the manufacture and supply of the required system and equipments within the specified time of completion after meeting all their current commitments.	Yes	Yes
5	Details of Service Centres and information on Service support facilities that would be provided after the warranty period [in the Service Support Form given in Section XV/2] Bidder should have established support centre & registered office in Kerala from more than 5 years	Yes	Yes
6	Reports on financial standing of the bidder such as profit and loss statements, balance sheets and auditor’s report for the past three years, bankers certificates, etc	Yes	Yes
7	The bidder should furnish a conformity statement of the goods and services in the Price Schedule with the Purchaser’s Technical specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications with brand name/Product no/Catalog No. per ITB clause 14, in the Format given in Section XV/3 with the documentary evidence of conformity of the goods and services to Bidding Document	Yes	Yes
8	Have registered office in Kerala	Yes	Yes
9	Is Minimum Financial Turnover met in at least once of the last three years excluding current financial year?	Yes	Yes
10	Satisfactory delivery of similar goods/items of value not less than 80% of estimated contract value in less than 3 years.	Yes	Yes
11	VAT		

Note : 1(\*). List all criteria specified in the bidding document and give comments on how bidder meets or fails in criteria.



2. Give details for the recommended bidder and other lower bidders whose offer is  
Evaluated as non-responsive / who have been determined as not meeting with this criteria.

Annex XI

Details of Recommended Offer

Name of Bidder **SMARTSOFT, KOCHI**

Sl. No.	Name of Item	Specification or Part No.	Unit	Qty.	Rate	Value*
1.	Desk top High end system , Intel i7	Dell Optiplex 7010MT	Number	26	54757	1423682
	Desktop Desktop Computer, i5 3 <sup>rd</sup> Generation with graphics card	Dell Optiplex 7010MT	Number	24	46859	1124616
	Desktop system Intel i5 3rd generation	Dell Optiplex 7010MT	Number	158	40572	6410376
2.	List of Tools	Nil				
3.	List of special accessories and spares	Nil				
4.	List of spares for 3 year maintenance	Nil				
5.	Total Cost*					Rs 89,58,674 (without tax) Rs 94,06,608 (with tax)

\* All values in Bid Currency

## Annerure – 3

### **Minutes of the First Research Guidance Committee for TEQIP II at College of Engineering Karunagappally, Kollam, Kerala held on 22/02/2014 at 10:30 AM in Principal's room under the Chairmanship of Senior Research Advisor Prof. E.Gopinathan**

No: CEK/TEQIP/RGC/01/2014.

22-02-2014

#### **Agenda**

Silent Prayer

Welcome address by the Principal.

#### **1.1 Approval of the application format for Research Seed Money**

In the second meeting of the BOG which held on 30.10.2013, the application format for Research Seed Money was approved. The same is placed before the Research Guidance Committee (RGC) for further approval.

#### **1.2 Approval of Guidelines fixed for Research Seed Money.**

The guidelines approved by the BOG in its second meeting held on 30.10.2013 is placed before the RGC for consideration and approval.

#### **1.3 Scrutiny of applications received from Faculty members for Seed Money.**

Eight proposals were received from different faculty members for granting Seed Money. The proposals are placed before the RGC for consideration.

#### **1.4 Evaluation of the applications based on the presentations by the Investigators**

#### **1.5 Decisions on maximum amount permitted to each Principal Investigator.**

#### **1.6 Any other matter regarding improvement of Research and Development**

**The following members were present:**

1. Prof. (Dr.) Gopinathan E, Former Director, NIT Calicut, SRA of the Institution (Chairman)
2. Prof. (Dr.) Hari V.S, Principal (Convenor)
3. Dr. Rajkumar Choudhary, Scientist Space Physics Laboratory, VSSC, Member
4. Sri. Shajahan M, Scientist Space Physics Laboratory, VSSC, Member
5. Dr. Ajilkumar A, TEQIP II Coordinator, Member
6. Prof. Manoj Ray D, HOD CS, Member

7. Ms. Smitha P, R&D Coordinator, Member
8. Prof. Libi A, HOD EEE, Member
9. Prof. Anil Kumar C V, HOD (i/c) ECE, Member

The Meeting started at 9.15.AM under the presidency of the Hon'ble Chairman with a silent prayer followed by welcome address by the Principal. Thereafter Dr. Ajilkumar A gave a brief introduction about TEQIP II.

The Principal introduced the agenda to the committee members and the agenda items were taken one by one for discussion.

**Item No 1.1 / RGC 1: Approval of the application format for Research Seed Money**

The Principal presented the application format to the committee members and after discussions the committee approved the format.

**Item No 1.2 / RGC 1: Approval of Guidelines fixed for Research Seed Money.**

The Principal reported that the draft guidelines prepared for granting Research Seed Money was approved by the BOG of the Institution. After discussions, the RGC approved the guidelines.

**Item No 1.3 / RGC 1: Scrutiny of applications received from Faculty members for Seed Money.**

The Principal reported that six faculty members had submitted eight proposals for granting Research Seed Money. He also reported that the research activities of the Institution centered to Image Processing since the Institution conduct the PG courses in Image Processing and Signal Processing,

The committee after going through the proposals commented that all the proposals are of good quality and are socially relevant. The following general comments are made by the committee members.

Mr. Shajahan suggested that the proposals should have been sent to the external members earlier for better understanding of the proposals. He also suggested adding Prof. Sukesh Kumar (former Director, LBS) who is a National Level Health Committee person and an expert in the fields of Image Processing and Signal Processing, as a member of the RGC.

Dr. Rajkumar opined that if the proposals are of good standard then necessary publications should be made.

Prof. E.Gopinathan said that some proposals seemed very good and the topics are socially relevant too. He added that the vulnerability of the proposals could be finalized after analyzing the presentations.

Hence the Committee asked the Faculty members to present the proposals and the presentations started at 12.00 noon in the Seminar Hall.

- i) The first presentation was done by Dr. Hari V S on the proposal submitted by him titled "Automated Detection of Alzheimer's Disease using QVF". He presented to sanction an amount of Rs.100000/- as seed money.

The committee queried about the challenges in getting reliable data. Prof. E.Gopinathan suggested signing a MoU with the agencies who can provide reliable

data. Legal issues in using biomedical data must also be considered while preparing MoU.

Mr. Shajahan suggested procuring FPGA boards using VHDL/ Verilog. He also suggested using wavelets for the detection.

Dr. Rajkumar opined that periodical review may be conducted to review the progress of the work carried out. He also suggested the work plan for each project.

Dr. Ajilkumar replied that the time period for periodical review by the RGC had been specified as six months in the guidelines approved by BOG and RGC.

- ii) Smt. Deepa A K, AP in ECE presented the proposal on “Image Processing Techniques for Breast Image Analysis”. She asserted that breast cancer is the second largest critical medical issue. She presented the advantages of imaging. She explained that the proposed work is to develop software to screen the subjects. The software tool planned is using MATLAB She presented to sanction an amount of Rs.100000/- as seed money.

The committee suggested to do more literature survey and to collect latest publications on the topic.

Mr. Shajahan commented that normally using digital X-ray which provide many files with less noise.

Prof. Gopinathan said that the functionalities and techniques used in each block presented must be made clear.

The committee members commended that the proposal submitted by Smt. Deepa A.K is very good and useful for the society.

- iii) Smt. Remya R S & Mili Roslin Mathew presented the proposal on “Video Tampering Detection –An application to video forensics”

She presented the schedule for the next one year, the methodologies-Double compression in mpeg and H26, Computer vision technologies, classification based on SVM. The aim of the proposal is to develop software to decide whether a video is tampered or not. She further explained that she will be using ideal language as it is faster language software and with the support of CDAC the project can be finished within expected time. Prof. Gopinathan suggested signing MoU with CDAC. Dr. Rajkumar wanted her to show examples of tampered videos to which she replied that in the next presentation the same will be shown. She has requested an amount of Rs.100000/-(Rupees One lakh only) as seed money using which she plans to buy a video capturing device and printer as equipments. The committee members pointed out that the idea is very good and challenging.

- iv) Smt. Smitha P gave presentation on “Automated Cancer Detection and Grading of Breast Microscopy Images”. She presented that presently, pathologists are visually deciding whether a sample is malignant or not. More than 1000 samples are collected.

These samples must contain a good number of normal tissues also. Staining must be standard and magnification used for all samples must remain constant. The pathologists must be trained for that and the disease is finally confirmed by using biopsy images. This kind of work is going on at different places but they have not yet automated. She explained that aim of her work is automated cancer detection. The primary discussions with R&D department of RCC had completed. The cytology images for the work will be provided by RCC. She has requested for an amount of Rs.100000/-(Rupees One lakh only) as seed money. For further expanding the research, a Fluorescent microscope will be needed. The expected cost of florescent microscope is 25 lakhs approximately and Prof. Gopinathan said that such huge money can be granted by funding agencies if expertise in the specified area is proved.

- v) Mr. Shaji presented the proposal on “Early Lung Cancer Detection through Extraction and Analysis of Sputum Cell Images” He explained that the main types of lung cancer are small cell lung carcinoma, also called oat cell cancer, and non small cell lung carcinoma. The survival rate of lung cancer is very low as the preliminary symptoms are breathing problem and cough and initial treatments will be based on medicines. After failing in all treatments, only in the final stage this case is referred to cancer centers. For these medical projects validation is important. He pointed out that preliminary discussions were over with RCC for a joint proposal and MoU draft is approved by both the Institutions. He requested an amount of Rs.100000/-(Rupees One lakh only) as seed money.
- vi) Smt. Jyothi R L presented the proposal on “Handwritten character recognition from manuscripts written in ancient Grantha scripts”. She explained that handwritten character recognition is one of the most challenging and ongoing areas of research in the field of pattern recognition. She proposes a new system where literature work seen in manuscripts written in grantha script is converted to Malayalam language. The information repository created will be very useful for young researchers in the field of Malayalam, manuscript, Ayurvedic researchers, history etc. Oriental Research Institute (ORI) planned for such a work in 2007 but the progress has not been reported. For the present work, discussions with CDAC personnel and CUSAT Professors are done. She has requested for an amount of Rs.100000/-(Rupees One lakh only) as seed money.  
Mr. Shajahan suggested that Travancore Palace has large collection of old granthas and the help of old people having experience in old as well as the new Malayalam characters can be sought.  
Dr. Rajkumar suggested that if this work is a success then the same can be implemented in other languages.  
Prof. Gopinathan remarked that it is a very tough task but interesting.

- vii) Smt. Sabeena K & Remya R S presented on “Detection of Acute Lymphocytic Leukemia”. They presented that the objective of this project is to identify an efficient and effective method for Detection of Lymphocytic Leukemia which is focused on the Classification of Lymphocytes into Normal and Lymphoblast. The work aims to demonstrate that the peripheral blood film observation can be fully automated and can be performed as ancillary/backup service to the physician activity. They have requested for an amount of Rs.100000/- (Rupees One lakh only) as seed money. Dr. Gopinathan and Mr. Shajahan asked about the time needed to implement the project. Smt. Remya replied that she has not implemented so far. Prof Gopinathan said that rather than time accuracy is important. Dr. Rajkumar enquired about the new techniques they are planning to use in this project. Smt. Sabeena replied that Genetic Algorithm will be used. Then Dr. Gopinathan asked why ABC or FCM algorithms could not be used. He also suggested collecting a pool of algorithms and selecting a better and fast algorithm with less computing cost.
- viii) Smt. Jyothi presented her project topic on “Handwritten character recognition of various ancient and current Malayalam fonts”. She explained that the proposed work is to convert the cultural and literature works written in old Malayalam language to current Malayalam scripts. She added that the information repository created will be very useful for young researchers in Malayalam literature to make a comparative study between the transliterate work and data in the newly created repository. She has requested for an amount of Rs.100000/- (Rupees One lakh only) as seed money. Dr. Rajmohan asked how she will be providing results for both the projects within 6 months. Mr. Shajahan suggested that efficient co-ordination and manual corrections needed for efficient classification which will provide success in these projects. Prof. Gopinathan advised to use latest processors to reduce the execution time and also to get help from maximum persons.

**Item No 1.4 / RGC 1: Evaluation of the applications based on presentations by the Investigators**

The RGC unanimously approved all the eight proposals submitted by the faculty members.

The Chairman, Prof. Gopinathan, appreciated the efforts taken by all the faculty members for preparing the proposals. He commented that almost all proposals were of good quality and some proposals needed extra efforts. He congratulated the principal investigators for presenting the proposals and urged them to keep the tempo to finish the projects within time. Further, he reminded the faculty members to prepare final project proposals to submit to various funding agencies after one year. He also told that Government of India has many schemes to promote R&D among women; but the only hurdle is the critical assessment of the projects. He opined that if a project converts to a product, rather than publishing the work go for patenting. He stressed the need for making at least one international publication in peer reviewed journal.

Dr. Rajkumar commented that all the proposals were of high standard and wanted everyone to continue the same positive energy till the end of project period. He wanted all the investigators to proceed a step ahead in the next review meeting.

Mr. Shajahan appreciated all the faculty members for preparing and presenting good proposals which would be very useful to the society. He suggested being more professional for fetching funds from external funding agencies. He also suggested that the amount of seed money granted can be increased if the investigators needed.

**Item No 1.5 / RGC 1: Decisions on maximum amount permitted to each Principal Investigator.**

The committee decided to grant the amounts requested by each Principal Investigator as per the Table shown in Annexure I.

**Item No 1.6 / RGC 1: Any other matter regarding improvement of Research and Development**

External members assured their service whenever required.

They suggested holding the meetings in Saturdays with prior information.

**The Hon'ble Chairman of RGC called the meeting to end at 4.30 pm.**

**ANNEXURE-1**

Sl. No.	Name of the Principal Investigator	Title of the project proposal	Amount requested (Rs)	Amount Sanctioned (Rs)
1.	Dr. Hari V.S	Automated Detection of Alzheimer's Disease using QVF	100000	100000
2.	Deepa A.K	Image Processing Techniques for Breast Image Analysis	100000	100000
3.	Remya R.S	Video Tampering Detection – An application to video forensics	100000	100000
4.	Smitha P	Automated Cancer Detection and Grading of Breast Microscopy Images	100000	100000
5.	Shajy L	Early Lung Cancer Detection Through Extraction And Analysis Of Sputum Cell Images	100000	100000
6.	Jyothy R.L	Handwritten character recognition from manuscripts written in ancient Grantha scripts	100000	100000
7.	Remya R.S	Detection of Acute	100000	100000

		Lymphocytic Leukemia		
8.	Jyothy R.L	Handwritten character recognition of various ancient and current Malayalam fonts	100000	100000



## **Annexure 4**

### **Key Performance Indicators**

## Annexure 5

### Acknowledgement for Registration Fee

Sent 19-11-2013 16:10:40  
From msadmnba  
To COLLEGE OF ENGINEERING KARUNAGAPPALLY  
CC  
Subject Acknowledgement for Registration Fee  
Attachment

Madam/Sir

Registration Fee Payment Detail for Institute 'COLLEGE OF ENGINEERING KARUNAGAPPALLY' Registration, Ref#49281 are as follow:

-----  
Payment Mode: Demand Draft  
Amount: 112360  
Bank Draft No: 663957  
Bank Draft Dated: 16-11-2013  
Drawn on(Specify bank): State Bank of Travancore karunagappally Branch  
Courier Name: Indian Postal Service  
Courier Tracking No.: EL090908304IN  
Dispatch Date: 19-11-2013  
-----

Accreditation Division  
NBA

### **Acknowledgement of Accreditation Fee**

Sent 30-04-2014 18:12:19  
From msadmnba  
To COLLEGE OF ENGINEERING KARUNAGAPPALLY  
CC Accr1@nbaind.org,Accr2@nbaind.org  
Subject Acknowledgement of Accreditation Fee  
Attachment

Madam/Sir

The following details of payment of prescribed fee for the Institute COLLEGE OF ENGINEERING KARUNAGAPPALLY towards the application ID **812-31/03/2014** has been received by NBA. Fee Payment Detail for Institute are as follow:

-----  
Payment Mode: Demand Draft  
Amount: 786520  
Bank Draft No: 965467  
Bank Draft Dated: 30-04-2014  
Drawn on(Specify bank): SBT, Karunagappally  
Courier Name: The Professional couriers  
Courier Tracking No.: 6883926  
Dispatch Date: 30-04-2014  
-----

Regards  
Accreditation Division  
NBA

## Annexure – 6

SAR Marks-Electronics and Communication							
Criterion	Max Marks	Actual Mark	Sub-criterion	Max Marks	Actual Mark	Reason for low marks	How marks can be improved
Vision, Mission and Programme Educational Objectives	75	36	Vision and Mission	5	3	Vision and mission of the department is only formulated	To be refined
			Programme Educational Objectives	15	5	Draft prepared	To be refined
			Achievement of Programme Educational Objectives	20	10	Assessed based on the draft prepared	Final assessment will be done after redefining the PEOs
			Assessment of the achievement of the Programme Educational Objectives	25	13	Assessed based on the draft prepared	Final assessment will be done after redefining the PEOs
			Indicate how the PEOs have been redefining in the past	10	5	Redefining is under process	Will complete soon
Programme Outcomes	150	63	Definition and Validation of Course Outcomes and Programme Outcomes	25	10	Draft prepared	Will be finalised immediately
			Attainment of Programme Outcomes	40	20	Only regular assessments (examinations,quiz etc)	Final assessment will be done immediately
			Evaluation of the attainment of Programme Outcomes	75	30	Only regular evaluations	Final assessment will be done immediately

			Indicate how the results of evaluation of achievement of the POs have been used for redefining the POs	10	3	Redefining is under process	Will be completed soon
Programme Curriculum	125	43	Curriculum	15	14		
			State the components of the curriculum and their relevance to the POs and the PEOs	15	8	Based on the drafts of POs and PEOs	will change in the final assessment based on the redefined Pos and PEOs
			State core engineering subjects and their relevance to Programme Outcomes including design experience	30	0	Based on the drafts of POs and PEOs	Will change in the final assessment based on the redefined Pos and PEOs
			Industry interaction/internship	10	6	Conducted few industrial visits and expert lectures	
			Illustrate the measures and processes used to identify the curricular gaps to the attainment of the COs/Pos	15	0	Only draft POs and PEOs are prepared	conducted after finalising the Pos and PEOs
			Indicate the content beyond syllabus imparted for the attainment of the COs/POs	35	10	Expert lectures are arranged	Will arrange more such programs
Students' Performance	100	51	Course Syllabi	5	5		
			Success Rate	30	17	Average pass percentage	Remedial classes on more subjects can be provided
			Academic Performance	20	12		Special care will be taken to improve the performance

			<b>Placement and Higher Studies</b>	<b>30</b>	15		More Placement trainings will be arranged
			<b>Professional Activities</b>	<b>20</b>	7		More activities can be organised under IEEE & ISTE
<b>Faculty Contributions</b>	<b>175</b>	<b>66</b>	<b>StudentTeacher Ratio (STR)</b>	<b>20</b>	17		
			<b>Faculty Cadre Ratio</b>	<b>20</b>	1		Need to be posted
			<b>Faculty Qualifications</b>	<b>30</b>	20		Need PhD holders
			<b>Faculty competencies in correlation to Programme Specific Criteria</b>	<b>15</b>	9		Will improve through FDP/summer schools
			<b>Faculty as participants/resource persons in faculty development/training activities</b>	<b>15</b>	10		
			<b>Faculty Retention</b>	<b>15</b>	6		
			<b>Faculty Research Publications (FRP)</b>	<b>20</b>	2	Number of publications in international journals are less	Research activities are promoted
			<b>Faculty Intellectual Property Rights (FIPR)</b>	<b>10</b>	0	No patents	
			<b>Funded R&amp;D Projects and Consultancy (FRDC) Work</b>	<b>20</b>	1	Number of funded R & D projects is less	Seed money is sanctioned for conducting basic research & preparing proposals for funded projects
			<b>Faculty interaction with outside world</b>	<b>10</b>	0	Interaction with outside world is poor	

<b>Facilities and Technical Support</b>	<b>125</b>	<b>87</b>	<b>Classrooms in the department</b>	<b>30</b>	20	Not enough class rooms	By improving the built-up space (PTA fund, Institution fund)
			<b>Faculty rooms in the department</b>	<b>20</b>	10	No individual faculty rooms	More built-up space to be added.
			<b>Laboratories in the department to meet the Curriculum Requirements and the POs</b>	<b>60</b>	46		
			<b>Technical Manpower Support in the Department</b>	<b>15</b>	11		
<b>Academic Support Units and Teaching-Learning Process</b>	<b>75</b>	<b>52</b>	<b>Academic Support Units</b>	<b>35</b>	26		
			<b>Teaching – Learning Process</b>	<b>40</b>	26		More effective teaching can be employed
<b>Governance, Institutional support and Financial Resources</b>	<b>75</b>	<b>38</b>	<b>Campus Infrastructure and Facility</b>	<b>10</b>	8.5		
			<b>Organisation, Governance, and Transparency</b>	<b>10</b>	3	Not much transparent	
			<b>Budget Allocation, Utilisation, and Public Accounting</b>	<b>10</b>	8		
			<b>Programme Specific Budget Allocation, Utilisation</b>	<b>10</b>	6		
			<b>Library</b>	<b>20</b>	7	Inadequate space & less number of titles	Purchase under TEQIP is in progress
			<b>Internet</b>	<b>5</b>	4.5		
			<b>Safety Norms and Checks</b>	<b>5</b>	1		Measures are to be taken

			Counseling and Emergency Medical Care and Firstaid	5	0	Facility not provided	Can be provided
Continuous Improvement	100	42	Improvement in Success Index of Students	5	2		Can be improved through remedial classes
			Improvement in Academic Performance Index of Students	5	2		Special care will be taken to improve the performance
			Improvement in StudentTeacher Ratio	10	6		
			Enhancement of Faculty Qualification Index	10	6		
			Improvement in Faculty Research Publications, R&D Work and Consultancy Work	20	2	Number of publications are less	Faculty are encouraged to carry out R&D works
			Continuing Education	10	4		more short term courses/workshops will be conducted
			New Facility Created	20	10		Under TEQIP more works are going on
			Overall Improvement since last accreditation, if any, otherwise, since the commencement of the programme	20	10	Inconsistent Results	Trying to maintain consistency in results
Total Marks	1000	478		1000	478		



SAR Marks-Computer Science and Engineering							
Criterion	Max Marks	Actual Mark	Sub-criterion	Max Marks	Actual Mark	Reason for low marks	How marks can be improved
Vision, Mission and Programme Educational Objectives	75	21	Vision and Mission	5	2	Not yet published.	Publishing both in website and notice boards
			Programme Educational Objectives	15	8	Not yet published and yet to be modified	More analysis is needed for further improvement,publishing both in website and notice boards
			Achievement of Programme Educational Objectives	20	6	Efficient administartive system not been established	By forming various committees
			Assessment of the achievement of the Programme Educational Objectives	25	5	Alumni survey,industrial survey not yet done	Establishing alumni association
			Indicate how the PEOs have been redefining in the past	10	0	Not yet redefined	Refining by discussing varios committes
Programme Outcomes	150	71	Definition and Validation of Course Outcomes and Programme Outcomes	25	12	Very low emphasis given for assessing the correlation between PEOs and Pos	Analysing correlation between Pos and PEOs
			Attainment of Programme Outcomes	40	19	Assessment of corelation between PO s and NBAattributes has not been completed	By completing the assessment

			Evaluation of the attainment of Programme Outcomes	75	40	Not tabulated the result of assessment tools	By tabulating and analysing
			Indicate how the results of evaluation of achievement of the POs have been used for redefining the POs	10	0	Not yet redefined	Based on analysis of above result
Programme Curriculum	125	61	Curriculum	15	10		Establishing correlation between curriculum and program specific criteria
			State the components of the curriculum and their relevance to the POs and the PEOs	15	10		Establishing correlation between curriculum and program specific criteria
			State core engineering subjects and their relevance to Programme Outcomes including design experience	30	18		establishing correlation between curriculum and program specific criteria
			Industry interaction/internship	10	0	Not provided	MOUs are signed
			Illustrate the measures and processes used to identify the curricular gaps to the attainment of the COs/Pos	15	0	yet to be measured	By developing tools for measuring the gap
			Indicate the content beyond syllabus imparted for the attainment of the COs/POs	35	18		By conducting more workshop and seminar beyond syllabus
			Course Syllabi	5	5		

<b>Students' Performance</b>	<b>100</b>	<b>54</b>	<b>Success Rate</b>	<b>30</b>	<b>20</b>		
			<b>Academic Performance</b>	<b>20</b>	<b>12</b>		
			<b>Placement and Higher Studies</b>	<b>30</b>	<b>12</b>	Less campus placements	By providing training to students and inviting new companies
			<b>Professional Activities</b>	<b>20</b>	<b>10</b>		
			<b>Student Teacher Ratio (STR)</b>	<b>20</b>	<b>20</b>		
<b>Faculty Contributions</b>	<b>175</b>	<b>81</b>	<b>Faculty Cadre Ratio</b>	<b>20</b>	<b>8</b>	no professors in the department	By appointing new professors
			<b>Faculty Qualifications</b>	<b>30</b>	<b>17</b>	No Doctrate holders	Promoting faculty to higher education
			<b>Faculty competencies in correlation to Programme Specific Criteria</b>	<b>15</b>	<b>9</b>		
			<b>Faculty as participants/resource persons in faculty development/training activities</b>	<b>15</b>	<b>12</b>		
			<b>Faculty Retention</b>	<b>15</b>	<b>10</b>		
			<b>Faculty Research Publications (FRP)</b>	<b>20</b>	<b>5</b>	Less number of publications	Promoting the faculty to increase the publications
			<b>Faculty Intellectual Property Rights (FIPR)</b>	<b>10</b>	<b>0</b>		
			<b>Funded R&amp;D Projects and Consultancy (FRDC) Work</b>	<b>20</b>	<b>0</b>	R & D work is in the intial stage and will be improved in a short span of time due to TEQIP	Proposals of R & D are given as part of TEQIP

			Faculty interaction with outside world	10	0	Just started	By setting up new collaboration
Facilities and Technical Support	125	49	Classrooms in the department	30	14	Not enough Class rooms	Increase infrastructure facilities
			Faculty rooms in the department	20	6	No individual faculty rooms	Providing individual facility rooms
			Laboratories in the department to meet the Curriculum Requirements and the POs	60	18	Number of Labs available are less	By providing more build-up space.
			Technical Manpower Support in the Department	15	11		
Academic Support Units and Teaching-Learning Process	75	52	Academic Support Units	35	26		
			Teaching – Learning Process	40	26		New innovative methods should be implemented
Governance, Institutional support and Financial Resources	75	28	Campus Infrastructure and Facility	10	2		Low infrastructure facilities
			Organisation, Governance, and Transparency	10	10		
			Budget Allocation, Utilisation, and Public Accounting	10	4	Low budget allocation for department infrastructure	by allocating more Budget
			Programme Specific Budget Allocation, Utilisation	10	2	Low budget allocation for department infrastructure	by allocating more Budget
			Library	20	2	No well functioning department library	By getting fund for improving
			Internet	5	5		
			Safety Norms and Checks	5	3		

			Counseling and Emergency Medical Care and Firstaid	5	0	No medical care and counselling	By providing counselling and medical care unit
Continuous Improvement	100	57	Improvement in Success Index of Students	5	4		
			Improvement in Academic Performance Index of Students	5	4		
			Improvement in StudentTeacher Ratio	10	8.5		
			Enhancement of Faculty Qualification Index	10	5		
			Improvement in Faculty Research Publications, R&D Work and Consultancy Work	20	5		
			Continuing Education	10	0	No continuing education cell	By starting continuing education cell
			New Facility Created	20	16		
			Overall Improvement since last accreditation, if any, otherwise, since the commencement of the programme	20	14		
Total Marks	1000	473.5		1000	473.5		

## **Annexure – 7**

## **Annexure-8**