

ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ, ਜਲੰਧਰ

AGENDA

for

35TH MEETING OF THE ACADEMIC COUNCIL

**on 11-05-2010 at 11.00 am
(TUESDAY)**



**PUNJAB TECHNICAL UNIVERSITY
JALANDHAR**

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

**AGENDA FOR 35th ACADEMIC COUNCIL SCHEDULED TO BE HELD ON 11-5-2010
AT 11:00 AM AT CONFERENCE HALL, PUNJAB TECHNICAL UNIVERSITY
JALANDHAR**

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35.4	To inform about all admissions & Counselling (2010-11)	1	IV (11)
35.5	To approve introduction of new courses (1) B. Tech. (Aeronautical Engg.) (2) B. Tech. (Welding Technology) (3) B.Sc (Cyber Tech.) (4) MBA (Agriculture & Food Business)	1	
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AGENDA FOR 35th ACADEMIC COUNCIL SCHEDULED TO BE HELD ON 11-5-2010 AT 11:00 AM AT CONFERENCE HALL, PUNJAB TECHNICAL UNIVERSITY JALANDHAR

35.1 To confirm the minutes of 34th Academic Council held on 08.02.2010

Minutes of 34th Academic Council held on 08.02.2010 were circulated to all members (**Appendix – I**). No comments were received.

The item is placed before the Academic Council for confirmation.

35.2 Action taken report on the 34th meeting of the Academic Council

The action taken report on the 34th meeting of the Academic Council is placed at **Appendix – II**.

The item is placed before the Academic Council for information.

35.3 To approve academic Calendar for the session 2010 -11.

The Academic Calendar for the session 2010 - 11 (Odd and Even Semester) is placed at **Appendix – III**.

The matter is placed before the Council for approval.

35.4 To inform about all admissions and counselling (2010-11)

CET- 2010 is being conducted on 2nd May, 2010. The schedule for counselling is attached **Appendix – IV**. All arrangement have been made for smooth conduct of CET.

The tentative Counselling Schedule for other courses is as below :

Sl.No.	Course	Dates
1.	M. Pharma	04 th and 05 th August, 2010
2.	M. Tech.	06 th and 07 th August, 2010
3.	Lateral Entry to B.Tech. / B. Pharma	09 th August, 2010 onwards

The matter is placed before the Council for information.

35.5. To approve introduction of new courses: (1) B.Tech. (Aeronautical Engg.) (2) B.Tech. (Welding Technology) (3) B.Sc. (Cyber Tech.), (4) MBA (Agriculture & Food Business)

The University has decided to introduce the following courses :

- (1) B. Tech. (Aeronautical Engg.)
- (2) B. Tech. (Welding Technology)
- (3) B.Sc. (Cyber Tech.)
- (4) MBA (Agriculture & Food Business)

The colleges interest to introduce the above courses may apply to the University within 10 days.

The matter is placed before the Council for approval.

(5) B.Tech Aero-Tech.

M.Sc. FT

M.Sc. Jalandhar Pharma
MBA - Pharmaceutical

35.6 To inform about the status of B.Tech. (TQM) to start at Gian Jyoti Institute of TQM, Mohali

A meeting of the special committee was held on 21st February, 2010 to decide the modalities of starting B.Tech. (TQM). The minutes of the meeting are approved by BOG and are placed at **Appendix - V**

The matter is placed before the Council for information.

35.7 To inform about Lateral entry admission to 2nd year / 3rd semester of BCA / BBA and B.Sc. courses

A committee was constituted to decide lateral entry to 2nd year / 3rd semester of BCA / BBA and B.Sc. courses to students who have passed Diploma after 10th / 10+2. The recommendations of the committee have been approved by the BOG and same is placed at **Appendix – VI**.

The matter is placed before the Council for information.

35.8 To decide about upgradation on 1st semester result instead of 1st & 2nd semester result.

Presently, the upgradation for the second year is being done based on 1st year marks. The admission to B.Tech. 2nd year / 3rd semester is also made to vacant seats of last year after the upgradation and migration process is over in addition to 10% additional seats for LEET.

In the prevailing conditions upgradation of students to their branch of choice is being done on the basis of 1st year result (i.e. 1st and 2nd semester) which is normally declared in the last week of July / 1st week of August due to which admission process for lateral entry is delayed.

To avoid this delay, it is proposed to conduct upgradation on the basis of 1st semester result instead of 1st year.

The item is placed before the Council for approval.

35.9 To submit Mandatory disclosure

It is mandatory for every college to submit Mandatory Disclosure every year. However, number of institutions have not uploaded the same till date. Therefore, all such institutes are requested to upload it on the college website by 20th May, 2010 and copy of the same may be emailed at deanacad_ptu@yahoo.com

35.10 Eligibility of student who did their Master's through Distance Education

In case of students who have done their Master's Degree through Distance Education Mode, the eligibility conditions is that the awarding University/ Institute must be approved by joint Committee of UGC /AICTE/DEC.

The same shall be applicable in case of PTU also.

The matter is placed before council for approval.

35.11 To approve amended Ph.D. Regulations.

The committee constituted to finalize the Ph.D. Regulations have amended Regulations by considering all the previous amendments and new UGC guidelines. The detailed regulations framed for Ph.D. have been placed at **Appendix – VII.**

The matter is placed before the Council for approval.

35.12 To inform about addition in BOS

34th Academic Council authorized the Vice-Chancellor to approve the addition / amendments in the BOS. The same have been approved and are placed at **Appendix – VIII.**

The matter is placed before the Council for information.

35.13 Award of Ph.D

RDC have recommend the following candidates for awarded of Ph.D.

S. No	Registration No.	Name	College/Insti	Specialization	Tital of Thesis
1	12.08.05 dated 18.11.05	Ms. Vandana Garg	ISF College of Pharamcy, Moga	Pharmacy	Biological Phyochemical & Standardization Studies on Gelsemimum Sempervirens Aiton
2	05.19.04 dated 27.04.04	Mr. Balkar Singh	PTU	Mechanical Engg.	Non-Linear Transient Analysis of Flexible non- recessed Hybrid Journal Bearing Using Finite Element Modeling

Academic Council may consider the case for recommendation to BOG for approval of the award of the Degree

35.14 Award of dual degrees to Indian and foreign students

The item has been received from LCET, Ludhiana for award of dual degree to Indian and foreign students. The detailed item is placed **Appendix - IX.**

The matter is placed before the Council for approval

35.15. Pending dues – collection of data (Non-AICTE Colleges)

The colleges were requested to send the data about sanctioned intake, admissions, fee paid etc. since establishment of the college. The college as at **Appendix – X** have not submitted the relevant detailed yet. They are once again requested to deposit the above data by 12.05.2010 positively and otherwise their case for continuation may not be processed.

The matter is placed before the Council for information.

35.16 Any other item with the permission of the Chair

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

Minutes of the 34th Academic Council Meeting held on 8th February, 2010 at 11:00 AM (Monday)

The new members introduces themselves to the members of the Council.

34.1 To confirm the minutes of 33rd Academic Council.

Minutes of 33rd Academic Council held on 29.08.2009 were confirmed.

34.2 Action taken report on the 33rd meeting of the Academic Council

The Council noted the actions taken on the minutes of the 33rd Academic Council meeting.

34.3 Award of Ph.D Degree

The council took note of award of Ph. D Degree to the following candidates and recommended to BOG for approval.

S.No	Registration No.	Name	F Name	College/ Institute	Speciali- zation	Titel of Thesis
1	14.16.04 dated 01.10.04	Mr Gurpal Singh.	Mr. Jagir Singh	A.P.& Head . Deptt. of CSE & IT, BBSCEY, Fatehgarh Sahib.	Engineering (ECE)	Mobility Management and Performance Enhancement in All IP Based Next Generation Wireless Networks
2	02.09.03 dated 14.05.03	Mr. Jyoteesh Malhotra	Mr. R.C. Malhotra	GNDU Regional Campus, Jalandhar	Engineering (ECE)	Performance Evaluation and Simulation of Wireless Communication System in the Presence of Fading
3	08.06.03 dated 12.09.03	Mr. Rattan. Chand	Mr. Bansi Ram	Lect. in Physics, Govt. Sr. Sec. School, Simla Distt. Mandi HP	Applied Sciences (Physics)	A Study of Wave Propagation Phenomenon in Thermoviscoelastic Materials
4	04.11.03 dated 17.10.03	Mr. Sushil Kumar	Mr. Sehaj Ram Sharma	Deptt. of Applied Sciences, NIT, Hamirpur	Applied Sciences (Chemistry)	Development of polymer based composites using Flax Cellulose as reinforcing agents and evaluation of some Mechanical and Chemical Properties.
5	11.11.03 dated 27.01.03	Ms. Anurag Pahuja	Sh Leela Dhar Pahuja	Apeejay Institute of Mgt. Jalandhar	Mgt	A Study of Corporate Governance in Selected Companies in Northern India
6	04.15.03 dated 17.12.03	Mr. Rati Kanta Bera	Mr. Pasupati Bera	SLIET Longowal	Applied Sciences (Chemistry)	Development of Fluorescent and Electrochemical Sensors for Environmental and Biological Applications
7	03.09.02 dated 22.06.02	Mr. Gopal Krishan Sharma	Mr. Harsavrup Sharma	NIT Jalandhar	Engineering (Chemical)	Study on Re-refining of used Lubrication oils

The Dean (Academic) informed the Council that eight more students are likely to complete the academic requirements for Ph.D. before Convocation. The Council authorized the Vice-Chancellor for making recommendations for such students for award of Ph.D. Degree to BOG for approval.

34.4 To approve the degrees to be conferred in 8th Convocation to be held on 25th February, 2010.

The Dean (Academic) informed the Council about 8th Convocation scheduled to be held on 25th February, 2010 at 11:00 am. His Excellency Governor of Punjab Shivraj Patil, the Chancellor of the University shall preside over and Prof. J.S. Bajaj Vice Chairman, State Planning Board, Punjab would deliver the convocation address. Dr. P.V. Indiresen, Padam Bhushan will be the Guest of Honour.

The Council approved award of the Degrees to merit holder students of all courses.

It was also decided that all Ph.D., 10 students each of M. Tech. & M Pharma and Medal recipients of all courses shall be invited on the convocation.

34.5 To consider amendments in Ph.D regulations

After a deliberation the Council approved the amendments in the regulations with the following modifications

2.1 The Admission test will be conducted twice in a year i.e. in December and June. Exemption for M.Phil if prevails in ordinances of other Universities may be considered on merit.

2.3 After admission the candidate will go through the prescribed course work at the University campus / allotted regional center / affiliated Institution of the university as decided by the University as per the scheme of examination for Ph. D candidates, and will pay the prescribed fees.

- II
1. Questions in test paper will be based on the common contents of
 - i. B.Tech and M.Tech courses of concerned disciplines of engineering
 - ii. B.Arch and M.Arch Architecture
 - iii. MBA
 - iv. B. Pharma & M. Pharma
 - v. Applied Sciences

It was also decided that at special test may be conducted for admissions in the current year.

34.6 Addition of new members in Board of Studies

It was decided that all Council members will send the names of the experts alongwith CV of the recommended person for addition in BOS within a week's time to the Dean (Academics) and after getting comments from BOS Chairman the final list will be issued.

The Academic Council authorized the Vice-Chancellor to approve the list on behalf of Academic Council



- 34.7 To constitute separate Board of Studies for**
 (i) **Physics and Material Sciences**
 (ii) **Chemistry and Environmental Sciences**
 (iii) **Mathematics**
 (iv) **Humanities / Communication Skills**

The Council approved creation of above Board of Studies and authorized the Vice-Chancellor to approve the list on behalf of Academic Council

- 34.8 Grant of grace marks in one subject to pass out students.**

The council ratified the decision of granting a special grace of upto four marks to such students of pass out batches having reappear in only one paper for completion of degree in any subject / semester.

The same provision shall be applicable to students supposed to be passed out upto June, 2009 only.

- 34.9 To review the eligibility criteria for M.Sc. (IT).**

The council approved the following eligibility for M.Sc. (IT)

Present Eligibility	Proposed
All those candidates who have passed any recognized bachelor's degree of minimum three years duration with Mathematics / Statistics / Business Mathematics / Business Statistics / Quantitative Techniques as compulsory / Optional / additional paper as one of the subjects either at 10+2 or at graduation level.	All those candidates who have passed any recognized bachelor's degree of minimum three years duration with Mathematics / Statistics / Business Mathematics / Business Statistics / Quantitative Techniques / Computer Science/ Information Technology as compulsory / Optional / additional paper as one of the subjects either at 10+2 or at graduation level. OR PGDCA / BCA / B.Sc.(IT)

The same shall be applicable from 2010 session onwards.

- 34.10 To inform about starting of PCI approved course Pharm'D.**

The council noted. The Scheme and syllabi has been referred to the concerned Board of Studies.

- 34.11 To consider guidelines for using Development Fund after 10 years of establishment of college.**

Council approved the proposal with the modification that 7.5% shall be spent for Training and Placement out of the budget allocation of 25% for upgradation



34.12 Issue of affiliation orders.

The council noted. Dean Academic briefed the Council that the BOG has given directions to the University not to make any admission to the college in session 2010 who fails to clear their dues. All the members were requested to clear their dues timely.

34.13 Result Calendar

Council appreciated the efforts of the University. It was informed that the University is adhering to the Result Calendar and results are being issued as per notified schedule.

34.14 Implementation of industrial training for B. Tech degrees.

Council approved the proposal that

1. Colleges should arrange the industrial training of all the students. In case of non-availability of training in industry for some students same may be given on industry live projects in the institution / college.
2. For each batch a coordinator of the training should be appointed as envisaged
3. The report of training should be prepared in the proforma to be supplied by the University

A report containing the information from 1 to 3 be submitted to the University alongwith the awards of industrial training.

34.15 Starting of B.Tech Industrial Engineering & Management as part time at Gian Jyoti School of TQM & Entrepreneurship, Mohali.

The item was deferred.

34.16 Any other item with the permission of the Chair.

Supplementary Agenda

Agenda items received from Colleges

- (i) 10% Extra admission to University Developed Non-AICTE approved courses

The item was deferred

- (ii) Clarification regarding Ph.D

Discussed under item No. 34.5

The meeting ended with a vote of thanks to the Chair.


Registrar

Appendix - II

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

Action taken on 34th Academic Council Meeting held on 8th February, 2010 at 11:00 am (Monday)

Item No.	Item	Action taken
34.1	To confirm the minutes of 33 rd Academic Council.	Confirmed in 34 th meeting
34.2	Action taken report on the 33 rd meeting of the Academic Council	Action taken and already reported in 34 th Academic Council meeting.
34.3	Award of Ph.D Degree	Ph.D Degrees have been awarded in 8 th Convocation
34.4	To approve the degrees to be conferred in 8 th Convocation to be held on 25 th February, 2010	The degrees have been conferred in 8 th Convocation
34.5	To consider amendments in Ph.D regulations	The matter is being placed as agenda point no 35.5
34.6	Addition of new members in Board of Studies	The addition of members has been approved by the Vice-Chancellor and the same is placed as item No. 35.7 for the information of the Council
34.7	To constitute separate Board of Studies for (i) Physics and Material Sciences (ii) Chemistry and Environmental Sciences (iii) Mathematics (iv) Humanities / Communication Skills	Notified.
34.8	Grant of grace marks in one subject to pass out students.	Implemented.
34.9	To review the eligibility criteria for M.Sc. (IT).	Amended and notified.
34.10	To inform about starting of PCI approved Pharm'D courses.	The proposal received has been forwarded.
34.11	To consider guidelines for using Development Fund after 10 years of establishment of college	Amended
34.12	Issue of affiliation orders	Affiliation orders have been issued to the colleges those have cleared dues.
34.13	Result Calendar	Remaining results have been declared as per schedule.
34.14	Implementation of industrial training for B. Tech degrees.	Letter issued to the colleges.
34.15	Starting of B.Tech Industrial Engineering & Management as part time at Gian Jyoti School of TQM & Entrepreneurship, Mohali.	The matter is being placed as item No. 35.8.
34.16	Any other item with the permission of the Chair.	
(i)	10% Extra admission to University Developed Non-AICTE approved courses	Item was deferred. No action required
(ii)	Clarification regarding Ph.D	Same as item No. 34.5.

Appendix – III

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

PROPOSED ACADMIC CALENDAR

Session : 2010-11

Event	Odd Semester (2010-11)	Even Semester (2010-11)
Academic Session	02.08.2010 to 01.12.2010*	03.01.2011 to 10.05.2011*
I Mid Semester test	23-24-25 Sept., 2010	17-18-19 Feb., 2011
II Mid Semester test	25-26-27 Nov., 2010	05-06-07 May, 2011
Practical Examinations & Preparatory Holidays	02-09 Dec, 2010	11-19 May, 2011
End Semester Exam (Regular)	10.12.2010 to 25.12.2010	20.05.2011 to 05.06.2011
Institutional Training / Workshop Training	-----	07.06.2011 to 25.07.2011
Vacation (for faculty)	15.12.2010 to 31.12.2010	30.05.2011 to 29.07.2011
Break for students who go for workshop training		26.07.2011 to 31.07.2011
Odd Semester starts 2011-12		01.08.2011

Note : The external and internal examination for workshop and industrial training will be conducted in between the semester by the Institutions

Note : The colleges can arrange third mid semester test at their own level.

*Number of days falling short of 90 should be compensated by making Saturdays Working by the institutions

Admission Schedule for CET – 2010

1st Round (85% & 15% Category)

Date	Event
15 th May to 9 th June, 2010	Counselling Fee Deposition at Banks
12 th June 2.00 PM	Uploading Fee status
15 th June 9.00 AM	Registration & pre-eligibility check. Choice Filling by CET & AIEEE candidates
22 th June 5.00 PM	Close of Choice Filling
23 rd to 25 th June	Result processing & verification
26 th June	Result declaration & provisional seat allotment letter
27 th June to 30 th June 5.00 PM	Eligibility check and fee deposit at Participating Institution and issue of final admission slip
1 st July to 5 th July	Seat matrix updation on website for 2 nd Counseling.

2nd Round (85% Category)

6 th July to 8 th July	Choice Filling for 85%
8 th July (05.00 PM)	Close of Choice Filling
9 th to 10 th July	Result processing & verification
12 th July (10.00 AM)	Result declaration & provisional seat allotment letter. Management Quota Counselling starts
12 th July to 15 th July	Fee deposit at Participating Institution, eligibility check and issue of final admission slip
16 th July	Status updation of seats in college
17 th July to 19 th July	Seat matrix Updation

2nd Round (15% Category)

20 th July to 22 nd July	Start Choice filling for 15% students
23 rd to 24 th July	Result processing & verification
26 th July	Result declaration & provisional seat allotment letter
27 th to 31 st July (05:00 pm)	Fee deposit at Participating Institution, eligibility check and issue of final admission slip
2 nd August	Status updation

and Punjab students also

12th July 2010

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR**Notification**No. PTU/reg/notification/01 | *Punjab* 1124dated
28-04-10

The Board of Governor is pleased to approve the following in respect of PTU – Gian Jyoti School of Excellence in TQM and Entrepreneurship, Mohali

1. The institute may conduct B. Tech. (Industrial Engineering & Management with specialization in TQM) courses in Part-time Mode w.e.f. from Academic Session 2010 -11.
2. Duration of the course shall be four year (8 semesters) and the maximum duration will be eight years.
3. Admission to the above courses shall be twice a year (intake shall be 180 i.e. 90 per semester). When the number of applicants is more than the sanctioned intake, the selection should be done on the basis of aggregate percentage in Diploma exam plus some weightage for work experience (say 1% for each year of experience to maximum of 10%) shall be given.
4. Awards to the extent of 60% of the total marks in a subject shall be through Internal assessment. However, in doing so the assessment (Internal) for the Projects / assignments must be evaluated by an examiner who is not from within the system in which the student is employed.
5. Weightage of 70% shall be through Internal Assessment in respect of laboratory & project courses. The conditions as in above (for evaluation) shall be applicable in this case also.
6. The semester examinations shall be conducted alongwith the regular examinations of B. Tech. courses.

B. Singh
Registrar

Draft Academic Regulations for B.Tech. (Part-time) Industrial Engg. & Management (Spl. in TQM)

1. Duration

Duration of the programme will be eight consecutive semesters, spread over 4 academic years (one academic year comprising of two semesters).

- 1.1 A student is ordinarily expected to complete the B.Tech. (Part-time) degree programme in 4 years (eight semesters) but in case he/she is unable to complete the course requirement in eight semesters, he/she may complete it within a maximum of sixteen semesters (eight years) reckoned from the commencement of the first semester to which the candidate was admitted.

2. Eligibility for admission

- 2.1 The candidate must have a technical diploma from an institution approved by Board of Technical Education from any state or equivalent (Three year diploma) or Bachelors Degree in Science with Mathematics.
- 2.2 The candidate shall have been employed for a minimum of one year as on date of admission.
- 2.3 He/ She must be in a good mental and physical health. Each candidate shall have to produce a medical fitness certificate, as prescribed by the University.

3. Examinations

3.1 General

- 3.1.1 The University examination shall be held at the end of each semester as per the prescribed scheme of examination and date sheet notified by the University.
- 3.1.2 It will be the responsibility of the candidate to collect all information regarding examination-schedule, admit card and result etc. from the School's office. Students will collect the admit card at least one day before the commencement of the examination.
- 3.1.3 The School office shall display on the website, the schedule of examination/date sheet etc. as soon as it is received from the University. The University will normally supply this information not less than fifteen days before the start of examination.
- 3.1.4 No candidate will be allowed to appear in the University examination without the admit card.
- 3.1.5 The medium of instruction and examination shall be English.

3.2 Eligibility

- 3.2.1 In order to be eligible to appear in any semester examination the candidate must have his examination form submitted to the Registrar through the School along with the following certificates signed by the Principal/Authorised signatory.
 - i) Of having remained on the rolls of the School.
 - ii) Of having attended not less than 75% of the aggregate scheduled periods in each prescribed course of Theory (lectures + tutorials) and Practical (including

- iii) Ideally, every student is expected to attend all classes and earn 100% attendance. However, in order to allow provision for certain unavoidable reasons, the student is expected to earn a minimum of 75% attendance. Therefore, he/she shall secure not less than 75% for overall attendance in that semester taking into account the total number of periods in all courses attended by the candidate as against the total number of periods in all courses offered during that semester.
- iv) Attendance shortage upto 10% in the total due to medical reasons, calamity or any other untoward reason may be condoned by the head of the institute (Principal / Director / CEO) subject to the condition that the candidate submits documents in support of the same.
- v) Candidates who do not satisfy the clauses 3.2.1.iii & 3.2.1.iv will not be permitted to write the end-semester examination of that current semester. They are required to repeat the incomplete semester in the subsequent semester.

3.3 Examination Fee

- 3.3.1 The amount of examination fee to be paid by a candidate and the last date by which his/her examination form and fee must reach the Registrar, shall be notified by the University.
 - i) Examination forms will be accepted with late fee of Rs. 1000/- upto 7 days before the commencement of examinations.
 - ii) Under very special circumstances, examination forms shall be accepted by the University upto two days before the commencement of examination on payment of late fee of Rs. 2000/-.
 - iii) Examination form shall be accepted upto the evening previous to the date of examination on payment of late fee of Rs. 5000/- with the approval of the Vice-Chancellor.
- 3.3.2 The examination fee for one or more reappear/repeat papers of any examination shall be the same as for the whole of semester examination. Separate examination forms for papers belonging to different semesters are to be filled by the candidate indicating paper(s) offered for each semester examination.

3.4 Reappear

- 3.4.1 In case of reappear papers, candidates shall be required to submit their Examination Forms within 15 days from the date of declaration of the result, or the regular date for submission of examination forms, whichever is later.

4. Evaluation System

- 4.1 In a theory paper, the question paper will be set by an examiner appointed by the Vice-Chancellor from a panel of examiners, proposed by the Board of Studies of that discipline. A sample question paper of the concerned discipline will be supplied to the paper setter for guidance.
- 4.2 The answer books will be evaluated by table marking in the University or evaluation centres set up in affiliated colleges/institutes. For each subject, a panel of evaluators will be appointed.
- 4.3 Practical examination in each practical subject will be conducted jointly by an internal and an external examiner. The internal examiner will be from the College, where examination is being conducted, while the external examiner may be from any of the affiliated Colleges of the University or from outside.

4.4 In case an examining for practical examination does not report at the scheduled date, the Principal/ Director/ CEO of the College will make alternative arrangement from within the College or from outside and intimation of the same will be sent to the University immediately.

5. Certification

5.1 Conditions for Certification

- 5.1.1 Every candidate shall be examined in the subjects according to the syllabi and course outlines prescribed from time to time.
- 5.1.2 For all subjects other than projects, seminars and labs, 40% marks will be for the external examination and 60% marks will be for internal assessment. Internal assessment will be based on attendance, quiz test, assignments and class participation etc. The project report, and its presentation, seminars and practicals, shall be evaluated with weightage of 70% internal and 30% external examinations.
- 5.1.3 The students will have to obtain a minimum of 40% marks in written Theory, external Practical examination, and internal assessment separately to pass the subject. However, to become eligible for the award of degree, a student must obtain a minimum of 50 % of the total marks of all the courses prescribed for the 8 semesters.
- 5.1.4 In case the student fails to obtain a total of 50% marks in any subject at any stage, he/she may improve the percentage of marks by reappearing in the subject(s) of his/ her choice at the time the subject(s) are being offered next within the specified maximum duration of the course, provided that at the end of 8 semesters improvement shall be allowed only to those students who get an aggregate of less than 50% marks and the maximum duration of the course is not over.
- 5.1.5 Reappear/ Improvement exams will be taken with the scheduled exams of the coming batches.
- 5.1.6 The enrolment/registration number of the candidate for the programme will be valid for the maximum period for the completion of the programme mentioned in clause 7.1.
- 5.1.7 The internal assessment will be based on continuous evaluation of the students, through class tests, quizzes, seminars, home assignments and class work.
- 5.1.8 The internal assessment marks will be submitted to the University within 15 days after the final examinations of the semester.
- 5.1.9 The internal assessment marks may be moderated by a Moderation Committee appointed by the Vice-Chancellor, if required.
- 5.1.10 At the end of each semester, the University will conduct semester examination. A student will be supplied detailed marks card (DMC) indicating the marks obtained in each course passed.
- 5.1.11 The University will publish the final result obtained by each candidate when the candidate has cleared all the courses/papers/subjects of all the eight semester examinations. Division will be awarded in the degree.

5.2 Award of Degree

A student will be awarded degree subject to the following conditions:

- i) must have obtained a total of 50 percent marks at the end of eight semesters of study, as applicable.
- ii) has paid all the fees and other charges including fines, if any, due from him to the University.

Minutes of Meeting of Special Committee of PTU, constituted for B.Tech.-Industrial Engg. & Management (Spl. in TQM)

Date: 21st February, 2010

Time: 11.30 hrs

Venue: PTU's Gian Jyoti School of TQM and Entrepreneurship,
B-102, Industrial Area, Phase VII, Mohali.

Agenda:

Running of B.Tech.-Industrial Engg. & Management (Spl. in TQM) as Part-time programme under regular stream at PTU's Gian Jyoti School of TQM and Entrepreneurship.

Present:

1. Dr. R S Khandpur : Director General, Pushpa Gujral Science City, Chandigarh
2. Dr. N P Singh : Dean Academics, PTU, Jalandhar
3. Dr. D S Hira : SUS College, Tangori
4. Dr. M S Grewal : Principal, Baba Banta Singh Bahadur Engineering College, Fatehgarh Sahib
5. Dr. V K Jadon : Professor and Head, Rayat Bahra Institute of Engineering, Kharar
6. Mr. Manish Trehan : CEO, PTU's Gian Jyoti School of TQM & Entrepreneurship, Mohali

1. Dr. N P Singh welcomed all the members of the committee and briefed them about the proposal for running B.Tech.-Industrial Engg. & Management (Specialisation in TQM) as part-time programme under regular stream of PTU at PTU's first School of Excellence and constituent institute, PTU's Gian Jyoti School of TQM and Entrepreneurship, Mohali:
 - a) PTU's Board of Studies (Mechanical / Production / Industrial Engineering) prepared the Scheme & Syllabus for B.Tech. (Part-time)-Industrial Engg. & Management (Specialisation in TQM). The final draft was forwarded to Dean-Academics on 3rd February, 2010 and discussed in PTU's Academic Council Meeting on 8th February, 2010.
 - b) In the Academic Council meeting, a question was raised regarding the proposed duration of 3.5 years (7 semesters) of this part-time B.Tech. programme for working diploma holders with minimum 2 years experience. It was decided to refer the matter to a special committee of the Academic Council, which was also entrusted the responsibility of looking into other technical aspects of the programme.
 - c) Copy of the proposed Scheme & Syllabus of this part-time B.Tech. programme, along with the minutes of the various meetings of the Board of Studies was circulated to the committee members.

Contd. P. 2

(Signature)

(Signature)
27/2/10

(Signature)
R. S. Khandpur

(Signature)
N.P.

(Signature)

2. Dr. R S Khandpur raised a query whether approval from AICTE is required for running this part-time B.Tech. programme at PTU's Gian Jyoti School of TQM and Entrepreneurship.

Dr. N P Singh clarified that since PTU's Gian Jyoti School of TQM and Entrepreneurship, Mohali is a constituent unit of PTU, no such approval is required. He mentioned that there is an AICTE notification to this effect, which was referred to by PTU when it started full-time B.Tech. programmes at Caparo School of Manufacturing and Materials Technology.

However, members requested Dr. N P Singh to check the current status again.

- * 3. As regards the duration of the programme, members suggested that it should be a 4 year (8 semester) programme, with final semester for major project. The maximum duration should be 8 years. The committee recommended that the Board of Studies should redo the Scheme & Syllabus in line with this.
4. Members suggested that the possibility of conducting some of the laboratory work at the student's own place of work, under a supervisor from the student's organization, could be explored.
5. The minimum educational qualification should be as per PTU's LEET scheme, i.e., 3-year Diploma from an institution approved by Board of Technical Education of any State or equivalent. In addition, minimum work experience of 1 year should be mandatory.
6. To start with, the intake should be 120 students every year – it may be split into two intakes of 60 students each, once in July and once in January. When the number of applicants is more than the sanctioned intake, the selection should be done on the basis of aggregate percentage in Diploma exam. plus some weightage for work-experience (say 1% for each year of experience, subject to maximum of 10%), which may be notified by PTU.

7. Evaluation

Members endorsed the recommendation of BOS for evaluation as under:

	<u>Internal</u>	<u>External</u>
Theory courses	60%	40%
Laboratory & Project courses	70%	30%

As regards end-semester university examination for theory courses, Committee recommended that the exams should be closed-book. Keeping in view that this B.Tech. programme emphasizes application-based learning, the question paper should have application-oriented questions.

8. The Academic regulations for this programme should be notified separately by PTU.

Meeting ended with thanks to the Chair.

* Subject to be increased to make the credit hours nearly equal to B.Tech. Program
(ii) Contents to be improved by including courses related to Analysis & Design as well as CAD/CAPP.

R. S. Khandpur

Dr. R S Khandpur

NPS

Dr. N P Singh

Dr. D S Hira

25/3/2010

Dr. M S Grewal

Dr. V K Jadon

Mr. Manish Trehan

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

Minutes of the meeting of committee, constituted to decide lateral entry admission to BBA / BCA / B.Sc. etc. courses to Diploma Holders, held on 26.03.2010 at 11:00 am in the office the Dean (Academics)

The following were present :

- | | | |
|----|---|-------------------|
| 1. | Dr. Buta Singh, Dean (Academics) | - Chairman |
| 2. | Er. H.S. Bains, Registrar | - Special invitee |
| 3. | Dr. B.S. Bhatia, Director, RIMT-IMT, Mandi Gobindgarh | - Member |
| 4. | Dr. J.S. Dhillon, Prof. & Dean (Academics), SLIET, Longowal | - Member |
| 5. | Dr. P.K. Bansal, Ex-Principal, MIMIT, Malout | - Member |
| 6. | Er. Darshan Singh, Professor, ECE Deptt. GZSCET, Bathinda | - Member |

For the larger interest of the qualified diploma holder students and to promote the professional placement prospects the committee resolved that the candidates who have qualified diploma programmes as specified below should be eligible :

1. Students who have passed three year diploma after 10th or 2 years diploma after 10+2 recognised by Punjab State Board of Technical Education & Industrial Training, Chandigarh or equivalent are eligible for lateral entry to 2nd year i.e. 3rd semester of the following programmes :
 - (i) BBA
 - (ii) BCA
 - (iii) B.Sc. (IT)
 - (iv) B.Sc. (ATHM)
 - (v) B.Sc. (MEFT)
 - (vi) B.Sc.(HMCT)
 - (vii) B.Sc. (FT)
2. For B.Sc. (Bio-Technology) eligibility shall be pass in three year diploma in Engineering/ Technology after 10th OR 2 years diploma in Engineering / Technology / Pharmacy after 10+2 recognised by PSBTE&IT, Chandigarh or equivalent.
3. Further the committee recommends that such students will have to study bridge courses during 3rd / 4th semester / summer break of the respective programme. Details of bridge courses will be decided by the respective BOS & the teaching of these courses will be provided by the respective colleges.
4. Students have to clear the bridge courses within the normal stipulated period.

Sd/-
(Dr. B.S. Bhatia)

Sd/-
(Dr. J.S. Dhillon)

Sd/-
(Dr. Darshan Singh)

Sd/-
(Dr. P.K. Bansal)

Sd/-
(Dr. H.S. Bains)
Registrar / Special Invitee

Sd/-
Dean (Academics)
Dean (Academics) / Chairman

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

Minutes of the meeting held on 06.04.2010 regarding amendments in Ph.D regulations according to UGC guidelines.

The following were present :

1. Dr. Buta Singh Sidhu, Dean Academics
2. Dr. D.S. Hira, Director, SUSCET, Tangori
3. Dr. M.S. Grewal, Principal, BBSBEC, Fateharh Sahib
4. Er. E.S. Johal, Deputy Registrar

The following decisions were taken:

1. In addition to the amendments approved in 34th Academic Council meeting, the candidates who have M. Phil Degree are also exempted from Entrance Test for admission to Ph. D.
2. An examination Fee Rs. 1000/- shall be charged for Entrance Test.
3. Course work fees per subject shall be at par with M. Tech. fees being charged in Regional Centres of PTU.
4. Faculty at the level Professor can guide seven Ph.D. students, Associate Professor Five and Assistant Professor three candidates
5. Maximum time period for completion of course work shall be one year. If the course work is not cleared within stipulated time period the students may seek re-registration.
6. Annual Progress Report will be submitted by the guide through the Head of the Institution (where the student is registered).
7. An internal candidate shall be defined as a full time member of the faculty or a research fellow of any Department of Punjab Technical University, Jalandhar or any Institute affiliated to Punjab Technical University, Jalandhar
8. An external candidate shall be defined as an employee of a public sector undertaking, a Government department, a research / development or a private industry or an educational Institution not affiliated to but recognized by Punjab Technical University, Jalandhar as Centre of research. Such candidates shall produce a certificate from the Head of the Organization (where working) that he /she would be allowed to spend a minimum of 12 months residency at the place of his registration (Any Regional Centre of Punjab Technical University, Jalandhar).
9. Few cases of Ph. D registration were pending due to clarification regarding degree from Distance Education. It was decided that these students will have to clear Entrance Examination alongwith the new students. However they will be governed by old Ph. D. regulations existing at time of submission of their application.
10. The test should be objective type with minimum 90 minutes duration and 40 % is the minimum qualifying percentage.

Sd/-
(Dr. D.S. Hira)

Sd/-
(Dr. M.S. Grewal)

Sd/-
(Er. E.S. Johal)

Sd/-
Dean (Academics)

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR

PH.D. REGULATIONS (AMENDED)

I. ELIGIBILITY

- a) A candidate seeking enrolment must satisfy the following academic criteria:
Masters degree in the concerned/allied subject with 60% marks at Masters Level or CGPA of 6.75 on 10 points scale or equivalent
or
M.Phil./M.Litt. Degree with B+ Grade or equivalent in case of applied sciences.
- b) Internal Candidate shall be defined as full time member of the faculty or research fellow of any department of Punjab Technical University (PTU) Jalandhar or any college/ institute affiliated to PTU.
- c) An External Candidate shall be defined as an employee of public sector undertaking, a Government department, or Research/Development or a Private industry or an educational institution not affiliated to but recognized by PTU Jalandhar as centers of research. Such candidates shall produce a certificate from the Head of the organization mentioning that he/she would be allowed to spend a minimum of 6 months of residency at place of his/her registration (i.e., any institute affiliated to PTU).
- d) However degree will be awarded in the concerned subject (Engineering, Management, Pharmacy, Hotel Management, Architecture, Basic and Applied Sciences).

II. RESIDENCY CONDITIONS:

All research scholars are required to spend at least 6 months for consultation and research work in the department wherever registered. The certificate in this regard, by the Supervisor and counter-signed by the Head of the Institute, is to be submitted to Dean (Research) PTU.

III. PROCEDURE FOR REGISTRATION

(a) APPLICATION FOR ENROLMENT:

A candidate wishing to enroll for the Ph. D Degree shall fill the prescribed application form and submit the same along with a fee of Rs.1000/- in kind of demand draft (favouring Registrar PTU Jalandhar) to the Head of Institution for onward submission to Punjab Technical University, Jalandhar. The Head of the institution after verifying the eligibility conditions shall forward the same to the university within a week. Applications for enrollment shall be entertained by the university throughout the year.

(b) ENTRANCE TEST FOR ENROLMENT:

- (i) The entrance test for admission to Ph. D program will be conducted in the month of December/June every year, the exact date of the examination will be advertised by the PTU separately. The applications received till one month before the date of test shall be entertained.
- (ii) Separate question papers will be set for candidates of different disciplines of Engineering/Architecture/Pharmacy/Management/Sciences.
- (iii) The question paper will be objective type and of 90 minutes duration. The minimum qualifying percentage is 40.
- (iv) Course contents for the test will be based on the fundamental and subjective aspects of the concerned discipline.
- (v) Candidates who have already cleared UGC/CSIR Exam/SLET/GATE will be exempted from entrance test and preference will be given to them for admissions. The inter-se merit of such candidates will be determined by their score in UGC/CSIR Exam/SLET/GATE.

- (vi) The candidates having M. Phil degree may be given exempted from test provided their admission in M. Phil was through an entrance examination. Such candidates shall provide an appropriate proof for the latter.
- (vii) The inter-se merit of candidates appeared in test will be made on the basis of merit calculated as per the following criteria:

Weightage to marks in Master's/M. Phil programme: 40%
Weightage to marks in admission test: 40%
Weightage to interview: 20%

At the time of interview candidates are expected to discuss their research interest /area with interview board. Only the predetermined number of students, based upon the available recognized research supervisors (with concerned specialization/research interest) will be selected for admission to Ph. D and the list of successful candidates shall be released.

(c) APPOINTMENT OF SUPERVISOR

The successful candidates are required to contact the available recognized research supervisors (with concerned specialization/research interest) from within the PTU (this includes teachers in the colleges affiliated to the PTU). Subsequently the allocation of supervisor shall be approved by the university, based upon the written request of the candidate endorsed by the supervisor. If necessary, Co-supervisor may be appointed from within the same Department or of a different Department of the University or outside the University. However, a written justification for having a Co-supervisor should accompany the application duly recommended by the supervisor. Only such expert may be proposed as Supervisor or Co-supervisor who is holding a Ph. D. or equivalent degree or research work equivalent to Ph.D. as per the University equivalence rules and is not below the rank of Assistant Professor.

The maximum number of candidates those can be registered for enrollment to Ph.D. Degree under a Supervisor/Co-supervisor is as follows.

Assistant Professor	-	3
Associate Professor	-	5
Professor	-	7

The upper limit of number of candidates includes all full-time and part-time research scholars put together under a Supervisor or Co-supervisor. A certificate in this regard shall be given by the Supervisor/Co-supervisor. While calculating the number of candidates in case of combined supervision, the load should be equally divided within the supervisors e.g., in case of two supervisors allotted to a candidate, the load of each supervisor shall be 0.5.

Provided further that no relative of the candidate such as wife, husband, son, daughter, sister, brother, wife's or husband's brother and sister, brother's son and daughter, sister's son and daughter, first cousin, nephew, grand-son, grand-daughter, or such other person as may be deemed a close relation by the Vice-Chancellor, shall not be appointed as Supervisor/Co-Supervisor. A certificate to this effect will be given by the Supervisor/Co-supervisor along with the application for enrolment.

(d) REQUEST FOR CHANGE OF THE SUPERVISOR

Such requests could be entertained only:

- (i) In case the Supervisor has left the service of the University or its affiliated institute.
- (ii) In case of extreme hardship where it becomes almost impossible for a candidate to work with the existing Supervisor, in that case the matter may be placed before the committee constituted by Dean Research.

- (iii) The change of Supervisor shall be allowed during the first two years after registration. No change will be allowed after that period.
- (iv) If the supervisor proceeds on long leave for three or more than three years, he/she may not be allowed to act as Supervisor. However, Ph.D. scholars who are already registered prior to proceeding on long leave may be allowed to continue provided an administrative supervisor is also appointed to facilitate the work of the candidate.

IV. GUIDELINES CANDIDATE SELECTED FOR ADMISSION TO Ph. D DEGREE

Candidate shall fill the prescribed application form for registration and submit the same along with a fee of Rs.10, 000/- to the University through the Head of Institution for temporary registration. The candidate shall also submit one-page (maximum) report on the research area in which he/she intends to work for his/her Ph. D degree. Based upon this report, the candidate shall be advised to take up course work. Candidate shall complete the prescribed course work at the allocated regional centre/affiliated institution of university for a minimum period of one semester as per the scheme of examination of Ph. D. programs by paying the prescribed fee for the course work as applicable to M Tech. courses to the allocated regional centre. One of the courses shall be on research methodology (which may include quantitative methods and computer applications) which is compulsory to all the candidates and the second subject shall be recommended by the supervisor concerned with research area. The courses should be of post graduation level as per the PTU nomenclature. The course should be completed by the candidate within one year of enrollment and pass percentage in the course work is 65.

After temporary registration, the candidate will submit the synopsis of the proposed work, within a period of eighteen months of his/her enrolment through the supervisor to the university. If he/she does not submit the synopsis within this period, his/her temporary registration shall stand cancelled. However the candidate with prior permission of Dean Research may apply afresh along with a registration fee of Rs 10,000/- again within twenty four months from the date of first enrollment to the university through the supervisor. No further extension shall be given and the enrolment shall deem to be cancelled.

All those who are registering for Ph. D. shall have to pay an Annual fees of Rs. 5000/- by 31st March every year. Late fee for delayed payment of annual fee shall be Rs.100/- per month. Thesis submission/evaluation charges shall be Rs. 15000/- at the time of submission. Late fee with regard to submission of Annual Progress Report shall be Rs.1000, whereas Rs 5000/- shall be charged for Topic Modification.

The candidate will submit 8 copies of the synopsis giving brief outlines of about 7 – 8 pages, indicating the purpose/objective of the research, brief review of literature, general approach and/or research methodology to be used, tentative plan of work/chapter scheme, bibliography / references etc.

A Research Degree Committee (RDC) consisting of the following will evaluate the synopsis:-

1. Dean Research or Nominee (Chairman)
2. Supervisor/supervisors
3. Two External Experts who had evaluated the synopsis (List of minimum six external experts to be submitted by the Supervisor, out of which the Vice Chancellor shall appoint two examiners.)

Copies of the synopsis for registration for Ph.D. Degree will be provided to the above said committee members at least one month in advance to the date of RDC meeting or date of presentation of seminar. It is understood that all the deficiencies/improvements to be made in the synopsis will be settled in the meetings of RDC. **The quorum for holding the synopsis evaluation will be three members.**

In the seminar/ presentation

- (a) The candidate shall be required to present a seminar pertaining to Registration on the topic of his/her study in the presence of RDC to which other members of the university /affiliated colleges may also be invited.
- (b) The RDC while recommending registration of the candidate for consideration shall send a detailed note about the suitability of the research topic as well as the methodology proposed by the candidate.

The note shall include the names of the members of RDC present at the meeting, the discussions hold and its final outcome.

If the RDC approves the synopsis and registration to the Ph.D., his/her temporary registration will be considered as confirmed. In case the RDC does not approve the topic or suggests some modifications in the title, field of work, research methodology etc. the case will be referred to Dean Research along with reasons and justifications. In such case the candidate may avail one more opportunity with prior permission of Dean Research to resubmit the synopsis after duly incorporation of suggestions made by the RDC, within six months. In case synopsis is rejected second time, the candidate will have the option to apply for a fresh registration on new topic.

- (c) Letter of confirmed registration will be issued by the university to candidate.

V. TOPIC MODIFICATION

A candidate may within one year of his/her registration modify the scheme of his/her research work with the approval of the RDC. Provided that the RDC allows modifications to be made such that the modifications proposed did not involve any major change in the original scheme and scope of the subject.

VI. GENERAL REQUIREMENTS DURING THE PERIOD OF REGISTRATION

A candidate will have to submit Annual progress report, which shall be submitted to the Office of the Dean Research through the supervisor latest by 31st March of every year. The report will include all the progress aspects such as surveys, tours, publications, research work etc. The supervisor of the candidate shall endorse the progress of the candidate. If a candidate is registered between 1st December and 31st March of a year he/she need not submit annual report by or before 31st March of that year. However, all the other candidates shall be required to submit their annual progress report by 31st March every year. In case of non-receipt of a progress report or irregular reports the matter shall be put before research Degree committee (RDC) for cancellation of registration.

VII. PERIOD REQUIRED FOR SUBMISSION OF THESIS AND EXTENSION IN PERIOD

The minimum period required for submission of thesis is two and half years and maximum period is five years and for this purpose the period shall be counted from the date of issue of enrollment letter. However, after five years, a candidate may seek extension for sixth year by paying a fee of Rs 10,000/- and for the seventh year by paying a fee of Rs 15,000. No extension shall be allowed further. Registration of candidates who fail to submit their thesis within the stipulated period as mentioned above or who fail to apply for grant of extension would automatically stand cancelled.

VIII. SUBMISSION OF THESIS

Pre-Submission: If a candidate wants to submit Ph. D. thesis, he/she should inform the office of Dean Research through a letter forwarded by his/her supervisor mentioning that he/she intends to submit his/her thesis. For that he/she will also submit five copies of extended abstract of the thesis for

pre-submission evaluation. Simultaneously the supervisor will submit a panel of examiners. The Office of Dean Research would then process the application and take steps for the appointment of Examiners and obtain acceptance from the concerned Examiners from that panel.

The candidate will give a pre-submission seminar before submission of Thesis. Annual progress report needs not to be submitted once the candidate successfully accomplished his/her pre submission seminar, however he/she shall produce rough draft of thesis at the time of presentation. The presentations shall be organized by the university.

For these presentations following committee shall be constituted:

1. Dean Research or Nominee
2. Supervisor/supervisors of the candidate
3. Two external experts (List of minimum six external experts to be submitted by the Supervisor, out of which Vice Chancellor shall appoint two examiners.)

A report including the copy of the presentation and recommendation of the committee will be sent to the Dean Research for further action.

A candidate must submit the Ph.D. thesis within three months from the date of presentation of pre-submission seminar. In case of non-submission of thesis within the stipulated period, the candidate can seek extension of further three months from the Dean Research with a late fee of Rs. 1000/- .

- (a) Thesis presented by the candidate must be a part of original research work characterized either by the discovery of new facts or by fresh interpretation of facts or theories or should consist of applied work such as developing and fabricating special instruments or apparatus and should show the candidate's capacity for critical examination and judgment and for lucid presentation.
- (b) The candidate will not be permitted to submit his/her thesis for the degree unless his/her supervisor is satisfied that the thesis presented is worthy of consideration for the award of the Ph.D. degree.
- (c) The candidate may incorporate in his/her thesis the contents of any work which he/she may have published on the subject and shall inform the examiners, if he/she has done so; but he shall not submit his/her thesis on any work for which a degree has already been conferred on him/her by this or any other University. The candidate may, however, incorporate in his Ph.D. thesis any work from his/her M.Phil./M.Litt. dissertation with due reference to the thesis and acknowledgement to the Supervisor provided the work has been carried out at this University.

Provided that in case the work was done through collaboration, a certificate duly signed by all collaborators and countersigned by the supervisor concerned, to the effect that none of the collaborators has made or will make use of the joint work (published/unpublished) incorporated in this thesis for the award of any degree/diploma of any University/Institution, shall be furnished along with the thesis. Also, he/she has to submit No Objection Certificate (NOC) from the collaborating organization.

- (d) At the time of submission of thesis, a candidate will produce evidence of having published two research papers (relating to the research topic on which he/she has been registered for Ph.D. Degree and the academic work included in the thesis) in refereed Journals, with at least one Journal having impact factor equal to or more than one.
- (e) At the time of submission of thesis, the candidate will give a certificate on the prescribed form that there is no plagiarism/word to word copy of matter from any other script or document in the present thesis.
- (f) Along with five copies of thesis a candidate is required to submit a soft copy (in MS word and .pdf format) in the form of CD for keeping in the University Library. The same may be submitted to UGC to put on Infilbnet.

IX. PANEL OF EXAMINERS

Supervisor would submit a panel of minimum of eight examiners out of which at least half will be from within India and rest half from abroad indicating the full particulars about their designation, area of specialization etc. for the evaluation of the thesis. The supervisor should preferably recommend only those examiners whose research work is referred by candidate in his/her research work under evaluation. The Vice-Chancellor will appoint two examiners from the panel and at least one of them would be from abroad.

The persons recommended for the evaluation of the thesis should invariably be Professor or of equivalent rank. The examiner will be free to seek clarifications on any matter from candidate's supervisor or the co-supervisor through Dean Research. The Dean Research will ensure the secrecy of examiner's identity.

The examiner will state in his/her report:

- (a) Whether he recommends the award of the degree to the candidate without any changes.
- (b) Thesis is acceptable subject to the satisfactory answer to the queries raised by the examiner during the final viva-voce examination.
- (c) Whether he/she recommends re-submission of the thesis after revision. In case an examiner recommends revision of the thesis he/she will also indicate the nature of changes.
- (d) Whether he/she recommends rejection of thesis.

In the event of an examiner making recommendations for revision/modification of the thesis, the However, if the examiner is not satisfied with the candidate's defense, the candidate shall be required to carry out necessary revision/modification as finally suggested by the examiner before his/her case is processed further. It may be added that one examiner can recommend revision of thesis only once. If a second revision is recommended by the same external examiner then it will be treated as rejection of thesis.

The candidate who is required to resubmit the thesis, must do so within one year from the date of receipt of comments of the examiner to him/her by the University irrespective of his/her submission of defense unless extension is specially given by the Vice-Chancellor. A resubmitted thesis will be examined by the examiner who has recommended re-submission unless he/she himself is unable to do so or declines to do so.

In the event of one of the examiners recommending the award of the degree and the second examiner recommending rejection of the thesis; on the recommendation of the Vice-Chancellor, the thesis shall be referred to a third examiner to be appointed by the Vice-Chancellor from out of the original panel of examiners. The third examiner shall not be informed of the recommendations of the two examiners. The recommendations of those two examiners who submit similar recommendations shall be final. This procedure shall also be followed if the examiner who has suggested modification rejects the revised thesis.

Each examiner shall be given three month's time for the evaluation of thesis. In case report from him/her is not received, he/she may be reminded telegraphically or through e-mail. After the period of three months if no report is received, the next examiner may be appointed. The first examiner will be requested to send the thesis back to university. If in due course, the report is received from the first examiner, the report will not be considered.

X. VIVA-VOCE EXAMINATION

The candidate is required to appear in an open house viva-voce examination, which shall be compulsory for all the candidates. This will normally be conducted at PTU by one of the two external examiners who have evaluated the thesis. The Dean Research/Nominee and the Supervisor of the

candidate will be associated with the conduct of the viva-voce to be arranged by the university. There will be a presentation by the candidate before the following committee:

1. Dean Research or Nominee
2. Supervisor/supervisors of the candidate
3. One external examiner who has evaluated the thesis.

The quorum for holding the viva-voce examination will be three members.

In case an external examiner communicates that he/she is unable to conduct a viva-voce, the Vice-Chancellor will appoint an examiner and a copy of the thesis will be sent to the III Examiner.

In case report(s) of the examiner(s) of the thesis are not favorable, the viva-voce examination of the candidate shall not be conducted.

The report about the performance of the candidate in the viva-voce examination shall be recorded by the external examiner(s) only.

XI. AWARD OF DEGREES

- (a) If the two examiners of the thesis have recommended the award of the degree and the viva-voce examiner is satisfied himself/herself on the basis of performance of the candidate in the oral examination that the candidate has written the thesis himself may recommend the award of the degree.
- (b) The result of Ph.D. degree of a candidate be deemed to have been notified by Dean Academics and Controller of Examination shall publish the result.

XII. SUPPLY OF REPORTS

The reports of the examiners may be supplied to the candidate and the Supervisor after declaration of the result.

PREPARATION OF SYNOPSIS

1. Excluding Cover Page, the length of a thesis' synopsis should be 6-8 pages including tables and figures in place. Synopsis should be on A4 size paper with 1.5 line spacing. Eight hard copies and a soft copy on CD in word and .pdf format of the synopsis are required to be submitted.
2. Title/Cover Page.
3. Introduction (should not exceed three pages including Figs.): The Engineering/ Technological/ Scientific/ Used/Social relevance or importance of the research work should be reported.
4. Brief Literature survey (should not exceed two pages)
5. Problem formulation (should not exceed one page): Need and significance of proposed research work. The details of the following should be mentioned briefly, clearly and sufficiently
 - a. Research problem
 - b. Research Methodologies
6. Objectives (should not exceed one page): The objectives and scope of the research work should be clearly mentioned. The conceptual, analytical, experimental and methodological details within which the research has been carried out should be well defined. The future scope should also be mentioned for further research.
7. Methodology/ Planning of work (should not exceed one page)
8. Facilities required for proposed work
9. Proposed Place of work
10. Signature of candidate
11. Duly signed by supervisor

FORMAT FOR THESIS

1. The thesis must represent a coherent body of original work by the student. It must display a scholarly approach and thorough knowledge of the subject.

2. Plagiarism in any form is completely unacceptable.

3.1 General Guidelines

(a) **Language:** English.

(b) **Style:** A style appropriate to the subject matter should be followed consistently. American or British spelling is acceptable, but one form must be used consistently throughout the thesis.

(c) **Paper:** A4 size, portrait (vertical) orientation. The thesis must be printed on good quality white paper (20-40 lb. bond) on both side of the paper with all the figures and tables in line with the text. In a way, the thesis shall look like a book. Oversize or undersize pages (e.g., maps) can be included but should not be bound into the thesis—they may be placed in a pocket at the back of the thesis.

(d) **Margins:** For copying and binding purposes, the margins of every page of thesis must be kept within the following:

Top: 1" Right: 1"

Bottom: 1" Left 1.5"

To insure that margins are correct:

Header = 1.3"

Footer = 1.1"

All manuscript materials must fit within these margin requirements (including tables, headers and footers, figures, graphs and page numbers). When full-page prints of photographs are desired, the image area of the print must conform to the same margins as the text.

(e) **Font:** For the main body of the text, a standard, easily legible, 12-point Times New Roman font is preferred. Footnotes can be 10 or 12-point font. The thesis must be printed in black ink; printing should be laser printer or letter quality. The title of your thesis must be in Title Case or ALL CAPS. The title of all entries in the Table of Contents must be in Title Case.

(f) **Page Numbers:** All pages must be numbered in sequence. There must be no missing, blank, or duplicate pages. Specific page number formats, where applicable, are indicated below. Minimum font size is 10-point and must be consistent throughout the text. Chapter 1 must start on page 1.

(g) **Line Spacing:** 1.5

(h) **Order of Items in Entire Thesis:** The following order of items is common to both Standard and Publication thesis formats. Please note which items are optional.

Preliminary Pages (numbered with lower case Roman numerals):

Title Page

Certificates

Abstract

Dedication Page (optional)

Acknowledgements

Table of Contents

List of Figures

List of Tables

List of publications from the thesis
List of Abbreviations and Symbols Used (optional)
Glossary (optional)

Main Pages (numbered with Arabic numerals):

Body of Text – divided into chapters

Final Pages (continuation of Arabic numerals):

Endnotes (optional)
Bibliography/References
Appendices (optional)* (*Final Entry in Table of Contents*)
Author's Bio-Data

3.2 Preliminary Pages

- (a) **Page Numbers:** The page numbers in the preliminary material are to be in lower case Roman numerals, centered at the bottom of the page, except for the title page, which is not numbered.
- (b) **Title Page:** This must be in standard format. There is no page number written on this page, but it is considered to be page one (i).
- (c) **Certificates** (page ii): This must be in standard format. The original copy must bear original signatures.
- (d) **Dedication Page** (if applicable): The content and format of this page are up to the student.
- (e) **Table of Contents:** For clarity, use 12 point font. For the ordering of items in the Table of Contents, please see section 3.1.h (above). All chapter titles, headings and subheadings should appear in the Table of Contents. Insert the word "Chapter" in front of chapter numbers in the table of contents and in the main body of text. Chapter 1 should be entitled Introduction, for example, 'Chapter 1: Introduction' and the last chapter entitled Conclusions (or Discussion). Line spacing of 1.5 should be maintained between entries. Text within the titles must not hang over the Table of Content's page numbers; the 'column' of page numbers must be free of any text from the titles. Right align page numbers. Each appendix (if applicable) should be listed separately in the Table of Contents.
- (g) **List of Tables and List of Figures** (if applicable): line spacing of 1.5 should be maintained between entries. Text within the titles must not hang over the page numbers; the 'column' of page numbers must be free of any text from the titles. The lists should include any material inserted in a back pocket. When listing the Tables and Figures make sure that text within the titles must not hang over the page numbers; the 'column' of page numbers must be free of any text from the titles. Figures and Tables must be numbered separately. For example: "Figure 1. Database contexts", "Table 1. Input data". Figure captions are to be *below* the figures. Table titles are to be *above* the tables. Do not put the figures and tables at the end of the document. A figure/table should appear at or near the place where it is referred to in the text for the first time.
- (h) **Abstract:** This part of the thesis will be the most widely published and most read because it will be published in Dissertation Abstracts International. It is best written towards the end, but not at the very last minute because you will probably need several drafts. It should be a distillation of the thesis: a concise description of the problem(s) addressed and your method of solving it/them, your results and conclusions. An abstract must be self-contained. Usually they do not contain references. When a reference is necessary, its details should be included in the text of the abstract. The number of words may be limited to 2000 not exceeding four pages of spacing 1.5 and font type Times New Roman with size 12.
- (i) **List of Abbreviations and Symbols Used** (if applicable).

- (j) **Glossary** (if applicable).
- (k) **Acknowledgements** (if applicable): The author of the thesis can acknowledge the help and guidance received from different persons in this section. Any financial support received from funding agencies in the preparation of the thesis should definitely be stated here.

3.3 Main Pages (Body of Text) – Standard format

- (a) **General:** The thesis should be organized as chapters, and should follow the general guidelines and order of items listed in section 3.1. Chapter 1 must start on page 1 with subsequent chapters should start from the right hand side page as we open the thesis.
- (b) **Page Numbers:** All pages must be numbered in sequence. Minimum font size is 10-point. It is normal practice for the page numbers in the main body of the text to appear in bottom centre, although lower right or the upper right corners are also acceptable. Page numbers must be at least 0.5 inches (1.3 cm) from the bottom of the page and centered.
- (c) **Line Spacing:** 1.5, except where indicated otherwise. Short sections (e.g., quotations, equations, footnotes) may require more or less than this.
- (d) **Chapter Titles, Headings, and Sub-headings:** All chapter titles, headings, and sub-headings must appear in the table of contents. For each level of title or heading, consistent format in font size and style, numbering or lettering, and placement should be maintained throughout the thesis text. Each chapter should begin on a new page. Chapter title should be Arial, 16 point Boldface Uppercase.

First-order headings: Times 14-point boldface, upper case, flush left, with one blank line before, and one blank line after. Use a period (".") after the heading number, not a colon.

Second-order headings: As in this heading, they should be Times 14-point boldface, initially capitalized, flush left, with one blank line before, and one after.

Third-order headings: Third-order headings, as in this paragraph, are discouraged. However, if you must use them, use 12-point Times, initially capitalized, flush left, preceded by one blank line, followed by a period and your text on the same line.

(e) **Tables and Figures:**

- **General:** The content, placement, and format of figures and tables are determined by discipline practice. Sources of any figures or tables not original to the thesis must be cited. Lettering in tables and figures should be legible at the scale of reproduction in the thesis. Figures may be in colour or grey-scale, as appropriate to the subject matter. **Figure and table should be embedded in the text.**
 - **Captions:** Captions may be directly placed above the table and below the figure. Captions can be in sentence form, without capitalizing all major words and should be self contained in all respects.
 - **Page Setup:** Figures, tables, and captions may be embedded in the text or appear on separate pages as appropriate. Landscape or portrait orientation is acceptable, although the page itself must appear in portrait (vertical) orientation. Margin width and page number placement should be consistent with the rest of text.
 - **Numbering:** All figures and tables are to be listed at the beginning of the thesis except those appearing in the appendices. Numbering or lettering style (if any) should be in accordance with discipline practice, and consistent throughout the thesis.
 - **Other:** Oversize tables, charts, maps, or diagrams are to be inserted into a back inside pocket; these should be included in the list of illustrations or tables.
- (f) **Header:** Header may be placed at the top of the page and formatting should be consistent throughout the thesis.

3.4. Final Pages (Endnotes/References/Appendices)

- (a) **Endnotes:** If used, must be placed before the Bibliography and Appendix.
- (b) **References/Reference List:** All cited references must be listed at the end of the thesis. The thesis must contain a complete reference list or bibliography, citing all the literature and other sources referred to in the thesis and appendices, including websites. Format and placement of reference citations should be consistent throughout the thesis, and should conform to a scholarly style consistent with discipline practice. References in the text should be written this way:
- Active citation: 'Johansen (1982)'. Example: "as discussed in Johansen (1982)".
 - Passive citation: '(Johansen, 1982)'. Example: "as discussed in the literature (Johansen, 1982)".

Reference to journal articles and papers in serial publications should include:

- last name of each author followed by their initials
- year of publication
- full title of the cited article in quotes, title capitalization
- full name of the publication in which it appears
- volume number (if any) in boldface (Do not include the abbreviation, "Vol.")
- issue number (if any) in parentheses (Do not include the abbreviation, "No.")
- inclusive page numbers of the cited article (include "pp.")

Reference to textbooks and monographs should include:

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- inclusive page numbers of the work being cited (include "pp.")
- chapter number (if any) at the end of the citation following the abbreviation, "Chap."

Reference to individual conference papers, papers in compiled conference proceedings, or any other collection of works by numerous authors should include:

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- inclusive page numbers of the work being cited (include "pp.")

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- last name of each author followed by their initials
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- report number (if any)
- publisher or institution name, city

Online References

- Name of Author
- Name of Article
- Name of website
- Date of Access of Website

Sample References:

- [1] Ning, X., and Lovell, M. R., (2002), "On the Sliding Friction Characteristics of Unidirectional Continuous FRP Composites," ASME J. Tribol., 124(1), pp. 5-13.
- [2] Barnes, M., (2001), "Stresses in Solenoids," J. Appl. Phys., 48(5), pp. 2000-2008.
- [3] Jones, J., (2000), Contact Mechanics, Cambridge University Press, Cambridge, UK, Chap. 6.
- [4] Lee, Y., Korpela, S. A., and Horne, R. N., (1982), "Structure of Multi-Cellular Natural Convection in a Tall Vertical Annulus," Proc. 7th International Heat Transfer Conference, U. Grigul et al., eds., Hemisphere, Washington, DC, 2, pp. 221-226.
- [5] Watson, D. W., (1997), "Thermodynamic Analysis," ASME Paper No. 97-GT-288.
- [6] Tung, C. Y., (1982), "Evaporative Heat Transfer in the Contact Line of a Mixture," Ph.D. thesis, Rensselaer Polytechnic Institute, Troy, NY.
- [7] Smith, R., (2002), "Conformal Lubricated Contact of Cylindrical Surfaces Involved in a Non-Steady Motion," from web site <http://www.cas.phys.unm.edu/rsmith/homepage.html> accessed on 12/08/2007.

(c) **Appendices:** Each appendix should be listed separately in the Table of Contents.

- **General:** Appendices may include data tables, source codes, analytical procedures, survey forms, or any other supplementary material approved by the supervisory committee. Content and format should be in accordance with discipline practice.
- **Copyright Permission:** Where a thesis includes copyrighted material (e.g., publications), copyright permission letters should be included as a separate appendix. Reprints may be included in the appendices, provided copyright permission is obtained.

(d) **Pagination:** Pages should be numbered in sequence with the rest of the thesis.

(e) **Line Spacing:** spacing between entries should be 1.5. Individual reference entries must not be split over two pages.

(f) **Font Size:** Font size for both endnotes and cited references should be consistent with the rest of the thesis text. Other details of format (italics, punctuation, etc.) should be compatible with discipline practice and should be consistent through the entire list.

3.5. Supplementary Material (Included in Thesis)

- (a) **Electronic supplements:** read-only CD/DVD-ROM (in hard case) labeled with student name, thesis title, institution, and date, for back pocket of the thesis, written description of electronic supplements (if any), oversize pages for back pocket.
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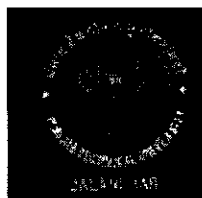
3.7. Electronic Formats

- (a) **General:** candidates may include supplementary material in electronic format. A CD-ROM or DVD-ROM (read-only) containing this material should be submitted in a hard case and will go in the back pocket of the thesis. A description of the supplementary material, including file names, formats, and a brief description of the contents, should be included as an appendix in the paper copy of the thesis and as a "read-me" file on the CD/DVD-ROM.
- (b) **Labeling:** The CD/DVD-ROM must include both electronic and physical labels that list the thesis title, author, institution, and date.

3.8 The thesis shall be hard bound with cover page in **maroon background and golden text** color. The name of the candidate, degree (specifying the specialization), year of submission, name of the University including college name shall be printed in black on the cover.

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SUBMITTED TO**



**PUNJAB TECHNICAL UNIVERSITY
JALANDHAR (INDIA)**

**IN FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF**

**DOCTOR OF PHILOSOPHY
IN
_____ ENGINEERING**

**By
Name of Candidate
Regd. No. –**

**Department of.....
Name of Institution/College
Year**

PUNJAB TECHNICAL UNIVERSITY, JALANDHAR**Notification****No. PTU / REG / BOS / NOTIFICATION / PTU/DA/1116****Dated: 19.04.10**

In continuation to this office notification No. PTU / REG / Notification / 4399 dated 29.09.2008, the following amendments are made in the present Board of Studies. The terms & conditions of the Board of Studies is the same as notified earlier.

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4. All concerned

MEMORANDUM OF UNDERSTANDING BETWEEN

Ludhiana College of Engineering and Technology, Ludhiana, Punjab
 Lala Lajpat Rai Institute of Engineering and Technology, Moga
 GGS College of Modern Technology Kharar, Punjab
 Sachdeva Engineering College for Girls, District Mohali, Punjab
 Amritsar College of Engineering and Technology, Amritsar, Punjab
 Lala Lajpat Rai Memorial Polytechnic, Moga, Punjab
 GGS Polytechnic Kharar, Punjab
 Lala Lajpat Rai Institute of Engineering and Technology, Moga
 And

GLASGOW CALEDONIAN UNIVERSITY

THIS AGREEMENT, effective from 1 February 2010 is made and entered into by and between the above mentioned institutes (hereinafter referred to as Punjab Group of Institutes, PGI) and Glasgow Caledonian University, Scotland, UK (hereinafter referred to as GCU) under the following terms and conditions:

ARTICLE 1: PURPOSE

- 1.1 The purpose of this Agreement, and the Supplementary Agreements envisioned herein, is to establish links and create the foundation for mutual cooperation and collaboration amongst academic disciplines that PGI and GCU (hereinafter referred to as the partner institutions) have in common.

ARTICLE 2: SCOPE

- 2.1 The scope of this Agreement will include the areas of teaching, research, faculty and student exchanges, and any other related areas that are mutually determined to be appropriate by the two partners in the future. Under the framework of this Agreement, any and all Faculties, Schools, Departments and Units of the two parties have the ability, in coordination with the respective points of contact identified in Article 4.1 of this document to develop and engage in joint activities. The content and special conditions of such activities shall be specified by the partners in Supplementary Agreements to this Agreement that will govern their collaborative relationship. This Agreement does not require either PGI or GCU to assume additional financial obligations unless such obligations are mutually and clearly agreed upon between participating partners in Supplementary Agreements.

2.2 **Activities :** Examples of Activities to be encouraged by this Agreement include, but are not limited to, the following:

- Articulation of students from PGI to GCU via appropriate pathways
- The Exchange of Material, Techniques, Publications and Academic Information related to Education and Research, including Institutional Publication of the two Institutions.
- Reciprocal faculty Development and Exchange Programs
- Cooperation in Planning and Implementation of Study Abroad and Student Exchange Programs.
- Cooperative Programs of Academic Research.
- Security and accommodation arrangements for student, staff and official of Institutions.
- Award of joint degree, diploma and certificate.
- Exploration of similarity and dissimilarity of prescribed courses of the both Institutions meant for the similar degree, diploma and certificate.
- Construction of joint course contents (Theory & Practical).
- Opening of learning Centers and colleges in India and Scotland.
- Duration of Time and part of curriculum to be carried on in India and Scotland
- Fee structure for each course and Fee Ration of both the Institutions.

ARTICLE 3: SUPPLEMENTARY AGREEMENTS

3.1 Individual Faculties, Schools, Departments and Units of PGI and GCU that wish to engage in collaborative activities on a regular basis must negotiate a Supplementary Agreement to this Agreement. To be valid, every Supplementary Agreement must be signed and approved by the relevant Faculties, Schools, Departments, Centers or Units, and the point of contact at the partner Institution named in Article 4.1 of this document. The terms of a Supplementary Agreement, may not, directly or by default, contradict the terms of this General Agreement between PGI and GCU.

3.2 Every Supplementary Agreement negotiated between participating departments or units at PGI and GCU must clearly and fully identify the following elements:

3.2.1 The scope, timeframe, and objectives of the activity in detail.

3.2.2 The responsible parties within the particular Faculties, Schools, Departments, Centers and Units that are concluding the Supplementary Agreement. The individuals named will be directly responsible for the implementation and oversight of the proposed activity in the Supplementary Agreement. Changes to the personnel involved may be made at the discretion of the department or unit head, in coordination with the institutional points of contact at PGI and GCU named in Article 4.1 of this document.

3.2.3 The commitment of resources, if applicable, and the attendant financial obligations of the respective partnering departments. This General Agreement does not obligate either party to support any new financial commitment unless expressly agreed upon in this manner by the partnering departments.

ARTICLE 4: COORDINATION

4.1 In order to oversee this General Agreement and coordinate with the associated departments and Supplementary Agreements, both parties agree that the institutional points of contact shall be the following:

4.1.1 For PGI: Dr. Rohin Kumar Sachdeva (Chairman/General Secretary)

4.1.2 For GCU: Professor Mike Mannion, PVC International, Principal's Group, Glasgow Caledonian University, Glasgow G4 0BA, UK.

4.2 All official notices between the two partners regarding the terms and conditions of this Agreement shall be in writing and be sent via express courier or as registered or certified mail between and to the respective principal points of contact identified in Article 4.1 of this document.

ARTICLE 5: VALIDITY AND TERMINATION

5.1 This Agreement will come into effect on 1 February 2010 and shall be considered to be in force and valid for a period of sixty months. It shall be renewed automatically for subsequent 60 month terms unless either party is formally notified by the other through written notice of a desire to terminate or alter the Agreement. Such notice must be received no later than one hundred and twenty (120) days prior to the termination date. Either party may terminate this Agreement.

Not Recived	
Sl. No.	Name of the College / Institute
1	Adesh Institute of Engineering & Technology, Faridkot.
2	Aryans Institute of Management & Technology, (AIMT) Vill-Nepura, Chandigarh-Rajpura Road, Tehsil Rajpura, Distt. Patiala
3	Baba Farid Institute of Computer & Information Technology, Moga Road, Barnala
4	Baba Isher Singh Institute of Technology, V.P.O. Gagra (Moga)
5	Baba Sri Chand College of Management, Nurpur
6	Bhai Gurdas Institute of Management & Technology, Main Patiala Road, Sangrur - 148 001
7	C.T. Institute of Pharmacy Shahpur (Distt. Jalandhar)
8	Centre for Management Studies, Village Ram Nagar, PO Jansia, Near Banur, Tehsil. Rajpura, Distt. Patiala
9	Chanakya Institute of Management & Information Technology, Vill. Gharuan, NH-95, Morinda Kharar Highway
10	Chandigarh Business School, Landran
11	Chandigarh College of Hospitality, Landran
12	Chandigarh College of Hotel Management & Catering Technology, VPO Gharuan Tehsil Mohali Distt. 140 307
13	Chandigarh College of Hotel Management & Catering Technology, VPO Landran, Tehsil Mohali Distt. 140 307
14	Chandigarh College of Technology, Landran, Mohali, Distt. Ropar
15	Chandigarh group of Colleges, Gharuan, Mohali
16	CIIS- Institute of Science & Technology, Mohali
17	College of Management & Technology, Santi Nagar, Behind Urban Estate - 2, Near Sirhind bye pass, Patiala
18	CT Institute of Management Technology, Shahpur, Jalandhar
19	Dashmesh Institute of Management & Technology, Barnala
20	Deep Institute of Management & Technology, Bulandpur, Pathankot Road, Jalandhar
21	Desh Bhagat Institute of Advanced Computer Sciences, Village Saunti, Amloh Road, Mandi Gobind Garh.
22	Global College of Pharmacy, Khanpur Khui, Anandpur Sahib
23	Guru Gobind Singh Information Technology and Research, Talwandi Saboo (Bathinda)
24	Guru Sewa Institute of Science & Tech., Garhshankar (Nawanshahr)
25	I.S.F. College of Pharmacy, Moga
26	Institute of Management Studies (For Girls), Model Town, Ludhiana
27	K.C Institute of Hotel Management, Nawanshehar (New)
28	K.C. College of Management & Technology, Nawanshehar
29	Kalpna Chawla Institute of Management & Computer, Village Shambhu Kalan, Tehsil Rajpura, Distt. Patiala
30	Kay Jay School of Management & Technology, Vill. Rasulpur, Near Vill. Chappar, Ghanour Road, Patiala
31	Khalsa Institute of Management & Technology for Women, Civil Lines, Ludhiana
32	Lala Lajpat Rai Institute Of Engineering & Tech., G.T. Road, Moga, Punjab.
33	Ludhiana College of Engg & Tech, Katani Kalan, Ludhiana
34	Maharaja Ranjit Singh Khalsa Tech. College, Bathinda 151 001
35	Punjab College of Technical Education, Village Jhande
36	Punjab Business School, Village Sarapra, P.O. Chunni Kalan, Via Landran, Distt: Fatehgarh Sahib
37	Punjab College of Technical Education, Ferozepur Road, Baddowal, Ludhiana - 142 021
38	Rayat & Bahara Institute of Management, VPO Sahuran, Tehsil Kharar, Distt: Mohali
39	Rayat & Bahra Institute of Hospitality Management, VPO Sahauran, Tehsil, Kharar, Distt. Mohali - 140 104
40	Regional Institute of Information Technology and Management, Vill Behman Dhiwana, Distt. Bathinda

41	Regional Institute of Management & Technology, Village Harbanspura, G.T. Road, Mandi Gobindgarh
42	RIMT - Institute of Management & Computer Technology, Mandi Gobindgarh - 147 301
43	RIMT-School of Management Studies, Near Floating Restaurant, Sirhind Side Mandi Gobindgarh, Distt: Fatehgarh Sahib
44	Sai Institute of Engg. & Tech. Mannawal, Near Civil Hospital, Dist. Amritsar
45	Satyam Institute of Management & Technology, Nakodar
46	Shaheed Udham Singh Institute of Computer, Tangori
47	Shri Balaji Faculty of Information Technology & Business Management, Patiala - Sangrur Road, Near Parmeshwar Darbar, Patiala (New)
48	Social Institute of Management & Technology, Manjit Nagar, Basti Sheikh, Jalandhar
49	Sri Sai College of pharmacy, Badhant (Pathankot) - 145 001
50	St. Soldier Management & Technical Institute, Basti Mithu, Kapurthala Road, Jalandhar
51	Swami Sarvanand Institute of Management & Tech., Vill. Talwandi, GT Road, Dinanagar
52	Swami Vivekanand Institute of Management & Technology, Banur
53	Swami Vivekanand Institute of Tech., Banur (New)



भारतीय प्रबंध संस्थान वस्त्रपुर, अहमदाबाद 380 015

INDIAN INSTITUTE OF MANAGEMENT Vastrapur, Ahmedabad 380 015

Pb. Tech. Univ. Jalandhar

Receipt No. 6832

Date: 05/05/10

Prof Anil.K. Gupta

Dr. Rajneesh Arora

Vice Chancellor, Punjab Technical University
Punjab Technical University, Kapurthala Campus,
Jalandhar - Kapurthala Highway, Post Bag No.-01
Kapurthala (Punjab) - 144601

Dt. 17.04.2010

Respected Sir,

Subject: Cooperation in building a viable and sustainable platform for linking the technological challenges in MSME and informal sector with the creative potential of young technology students and faculty in various engineering institutions/www.techpedia.in

You might already be aware about the existence of Techpedia.in, as a national platform for bridging the gap existing between Industries, Academics and Innovation. The novel venture initiated in mid 2009 and within a span of just 6 months we have been able to amass an exhaustive database of more than 100,000 technical projects and write-ups from more than 500 technical colleges (AICTE approved) across the country, including IITs and NITs.

Every year approximately 6 lac students graduate out of technical colleges in India and as per the norms set by AICTE, 1.25 lac projects prepared by the students and guided by the faculty are submitted to the college authorities. It is sad but true that no one knows about the fate of these projects and their usability in industries. As noted by former director general of DSIR, Dr R.A.Mashelkar on Techpedia recently that over 3 million human months of our Yuvashakti being spent on solving real life problems here in college campus. For the first time, we have an access to the magnificent outcome of this great endeavour. We at Techpedia believe in transforming ideas into products and therefore, we are very focussed in bridging the gap that exists between students and industry, and work on the underlined principle.

- Breaking barriers between "Industries - Academia"
- Endorsing innovation fuelled Techno-entrepreneurship
- Commandeering break-through solutions for Industries and Society.
- Pioneering Open innovation and harvesting need based technological evolution

If out of these 1.25 lac projects which are submitted every year, even 1000 (1%) have the potential to be developed into commercial products or solutions that could provide breakthroughs in the fields of Science and Technology, it could be a phenomenal success in itself. We therefore expect some pivotal measures to be stemmed from your desk, which can accelerate the process of transforming the prevailing environment into a system which harvests technology based entrepreneurship and innovation, and at the same having a transparent system for protection and transfer of the due credentials to the innovators and contributors of the idea till it is transformed into a product. The technical students addresses the IDPs posed by industries and management students address modules similar to developing ERPs to raise the sick units of SMEs and others and new student developed Enterprises.

An NMN (National Mentoring Network) is being developed to guide these students and faculties to address the industry projected problems consisting of retired scientists, policy makers, faculties and expert professionals from all corners of industry and academics headed by Dr.R.A.Mashelkar. Multiple student and faculty groups irrespective of time and space attempt these problems via our web and lead a relay model in developing faster solutions saving the major R&D investments of many industries.

Techpedia database has an exhaustive collection of more than 100,000 projects but that accounts for only 4-5% of the total extractable data across all the Technical colleges in the country. Therefore we request your valuable co-operation and suggestion in this regard in order to accelerate and actuate the process of transforming the technical students of the country into potential techno-entrepreneurs of the future. We expect your help in the following aspects:

1. Informing all the Institutes, Faculties and Students of your esteemed University about the mission and objectives of Techpedia for a nation building cause.
2. Requesting the institution to transfer the current database of the projects submitted by the final year students to Techpedia, preserving all credentials (IPR) of the students and faculty involved for further value addition and lead to product.
3. Requesting eminent faculty and researchers under institutes of your University to become a part of the National Mentoring Network(NMN) headed by Dr R.A.Mashelkar ,former director general of DSIR and guide the students involved in pursuing solutions pertaining to the Industry Defined Problems (IDP) even in the academic projects for final and prefinal year of Engineering which will make academic section one step close to industry too.(A lot of industries has floated their Industry defined projects on Techpedia to pose challenge to students and faculties preserving all IPRs)

Looking forward to your valuable co-operation and suggestions for this nation building cause.

With best regards

Yours sincerely,



Anil K Gupta

Email: anilg@techpedia.in , hiranmay@techpedia.in