

## **Ordinance: Doctor of Philosophy**

### **1. Preamble**

The Ph.D programme is an integral component of the higher technical education in the University. All the teaching departments offer Ph.D programmes in identified thrust areas which are based on facilities available and market requirements. Each year a consolidated list of number of seats available will be prepared by the University for which the admission to be made as per the process laid down in this Ordinance.

### **2. Locale**

- (i) The degree of Doctor of Philosophy (Ph.D) shall be granted by the YMCA University of Science & Technology, Faridabad in any of the faculties in which PG teaching is imparted on its campus.
- (ii) Subject to general guidelines issued by the Academic Council and overall control of the administration, the research activities for Ph.D programmes regulated by the various Post-graduate Boards of Studies and Research
- (iii) The applicants/scholars shall be classified in the following ways :-
  - (a) On the basis of the time devotion to the Ph.D programme
    - Full time
    - Part-time
  - (b) On the basis of fellowship/scholarship
    - A research scholar getting YMCAUST fellowship/scholarship
    - A research scholar receiving fellowship/scholarship from outside organizations such as CSIR, UGC, QIP, DST, AICTE etc.
    - Non fellowship/scholarship

Preference will be given to full time candidates.

### **3. Constitution of Research Advisory committee (RAC)**

The Research Advisory committee (RAC) shall consist of the following provided each qualifies to be a Ph.D Supervisor:-

- (i) The Chairman of the Department
- (ii) All Professors of the Department
- (iii) Three Associate Professors of the department by rotation, having doctoral degree.

The term of an Associate Professor will be of 2 years. If such teachers are not

available in the department then chairperson of RAC may co-opt members from outside the department/university.

- (iv) Supervisors of the scholars:- They do not, however, constitute the regular members {unless covered under (i) or (ii) or (iii)}. They participate in RAC meetings only when the cases of their respective scholars are taken up. Also, the proposed supervisor is to be invited to participate in the RAC meeting when the case of his prospective candidate is taken up.

The chairman of the department shall be the chairman of the RAC. If the chairman does not qualify, the senior most qualifying faculty member of the department will act as the chairman of the RAC.

#### **4. Eligibility**

- (i) A candidate for admission to the course of Ph.D program shall have masters degree or a professional degree declared equivalent to the master's degree by the corresponding statutory regulatory body with at least 55% marks in aggregate or its equivalent grade B in the UGC 7 point scale (or an equivalent grade in a point scale where ever grading system is followed or an equivalent degree from a foreign educational institution accredited by an assessment and accreditation agency which is approved/recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institution. The equivalence of the degree will be decided by the Board of Studies (BOS) in the University.
- (ii) A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC(non-creamy layer)/Differently-Abled and other categories of candidates as per the decision of the Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.
- (iii) Candidates who have cleared the M.Phil. course work with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent grade in a point scale wherever grading system is followed) and successfully

completing the M.Phil. Degree shall be eligible to proceed to do research work leading to the Ph. D. Degree in the same Institution in an integrated programme. A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC(non-creamy layer)/differently-abled and other categories of candidates as per the decision of the Commission from time to time.

- (iv) A person whose M.Phil. dissertation has been evaluated and the viva voce is pending may be admitted to the Ph.D. programme of the same Institution. The candidates who appeared in regular master's level examination in the current session may also appear in the entrance test. But they must submit the proof of having passed the examination on the pre-designated date before admission to the Pre-Ph.D course.
- (v) Candidates possessing a Degree considered equivalent to M.Phil. Degree of an Indian Institution, from a Foreign Educational Institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions, shall be eligible for admission to Ph.D. programme.
- (vi) The state reservation policy shall be followed in Ph.D Admission.
- (vii) A candidate provisionally registered for Ph.D shall be required to attend classes for one semester for a Pre-Ph.D course work.
- (viii) The candidates who are awarded fellowship by the university/outside agency to carry out Ph.D work, shall be required to stay at university headquarter for whole duration of the fellowship. The chairperson of the department concerned will certify the stay of the candidate.

#### **5. Additional Eligibility Conditions for Part-Time Ph.D Admission**

- (i) The applicant should be an employee of an educational institute/organization/Industry and must produce No Objection Certificate (NOC) from his employer on or before the interview.
- (ii) The candidate proves to the satisfaction of the RAC that his/her official duties permit him to devote sufficient time to research.
- (iii) The candidate proves to the satisfaction of the RAC that facilities for pursuing research are available at his place of work in the chosen field of research.

- (iv) He will be required to visit university (on working days) to meet his supervisor in the department at least twice in a month and such visit is to be reported to the chairman- RAC for record.

## **6. Rules for Full Time Ph.D.**

The full time PhD program will have following three categories of scholars admitted to program

- (a) A research scholar getting University fellowship / scholarship.
- (b) A research scholar receiving fellowship / scholarship from outside organizations such as CSIR, UGC, QIP, DST, AICTE etc.
- (c) Self-financed A scholar who does not receive financial help like scholarship/assistant ship from university, or from any other source during his Ph.D. program.

### **6(i) University Research Scholarship**

- I. Each department will have two scholarships every year. The amount of this scholarship shall be Rs.8000/- per month. It will be tenable for two years in the first instance. This scholarship may be extended only for a period not exceeding one year i.e. 3rd year by the Vice- Chancellor on the recommendations of the Committee consisting of the Chairperson, senior most teacher of the Department and the Supervisor of the scholar. Each scholar receiving this scholarship shall also receive a contingency grant of Rs. 5000/- per annum. This scholarship will be awarded on the basis of the merit of the qualifying examinations. In addition to the above, three University Research Scholarships or 20% of the allocated URS whichever is higher will be awarded to SC/ST candidate.
- II. This scholarship shall be awarded on the recommendations of the Selection Committee consisting of the Chairperson of the Department and two members of the department nominated by the Vice-Chancellor.
- III. This scholarship will be awarded from the date of joining in the department before registration including pre-registration period. However, the amount will be payable after his/her registration in the department. Failure to get registered will disqualify the candidate for this scholarship.

- IV. The scholar will be required to do whole-time research work under approved guidance of his/her supervisor and shall not be allowed to take financial benefit (funds/fellowships) from any other source during this tenure.
- V. The scholar will be required to submit a certificate of progress and satisfactory work, duly countersigned by his/ her Supervisor and recommended by the concerned Chairperson to the Registrar every six months. The continuance of the fellowship would be subject to satisfactory progress of work of the Scholars.
- VI. The scholar shall complete the full period of research work. In the event of a scholar discontinuing or giving up his work before the expiry of two years, or before the expiry of the extended period, if extension was allowed, for no valid reason he shall be required to refund to the University the entire amount received by him.

Provided that in very exceptional cases this condition may be waived by the Vice-Chancellor in consultation with the Dean of the Faculty, the Chairperson of the Department concerned and the Supervisor. The scholar shall, execute a Bond with the University in the form prescribed for the purpose giving surety of any of the following:-

- (a) A permanent employee of this University.
- (b) A person possessing property in the jurisdiction of Faridabad Court (mentioning the details of property).
- (c) A permanent employee of the Government.

Provided that the Vice-Chancellor may, on the recommendation of the Chairperson of the Department grant a person who was awarded a University Research Scholarship, leave not exceeding six months and allow him to resume the scholarship on the expiry of this leave to complete the remaining tenure of the scholarship.

Provided further that the Vice-Chancellor may, in very hard and exceptional cases, allow extension in leave for a period not exceeding three months to a Research Scholar to prosecute academic pursuits only.

- VII. Reports on the satisfactory progress on the work of the scholar shall be submitted to the Board of Studies by the Chairperson of Department concerned once every six months. The

continuance of the Scholarship would depend on the satisfactory progress of work of the Scholars.

### **6(ii) Leave**

Leave for a maximum of 15 days in a year in addition to general holidays may be allowed to a Research Scholar by the Chairperson of the Department on the recommendation of the Supervisor. The scholar will not be entitled to any vacations. No other leave of any kind with scholarship will be admissible to a Research Scholar.

### **6(iii) Contingency Grant**

(a) The contingency grant of Rs. 5000/- per student, per annum may be utilized on apparatus, chemicals, books and journals, Photostat copies, macro films, typing, stationery, postage and field work/ travel needed in connection with the approved research projects with the approval of the Chairperson of the Department on the recommendations of the Supervisor.

(b) the contingency grant is not intended for making payment of examination and other fees.

(c) The non-consumable articles purchased out of the contingency grant will be first entered in the accession/ stock register of the Library/ Store of the concerned department and then the articles will be issued to the research scholar (s) so as to ensure that on expiry/ termination/ relinquishment of scholarship, these are returned to the Department

(d) For all expenditure out of the contingency grant, a certificate from the supervisor duly countersigned by the Chairperson of the Department concerned to the effect that the expenditure incurred is in furtherance of the approved research work will be necessary.

(e) Travelling allowances for approved field work/ travel in connection with the research work will be admissible according to the rules of the university.

(f) The unspent balance, if any, out of the contingency grant of the previous year will not be carried forward to the next year at any cost.

(g) The grant will be released in the installments in a year i.e. at the rate of Rs. 1500/- half yearly on submission of the bills duly recommended and certified by the Supervisor and the Chairperson of the Department concerned. The bills of each installment will be accepted in the same period for which the grant has been allocated.

**A full time PhD program may be converted to a part time program at the completion of two years if he/she satisfies the following conditions. No scholarship will be provided on part time conversion.**

i. The request from the Research Scholar in this regard is made to Dean (R&D) through proper channel and he/she has already passed the prescribed course work.

ii. His/her progress reports by his/her supervisor(s) for the previous two years are found satisfactory.

iii. In case, he/she has been offered a regular job in some organization, then he/she may obtain a 'no objection certificate' from his/her employer to continue his/her research work as a part-time Research Scholar at YMCA, UST and enclose along with his/her request for the purpose.

iv. The Research Scholar may be allowed to register as part-time candidate only after the recommendation of the RAC and approval of Chairman, Supervisor.

v. The full-time Research Scholar after conversion to part-time Research Scholar shall not be considered for any scholarship/stipend/contingency/grant teaching assistantship as meant for full-time Research Scholar

VI: All rules and regulations-of part-time programme shall be applicable for such Research Scholar Further, once changed to part time candidature; the concerned Research Scholar cannot revert back.

#### **7. Part time Ph.D. for sponsored candidates**

A part time PhD program will be for candidates with minimum 15 years of experience in reputed industry / organization having R & D facilities, Govt. R&D Departments / National Research Laboratories / Units of Government / Quasi Government / Public sector etc. Separate guidelines for admission will be issued for these seats whenever these are published/advertised.

## **8. Enrollment**

- (i) The enrollment to Ph.D programmes in the teaching departments shall be made once/twice a year through the entrance test conducted by the Controller of Examination. The cut-off date for this will be decided on year to year basis. The applications in the prescribed form shall be submitted by candidates to the Academic section.
- (ii) The number of vacancies in various departments will be given on university website and mention of the same will be made in the admission notices for information of the candidates. At the time of notifying the vacancies in newspapers, the number of vacancies for registration shall be indicated course wise.

The eligible candidate shall apply for admission in the prescribed form downloadable from the university website.

### **Duration of the Programme:**

- (i) Ph.D. programme shall be for a minimum duration of three years, including course work and a maximum of six years.
- (ii) The women candidates and Persons with Disability (more than 40% disability) may be allowed a relaxation of one year for M.Phil and two years for Ph.D. in the maximum duration. In addition, the women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of M.Phil/Ph.D. for up to 240 days.

## **9. Procedure for Admission**

The procedure for admission to Ph.D programme shall consist of the following steps :-

- (i) Receipt of applications
- (ii) Scrutiny of the applications by the concerned department
- (iii) An Entrance Test shall be qualifying with qualifying marks as 50%. The syllabus of the Entrance Test shall consist of 50% of research methodology and 50% shall be subject specific. The Entrance test will be of 2 hours duration having 80 questions of one mark each of concerned discipline / branch. Entrance Test shall be followed by an interview to be organized by the department concerned.
- (iv) The candidates who have qualified UGC-NET (including JRF)/UGC-CSIR NET (including JRF)/SLET/GATE/teacher fellowship holder or have passed M.Phil programme will be



exempted from appearing in the entrance test for Ph.D Programme. However, they will have to appear in the interview as per schedule.

- (v) At the time of interview, doctoral candidates are expected to discuss their research interest/area through a presentation before duly constituted RAC.
- (vi) Only the predetermined number of students will be admitted to Ph.D programme in a department with provisional registration.
- (vii) The interview/*viva voce* shall also consider the following aspects, viz. whether:
  - a. the candidate possesses the competence for the proposed research;
  - b. the research work can be suitably undertaken at the Institution/College;
  - c. the proposed area of research can contribute to new/additional knowledge
- (viii) After having admitted, each provisionally registered Ph.D student shall be required to pass pre-Ph.D course work of one semester (minimum attendance required is of 75%). The course work shall include a compulsory course on :-
  - (a) Research methodology (credit 4) including quantitative methods and computer applications
  - (b) Course suggested (credit 4) by RAC and supervisor
  - (c) The course work will also include reviewing of published research in the relevant field. The Departments should submit the report in their BOS in this regard.
- (ix) For admission to Pre-Ph.D course work the candidate will be required to deposit fee as prescribed by the university.
- (x) All candidates admitted to the M.Phil. and Ph.D. programmes shall be required to complete the course work prescribed by the Department during the initial one or two semesters
- (xi) Candidates already holding M. Phil. degree and admitted to the Ph.D. programme, or those who have already completed the course work in M.Phil. and have been permitted to proceed to the Ph.D. in integrated course, may be exempted by the Department from the Ph.D. course work. All other candidates admitted to the Ph.D. programme shall be required to complete the Ph.D. course work prescribed by the Department.
- (xii) A Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis.
- (xiii) The evaluation of Pre-Ph.D examination will be got done internally. The result will be declared within one month of Pre-Ph.D examination. Reappear examination for Pre. Ph.D course shall be conducted along with the other semester exams. The candidates attaining less

than the minimum qualifying CGPA will have to qualify with minimum CGPA requirement for confirmation of registration within two years.

A student admitted to the Ph.D. Programme shall be required to clear the course work within the first two consecutive semesters. The name of a student admitted to pre-Ph.D/Ph.D. programme may be removed from the roll of the University after two semesters at the recommendation of the concerned chairperson.

- (xiv) The presentation of Synopsis by the candidate will be before RAC of the department as per the schedule decided by the department concerned. In the synopsis student should mention the broad area of research and tentative topic of the research. The final topic of the research will be submitted by the student before six months of submission. The BOS will consider and approve the synopsis of all candidates and shall confirm the registration by the date of approval by RAC.
- (xv) The Vice-Chancellor may cancel the registration of a candidate at any time, after the issue of a due show-cause notice, on disciplinary or any other grounds, which are considered to be not in consonance with the dignity and behavior of a research scholar or non-payment of hostel or any other dues.

**\* Cancellation Rules**

- (i) If the candidate is not able to submit the fees, the accounts section should send his/her name to the respective department and department will issue a letter to the candidate. If the candidate will not submit fees after two consecutive semesters his/her name may be stuck off from the rolls of University after the recommendation of chairman and supervisor.
- (ii) If the candidate fails to submit his/her progress report after every semester, after two consecutive such semesters, RAC may recommend the cancellation of admission.
- (iii) In case two consecutive six monthly reports are unsatisfactory, RAC may recommend for cancellation of the registration.
- (iv) If the supervisor feels that the candidate lacks interest and motivation for research after completion of course work, he can recommend his/her case to the RAC and RAC can recommend for cancellation of admission.

Finally, the Academic Council, on the recommendation of the RAC, may cancel the registration of a research scholar.

## 10. Allocation of Supervisor/Co-Supervisor

(i) Research Supervisor/Co-supervisor who is a Professor, at any given point of time, cannot guide more than Eight (8) Ph.D. scholars. An Associate Professor as Research Supervisor can guide up to a maximum of six (6) Ph.D. scholars and an Assistant Professor as Research Supervisor can guide up to a maximum of four (4) Ph.D. Teachers working in YMCAUST and approved faculty in recognized colleges affiliated to this university with Ph.D degree and three year post Ph.D experience with proven research record in the form of 05 research publications shall be permitted to act as supervisor on the recommendation of Board of Post Graduate Studies and Research. The Vice-Chancellor may permit these limits to exceed marginally on special ground to be recorded. No fresh registration will be allowed by BOS/AC to teachers who proceeded on extra ordinary leaves.

The allocation of research supervisor for a selected research scholar shall be decided by the department concerned depending upon the number of scholars per supervisor, the available specialization among the supervisors and research interest of the scholars as indicated by them at the time of interview/Viva voce.

(ii) Scientist/Researchers/Faculty working on regular basis in various IIT/NIT/Research Laboratories/Industrial Establishments (which are recognized by YMCAUST/Central university/ state govt university/govt. aided institutions/Directorate of technical Education (DTE) with Ph.D degree shall, however, be permitted to act as co-supervisor. The prior consent of the co-supervisor shall be obtained before registration.

(iii) The faculty member to be appointed as supervisor or co-supervisor shall not be a spouse/blood relation of the research scholar to be registered for Ph.D course.

(iv) In case of relocation of Ph.D women scholar due to marriage or otherwise, the research data shall be allowed to be transferred to the university to which the scholar intends to relocate provided all other conditions in these regulations are followed in letter and spirit and the research work does not pertain to the project secured by the parent institution/supervisor from the funding agency. The scholar will however give the credit to the parent guide and the institution for the part of research already done.

(v) The teacher(s) on extra ordinary leaves may continue to guide the candidates registered for Ph.D programme under his/her supervision in the university. If the supervisor(s) of a candidate leave(s) the university before the completion of the research work or is/are otherwise unable to see the work through, due to some valid reasons, the Vice-Chancellor may allow change of the supervisor, as chosen by the candidate, on the

recommendation of the RAC, if it is considered that the change of supervisor is in the interest of the completion of the work.

**(vi) Evaluation and Assessment Methods**

Research Scholar shall submit progress report along with the presentation in every six months before RAC. This Committee shall have the following responsibilities:

- To review the research proposal and finalize the topic of research
- To guide the research scholar to develop the study design and methodology of research and
- To periodically review and assist in the progress of the research work of the research scholar.

The six monthly progress reports shall be submitted by the Research Advisory Committee to office of Dean R & D with a copy to the research scholar once in a year. (at the end of September.) If the work of a research scholar is found unsatisfactory at any stage as reported by the supervisor(s), the Research Advisory Committee (RAC) shall give him or her an opportunity to explain his/her position and make suitable recommendation including de-registration. .

**(vii) Pre-submission of Thesis**

(i) A Pre-Ph.D submission is an essential requirement to assess the contents of the Thesis before the committee. On completion of the research work and complying with the submission requirements, the candidate shall submit to Supervisor(s), a copy of the extended synopsis (**Annexure A**) of his research work.

(ii) If supervisor(s) is / are satisfied that the research work has been completed as per pre-defined objectives and the research scholar meets the eligibility criteria for Pre-Ph.D submission including published work (*two research papers in reputed journals and two papers in the conferences/seminars during the period of registration in the form of acceptance letter or the reprint*), he/she/they shall forward the same with the certificate (**Annexure B**) through the chairperson to the dean of the faculty concerned.

“One research paper in any SCI, Scopus, Web of sciences journals and one research paper in a reputed journal in the form of acceptance letter or reprint”.

The extended synopsis and other concerned papers of the research scholar shall then be forwarded to Dean R & D for verification as per checklist (**Annexure C**). The file would then be routed back within three working days. Dean of faculty concerned would formulate a 3-5 member committee of the concerned department comprising of at least 2 Professors ,

Associate professor and Assistant professor possessing Ph.D degree for conduct of Pre-Ph.D presentation, the date and time for the same would be fixed in consultation with supervisor (except on holidays and vacations). Pre-Ph.D presentation of the research scholar shall be in the presence of faculty members, research scholars and PG students. One external member/ expert may be nominated for the same in case number of cadre are not available in the department. The committee would submit report of the pre Ph.D presentation as per format (**Annexure D**) to the concerned chairperson along with extended synopsis and submit its recommendations to the dean of faculty as under:

- (a) If the committee is fully satisfied with the research work completed by the research scholar, through RAC it will recommend to BOS to allow the research scholar to write his / her thesis and submit the final draft within 6 months from the date of clearance by BOS. The thesis can be submitted only after two months from the date of recommendation by RAC. If a candidate fails to submit the thesis in stipulated period, then extension in submission period can be provided by the Vice-Chancellor on the recommendation of BOS. If the research scholar even then fails to submit his / her thesis within a stipulated period of 8 months, he / she will have to submit the thesis after making Pre-Ph.D submission presentation again.
- (b) If committee is not satisfied with the research work done by the research scholar, it will advise the research scholar to make the specific changes / undertake additional research work and resubmit the extended synopsis.

(iii) Notice for Pre-Ph.D submission presentation must be issued by the office of Dean R & D with the approval of the dean concerned, date in consultation with the concerned chairperson and supervisor, **at least 7 working days in advance**.

(iv) The final report of the committee and all other papers will be submitted to **Dean R & D** for records.

**(viii) Submission of Thesis**

- (i) When a research scholar is ready to submit his or her thesis for evaluation, he or she shall obtain a certificate from his or her supervisor to this effect and shall apply to the chairperson.
- (ii) The Ph.D. candidate shall submit three soft bound (format given in Annexure A-1) and soft copy stored on CD to the concerned department. Four hard bound copies shall be submitted after the final viva.
- (iii) The candidate should also submit to the chairperson six copies of the summary of the thesis each indicating how far the thesis embodies the results of his or her own research or observation and in what respect his or her investigations appear to him or

her to advance the study of the subject of his or her thesis. This will be done two weeks before the meeting of the BOS.

- (iv) The Board of Studies shall approve a panel of 10 specialists (examiners) of Professors rank either working or retired from Govt. / Govt. aided Institute / Govt. Universities / IITs / NITs/ Central R & D Organization / Govt. Departments in the relevant field, out of which 5 specialists (examiners) will be from local states (Haryana, Punjab, Rajasthan and NCR Delhi) and 5 from outside states and country. However, the examiner shall not be from University / Institute of the Supervisor / Candidate and will not be related to them. Member of BOS shall be avoided as an examiner / evaluator of the thesis. The BOS is free to include or change the names of the examiners.”
- (v) The chairperson of the department shall send this examiner’s list (sealed envelope), duly signed by the members of the BOS, along with the copies of the thesis and summary to the office of dean R & D. After verifying the check list (see Annexure 2), the office of dean R & D shall forward this to the examination branch.
- (vi) The COE shall forward this examiner’s list to the Vice-Chancellor. The Vice-Chancellor shall appoint finally three examiners, out of which at least one should be outside the state and one should be outside the country. The Vice-Chancellor is authorized to appoint examiners from outside the panel forwarded by the BOS. The examination branch shall seek the consent of the examiners, if any of the examiner(s) show his/her inability to evaluate the thesis then the consent may be obtained from other examiner(s) approved by the Vice-chancellor. If the reply regarding the consent is not received within a month then the examination branch can communicate with the other examiner after the approval of the Vice-Chancellor.
- (vii) If any examiner does not reply even after three months, two reminders should be given to him at the gap of one month by COE and after that the thesis may be sent to the next examiner after the approval of Vice Chancellor. The entire process of evaluation of Ph.D. thesis should be completed within a period of six months from the date of submission of the dissertation/thesis.

The evaluator will state categorically whether in his or her opinion :

- (a) Thesis should be accepted for the award of Ph.D Degree

OR

- (b) It should be referred to candidate for presenting it again in revised form;

OR

(c) It should be rejected

- (viii) The evaluator shall state reasons for approval or rejection of the thesis. If he or she recommends re-submission /rejection, he or she shall specifically indicate what modifications he or she wants the candidate to effect and incorporate in the thesis. If all the examiners recommend the award of degree, they may also give in their report a set of questions which they would like to put to the candidate at the time of viva-voce. In case two of the examiners rejects the thesis the Vice Chancellor will send the thesis for evaluation to the another examiner. If only one of the examiners recommends re-submission with modification, in that case the candidate shall be asked to modify the thesis and submit the same after having carried out all the modifications within a year with a certificate from the supervisor(s) that all the modifications have been carried out as suggested by the examiner.
- (ix) A re-submitted thesis shall be examined by the examiner(s) who evaluated the original thesis unless any of them is unable or unwilling to do so in which case substitute(s) shall be appointed from the panel by the Vice-Chancellor. The examiner(s) for the revised thesis will only see whether the objections raised have been met or not.
- (x) A candidate whose thesis is rejected shall not be registered again for the Ph.D degree with the same topic.
- (xi) The examiner for a thesis shall indicate in their report whether the thesis is fit for publication in its original or modified form. In the later case, he shall make definite suggestions for improvement.
- (xii) If all examiners recommend award of the degree, the candidate shall be examined through viva-voce examination by one of the examiners, to be nominated by the Vice-Chancellor. If all the examiners are unable or unwilling to conduct the viva-voce examination another person will be approved for the purpose by the Vice-Chancellor from the panel already approved by PG Board of Studies.
- (xiii) The viva-voce examination shall be conducted by the external examiner and will be held in the department concerned at YMCA University of Science & Technology, Faridabad unless otherwise approved by the Vice-Chancellor. All the teachers including supervisor/ co-supervisor and research scholars will be invited to attend the viva-voce examination. The viva-voce examination will be based on the questions given by all the examiners. The candidate will openly defend the thesis in viva-voce examination. The viva-voce examination of the candidate should be on **any working** day and Saturday in consultation with the examiner and supervisor. Notice for Ph.D viva must be issued **at least 7 working days in advance.**

(xiv) After the viva-voce examination, the reports of all the examiners shall be placed before the research degree committee consisting of the Vice-Chancellor, the Dean of the Faculty concerned, chairperson of the university teaching department and one of the supervisor/co-supervisor. It shall be the function of the committee to consider the reports and to recommend to the Academic Council, whether;

(a) The degree be awarded

OR

(b) The thesis be revised and resubmitted for re-examination ;

OR

(c) The thesis be rejected

(xv) Further, provisional degree shall be issued from the date of meeting of research degree committee to such students in whose cases the research degree committee has recommended for award of Ph.D Degree. Along with the degree, the university shall issue a provisional certificate certifying to the effect that the degree has been awarded in accordance with the provisions to the UGC (Minimum Standards and Procedures for the award of Ph.D Degree) Regulation, 2009.

(xvi) Controller of Examination, Dean Academic Affairs & Dean (Research) may also be added in Research Degree Committee (RDC) and COE will act as Member Secretary of this Committee. Further, COE will issue notification of the candidates whose Ph D degree is recommended by RDC within 7 working days of RDC meeting to all concerned.

(xvii) After finalization of the award of Ph.D Degree, one copy will be sent to the University Library and the other to the Departmental Library. The third copy may be returned to be candidate. Further, the university shall submit a soft copy of the Ph.D thesis to the UGC within a period of thirty days, for hosting the same in INFLIBNET, accessible to all institutions/universities.

(xviii) No thesis shall be published without the prior permission of the university. The research scholar may apply to the chairperson of the department for permission to publish his or her thesis. The chairperson will place the request before the RAC which shall satisfy itself that the thesis is in publishable form. It will be guided by the reports of the examiners. A certificate will be obtained from the supervisor to the effect that the necessary improvements suggested by him or her and the examiners have been duly carried out. All the published thesis will be put on university website and will include catalogue and abstract of the thesis.



- (xix) The Academic Council, on the recommendation of the Vice-Chancellor, shall have the right to withdraw the degree if plagiarism or duplication or any other form of malpractice is detected at any stage and to initiate such further action as it deems fit. Provided that the Vice-Chancellor shall get the complaint in the matter investigated confidentially and shall give the accused an opportunity to explain before he makes his recommendation on the matter to the Academic Council. There shall be no limitation of time for this action of the Academic Council.
- (xx) Research Promotion Board (RPB) has the final authority to take decisions for the promotion of research in the University.

**Fee Structure:**

Fees to be paid by Pre-Ph.D. or Ph.D. candidate during the Ph.D. programme will be as laid down by the University from time to time.

Fee payable at the time of admission in Pre Ph.D. Programme:

- i) fee for Pre Ph.D. Course ` 10000/-
- ii) Registration fee : 3000/- one time.
- iii) Tution fee : 10000/- per semester.
- iv) Tution fee (for University Employees): 5000/- per semester.
- v) Caution Money (Refundable) : 5000/- one time.
- vi) Full fee is required to pay for that half year in which thesis is submitted by the scholar.

During the registration period, the Ph.D. Scholars are required to deposit their semester & other fees on or before 30<sup>th</sup> September and March. Otherwise late fee for delayed payment will be as under:

- a) upto 90 days : 1000/-
- b) from 91 days to semester end : 2000/-
- c) For more than one semester: 5000/ per semester
- v) Full fee is required to pay for the semester upto pre-submission.

(vii) Caution money / fee deposited for Ph.D. programme by the scholars will be refunded by the Accounts Branch of the university as per procedure of UG/PG courses on the recommendations of Chairperson / Director of the department / school concerned.

(viii) Remuneration payable to each examiner will be 3000/- for evaluation of thesis and 2000/- for viva-voce. Remuneration for expert in pre-submission will be Rs.2,000/

### **Guidelines for Submission of Extended Synopsis**

The Extended Synopsis should broadly indicate the work done, objectives proposed and achieved, methodology adopted and outcomes in chapter wise description. In general, the following should be the sequence of Extended Synopsis:-

1. Cover Page
2. Certificate by Supervisor
3. Content Page
4. Summary/Introduction
5. Research Objectives
6. Organization of proposed thesis (chapter wise)
7. Contribution
8. Scope for further work

The Extended Synopsis should typically be 15 to 20 pages (excluding title pages). It should be neatly typed on both sides in Times New Roman Font of size 12 with 1.5 spacing.

The general guidelines are as follows:

1. Synopsis must be unambiguous. Title of the Synopsis must be as approved by RAC/BOS.
2. The objectives and methodology of the research should be started in bullet form/itemized.
3. The entire text should be grammatical correct and must be at a reasonable language level.
4. The Synopsis must clearly mention the expected outcomes of the research.
5. Synopsis must be accompanied with a Certificate duly signed by Supervisor and countersigned by Chairperson concerned testifying therein that the entire text of the Synopsis has been read thoroughly and it is as per the guidelines.

Certificate from research supervisor(s) stating that

- (i) Two research papers in reputed journals from which one research paper is in any SCI, Scopus, and Web of sciences journals and two papers in the conferences/seminars during the period of registration in the form of acceptance letter or the reprint).
- (ii) There is *prima facie* case for the submission of the thesis/Extended Synopsis and the thesis does not contain any work, which has been previously submitted for the award of any degree anywhere.
- (iii) Undertaking from the candidate as well as research Supervisor(s) shall mention that: “The thesis is based on the individual, original work of the candidate, which is previously unpublished research work”.
- (iv) It shall be ensured by the research supervisor(s) that: the thesis shall not contain any material that infringes the copyright of any other individual or organization and does not hurt the sentiments of any individual(s) or religion(s). The information such as text, tables, equations, diagrams, figures, charts, graphs, and photographs taken from sources such a published work, like research papers, books, periodicals, web Sites or other sources has been cited appropriately. Further, the opinions expressed or implied in the thesis shall be entirely of the candidate.

**Check List for Students/Academic Section at the time of pre submission**

1. Minimum duration of three years, including course work and a maximum of six years.
2. Research Scholar should submit progress report every six months. Minimum 06 satisfactorily progress report is required for thesis submission. Copy of every progress report should be send periodically to academic section for records.
3. Pre-Ph.D course work certificate /DMC with a 55% or above marks or its equivalent grade in the UGC 7-point scale.
4. 6 copies of extended synopsis.
5. Two research paper (along with the cover page and contents list of that issue) from which one research paper is in any SCI, Scopus, and Web of sciences journals and two papers in the conferences/seminars during the period of registration. The candidate should be the main author in the paper. The List of Publication out of thesis should be divided into three categories:
  - (i) List of Published papers
  - (ii) List of accepted papers
  - (iii) List of communicated papers

The format of the list is given below

S.No	Title of the paper along with volume, Issue No, year of publication	Publisher	Impact factor	Referred or Non-Referred	Whether you paid any money or not for publication	Remarks

6. Patents, if any

## Pre-submission Seminar Report

---

**Thesis examination is unable to commence until the pre-submission seminar has been completed.**

**Candidate details:**

Name of the candidate

Student Registration No:

Faculty:

Department:

Family Name:  Title:

Supervisor/s:

Date of Registration:  /  /

Title of the thesis

---

**Section A: Committee Report****Members of the Committee**

	Name
1.	
2.	
3.	
4.	
5.	

**Oral presentation**

On what date was the oral presentation given?

 /  / 

Did the candidate provide a satisfactory oral presentation of at least 20 minutes?

Yes  No 

Did all members of the review panel attend the oral presentation?

Yes  No **Written submission**

Did candidate meet the guidelines for the written submission including any additional requirements of the faculty and/or Department?

Yes

No

Comments:

**Overall feedback** (If insufficient space below, please attach further information to this form)  
Comment on the quality of the content and delivery of the candidate's written and oral presentation.

Committee shall give specific Recommendation: *Whether the candidate is allowed to submit his/her thesis as per the presentation of the work or modification are required.*

The research work is of high standard, novel and sufficient for the submission of the thesis

Yes/No

**YMCA University of Science & Technology  
Faridabad  
Faculty of .....**

**FORMAT TO BE USED FOR Preparation of Ph.D. Thesis**

**1. ARRANGEMENT OF CONTENTS:**

The sequence in which the thesis material should be arranged and bound should be as follows:

1. Cover page
2. Inner cover page
3. Dedication (optional)
4. Candidate's Declaration
5. Certificate of the supervisor
6. Acknowledgement
7. Abstract
8. Table of contents
9. List of tables
10. List of figures/graphs
11. List of photographs
12. List of abbreviations
13. Body of the thesis
14. References
15. Appendices
16. Brief bio data of the research scholar
17. List of publications out of thesis

**2. PAGE DIMENSION, TYPING AND BINDING SPECIFICATIONS**

- a. The dimension of the thesis should be in A4 size
- b. The Thesis should be hard bound with cover page printed on it in specified format.
- c. Photographs, if necessary, should be suitably mounted on the same quality paper as the thesis.
- d. The typing of cover page, title page, declaration of candidate, certificate of supervisor and name of chapters should be only on one side of the paper whereas the other printing should be on both sides of the paper.
- e. The chapter numbers should be indicated in Roman.

- f. Three copies of the thesis in soft bound and soft copy stored on CD. In case of candidate being supervised by more than one supervisor, appropriate number of additional copies must be submitted.
- g. The colour of the binding (in hard) would be Red. The cover should have the material indicated in the item 'b' above printed on it and should be written with golden ink.
- h. The general text shall be typed in the font style 'Times New Roman' and Font size 12. Use 1.5 spacing between the regular text and quotations.
- i. **FONT**  
**REGULAR TEXT** – Times Roman 12 pts. And normal print  
**CHAPTER HEADING-** Times Roman 16 pts., bold print and all capitals  
**SECTION HEADINGS-** Times Roman 12 pts., bold print and all capitals  
**SUBSECTION HEADINGS** – Times Roman 12 pts., bold print and leading capitals i.e. only first letter in each word should be in capital. Single line spacing should be used for typing the general text.
- j. The margins for the regular text should as follows:  
 Front Side - LEFT = 1.50”, RIGHT = 1.00”, TOP = 1.00”, BOTTOM = 1.00”  
 Back Side - LEFT = 1.00”, RIGHT = 1.50”, TOP = 1.00”, BOTTOM = 1.00”

### 3. PREPARATION FORMAT

- 3.1 Cover Page - A specimen copy of the cover page of thesis is given in Appendix-1.
- 3.2 Inner Cover Page - A specimen copy of the inner cover page of thesis is given in Appendix-2.
- 3.3 Dedication - A specimen copy is given in Appendix-3.
- 3.4 Candidate's Declaration – A specimen copy of Declaration certificate is given in Appendix-4.
- 3.5 Certificate of the supervisor – A specimen copy of Title page of certificate is given in Appendix-5. The certificate shall carry the supervisor's signature and shall be followed by the Supervisor's name, academic designation department etc.
- 3.6 Acknowledgment – A specimen copy of Acknowledgement certificate is given in Appendix-6.
- 3.7 Abstract – Abstract should be one or 2 pages synopsis of the thesis typed in one and a half line spacing, Font Style Times new Roman and Font Size 12. A specimen copy abstract of the thesis is given in Appendix-7.
- 3.8 Table of contents – The table of contents should list all material following it as well as and material which precedes it. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the Table of Contents is given in Appendix-8
- 3.9 List of Tables – The list should use exactly the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the list of Tables is given in Appendix-9.
- 3.10 List of Figures – The list should use exactly the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head. A specimen copy of the List of Figures is given in Appendix-10.



- 3.11 List of photographs –A specimen copy of the List of photographs is given in Appendix-11.
- 3.12 Body of the thesis - The chapters may be broadly divided into 5 parts (i) Introductory chapter including over view of the concerned area and organization of the thesis (ii) Literature review (iii) Scope and objective, methodology of the thesis (iv) Chapters developing the main theme of the thesis work (v) Conclusion and future scope of work.

The main text will be divided into several chapters and each chapter may be further divided into several divisions and sub-divisions.

- The chapter title is the first-order heading. A chapter may be divided into section each of which has a section title (second-order heading). For example, in Chapter 3, the sections will be numbered 3.1, 3.2, etc. If at all possible do not further subdivide a section.
  - Use subsections (third-order headings) only if unavoidable. For instance, in section 3.2, the subsections will be numbered 3.2.1, 3.2.2, etc. Do not further subdivide beyond this point For example, subsection 3.2.2 may not be further divided into sub-subsections 3.2.2.1, 3.2.2.2 etc.
  - Tables and figures in a chapter should be placed in the immediate vicinity of the reference where they are cited.
  - Footnotes should be used sparingly. They should be typed single space and placed directly underneath in the very same page, which refers to the material they annotate.
- 3.13 **References** – A specimen copy of Bibliography is given in Appendix 13.
- 3.14 **Appendices** – A specimen copy of Appendices is given in Appendix 14.
- 3.15 **Brief bio data of the Ph.D scholar** – A specimen is given in Appendix 15.
- 3.16 List of Publications out of thesis –A specimen copy of the list of publication out of thesis is given in Appendix-16.

**Check List for Students/R&D Section at the time of submission**

1. Minimum duration of three years, including course work and a maximum of six years.
2. Research Scholar should submit progress report every six months. Minimum 06 satisfactorily progress report is required for thesis submission. Copy of every progress report should be send periodically to academic section for records.
3. Pre-Ph.D course work certificate /DMC with a 55% or above marks or its equivalent grade in the UGC 7-point scale.
4. 6 copies of extended synopsis.
5. Two research paper (along with the cover page and contents list of that issue) from which one research paper is in any SCI, Scopus, and Web of sciences journals and two papers in the conferences/seminars during the period of registration. The candidate should be the main author in the paper. The List of Publication out of thesis should be divided into three categories:
  - (i) List of Published papers
  - (ii) List of accepted papers
  - (iii) List of communicated papers

The format of the list is given below

<b>S.No</b>	<b>Title of the paper along with volume, Issue No, year of publication</b>	<b>Publisher</b>	<b>Impact factor</b>	<b>Whether Referred or Non-referred</b>	<b>Whether you paid any money or not for publication</b>	<b>Remarks</b>

6. Plagiarism report (not more than 25%) and certificate by supervisor and Chairman.
7. Thesis submission fee of Rs. 3500/-
8. No Dues Certificate from all the concerned departments/sections.

**TITLE OF THESIS**

<Font Size 18<>1.5 line spacing>

**THESIS**

<Font Size 14><1.5 line spacing>

**submitted in fulfillment of the requirement of the degree of**

<Font Size 14<>Italic>

**DOCTOR OF PHILOSOPHY**

<Font Size 16>

**to**

<Font Size 14 <>Italic>

**YMCA UNIVERSITY OF SCIENCE & TECHNOLOGY**

<Font Size 14<>Italic>

**by**

<Font Size 14 <>Italic>

**NAME OF THE CANDIDATE**

<Font Size 14>

Registration No.

**Under the Supervision of**

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**NAME OF THE SUPERVISOR  
DESIGNATION OF SUPERVISOR**

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logo

**Name of the Department**

**Faculty of \_\_\_\_\_**

**YMCA University of Science & Technology  
Sector-6, Mathura Road, Faridabad, Haryana, India**

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**MONTH, YEAR**

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**DEDICATION**

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**Body Text**

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to

My Parents/.....

## APPENDIX 4

(A typical specimen of Acknowledgement)

### DECLARATION

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#### Body Text

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I hereby declare that this thesis entitled **<TITLE OF THESIS>** by **<NAME OF STUDENT>**, being submitted in fulfillment of the requirements for the Degree of Doctor of Philosophy in **<NAME OF THE BRANCH>** under Faculty of \_\_\_\_\_ of YMCA University of Science & Technology Faridabad, during the academic year \_\_\_\_\_, is a bona fide record of my original work carried out under guidance and supervision of **NAME OF SUPERVISOR, DESIGNATION, DEPARTMENT** and has not been presented elsewhere.

I further declare that the thesis does not contain any part of any work which has been submitted for the award of any degree either in this university or in any other university.

(Name of Student)

Registration No. \_\_\_\_\_

**CERTIFICATE**

<Font-Style Times New Roman, size – 16>  
<Font Style Times New Roman, Font size 12>

This is to certify that this Thesis entitled **<TITLE OF THESIS>** <by **NAME OF STUDENT**>, submitted in fulfillment of the requirement for the Degree of Doctor of Philosophy in **<NAME OF THE BRANCH>** under Faculty of \_\_\_\_\_ of YMCA University of Science & Technology Faridabad, during the academic year \_\_\_\_\_, is a bonafide record of work carried out under my guidance and supervision.

I further declare that to the best of my knowledge, the thesis does not contain any part of any work which has been submitted for the award of any degree either in this university or in any other university.

**(Signature of Supervisor)**

Name of Supervisor

**DESIGNATION**

Department of \_\_\_\_\_

Faculty of \_\_\_\_\_

YMCA University of Science & Technology Faridabad,

Dated:

**ACKNOWLEDGEMENT**

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**Body Text**

<Font Style Times New Roman, font size 12>

I would like to express my sincere gratitude to my Supervisor **<Name of Supervisor>** / Joint Supervisor **<Name of Joint Supervisor>** for giving me the opportunity to work in this area. It would never be possible for me to take this thesis to this level without his/her innovative ideas and his/her relentless support and encouragement.

.....

.....

(Name of Student)  
Registration No. \_\_\_\_\_

**ABSTRACT**

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**Body Text**

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**TABLE OF CONTENTS**

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Candidate's Declaration	i.
Certificate of the supervisor	ii
Acknowledgement	iii
Abstract	iv
Table of Contents	v
List of Tables	vi
List of Figures	vii
List of Photographs	ix
List of Abbreviations	x

**Contents /Body of Thesis**

(Suggested format for chapters, which may be modified as per requirement)

1. Introduction
2. Overview of Area
3. Literature Survey Review
4. Motivation
5. Problem Formulation
6. Objectives of the Thesis
7. Methodology
8. Organization of the Thesis
9. Development of Main Work
10. Result and Discussions
11. Conclusion and scope for future work

**LIST OF TABLES**

<Font Style Times New Roman, size -16 Bold>

<b>Table</b>		<b>Page No</b>
Table 1.1	<Title of Table 1.1>	
Table1.2	<Title of Table 1.2>	
Table 2.1	<Title of Table 2.1>	

**LIST OF FIGURES/GRAPHS**  
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**Figure**

**Page No.**

Figure 1.1 <Title of Figure 1.1>

Figure 2.1 <Title of Figure 2.1>

.....

.....

**LIST OF PHOTOGRAPHS**

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**Photograph**

**Page No.**

Photograph 1.1      <Title of Photograph 1.1>

Photograph 2.1      <Title of Photograph 2.1>

.....

.....

**LIST OF ABBREVIATIONS**

<Font Style Times New Roman, size – 16 Bold>

**REFERENCES**

<Font Style Times New Roman, size -16 Bold>

- [1] A. Rezi and M. Allam, "Techniques in array processing by means of transformations, " in *Control and Dynamic Systems*, Vol. 69, Multidemsional Systems, C. T. Leondes, Ed. San Diego: Academic Press, 1995, pp. 133-180.
- [2] S. M. Hemmington, *Soft Science*. Saskatoon: University of Saskatchewan Press, 1997.
- [3] N. Osifchin and G. Vau, "Power considerations for the modernization of telecommunications in Central and Eastern European and former Soviet Union (CEE/FSU) countries," in *Second International Telecommunications Energy Special Conference*, 1997, pp. 9-16.
- [4] D. Sarunyagate, Ed., *Lasers*. New York: McGraw-Hill, 1996.
- [5] O. B. R. Strimpel, "Computer graphics," in *McGraw-Hill Encyclopedia of Science and Technology*, 8th ed., Vol. 4. New York: McGraw-Hill, 1997, pp. 279-283.
- [6] K. Schwalbe, *Information Technology Project Management*, 3rd ed. Boston: Course Technology, 2004.
- [7] L. Vertelney, M. Arent, and H. Lieberman, "Two disciplines in search of an interface: Reflections on a design problem," in *The Art of Human-Computer Interface Design*, B. Laurel, Ed. Reading, MA: Addison-Wesley, 1990. Reprinted in *Human-Computer Interaction (ICT 235) Readings and Lecture Notes*, Vol. 1. Murdoch: Murdoch University, 2005, pp. 32-37.
- [8] E. P. Wigner, "Theory of traveling wave optical laser," *Physical Review*, vol.134, pp. A635-A646, Dec. 1965.

**APPENDICES**

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**Body Text**

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**BRIEF PROFILE OF THE RESEARCH SCHOLAR**

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**Body Text**

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**LIST OF PUBLICATIONS OUT OF THESIS**

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**Body Text**

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**List of Published Papers**

Sl. No.	Title of Paper	Name of Journal where published	No.	Volume & Issue	Year	Pages
1.						
2.						
3.						
4.						

**List of Accepted Papers**

Sl. No.	Title of Paper	Name of Journal where accepted	No.	Volume & Issue	Year
5.					

**List of Communicated Papers**

Sl. No.	Title of the Paper	Name of Journal	Present Status	Year
6.				