



JIS College of Engineering

(An Autonomous Institute)

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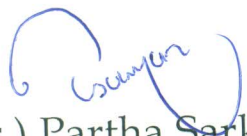
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CERTIFICATE

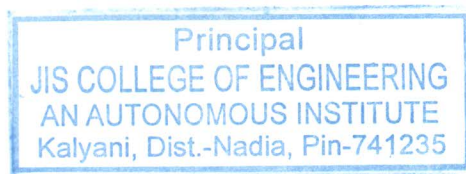
Sub: R&D Policy of the Institute

This is to certify that the Research and Development (R&D) policy of the Institute has been approved by the Board of Governor in its meeting held on

Date	Agenda point	Item
6 th July, 2009	Agenda 18.08: Miscellaneous	R&D Policy was approved
14 th February, 2015	Agenda 2.02: Miscellaneous	R&D Policy Amendment-I was approved
17 th November 2018	Agenda 3.11: Miscellaneous	R&D Policy Amendment-II was approved


Prof. (Dr.) Partha Sarkar
(Signature of Principal)

Date: 21.12.2020



This was approved by BOG

Dated 6th July, 2009

under Agenda No 18.08

**JIS COLLEGE OF ENGINEERING
(AN AUTONOMOUS INSTITUTE)
KALYANI, NADIA,
WEST BENGAL, INDIA**

Research and Development (R&D) Policy:

Preamble:

Improving high-quality scientific research is a necessary requirement for creating successful applications. The objective of Research & development (R&D) initiatives undertaken by JIS College of Engineering (JISCE) is to build research careers, internationalization of human potential, support to strengthen the knowledge foundation and promote the creation of new applications, as well as societal impact of education research and innovation. All education, research and innovation of this Institute should aim to be of a high standard. The goal of creating technological and social innovations has emerged alongside R&D-based activities.

Objectives:

- § Encourage Faculty and students to take up research
- § Monitor activities of centres of excellence/innovative labs/incubation centers
- § Collaboration with foreign universities for Research activities
- § Facilitate Institutional grants/seed money/incentives for promoting research
- § Assist in patenting
- § Conducting research and innovation conclaves

To achieve the high-quality research ambience the following policies has been undertaken. A research & development cell has been established that will prepare and implement the documents for development of research and development activities within the Institute.

1. Establishment of Research and Development (R&D) cell:

1.1 The Research and Development (R&D) Cell was established in 2012 as per the decisions taken by the Academic Council.

1.2. The R&D Cell comprises of the following members

- (i) Director/Principal-Chairman (*ex officio* member)
- (ii) Registrar (*ex officio* member)
- (iii) Dean–Coordinator (*ex officio* member)–would be the Secretary/Jt. Secretary of the Cell.
- (iv) Head of all Academic Departments (*ex officio* member)–
- (v) Members* Senior Faculties, nominated by the Director/Principal.
- (vi) Nominee from the Industry
- (viii) Nominee from the University
- (ix) Nominee from Network Institution.

*Head/ Members should have Doctoral degree (Ph.D.)

*Head/ Members should have Research publications in refereed journals to their credit.

2.1 The R&D Cell is responsible for assisting the Academic Council in the performance of the Council's responsibilities in respect of the establishment and promotion of excellence in the Institute's research and development, and academic and research training activities. This includes the development, review and monitoring of achievements under the Research & Development, and those aspects of other university/InstitutePlans.

2.2 The development and enhancement of the Institute's research capacities.

2.3 Motivate all Faculties to pursue research in their respective areas of expertise.

2.4 The protection and commercialization of the Institute's intellectual property.

2.5 Consultancy activities related to R&D.

2.6 The provision of research and development opportunities for academic staff to maintain enthusiasm, awareness of current scholarship and relevance in teaching and other Institutional activities.

2.7 The development of infrastructure conducive to promoting the quality and quantity of research and development.

2.8 The establishment of research and development priorities; and monitoring the quality and quantity of school research and development.

2.9 Disbursement of Institute Research Funds to established researchers, both individually and in groups; including research infrastructure funds; higher degree by research candidates; seeding grants to beginning researchers; research initiatives across the departments; and provision of consolidated information to the Academic Council and other appropriate Institutional bodies.

2.10 Monitor the application of Research Funds to ensure that the funds are properly and formally accounted for.

2.11 Promote emerging areas of research and development.

2.12 Development of mechanisms conducive to the best possible ways of engaging and motivating research staff.

2.13 To monitor and enhance the quality of research programmes, projects and the research infrastructure within Institute, including the training of research scholars.

2.14 To be responsible for progression of research scholars.

2.15 To foster the development of multi-disciplinary research endeavors across Faculties and departments.

2.16 Monitor the research and development performance of individuals, groups, Centres, Schools and Faculties to encourage excellence and productivity through maintaining a database of

research and development activities.

2.17 Oversee the application of the Code of Research Ethics for the responsible practice of research.

2.18 To formulate incentive schemes for promoting research activities with teachers and students/scholars.

2.19 The quality of postgraduate education to be brought up to an internationally high level. An evaluation of PG program to be carried out by the R&D committee.

2.20 To promote building strategic, durable partnerships and develop funding solution with Industries and research Institutions for steering, funding and cooperation.

2.21 Legislation on higher education is amended to support the export of education.

3. Terms of Office

3.1 Members of the R&D cell other than *ex officio* members serve for terms of up to five years.

3.2 An appointed member may be appointed to serve for additional terms as per the approval of the Academic Council of the Institute.

4. Quorum

The quorum for meetings of the R&D cell shall be the nearest whole number above 50% of the membership of the R&D cell for the time being.

5. Meeting Schedule

The R&D cell will meet at least once in each semester. The Chairman/Coordinator is responsible for determining if more meetings are required.

6. Reporting

The R&D cell will report to the Academic Council by way of its minutes.

7. Policy for Research and innovation funding: Development principles

(a) Funding will be long-term and predictable, and allocated under transparent criteria.

(b) Long term skill development requires a stable funding base: the diverse and strong technological and science base of this Autonomous Institute will be safeguarded.

(c) Funding to promote the application, introduction and commercialization.

(d) New and current resources to be directed towards the most important targets:

strengths and selected priority fields; infrastructures; the research career system; internationalization.

(e) Research and innovation by individual departments will be activated through funding, with the aim of improving the ability to innovate through interdisciplinary research work.

(f) The funding basis for the Institute to be diversified; quantitative objectives and incentives to be set for international funding through steering committees.

(g) A larger share of the research funds will be used for strengthening the knowledge base and for research and innovation as well as cross-border cooperation.

(h) Expanding the funding base of research institutes will be necessary in the future.

8. APPROVAL OF RESEARCH PROPOSALS

8.1 The design and methodology of research undertaken by a member of staff or student, that makes use of research and subjects like people, human remains, other living beings and the environment, must be submitted to R&D Cell for evaluation and approval, especially if legislation, professional councils or institutions affected by the research require it.

8.2 When students hand in research essays, mini-dissertations, dissertations and theses, they must declare that their research has complied with the Code of Research Ethics of the Institute.

9. Promotion of Research

JIS College of Engineering acknowledges innovations and research as a key focus area. Guiding and driving force behind the operation of this cell is the Research Advisory Board and Board of Governors of the Institute. Entire Research, Development and Innovation activities are coordinated by Dean Research and Development along with members of Institutional Innovation Council, JISCE and R&D Cell, JISCE. Both these bodies would work in three distinct aspects viz., advanced research, innovation and imparting standards among all the researchers across the departments. To promote research and innovation, Centres of excellence (CoE) and innovative labs have need to be established.

R&D Cell of the Institute is entrusted for reviews thrust areas on research, developing projects leading to publications in indexed Journals and conference proceedings, writing projects, filing patents.

The Institute would periodically review incentive schemes to potential faculty members for promotion of quality research at all levels.

10. ResearchCenters:

The Institute would focus on developing number of research Centers and or Centre of Excellence with focus on contemporary research works. State of art facilities like central instrumentation centre, central computing facility, central fabrication unit, central 3-D printing unit need to be set up in due time.

11. Intellectual Property Rights (IPR) policy:

In line with the Institutional Missional and Vision, all academic departments of the Institute would focus on identifying major problems and its engineering solutions through innovations which in turn would lead to the development of Intellectual Property Rights (IPR). All IPRs would be filed with JIS College of Engineering as applicant and concerned person(s)involved in the project as inventor(s).

12. Consultancy Policy:

The Institute would promote consultancy work utilizing available R&D resources and manpower. Teacher(s)/staff member(s) involved in the consultancy work would be eligible to receive maximum of 60% of the consultancy amount; remaining amount would be utilized for academic development purpose.

13. FACILITATING PROFESSIONAL& RESEARCH DEVELOPMENT**A. EligibleEmployees**

JIS College of Engineering employees (excluding employees on leave without pay) with a regular full-time appointment and with one year of accumulated service are eligible employees

B. Criteria for ProfessionalDevelopment: Training

- i) Courses, seminars, workshops and conferences intended to assist employees in maintaining and improving knowledge and skills relevant to the employees' responsibilities or to their career development at the Institute, can be considered forfunding
- ii) All professional development activities must be provided by an association that is in the business of career related training or upgrading, or a service provider that is in the business ofeducating
- iii) Employees approved for Professional Development Leave are entitled to up to 14 paid workingdays.

- iv) The following will not be considered for funding-
 - i. Professional fees and dues
 - ii. Training to meet minimum job requirements in the employee's current job (e.g. basic level training for newly installed or upgraded computer hardware or software will not normally be approved whereas intermediate and/or advanced computer training may be considered for funding).
 - iii. Courses or programs an employee is expected to take at the sole request of a supervisor
- v) General interest courses. An exception might be a course that could be an asset to the employee and the college

C. Criteria for Research Funding

To encourage research activities and fostering of R&D ambience within the Institute potential teachers would be provided Seed Grant as financial assistance to initiate major and minor projects within the Institute.

D. Disbursement and Utilization of Grant:

Eligible employees can access funds for approved professional development to a maximum of Rs. 1 lakh in each financial year (April 1 to March 31) per teacher. Maximum funding levels are set by Board of Governors and reviewed periodically.

Approved funding for individual professional development activities will not be carried forward into the next financial year.

Allowable expenses must be submitted within two (2) weeks of the staff development activity.

Funds allocated to professional development activities will be in the following priority order-

- i) Registration fees
- ii) Materials and supplies
- iii) Travel for activities off campus
- iv) Accommodations and meals

E. Process of approval Training:

- i) The College pre-approves requests for financial support or developmental activities only. The college does not normally approve funding requests retroactively.

- ii) Requests for leave to participate in a professional activity must be obtained by the applicant from the Principal through their respective Head of the Department.
- iii) Completed applications are to be submitted to the Principal's office at least one week prior to the event.
- iv) Completed applications are considered on a first come first serve basis. Applications will be date stamped upon receipt and reviewed for completeness.

R& D Grant:

- i) Application in prescribed format to be submitted to R&D Cell of the Institute.
- ii) All application to be scrutinized by the committee formed by R&D Cell.
- iii) Final approval to be made by the Research Advisory Committee.

F. Cancellation

Employees can request to withdraw their application and/or approved funding by writing to the Principal after obtaining approval from Head of the Department.

Employees can not use previously approved funding for a different purpose.

Employees who do not attend the professional development event for which they have received approved funding must repay the money.

14. Publications Policy related to R&D:

Publisher: The JIS College of Engineering shall be the publisher.

Scope: This policy applies to all departments and units.

Purpose of the Policy: Publication policies, procedures, and guidelines are framed to ensure a minimum standard and common visual identity in all official publications and promotional materials. The Institute official information will be accurate, consistent, legally compliant, timely and accessible.

To this end, clear roles and responsibilities will be defined for those who formulate, publish and maintain this information, whether electronically or in print. Each publication will have a designated content owner who is responsible for ensuring that the publication complies with this policy. Management and release of publications will be authorized by the designated content manager for specific publications and/or categories of publication. The Chairman / Convener Publications Committee shall be responsible for the overall

administration of the publication policy. All new and existing publications issued or reproduced in any language and in any medium, including web, print, CD ROM, video and audio, are required to be of a high standard and to represent fairly and accurately the institutes operations, services. The current standards are defined in the publication processes and procedures and in the policies referred to in the sections below.

Publishing: Publishing is defined as making or assisting to make information publicly available in a manner which purports to represent to public forum, its programmes of study, capabilities, activities or interests, whether on the institute website or by linking from that website, or printed, electronic or reproduced in any form whatsoever.

Publication types

- A. **Primary Publications:** The primary focus of this policy is to bring out institute's official information. This is defined as information which is of a regulatory or contractual nature and is therefore binding on or relied upon by those who deal with the institute. The policy in respect of this information is to manage the authorization, content and format of its production so that it can be contractually relied upon to represent or describe the institutes regulations, policies and practices as well as the services and products which the institute offers and the terms on which such services and products are supplied.

Publications which contain this type of information include the following: The Academic Calendar (published or reproduced in any medium, including web, print and CD ROM). All materials published or reproduced in any language and any medium, including web, print, CD ROM/DVD, video and audio, which are prepared for communicating contractual information to prospective, current or past students of the Institute or to those who influence and support them. Examples of such materials in print are: Short guide (for future students), Prospectus, Introducing booklets, Accommodation Guide, Family guide, College and campus handbooks, information for international students, programme guides and brochures, leaflets, posters, fliers and the like which are produced for the purpose of promoting programmes and services. All advertising communications, including television, cinema, newspaper, radio, magazine, flyers, leaflets, web banners, posters, electronic recordings, CDs, DVDs, vehicle and outdoor advertising, email, phone, SMS and direct mail campaigns and all other advertising formats. All materials published or reproduced in any language and any medium, including web, print, CD ROM/DVD, video and audio, prepared for the purpose of communicating contractual information to the Institutes

business partners, research partners and stakeholders.

B. Secondary Publications: The focus of this policy is on information which is not intended to be regulatory or contractual, but rather is teaching material, or is descriptive, interpretative or explanatory about people, activities and issues of interest to those who interact with the Institute. The publication policy is intended to cover scholarly publications such as journal articles, books and the like which are the product of normal academic activities. The policy in respect of this information is to have procedures in place to ensure that it is fit for purpose, without compromising the appropriate exercise of academic freedom of expression. Where the context does not make the status of the material self-evident, a disclaimer may be required, stating that no representation is being made or implied that the content has official endorsement as policy or should necessarily be contractually relied upon by those who deal with the.

JIS College of Engineering shall publish the following items.

1. Online Publications

- a. Websites
- b. Online News Letters
- c. e-Magazine
- d. e-Journals
- e. e-Brochures
 - i. Placement Brochure
 - ii. Institutional Brochure
 - iii. e-Prospectus

2. Hard Copy Publications

- a. News Letter
- b. Magazine
- c. Journal
- d. Brochures
 - i. Placement Brochure
 - ii. Institutional Brochure
 - iii. Prospectus

- e. Case Study Book
- f. Conference / Seminar Proceedings
- g. Research Thesis of Faculty
- h. Books Composed by Faculty Members in Original
- i. Monographs
- j. Study Materials

Roles and Responsibilities:

Policy Owner: The Chairman / Convener shall be responsible for administration of the publication policy. Issues of compliance, policy interpretation, and maintenance of the policy, processes and procedures and promulgation of the policy should be referred to the Chairman / Convenor. Compliance with the policy will be monitored and reported to the publications committee under guidance of Chairman / Convenor.

Content Owners: The Content owner is JIS College of Engineering, who shall manage the publication unit through the Chairman / Convenor Publication Unit, having overall responsibility for accuracy, consistency and timeliness of content in publications under their control as well as for approving content for publication. Content owners are responsible for compliance with this policy and the JIS College of Engineering's publication processes and procedures, as well as with other relevant policies and procedures (eg. for the management of copyright, adherence to advertising and branding guidelines and for publication consistent with the Policy).

Content Managers (Publication Committee): Shall ensure that appropriate policies and standards are in place and adhered to by internal stakeholders. Maintain an up-to-date list of publications, content owners, editors and authors. The content managers will normally delegate responsibility for particular publications or types of publication to the relevant operational line manager. The Web Content Manager is responsible for the Institutes web content management system. Chairman / Convenor publication committee shall create the team responsible for the institutes primary publications in print, CD ROM/DVD, video and audio. The convener website committee (under the guidance of chairman / convenor publications) shall be responsible for website publications.

A current content owner must be identified for each publication and it is their responsibility to

ensure they are registered with the appropriate content manager. The owner must be a staff member of JIS College of Engineering, such as heads of departments/faculty/staff who shall delegate the responsibility for the production of the publication to an editor.

Editors: An editor (or coordinating editor) shall have delegated responsibility for one or more publications which combine materials belonging to several content owners or authors.

Authors: Create and maintain content for specific publications in whatever format/medium. Authors must submit material to content owners for approval before publication.

Content Sources: JIS College of Engineering has number of authorized central repository which serve as the primary locations of official information. These are described in the (JIS College of Engineering) publication processes and procedures. Authorization to place or amend content in these repositories and to define templates and formats rests with the executive person or bodies delegated by (JIS College of Engineering) Principal shall authorize the publication committee for timetable information for the institutes teaching programmes.

Storage and security: The IT Manager is accountable for the hardware and network integrity and security of the University's authorized central repositories. Web servers and other infrastructure managed by units other than ITS which are used to store publicly available web content or files for publication must adhere to the same policies and to comparable service levels for administration, security, backup and maintenance as apply to ITS.

Branding: All primary publications are required to comply with JIS Group's current branding and design standards. These are contained in the JIS Group's Brand Identity Guidelines. Approved templates and guidelines for print and electronic publication are available from AGM Corporate at JIS Group Head Office.

All secondary publications must also comply with the (JIS College of Engineering)'s/

JIS Group's current branding and design standards as far as reasonable and consistent with their function.

Audience: All staff / stakeholders.

Relevant legislation:

All relevant acts relating to Indian publications

Copyright: All materials shall be published as original and should not have been published before in their current or substantially similar form, or be not under consideration for publication with any other journal / book / or any other form.

The contributors shall warrant that the materials is his/her/their original contribution and that it is no ways and no form under consideration for publication elsewhere.

Authors submitting articles for publications shall warrant that the work is not an infringement of any existing copyright and will indemnify the publisher against any breach of such warranty.

Permissions: Prior to article submission, all contributors shall obtain and submit clear permission to use any content that has not been created by them.

Rights of publishers:

1. Non-exclusive right to reproduce the material in the article or book chapter.
2. Print and electronic rights.
3. Worldwide English language rights.
4. To use the material for the life of the work (i.e. there should be no time restrictions on the re-use of material).

Publications Committee

Publisher: JIS College of Engineering **Chairman:** Principal (JIS College of Engineering)

Convenor: Jt. Convenor: Members:

15. Terms for Book Publications

AGREED TERMS:

RIGHTS

- i) The Contributor with full title guarantee assigns to the Publisher for the full period of copyright and all extensions and renewals (where relevant by way of present assignment of future copyright) the entire copyright and all other rights of whatever nature in and to the Contribution including, but not limited to, the right for the Publisher by

itself or with others, throughout the world, to copy, store and publish the Contribution or derivative works based on the Contribution and to issue, rent, sell transmit and distribute copies of the Contribution or derivative works to the public in all languages and in all media of expression now known or later developed, and to license or permit others to do so.

- ii) The rights in the title of the Contribution and the Work and any series titles used on or in connection with the Work including, without limitation, any trade mark or trade dress rights will belong solely to the Publisher.
- iii) If the Contribution is written by the Contributor in the course of the Contributor's employment, the Contribution is owned by the company/employer which must sign this Agreement (in addition to the Contributor's signature) in the space provided below.
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On or before the due date specified in the Letter of Invitation (the "Due Date") the Contributor will deliver one copy of the complete Contribution in accordance with the "Instructions for Contributors" to the Publisher. Upon completion of the Volume Editor's review, the Volume Editor will return the Contribution to the Contributor for revision and the Contributor will revise the Contribution in accordance with the Volume Editor's instructions or advice. Upon completion of the revision of the Contribution by the Contributor, the Contributor will submit the final version of the Contribution to the Volume Editor and Publisher within 4 (four) weeks of receipt of the Volume Editor's review.

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The Publisher may, after publication of the Work, dispose of all original materials and artwork. The Publisher will, however, on written request made prior to publication, make reasonable efforts to return any original material supplied by the Contributor. The Contributor must retain a copy of all materials delivered to the Editor.

v) ACCEPTANCE

If the Contributor fails to deliver the complete Contribution acceptable to the Publisher, the Editor and the Volume Editor in form, organisation, content and style on the Due Date, and/or does not make the changes referred to in Clause 2.2 within 4 weeks, or if notwithstanding those changes the Contribution is not, in the Volume Editor's or

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At the request of the Publisher, the Contributor will read and correct the proofs for the Contribution and return them to the Publisher within 14 days of receipt, failing which the Publisher may agree with the Volume Editor to dispense with proof corrections by the Contributor.

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- b. the Contributor is the sole owner of all rights in the Contribution and has not assigned, encumbered, licensed or otherwise disposed of any rights in or to the Contribution except pursuant to this Agreement and the Contribution has not previously been published and is not in the public domain;
- c. the Contribution contains nothing libellous, in breach of any confidentiality obligations or official secrets acts, or anything which would constitute a malicious falsehood or is otherwise unlawful and exploitation of the Contribution by the Publisher or any licensee of the Publisher will not infringe the copyright or any other rights of any third party;
- d. all statements in the Contribution purporting to be facts are true or based upon generally accepted professional research practices and any advice, recipe, formula or instruction contained in it will not, if followed accurately, cause any injury, illness or damage to the user.

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- b. create adaptations, updated versions or derivative works of the Contribution, either by itself or with others suitably qualified, provided that the Contributor will be credited as the author of the original Contribution, in which case the Contributor will receive no further payment for the Contribution.

xii) CONTRIBUTOR'S COPIES: Each Contributor shall receive access to the particular volume of the work in which their Contribution is published.

xiii) RESOLUTION OF DISAGREEMENTS: In the event of any disagreement between the Contributors which prevents or delays submission of the Contribution by the Due Date in form, organisation, content and style acceptable to the Publisher, or otherwise interferes with the publication of the Work, the Publisher may, in its sole discretion, determine how the disagreement will be resolved and its determination will be final.

xiv) TERMINATION OF AGREEMENT: The Publisher may terminate this Agreement immediately by notice in writing if:

- a. the Contributor fails to deliver the Contribution acceptable to the Volume Editor and Publisher in content and style by the Due Date, or fails or refuses to make the changes requested by the Volume Editor pursuant to clause 2; or
- b. publication may result in legal liability unacceptable to the Publisher in its reasonable judgement; or
- c. if the Publisher, in its sole discretion, does not publish the Contribution as part of the Work or does not proceed with publication of the Work.

xv) ASSIGNMENT

13.1 The Contributor recognises that the Contributor's engagement is personal and that the Contributor may not assign or dispose of the Contributor's rights or obligations under

this Agreement, other than the right to receive any fee payable, without the prior written consent of the Publisher.

13.2 The Publisher may assign the benefit of this Agreement (or any interest in this Agreement) to a third party provided the Publisher will procure that the assignee undertake to observe and perform all of the obligations of the Publisher in this Agreement.

xvi) GENERAL

Any notice given under this Agreement must be in writing and sent to the address of the other party set out in this Agreement or as otherwise notified. Notice may be given to a party to this Agreement by electronic mail (other than in respect of clause 12), hand delivery, pre-paid first class post, airmail or fax (provided the fax machine used has an answer back facility). In the case of notices sent by the Contributor to the Publisher,

these should be marked for the attention of the Publishing Director. Notices sent by post will be deemed received on the 5th business day after posting or, if sent by airmail, on the 10th business day after posting. Notices which are hand-delivered will be deemed given at the time of actual receipt. Any notice sent by fax or electronic mail will be deemed given at the moment when the answer back or message sent confirmation (as the case may be) is received by the sender.

This Agreement and any attachments and/or appendices to this Agreement contain the full and complete understanding between the parties and supersede all prior arrangements and understandings and may not be modified except in writing and signed by both parties or their duly authorised representatives. Nothing in this Agreement shall limit either party's liability in respect of fraudulent misrepresentation.

Failure by a party to enforce any term of this Agreement will not constitute a waiver of that term or of that party's right subsequently to enforce any term of the Agreement.

The warranties and indemnities contained in this Agreement and the provisions for payment of and accounting in respect of payment due to the Contributor under the terms of this Agreement will survive the termination or expiry of this Agreement.

Each party undertakes to the other that it will not disclose to any third party, except to their respective professional advisors, the terms of this Agreement without the prior written consent of the other.

Nothing contained in this Agreement will be construed as constituting a partnership or contract of employment between the parties.

The parties do not intend any term of this Agreement to be enforceable by any third party

which is not a signatory to the Agreement.

This Agreement will be governed by Indian Law as if made and wholly performed in England and the parties agree to submit to the non-exclusive jurisdiction of the Indian (West Bengal) courts.

Terms for Journal Publication

Guidelines

Ethics: (NAME OF THE JOURNAL) shall adhere to high ethical standards in publishing.

Copyright: Articles submitted to the journal should not have been published before in their current or substantially similar form, or be not under consideration for publication with any other journal / form. **The author is needed to submit an undertaking that the article is his/her/their original contribution and that it is no ways and no form under consideration for publication elsewhere. Authors submitting articles for publication shall warrant that the work is not an infringement of any existing copyright and will indemnify the publisher against any breach of such warranty.**

The editor/s shall / may use appropriate software for checking the originality of the submissions received.

Permissions: Prior to article submission, authors should clear permission to use any content that has not been created by them.

Rights of publishers:

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Guidelines

When reproducing tables, figures or excerpts (of more than 400 words) from another source, it is expected that:

- i. Authors shall obtain the necessary written permission in advance from any third party owners of copyright for the use in print and electronic formats of any of their

text, illustrations, graphics, or other material, in their manuscript. Permission must also be cleared for any minor adaptations of any work not created by them.

- ii. If an author adapts significantly any material, the author must inform the copyright holder of the original work and the authors would need to obtain and provide proof of consent statements
- iii. Authors must always acknowledge the source in figure captions and refer to the source in the reference list.
- iv. Authors should not assume that any content which is freely available on the web is free to use. Authors should check the website for details of the copyright holder to seek permission for re-use.

Final submission: Authors should note that proofs are not supplied prior to publication. The manuscript will be considered to be the definitive version of the article. The author must ensure that it is complete, grammatically correct and without spelling or typographical errors. Before submitting, authors should check their submission completeness.

Manuscript requirements: Authors are requested to prepare their manuscript using the following guidelines before submission

Format: All files should be submitted as a Word document as .docx file. Pictures / Figures (if any) are to be provided in high resolution .JPEG Format with insertion at appropriate positions in text with legends.

Article Length: Articles should be a maximum of 10000 words in length. This includes all text including references and appendices.

Article Title: This should clearly reflect the goal of the paper in as crisp and simple statement as possible

Article Title Page

A separate Article Title Page should be submitted alongside with the articles, this should include the following:

- i. Article Title
- ii. Author Details: Details should be supplied on the Article Title Page including: Full

name of each author, Affiliation of each author, at time when the research was completed, where more than one author has contributed to the article, details of who should be contacted for correspondence, E-mail address of the corresponding author, Brief professional biography of each authors, Acknowledgements

- iii. Abstract: This should clearly indicate the following, research design/methodology/approach, major findings, managerial implications (value contributed) within Maximum is 250 words.
- iv. Keywords: The author is requested to provide 8 to 10 keywords on the Article Title Page, that shall encapsulate the principal topics of the paper
- v. Article Classification (Research Paper / Spot Light/ Book Review)

Funded Research: In case of publication of outputs of funded research, the authors shall declare all sources of external research funding with a statement to this effect in the Acknowledgements. Authors should describe the role of the funder or financial sponsor in the entire research process, from study design to submission.

Headings: Headings must be concise, with a clear indication of the distinction between the hierarchy of headings. The preferred format is for first level headings to be presented in bold format and subsequent sub-headings to be presented in medium italics.

Notes/Endnotes: Notes or Endnotes should be used only if absolutely necessary and must be identified in the text by consecutive numbers, enclosed in square brackets and listed at the end of the article.

Figures: All Figures (charts, diagrams, lined drawings, webpages/screenshots, and photographic images) should be submitted in electronic form. All Figures should be of high quality, legible and numbered consecutively. Graphics may be supplied in colour to facilitate their appearance on the online database.

- i. Figures created in MS Word, MS PowerPoint, MS Excel, Illustrator should be supplied in their native formats. Electronic figures created in other applications should be copied from the origination software and pasted into a blank MS Word document or saved and imported into an MS Word document or alternatively create a pdf file from the origination software.
- ii. Figures which cannot be supplied in the above acceptable pdf formats.
- iii. Photographic images should be submitted electronically and of high quality. They should

be saved as .jpeg files at a resolution of at least 300dpi and at least 10cm wide. Digital camera settings should be set at the highest resolution/quality possible.

Tables: Tables should be typed and included in a separate file to the main body of the article. The position of each table should be clearly labelled in the body text of article with corresponding labels being clearly shown in the separate file.

Authors must ensure that any superscripts or asterisks are shown next to the relevant items and have corresponding explanations displayed as footnotes to the table, figure or plate.

References: References to other publications must be in Harvard style and carefully checked for completeness, accuracy and consistency.

1. **For books:** Surname, Initials (year), Title of Book, Publisher, Place of publication.
e.g. Kotlar, P. (2012), Marketing Management, 12th Ed., Pearson Education, New Delhi, pp. a-b
2. **For book chapters:** Surname, Initials (year), "Chapter title", Editor's Surname, Initials, Title of Book, Publisher, Place of publication, pages.
e.g. Calabrese, F.A. (2005), "The early pathways: theory to practice – a continuum", in Stankosky, M. (Ed.), Creating the Discipline of Knowledge Management, Elsevier, New York, NY, pp. 15-20.
3. **For journals:** Surname, Initials (year), "Title of article", Journal Name, volume, number, pages.
e.g. Capizzi, M.T. and Ferguson, R. (2005), "Loyalty trends for the twenty-first century", Journal of Consumer Marketing, Vol. 22 No. 2, pp. 72-80.
4. **For published conference proceedings:** Surname, Initials (year of publication), "Title of paper", in Surname, Initials (Ed.), Title of published proceeding which may include place and date(s) held, Publisher, Place of publication, Page numbers.
e.g. Jakkilinki, R., Georgievski, M. and Sharda, N. (2007), "Connecting destinations with an ontology-based e-tourism planner", in Information and communication technologies in tourism 2007 proceedings of the international conference in Ljubljana, Slovenia, 2007, Springer-Verlag, Vienna, pp. 12-32.
5. **For unpublished conference proceedings:** Surname, Initials (year), "Title of paper", paper presented at Name of Conference, date of conference, place of conference, available at: URL if freely available on the internet (accessed date).
e.g. Aumueller, D. (2005), "Semantic authoring and retrieval within a wiki", paper

presented at the European Semantic Web Conference (ESWC), 29 May-1 June, Heraklion, Crete, available at: <http://dbs.uni-leipzig.de/file/aumueller05wiksar.pdf> (accessed 20 February 2007).

6. **For working papers:** Surname, Initials (year), "Title of article", working paper [number if available], Institution or organization, Place of organization, date.
e.g. Moizer, P. (2003), "How published academic research can inform policy decisions: the case of mandatory rotation of audit appointments", working paper, Leeds University Business School, University of Leeds, Leeds, 28 March.
7. **For encyclopedia entries (with no author or editor):** Title of Encyclopedia (year) "Title of entry", volume, edition, Title of Encyclopedia, Publisher, Place of publication, pages.
e.g. Encyclopaedia Britannica (1926) "Psychology of culture contact", Vol. 1, 13th ed., Encyclopaedia Britannica, London and New York, NY, pp. 765-71. (For authored entries please refer to book chapter guidelines above)
8. **For newspaper articles (authored):** Surname, Initials (year), "Article title", Newspaper, date, pages.
e.g. Smith, A. (2008), "Money for old rope", Daily News, 21 January, pp. 1, 3-4.
9. **For newspaper articles (non-authored):** Newspaper (year), "Article title", date, pages. e.g. Daily News (2008), "Small change", 2 February, p.7.
10. **For electronic sources:** If available online, the full URL should be supplied at the end of the reference, as well as a date that the resource was accessed.
e.g. Castle, B. (2005), "Introduction to web services for remote portlets", available at: <http://www-128.ibm.com/developerworks/library/ws-wsrp/> (accessed 12 November 2007).
11. **Standalone URLs**, i.e. without an author or date, should be included either within parentheses within the main text, or preferably set as a note (roman numeral within square brackets within text followed by the full URL address at the end of the paper).

Submissions Procedure: please email the soft copy of the article to the editor in chief at (EMAIL ID) indicating the section for which the article has been submitted in the subject.

Review process: Each paper is first reviewed by the editor and, if judged suitable for consideration it would be put up to three referees for double blind peer review. Based on their recommendations, the editor would decide whether the paper should be accepted as is, revised or rejected. The Editors reserve the right to make additional recommendations over and above the reviewers', and to make the final decision on each manuscript.

16. CODE OF RESEARCH ETHICS:

This code expresses the ethical values of all staff engaged in academic and/or research activities at the JIS College of Engineering (An Autonomous Institute), who have committed themselves to:

- i) uphold the values of freedom, democracy, equality, human dignity and respect for diversity;
- ii) strive for distinguished scholarship, excellence in teaching, reputable research and innovation through leading, challenging, creating and exploring knowledge.
- iii) accomplish the above individually, through collective efforts and partnerships with Communities.
- iv) The purpose of the Code of Research Ethics is to guide staff and students engaged in academic and research activities to:
- v) respect the human dignity and rights of all stakeholders.
- vi) promote shared ethical values and fulfill all academic/research activities according to such values.
- vii) uphold and promote individual, group and institutional integrity when in the process of fulfilling the roles as Professors, Guides, Researchers, Mentors and Advisors.
- viii) create trust in the institution and the practice of science and engineering.
- ix) this code can be amended from time to time to deal with other aspects of research duties.
- x) the pursuit of truth through free inquiry and open dialogue.
- xi) just and fair treatment of human beings, other living beings, the environment, and human remains.
- xii) complying with the highest standards of scientific and engineering research

xiii) making no misrepresentation in the dissemination of research information and findings and not fabricating data or information.

xiv) designating authorship of consulted research sources clearly, accurately and justly and assigning authorship of research publications accurately and justly.

xv) committing no form of plagiarism.

xvi) practicing or promoting no form of unfair discrimination in research.

a. RELATIONSHIPS WITH THE COMMUNITY:

(i) Data or information shall be gathered and recorded in such a way that it can be made available at any time (after completion of the project) to other interested parties without undermining confidentiality.

(ii) Researchers will judiciously consider potentially destructive consequences of their research activities, outcomes or outputs on the human or natural environments and will avoid such research projects, or assiduously reduce the risk of such consequences through their research activities.

(iii) Researchers will exercise their rights to academic freedom and freedom of scientific research, researchers are accountable to the community for the way in which they exercise those rights.

b. RELATIONSHIPS WITH SPONSORS

(i) The methods, contents and results of research that has been funded (fully or partially) by external funds, shall be fully disclosed. Full particulars of the person or institution

from outside the Institute who funded the research shall be provided in the published results of the research.

(ii) Researchers shall be honest with sponsors of their research about their qualifications and their research expertise and skills. Researchers shall ensure that sponsors require nothing of their research that is contrary with internationally acknowledged standards for ethical research.

(iii) Researchers shall only utilise a sponsor's funds for purposes explicitly approved by the sponsor.

c. RELATIONSHIPS WITH RESEARCH PARTICIPANTS AND

RESEARCH OBJECTS:

- (i) Researchers shall, at all times, respect research participants' right to freedom, dignity, privacy and bodily and psychological integrity.
- (ii) Researchers shall treat non-human living beings with care, respect and awareness of their vulnerability and defenselessness.
- (iii) Researchers shall undertake research in a manner that does the environment no harm and that creates no additional environmental stress.
- (iv) Researchers shall undertake to carry out biohazard waste disposal as per established norms and practices.
- (v) Researchers may use people as participants of research only if they have given their proven informed consent for their participation in the research, or, in the case of persons younger than eighteen years, if their guardians have given such informed consent and also observe confidentiality.

Ph.D Regulations:

Following Regulations relating to the Degree of **Doctor of Philosophy (Ph.D)** in Engineering, Science, Humanities and Management Disciplines (henceforth referred as **Faculties**) of this Autonomous Institute have been constituted. The Regulations may be called **“Ph.D Regulations, IISCE, Kalyani”**.

PART - I

1. GENERAL:

The Ph.D. Degree shall be awarded to a candidate on the basis of original research work of merit recommended by the concerned Supervisor(s) followed by the Doctoral Committee and subsequently passed by the Board of Examiners and successfully defended by the candidate during his/her Viva-Voce Examination.

2. Eligibility Criteria for Admission

- (i) The application for admission to the Ph.D programme is to be made to the **DIRECTOR / REGISTRAR** in the prescribed form.
- (ii) **Ordinarily, The Institute shall admit a Ph.D. candidate through an ENTRANCE TEST** in the subject in which he/she has obtained Master's Degree. Although, if he / she wishes to apply other than the one in which he/she has got the qualifying degree, the candidate has to seek an endorsement from the concerned Doctoral Committee. **However, a person who has cleared UGC / CSIR(JRF)**

Examinations / NET / SET / SLET / GATE / Teacher

Fellowship or any other examinations that may be deemed equivalent by the Doctoral Committee or passed the M.Phil. / M.Tech. (the Master's Degree in any Engineering) or Equivalent Examination shall not be required to appear at the said Ph.D. Entrance Test.

- (a) In case of candidates holding a qualifying degree from any University,

admission for the Ph.D. Programme will proceed after determination of the **EQUIVALENCE by the Doctoral Committee of this Institute (JISCE)** and fulfillment of the admission criteria.

(b) In all other

cases the Institute (JISCE) shall admit as Ph.D. candidate through an ENTRANCE TEST conducted by the office of the Principal & Dean along with all the HODs and if qualified the applicant will have to be successful in the Interview governed by the Doctoral Committee of JISCE. However, the Dean and respective departmental Heads in consultation with the Director will decide the admission test procedure. A list of successful candidates name will be published and displayed through Institute's Internet.

- (iii) A person who has obtained a Post Graduate Degree of less than 2 years duration may also apply who has completed at least a total 5 years of Graduate and Post Graduate study in a recognized university / Institute provided the Doctoral Committee of JISCE endorse it.

In case of Foreign Applicant, a clearance from the Govt. of India is to be produced to the Director of the Institute. Moreover, Enrolment in the Ph.D. programme may be allowed only to such foreign nationals as have obtained and are holding RESEARCH VISA.

- (iv) A person who has obtained the Degree in MCA of this Institute or from any other Institutes of repute recognized as equivalent thereto by this Institute may also apply for Ph.D admission programme. The concerned departmental head (where he / she intends to enroll) in consultation with the members of the Doctoral Committee of JISCE will take up an Entrance test followed by an Interview.

- (v) The intending candidate must submit a statement that he / she is not

currently enrolled as a student in any course of studies or registered for the Ph.D degree in any Institute/University and shall undertake not to be thus enrolled or registered so long as he / she is registered for Ph.D degree of this Institute(JISCE)

- (vi) Doctoral Committee will predetermine the number of students to be admitted in the Ph.D. Programme in the month of July. (Once in a year). However, Entrance test schedule shall be notified once in a year and the reservation policy should be strictly followed as per rules of the Govt. of WestBengal.

3. RegistrationProcedure

- (i) The Doctoral Committee will process the application of the qualified candidate. The scheme of work and the Title of the Thesis which is to be submitted along with the application or within one year from the date of Registration.
- (ii) However, if the Doctoral Committee accepts the candidate for Registration then the candidate must register his/her name within one month of the date on which the decision of the said committee is communicated to the candidate, by paying the requisite fee plus such other fees duly determined by the Institute.
- (iii) Registration for Ph.D degree shall be granted to the candidate provided that the Doctoral Committee is satisfied that:
 - a) The candidate satisfies the requirements for eligibility as laid down in item no.2.
 - b) It shall be possible for the candidate to maintain regular contact with the Supervisor throughout the entire period of his/her work, and

c) The experimental part, if any, of the work can be carried out at this Institute or in other recognized Institute / University or Research Organization or Industry where adequate facilities for carrying out such work exist.

d) That person is qualified as per the norms and willing to act as supervisor.

In case of Failure to register within the prescribed time, the application shall be deemed to have been cancelled unless granted permission by the Director on the basis of a written application.

On payment of the registration fee, the candidate's name and other particulars will be included in the register maintained by the office of the Principal & Dean.

Registration shall remain valid for FIVE years from the date of registration. The relevant Doctoral Committee may, however, extend the period of registration beyond 5 (five) years on the merit of individual cases on sufficient grounds provided that such extension shall not exceed two (2) years.

The candidate may apply to the Director for cancellation of registration stating reasons, and such application, preferably forwarded by the Supervisor(s) must be placed and recorded at the meeting of the Doctoral Committee. If approved, the candidate's registration will be cancelled.

The Institute/ WBUT may also cancel the registration of a candidate if he/she does not fulfill the above criteria. In such cases, the Supervisor(s) may recommend to the Director for cancellation of the said registration. The application shall be placed at the meeting of the Doctoral Committee. The Doctoral Committee will take final decision after getting the reply within a stipulated period of time.

4. Privileges & Obligations of Registered Candidates

- i) A registered candidate shall work under the guidance of the Supervisor(s) appointed by the Doctoral Committee.
- ii) A registered candidate shall abide by such regulations as may be prescribed by the Doctoral committee from time to time.
- iii) If the candidates do not have Master's or equivalent degree, he/she will have to complete at least four courses, of which one course shall be on 'Research Methodology'. Each course shall be of one semester duration. The candidate with the approval of the Supervisor(s) may choose courses from the regular Master's degree courses and equivalent PhD level courses offered by the Institute or courses identified and approved by the Doctoral committee from any reputed and recognized Institute previously identified by them. All the courses must be successfully completed with at least 50% marks within two years of registration. Those mark sheets must be submitted to the Doctoral Committee through the Supervisor (s) for inclusion in the student's record.

A fee determined by the Institute shall be paid by a registered candidate for appearing at the examination for the course(s) mentioned above.

He/she shall submit a progress report in duplicate to the office of the Principal & Dean through the Supervisor(s) once in every completed year of research.

5. Thesis Supervision

- i) The Supervisor under whom a registered candidate shall have to work shall be a TEACHER of this INSTITUTE (JISCE) holding a Doctorate Degree or possessing adequate research experience as evidenced by the Quality PUBLICATIONS, which is to be decided by the members of the Doctoral Committee. However, if the teacher Himself / Herself

is registered for Ph.D degree, he/she shall not be eligible for appointment as a Supervisor till he/she is awarded the degree.

- ii) A) In special cases, the Doctoral Committee may appoint a Supervisor from outside this JISCE. A Teacher / Scientist from any University / Institute who wishes to supervise a registered candidate of this Institute for the first time has to apply in the prescribed form forwarded by the Director and this has to be approved by the Doctoral Committee.

B) The Doctoral committee may appoint a Supervisor from the Officers of the Institute holding a Doctorate Degree and possessing adequate research experience as evidenced by publications provided that if the officer himself/herself is registered for the Ph.D degree, he/she shall not be eligible for such appointment as Supervisor till he/she is awarded the degree.

C) A Teacher / Officer of this Inst. Can have registered candidates in any faculties / disciplines if he/she is eligible 5(i) and 5(ii) B) above.

- iii) The Doctorate Committee of each Disciplines (e.g., Engineering, Science & Management referred as Faculty) will constitute "Ph.D Research Committee" either for every department / schools (if any) or for each research work. Such committee shall be comprised of the following members:

A. Ph.D Research Committee for Departments / Schools (if any)

Head of the Dept./Director of the School as chairperson.

- a) Elected Member of the Doctoral Committee from the Department / Joint Director of the School.

- b) Concerned Supervisor(s) as inviteemember.
- c) FOUR (4) Subject-Experts of whom at least one must be from outside the Dept. / School and one must be from outside the Institute,nominated by the concerned Board of Studies / Academic Committee of School (ACS) for a maximum period of fouryears.
- d) Dean and Principal ofJISCE

B. Ph.D Research Committee for each researchwork

- a) Concerned HOD / Director of School asChairman.
- b) Same as A.
- c) 4 subject-experts of whom one must be from outside theInstitute.
- d) Concerned Supervisor(s) with one of them asConvener.

The Ph.D Research Committee will conduct the Interview, review the Title and Scheme of work and conduct pre-submission presentation of the candidate and forward its report to the Doctoral committee.

- iv) Not more than 4 (FOUR) candidates may work under the guidance of a Supervisor at a time. A joint supervision shall count as one fullsupervision

6. Thesis Submission

- i) A registered candidate shall have to work for a minimum period of 2 years after registration, although the Doctoral Committee may permit a candidate to submit his/her thesis One year after the successful completion of coursework, if the supervisor certifies that the candidate has carried on research for 2 years and that the thesis embodies at least 2 years' work.
- ii) A student must have at least One Publication in a referred Journal outof his/her doctoral research work prior to submission and shall produce evidence for the same in the form of

acceptance letter or offprint to the Doctoral Committee.

- iii) Before final submission of the thesis a student who has satisfactorily completed the course work (vide item 4(iii)), must present his/her work at a meeting of the Ph.D Research Committee as constituted under 5(iii). Interested researchers may also attend the meeting as invitee. Any suggestion may be suitably incorporated under the advice of the Supervisor(s).
- iv) S/he shall state in the preface on which the work is based and how the work contributes to the general advancement of knowledge. S/he shall also state the sources from which her/his information has been derived and shall indicate which portion(s) of the thesis s/he claims as her/his original contribution.
- v) A candidate cannot submit any portion of her/his thesis work for which a degree or diploma or other academic award has been conferred on her/him by this Institute or any other Institution but may incorporate as part of the thesis any such earlier work with proper citation/reference.
- vi) A registered candidate shall have to submit FOUR hard copies (the number may be determined separately in case of Joint Supervision) and one electronic copy of the thesis duly recommended by the Supervisor(s) embodying the results of the research she/he has carried out together with four copies of the Synopsis of the thesis. The copies of the Thesis should be submitted to the Principal & Dean's office together with a receipt of the fees paid to the institute for this purpose.
- vii) The Fee so paid is nonrefundable.

- viii) Proof of the candidate's fulfillment of other requirements shall also be submitted at this time.
- ix) The Executive Council shall have the power to revoke any Ph.D degree conferred duly if the candidate is found guilty of Plagiarism, falsification / copying of data / information or any other form of academic or ethical malpractice. The decision of the Council is final.

7. Thesis Examination

- a) The Doctoral committee shall approve names of Six persons who are well known authorities on the subject for appointment as Examiners of a thesis by considering the list submitted by the Supervisor(s). Such examiners shall neither be Teachers of this Institute nor persons who are supervising candidates for the Ph.D degree registered at this Institute.
- b) On recommendation of the Doctoral Committee, a Board of Examiners, consisting of two external experts and the Supervisor(s) under whose guidance the candidate worked, shall be appointed by the Executive Council of which at least one external expert shall be from outside the state of West Bengal.
- c) External Examiners will be requested to state their opinion in the prescribed form that has the following options:
 - i) The candidate may be awarded the Ph.D degree of this Institute / WBUT
 - ii) The candidate may be awarded the Ph.D degree of the Institute / WBUT provided that the following

Modifications are addressed in a separate addendum. The examiners present at the Viva Voce must certify that the modifications are satisfactorily addressed, failing which the thesis must be resubmitted after addressing the suggested modifications.

iii) The candidate may be awarded the Ph.D degree only after addressing following questions and resubmitting the thesis.

iv) The candidate not be awarded the Ph.D degree of this Institute /WBUT”

A detailed Report must also be submitted and signed by the external Examiners.

A thesis which has been directed to be resubmitted by at least one of the External Examiners may be submitted again after due revision, modification or alteration but not earlier than three months from the date of communication of the recommendation to the candidate and a fee shall have to be paid at the time of resubmission as decided by the Institute /WBUT. External Examiners appointed under 7(b) will examine the resubmitted thesis again. A thesis may be resubmitted only once.

d) If there is a difference of opinion in the recommendations {(clauses 7(c)

(i) to (iii) vis-à-vis (d)} of the External Examiners, all the reports and the thesis will be sent to a THIRD External Examiner appointed by the Doctoral Committee who will act as special Adjudicator and her/his recommendation will be considered as BINDING.

e) If both the external examiners reject the thesis {clauses 7 © (i)

& (ii)} or in case of a favourable opinion of the Special Adjudicator, s/he shall be asked to appear at the viva voce examination.

8. Viva Voce Examination

- i) There shall be an OPEN viva voce examination for which notice should be issued 15 (fifteen) days before the examination and teachers of all faculties shall be invited to attend the examination. Other interested persons may also attend.
- ii) The Executive Council on recommendation of the Doctoral Committee shall appoint one expert who is not a teacher of this Institute and is a well-known authority on the subject, and the Supervisor(s) of the candidate, as examiners for the oral examination. In case the supervisor is not available, the Institute /WBUT shall appoint another examiner in her/his place.
In the event of a Ph.D candidate proceeding abroad after submission of the thesis, two competent Scholars in the field abroad may be appointed as an examiner for the Open viva voce as a special case with the approval of the Director / Vice Chancellor.
- iii) The examiners at the oral examination may ask questions beyond the subject of the thesis in order to satisfy themselves that the candidate has

adequate knowledge of the particular branch of the subject on which s/he has submitted the thesis. If there is an addendum as mentioned under 7(c) (ii), the examiners will certify that it is satisfactory.

- iv) If the examiners are not satisfied, the candidate may be directed to appear again at the viva voce examination after six months. Such a candidate shall pay an additional fee duly determined by the Institute / WBUT.
- v) The Degree will be awarded by the WBUT if the examiners of the viva voce examinations are of the opinion that the candidate is a fit person to receive the degree.

9. Honorarium of Examiners

The members of the Board of Examiners shall be paid an honorarium as may be determined from time to time by the Institute / WBUT for the examination of the thesis and the Oral Examination separately.

Honorarium will be paid to the examiners at the same rate as mentioned above for re-examination of the thesis.

10. Registration of Candidates under Supervisors who are not the Teachers of JISCE

- i) The executive Council may identify research institutions from where the teachers and researchers may independently supervise candidates for the Degree of Ph.D of this JISCE, Kalyani Institute.
- ii) The research Institute shall only be recognized by the Institute (JISCE) if said institute does not confer Ph.D. Degrees independently
- iii) When a research institute is thus identified by the Executive

Council of this Institute (JISCE), the research institute must follow the rules and regulations of JISCE / WBUT regarding the Ph.D Programme.

- iv) The Director / Head of the research Institute must forward the candidate's application form for registration to the Ph.D programme of this Institute.
- v) The Ph.D research Committee as constituted under clause 5(iii) will conduct the Interview, review the Title and the Scheme of work and conduct pre-submission presentation of the candidate and forward its report to the Doctoral Committee.

Amended on 14th Feb, 2015

Approved By B06

Under Agenda No 2.02

Amendment 1:

Year of Amendment: 2015

The R&D policy of the Institute is herein amended with following clauses as impacted by transformation in industrial front vis a vis reforms in academic sectors.

A 1. 01: **Digital transformation in Education:** Focus on Digital transformation of education and education and development of educational technology workforce.

A1. 02: **Innovation and Incubation:** Systematic approach to be adopted for inculcating attributes of self-thinning and innovation through idea generations, project exhibition, mentorship towards product development and its commercialization.

An Innovation Cell should function under R&D Cell specially for nurturing and monitoring innovation activities.

A1. 03: **Seed Grant for UG and PG students project work:** Seed grant amounting amounts a minimum of Rs. 3000.00 to provided to each UG and PG final year students project group.

Amended on 17th Nov, 2018

Approved By BOG

Under Agenda No 3.11

Amendment 2:

Year of Amendment: 2018

The R&D policy of the Institute is herein amended as per the recent policies made by apex bodies and trends of emerging technologies.

A 2. 01: **Formation of Institutional Council:** The Institutional Innovation Cell thou exist would be transformed into Institutional Innovation Council and would function as per the structure of Innovation Cell of MHRD.

A2. 02: **Vertical project group formation:** All students' project group would work as a 'vertical project group' structure. Groups would be multidisciplinary and form a pyramidal structure with students from each year with faculty mentor at the top.

A2. 03: **Go-cluster:** In order to ensure cross pollination of ideas and tangible outcome based research various research groups can form clusters within Institution or with external collaborators. Go-cluster would ensure support for members of clusters through sharing of ideas.

A2. 04: **Peer Mentorship:** Senior teachers could act as mentor of cluster of teachers and supervise them towards research excellence.

A2. 05: Code of Research Ethics: This Code of Ethics in Research sets forth general principles of ethical conduct to guide UG/PG students/scholars toward the highest ideals of scholarly research. The principles mentioned in related policy document represent goals and requisite standards that should direct researchers to an ethical course of action.

A2. 06: Policy on maintaining academic integrity and anti plagiarism: Defined Policy related to maintaining academic integrity and anti plagiarism.

A2. 07: Research Advisory Committee (RAC): The Institute shall have a Research Advisory Committee (RAC) mainly to frame guidelines pertaining to the conduct of PG, Ph.D and Post-Doctoral research programmes offered by it on the lines prescribed by the UGC.