



**ELECTRONICS & TELECOMMUNICATION ENGINEERING  
DEPARTMENT  
JADAVPUR UNIVERSITY, KOLKATA - 700032  
[PHONE: 2414-6002(DIRECT), 2414-6666 EXT. 2402(O), 2404(HEAD)]**

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Ref. No.: BoS/ETCE/PV/17/2018  
Minutes of the BoS Meeting held on  
Friday, January 05, 2018 at 4.35pm in the Chamber of the Head

**AGENDA:**

0. To Confirm the minutes of the BoS Meeting held on 23/11/2017 and to ratify the List of Experiments for Basic Electronics Lab sent to the Convener for the Common I year Syllabus under FET.
1. To consider the matter of Syllabus for Research Methodology in connection with the PhD Admission Test (2017-18) of FET, JU, as directed by Dean, FET, JU during the just concluded Doctoral Committee and Faculty Council Meetings

**MEMBERS PRESENT**

l. #	Name	Sl. #	Name
1	Prof. P. Venkateswaran (in the Chair)	7	Dr. Chandrima Mondal
2	Prof. Bhaskar Gupta	8	Dr. Pratyusha Rakshit
3	Prof. Amit Konar	9	Mr. Nirmoy Modak
4	Prof. Subir Kumar Sarkar	10	Dr. Divya Somvanshi
5	Prof. Ananda Shankar Chowdhury		
6	Dr. Joydeb Bhaumik	11	Prof. Iti Saha Misra

**BoS Resolution on Agenda # 0:**

BoS has confirmed the Minutes of the BoS Meeting held on 23/11/2017 and ratified the List of Experiments for Basic Electronics Lab sent to the Convener for Common I year Syllabus under FET.

**BoS Resolution on Agenda # 1:**

Prof. B. Gupta, the DC Member of the Dept. shared the outcome of the just concluded two successive DC Meetings in the context of the discussion held on PhD Admission Process at the FET, JU. HoD also shared the outcome of the just concluded two successive DC and FC Meetings in the context of the discussion held on PhD Admission Process at the FET, JU. HoD informed that 145 applications were received by the FET, JU for the ETCE Dept. (highest for a single dept. as that of Mech Dept. under FET) in connection with the PhD Admission Process. Members of the BoS had a detailed discussion on the syllabus for the Research Methodology subject (Part I) as well as the syllabus for the subject / discipline wise test (Part II) for the proposed PhD Written Test to be conducted shortly by the FET, JU department wise.

**Resolved and Confirmed** that the syllabus for the for the Research Methodology subject (Part I) as well as the syllabus for the subject / discipline wise written test (Part II) for the proposed PhD Written Test to be conducted shortly by the ETCE Dept. as per Annexure – I be approved and the same be sent to the FET, JU on or before Jan. 15, 2017 for necessary action as requested by the Dean, FET, JU in the just concluded FC Meeting.

BoS had a detailed discussion on the modality of the PhD Admission Process (Both the Written Test and the Interview / viva-voce) also. Resolved that the modality of the PhD Admission Process / Test to be conducted by the ETCE Dept., JU be approved as per Annexure – II.

The meeting ended at 6PM with a vote of thanks to the Chair.

**Department of Electronics & Tele-Communication Engineering, JU**

**Ph.D. Admission Test : (2017-18)**

**Part – I : Syllabus for Research Methodology**

**Module I: Concept & Significance of Research**

Significance of research, Objective of Research, Motivation of Research, Research methods vs Methodology , Types of research – Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical Selection and formulation of Research Problem, Select a Research Topic , Steps/Stages in Narrowing a Research Topic , Steps for Successful Research

**Module II : Research Design**

Need for research Design, Research Methods : Traditional Methods – Historical, Institutional, Legal, Philosophical, Comparative, Ethical methods etc. Modern Methods: – Survey of Literature, Sampling method, Questionnaire, Schedule etc, Focus Group discussion, Observation Method, Case Study method, Content analysis, Statistical Method, Experimental method, Brainstorming Techniques etc. Selection of Appropriate Research Tools,

**Module III: Report Writing**

(a) Significance of Report Writing (b) Organization of the Research Report Preliminaries Like: Different steps in Writing Report, Layout of the Research Report, Bibliography, Appendices (c) Precautions for Writing Research Report like: IPR and Plagiarism

Reference:

1. <https://www.slideshare.net/lgustavomartins/research-methodology-10445096> (PPT on Research Methodology by Luís Gustavo Martins, Porto, Portugal)
2. Donald H. McBurney, “Research Methods”, Thomson Asia Pvt. Ltd., Singapore, 2002.
3. Kothari C. R., “Research Methodology and Techniques”, New Age International Publishers, 2<sup>nd</sup> Edition, New Delhi, 2004.

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**Part – II : Syllabus for Electronics & Tele-Comm. Engg. Discipline**

As per the Bachelor of Engineering (Electronics & Tele-Communication Engineering) syllabus (Updated) of Jadavpur University, available in the JU website.

**Ph. D. Admission Test / Process Modality**

1. Eligibility Criteria: B.E. / B.Tech. in Electronics & Tele-Comm. Engg or equivalent followed by the M.E. / M.Tech. in Electronics & Tele-Comm. Engg. or equivalent with atleast 55% Marks at the Master's level for the General category students and 50% Marks at the Master's level for the SC/ST/OBC(Non-creamy layer) / Differently abled and other categories of candidates as per the Govt. norms.
2. Every candidate who had applied online already as per the Dateline mentioned, for the PhD Programme under the Department of Electronics & Tele-Communication Engineering of JU and who satisfy the eligibility criteria as mentioned above are eligible to appear for the PhD Admission Test to be organized by the Dept. of ETCE, JU.
3. (a) (i) The first phase of PhD Admission Test which is a written test is purely qualifying in nature. (ii) This written test will have Part I on Research Methodology comprising 25 MCQ with 2 marks for each question. For every incorrect answer,  $\frac{1}{4}$  or 0.25mark will be deducted. (iii) Part II of the Written test is based the B.E. (ETCE) syllabus of JU, comprising 25 MCQ with 2 marks for each question. For every incorrect answer,  $\frac{1}{4}$  or 0.25 mark will be deducted. (iii) Total marks for the written test will be Part I - 50 + Part II - 50 = 100 marks. (iv) The duration of the written Test will be for One Hour. Calculators are not permitted during the written test. (v) Qualifying marks for the written test will be 50% (ie. 50 marks) for General Category candidates and 40% (ie. 40 marks) for SC/ST/OBC(Non-creamy layer) / Differently abled candidates. Candidates who qualify the written test will be eligible to appear for the second phase of the Admission Test.  
(b) The Part II of the written test which is subject / discipline specific will comprise a compulsory "Common Module" consisting of 7 questions and five "Specialization Modules" consisting of 18 questions in each module. A candidate has to answer compulsory "Common Module" consisting of 7 questions and one of the five "Specialization Module" consisting of 18 questions, thus a total of 25 questions under the subject / discipline specific written test.
4. (i)The second phase of the Admission Test will be based on the Interview / viva-voce (for the eligible candidates who qualify the written test). In the interview/viva-voce, a candidate shall be required to discuss his/her research interest/area indicated/ submitted during the online submission of PhD application through a Presentation before the Ph.D. Research Committee of the Department.

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 Department/School concerned;
- (c) the proposed area of research can contribute to new/additional knowledge

(ii) The maximum marks awarded for this session will be 100. (iii) Qualifying marks for the second phase of the Admission Test ie. Interview / viva-voce will be 50% (ie. 50 marks) for General Category candidates and 40% (ie. 40 marks) for SC/ST/OBC(Non-creamy layer) / Differently abled candidates. (iv) Final Merit List and selection of candidates to be admitted to the PhD Programme will be based on the marks obtained in the Interview / viva-voce only.

5. **The entire PhD admission process shall be coordinated by the Departmental Research Committee (DRC)** with the active cooperation from all the faculty members of the Department. All the faculty members will extend their cooperation for short listing the eligible candidates who would sit for the written test and also for the successful conduct of the written test at the Departmental Premise as an when the PhD Admission / Written test schedule is finalized by the FET, JU.

6. Faculty Members who have submitted the “intake of PhD Candidates” Form **along with their research area** in response to the Notice dated September 11, 2017 from the Principal Secretary, FET and **specifically those faculty members** who have opted to take the PhD students through the PhD Admission Process for the Session (2017-18) are requested to assist the DRC in preparing and compiling the questions for the admission test and also during the both phases of Admission test (Written test & Interview/viva-voce) so as to identify the suitable candidates who could work **as per the research area suggested by the concerned faculty members** of the Department.

7. It may be noted that as suggested by the FET during the just concluded DC and FC meetings, the Selection / Merit List of the successful candidates as well as the Waiting List is valid for the current session ONLY. It will not be carry forward to the next session.