# Guru Nanak Dev Engineering College, Ludhiana
## Electrical Engineering Department
### Notice
## MAJOR PROJECT- FINAL YEAR

**Ref.No.EE/31**                                                       08.01.2025

Students of final year (7th Semester) Electrical Engineering are required to submit project proposals duly typed (in Times New Roman Font size 12) with following guidelines latest by **16.01.2025, 8.30AM** in office of undersigned or by email to arvinddhingra@gndec.ac.in:

1. All project proposals should be of realizable hardware/software projects related to Electrical Engineering.
2. Projects based on microcontroller shall not be accepted unless accompanied by a certificate verifying the programming to be done in college laboratory only.
3. A group of four students at the most is permitted to be formed for project work.
4. The project proposal should include a brief summary of the proposed project, literature survey, basic circuit diagram, approximate cost of the project.

Students who do not submit the proposal by due date shall be grouped by the department and awarded the project by the department. Project groups/ project proposals once submitted shall not be changed.

Also the following is the likely schedule for Project Work

| | |
|---|---|
| Submission of Proposals | 16.01.2025 |
| Guide Allocation | 20.01.2025 |
| Synopsis Presentation | 30.01.2025 at 11.30AM in Drives Lab |
| Mid Term Review | 27.02.2025 |
| Final Project Submission | 30.04.2025 |

Students should note that continuous Rubrics based evaluation shall be followed for project evaluation. Rubrics shall be displayed separately. All project proposals/reports are subject to plagiarism check.

Dr. ARVIND DHINGRA
Project Coordinator

Cc: HOD(EED): for kind information please
DNB, Notice boards for classes of final year.
To be put up on departmental website

DNB (Mezzanine/Corridor)

| | |
|---|---|
| KDS ———— PTS | |
| RJS ———— NSB | |
| GSS ———— HSG | |
| AD ———— RKR | |
| SKG ———— BSA | |
| KSK ———— BHW | |
| KBS ———— ADK | |
| AKG ———— SWP | |
| SKS ———— BWS | |

Ref. No. EE/92-
dt. - 10/1/25

**GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA**
**ELECTRICAL ENGINEERING DEPARTMENT**
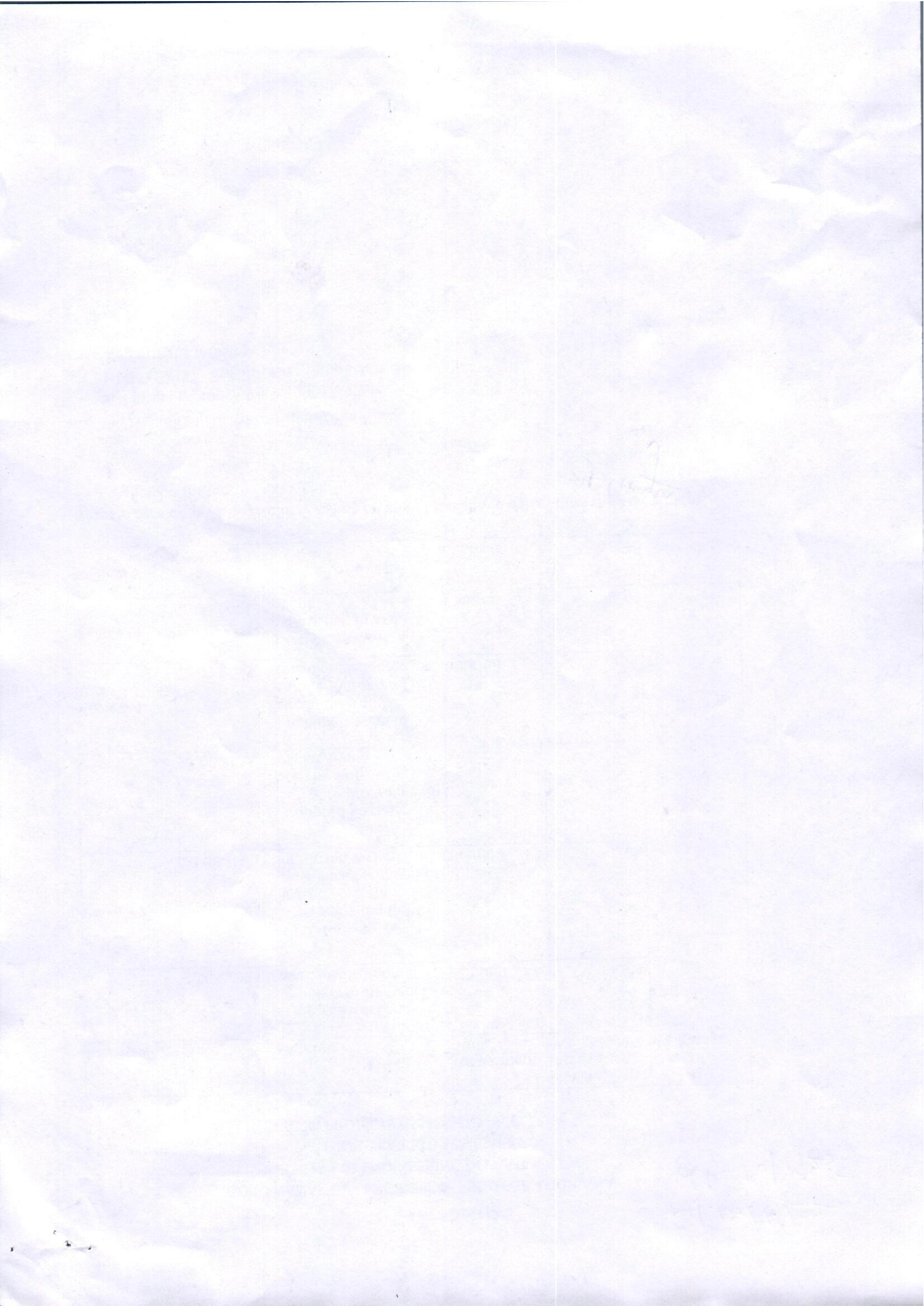**FINAL YEAR 8TH SEMESTER**
**MAJOR PROJECTS ASSESMENT SCHEDULE**

| Review # | Date | Agenda | Assessment Tool | Review Assessment Weightage | Overall Weightage |
|---|---|---|---|---|---|
| Review 1 | 30.01.2025 | Title, Abstract and Problem Statement with justification | Rubric 1 | 20% | 60% |
| Review 2 | 20.02.2025 | Literature review, merits and demerits of existing system, possible advantages of proposed system | Rubric 2 | 20% | |
| Review 3 | 27.02.2025 | Proposed Circuit/ Software program with step by step explanation | Rubric 3 | 20% | |
| Review 4 | 12.03.2025 | Implementation of circuit diagram/ software program/ technique adopted | Rubric 4 | 20% | |
| Review 5 | 16.04.2025 | Results, analysis, dicussion, future scope | Rubric 5 | 20% | |
| Review 6 | 30.04.2025 | Complete Project review | Rubric 6 | 100% | 40% |

**Note:** In case of any MST/Holiday falling on any of the above dates, then the assessment shall be shifted to next week.

Project Coordinator

Cc: DNB/ Notice Board of Final Year Classes
: All project Guides for Major Project
: HOD (EED) : For information please.
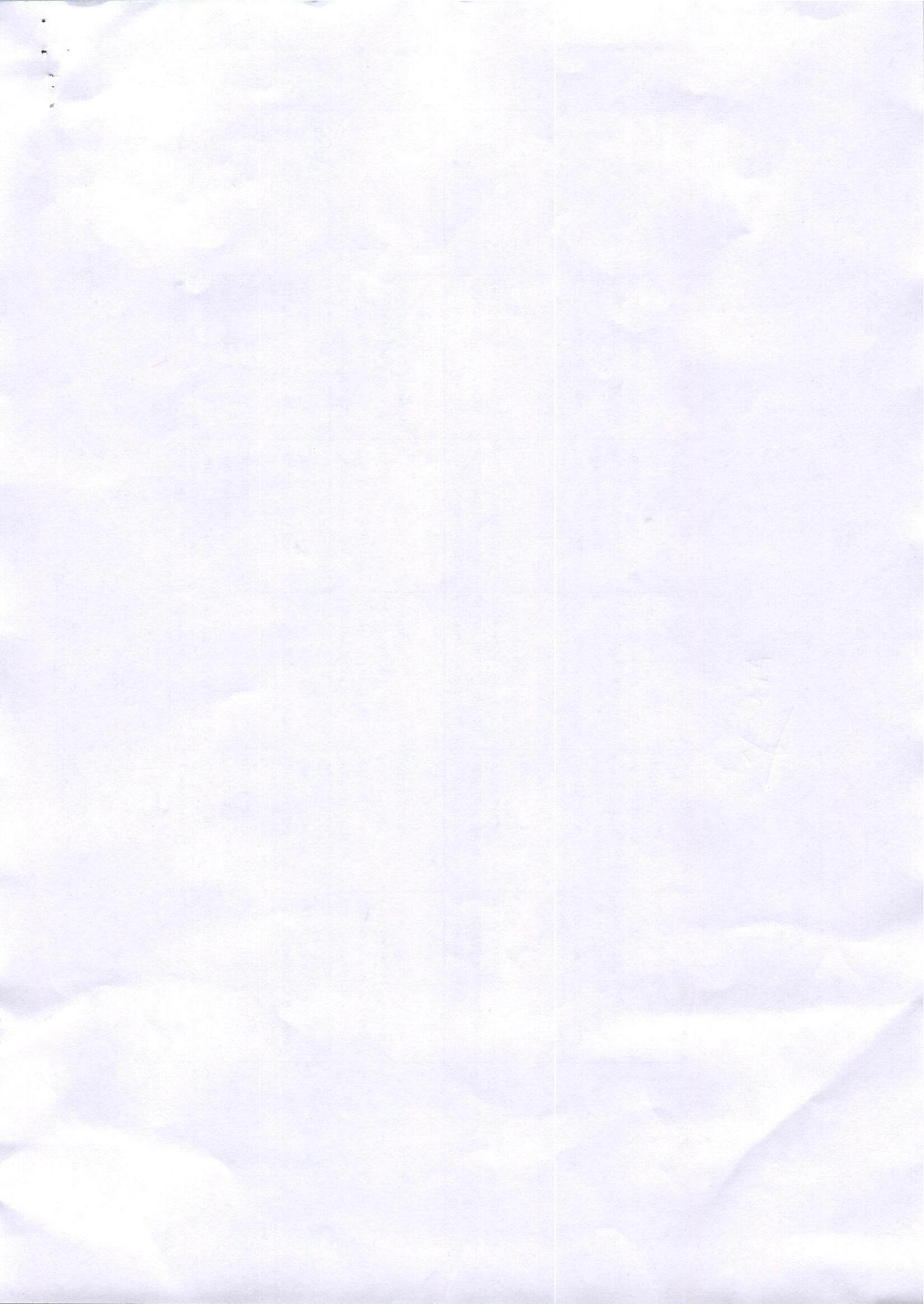: Department website

**Rubric #1**

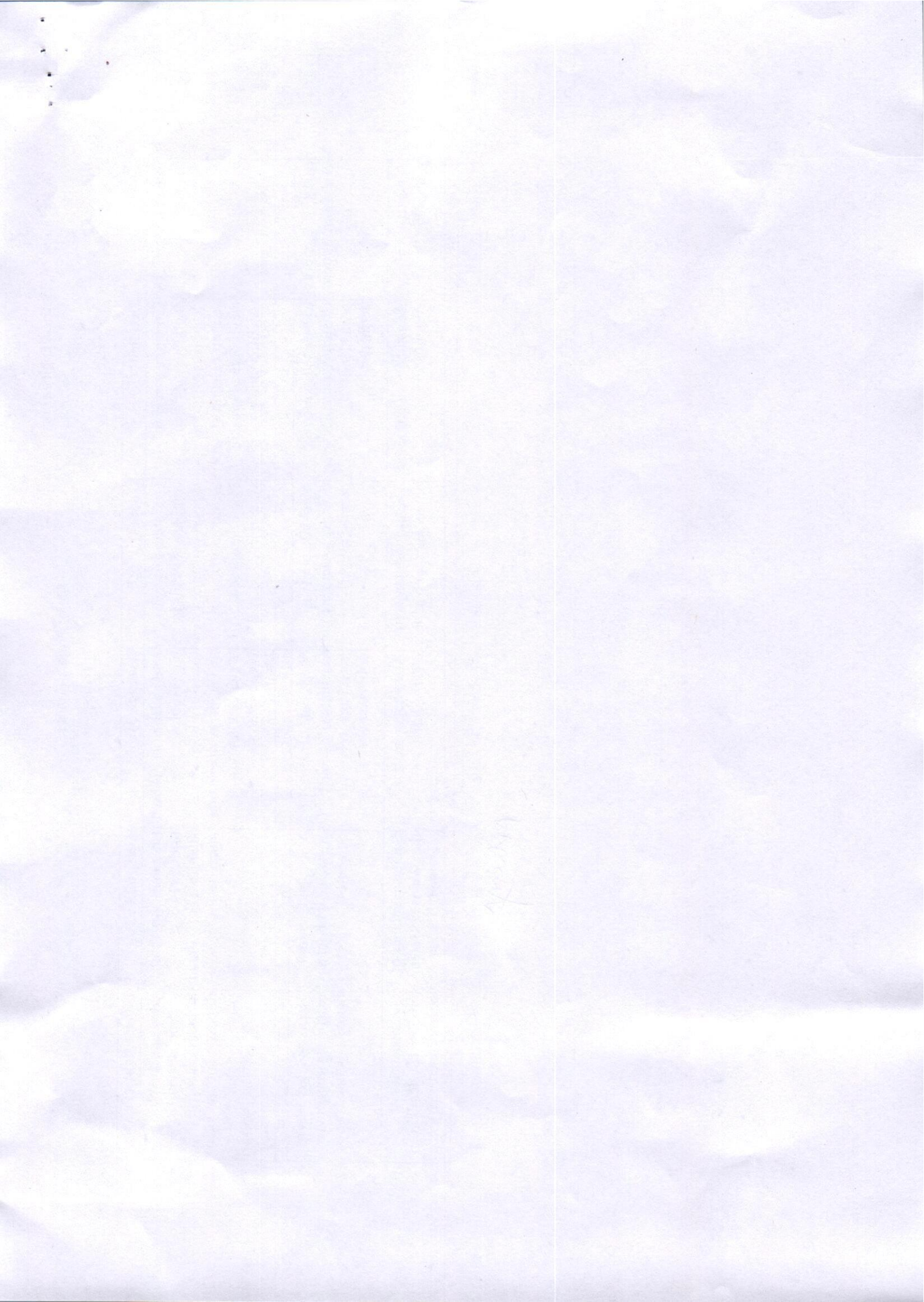| Rubric | Excellent (5) | Good(4) | Average(3) | Acceptable(2) | Unacceptable(1) |
|---|---|---|---|---|---|
| Title | The title is clear in description | Title is clear but does not match description. | The title is somewhat clear without any substance. | Title is somewhat clear without any substance. | The title is unclear |
| Abstract | The abstract is clear and concise | The abstract is not very clear. | The abstract is clear but not concise | The abstract is too long. | The abstract is not clear and not concise |
| Problem Statement | The problem is clearly defined and justification for choosing the problem is available | The problem and justification do not match. | The problem is clearly defined but justification is not available | The problem is defined to some extent without justification | The problem is not defined clearly and no justification is available |
| Subject Knowledge | Complete explanation of key concept with justification | Brief explanation of key concepts with some justifications. | Complete explanation of key concepts with sufficient but no justification. | Explanation is just concepts with literature are in accurate | Explanations of concepts with literature are in accurate |
| | Proper justification with supporting data/examples. Is able to show that problem is viable as project | Proper justification with supporting data/examples. Is notable to show that problem is viable as project | Justification with supporting literature and poor visuals | | |
| Justification | Proper justification with supporting data/examples. Is able to show that problem is viable as project | Proper justification with supporting data/examples. Is notable to show that problem is viable as project | Justification without examples but has some supporting data, but can prove problem as viable project | Justification without examples or supporting data, but can prove problem as viable projecy | Improper justification No supporting data. Project may not be viable. |

Department of Electrical Engineering

Major Project Rubrics

## Rubric # 2

| Rubric | Excellent (5) | Good(4) | Average(3) | Acceptable(2) | Unacceptable(1) |
|---|---|---|---|---|---|
| Literature Survey | Literature survey is complete; sufficient detail is provided to support existing system and proposed system identification | Literature Survey is complete; Details to support existing system are not proper, hazy idea of proposed system. | Literature survey is but complete; review focuses only on merits and demerits of existing system but misses proposed system identification | Literature survey is brief; project identified but without much details. | Literature survey is incomplete and includes excessive discussion of unrelated issues. |
| Merits & demerits of existing system | Merits and demerits of existing system have been clearly defined/stated | Merits/demerits if existing system are not defined properly. | Merits and demerits of existing system have been vaguely defined/stated | Merits and demerits are stated without any outcome. | Merits and demerits of proposed system have not been defined/stated |
| Advantages of proposed system | Advantages of proposed system are clearly defined | The proposed system advantages are vague. | Advantages are not clearly defined | Some advantages of the proposed system are given. | No advantages of proposed system have been defined |

**Rubric #3**

| Rubric | Excellent (5) | Good(4) | Average(3) | Acceptable(2) | Unacceptable(1) |
|---|---|---|---|---|---|
| Design methodologies and elaboration of process steps | provides good and clear circuit idea/ software algorithm; applies principles and algorithms correctly to problem domain | Provides a basic idea of circuit/algorithm techniques relevant to project are included, but fail to develop complete theoretical or design framework for project | Basic principles and techniques relevant to project are included, but without application of principles/ algorithms to problem domain | Some principles and techniques relevant to relevant circuits/ algorithms/techniques/ methods | Unable to identify algorithms/techniques/ methods |
| Explanation of circuit/ software program | The circuit to be used is clear with all ratings of the components clearly shown. The software program is supported by algorithm and basis for choosing the software language is also defined. | The circuit components are not clear. The software algorithms are also not proper. | The circuit to be used is clear but all ratings of the components are not shown clearly The software program is supported by algorithm but the basis for choosing the software language is not defined. | Circuit components not clearly mentioned. The software justification not shown clearly software program is not supported by algorithm and the basis for choosing the software language is not defined. | The circuit to be used is not clear and all ratings of the components are not shown clearly The software program is not supported by algorithm and the basis for choosing the software language is not defined. |
| Choosing circuit components/ software basis | The choice for a particular component with specified rating is supported by some calculations/ The choice of software is supported by proper reasoning | The component ratings are not clear. The software choice is not based on any findings. | The choice for a particular component is clearly supported but the specified rating is supported is not supported by some calculations/ The choice of software is not supported by proper reasoning | The components are not specified at proper locations in circuit. The software is devoid of any algorithms. | The components have been chosen randomly/ Software has been chosen randomly. |

**Rubric #4**

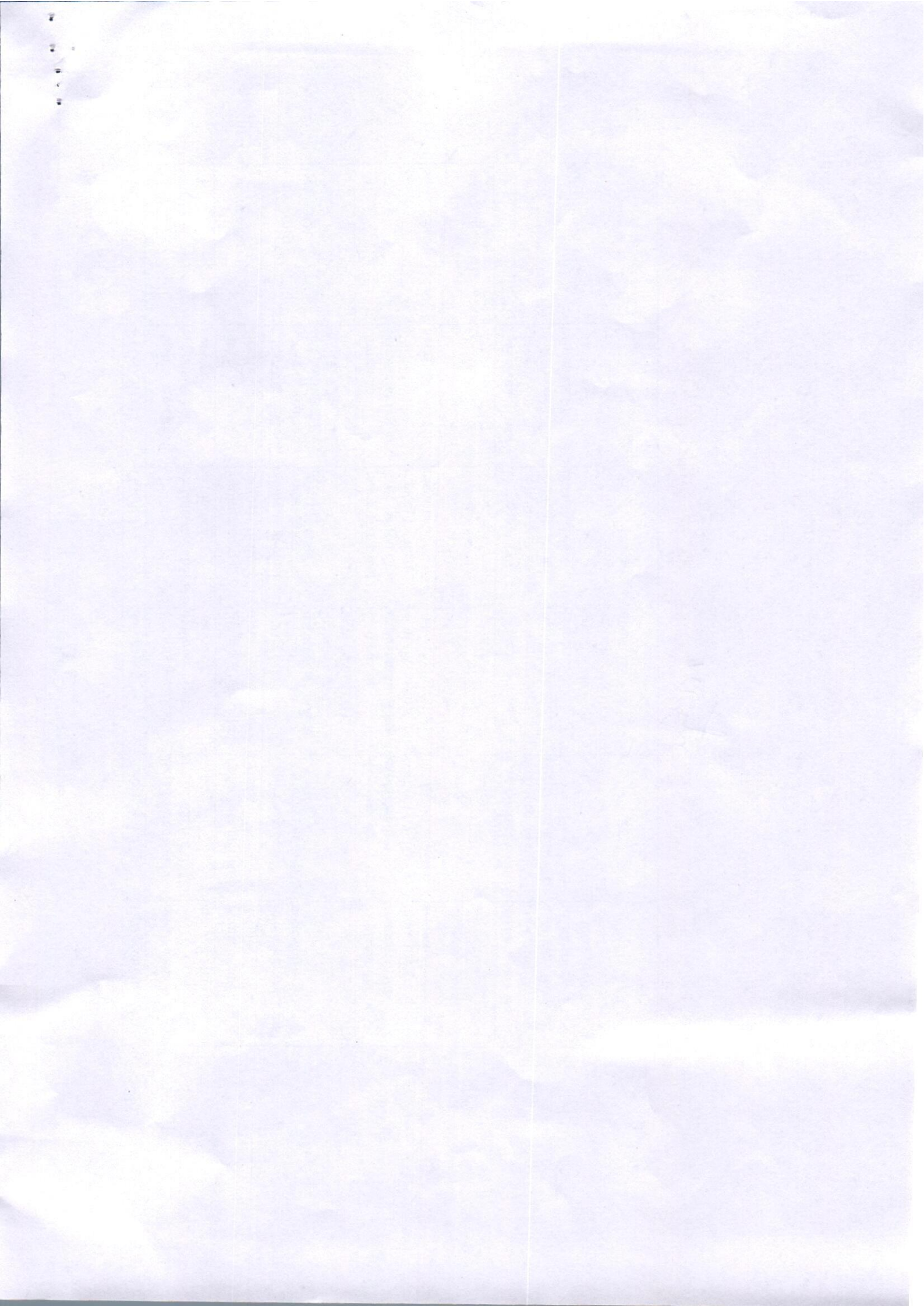| Rubric | Excellent (5) | Good(4) | Average(3) | Acceptable(2) | Unacceptable(1) |
|---|---|---|---|---|---|
| Steps for realization | Steps for realization of circuit are clearly shown and step by step testing is also explained. The steps in software program are clearly shown and debugging | Vague steps for realization of circuit. Only a brief idea of circuit testing/debugging. | Steps for realization of circuit are clearly shown but step by step testing is not explained. The steps in software program are clearly shown but debugging has not been | Steps for realization circuit are not in any order. The program details shown and step by step testing is not clearly specified. | Steps for realization of circuit are not clearly shown and step by step testing is not explained. The steps in software program are not clearly shown and debugging |
| Modern tools utilization | Usage of modern tools like software for designing of circuit and computing resources correctly and effectively. | Prevalent tools/softwares are being used. | uses modern tools viz. softwares and computing resources to some extent. | The use of modern tools is not clearly specified. | Unable to select proper tools for design and implementation |
| Identification of components (Circuit based projects) or Adoption of coding(software based projects | The components to be used are clearly identified with relevant specifications; coding is done using appropriate selection of programming language and is explained | Some components are specified/some specifications of software are defined. | The components are selected properly but explanation for selection of particular component is missing; Coding is done with appropriate selection of programing language but unable to explain the code | Components and software selected are without justification | Failed to identify the components or use the programming code |

**Rubric #5**

| Rubric | Excellent (5) | Good(4) | Average(3) | Acceptable(2) | Unacceptable(1) |
|---|---|---|---|---|---|
| Results & Analysis | Results are clearly explained and analyzed. | Results are almost explained and analyzed. | Results are clearly explained but not analyzed. | Results and analysis presented but do not clearly explained and not analyzed. | Results are not clearly explained and not analyzed. |
| Future Scope | Future scope is clearly defined | Future scope is vaguely defined | Future scope is not clear | Future scope is too brief. | Future scope is not defined. |
| Delivery | Clear Voice, good spoken language and confident delivery | Somewhat clear voice, jittery delivery. | Low Voice, acceptable spoken language and general delivery | Low voice, stuttering delivery. | Inaudible voice and poor delivery |
| Subject Knowledge | Complete explanation of key concept with justification | Somewhat clear explanation of key concept with justification | Complete explanation of key concepts with relevant literature and poor visuals | Key concept explained but without relation to literature and justification given. | Explanations of concepts with literature are in accurate |
| Relating to audience | Eye contact over entire room appropriate responses to questions | Eye contact is almost appropriate some questions unanswered. | Eye contact with limited group within audience. Generally appropriate responses to questions | Eye contact with audience. Some questions answered. | Makes some eye contact with audience. Responds to questions inadequately. |

**Rubric #6**

| Rubric | Excellent (5) | Good(4) | Average(3) | Acceptable(2) | Unacceptable(1) |
|---|---|---|---|---|---|
| Content and style | Information required is in logical sequence with diagrams, tables etc., complete and formatted. | Information required is in logical sequence but not formatted. | Information is in logical sequence without diagrams, table etc., complete and formatted | Information is not in logical sequence but some diagrams are given. | Mostly unclear and not formatted |
| Language ( grammar and word choice) | sentences are complete and grammatical. Words choice is good. | Sentences and grammar is good at most places. | Sentences and grammar are just as per requirement. | In a few places errors in sentence structure and grammar. Word choice could be improved | Errors in sentence structure and grammar. There is a repitition of same words and phrases. |
| Report Format | The format given has been followed completely | Format followed at most places. | The format given has been followed to a large extent different then specified. | Format followed but font size/style different then specified. | The format given has not been followed completely |
| Presentation | The presentation is clear and concise highlights all points of the project. | The presentation is clear to a large extent. | The presentation is clear but not concise. Does not highlight all points of project | The presentation is clear to some extent some points are highlighted. | The presentation is not clear and concise , does not highlight the necessary points of project. |