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|  |  |  |  |  |  |
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| 2. |  | To perform Addition, Subtraction between two numbers using NASM simulator. |  |  |  |
| 3. |  | To perform Multiplication and Division of two numbers using NASM simulator. |  |  |  |
| 4. |  | To perform calculations using loops in NASM simulator |  |  |  |
| 5. |  | To study the theory of Flag Registers and some of its types. |  |  |  |
| 6. |  | Perform addition and multiplication of two numbers by getting values from user using MIPS simulator. |  |  |  |
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**Psychomotor Rubrics for Software based Lab**

***Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Exceeds Expectations (>=90%)** | **Meets Expectations (70%-89%)** | **Developing (50%-69%)** | **Unsatisfactory (<50%)** |
| **Software Skills** | Ability to use software with its standard and  advanced features without assistance | Ability to use software with its standard and  advanced features with minimal assistance | Ability to use software with its  standard features with assistance | Unable to use the software |
| **Programming/ Simulation** | Ability to program/ simulate the lab tasks  with simplification | Ability to program/ simulate the lab tasks  without errors | Ability to program/ simulate lab tasks  with errors | Unable to program/simulate |
| **Results** | Ability to achieve all the desired results with alternate ways | Ability to achieve all the desired results | Ability to achieve most of the desired results with errors | Unable to achieve the desired results |
| **Laboratory Manual** | All sections of the report are very well written and technically accurate. | All sections of the report are technically accurate. | Few sections of the report contain technical errors. | All sections of the report contain multiple technical errors. |

**Psychomotor Rubrics Assessment Software based Lab**

**Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lab # | Score Allocation | | | | | |
| **Software Skills**  **Marks (3)** | **Programming/ Simulation**  **Marks (2)** | **Experimental Results**  **Marks (3)** | | **Laboratory Manual**  **Marks (2)** | **Total Marks (3)** |
| 1 |  |  |  | |  |  |
| 2 |  |  |  | |  |  |
| 3 |  |  |  | |  |  |
| 4 |  |  |  | |  |  |
| 5 |  |  |  | |  |  |
| 6 |  |  |  | |  |  |
| 7 |  |  |  | |  |  |
| 8 |  |  |  | |  |  |
| 9 |  |  |  | |  |  |
| 10 |  |  |  | |  |  |
| 11 |  |  |  | |  |  |
| 12 |  |  |  | |  |  |
| 13 |  |  |  | |  |  |
| 14 |  |  |  | |  |  |
| Total Marks | | 140 | | Total Obtained marks | |  |

***Overall Score: \_\_\_\_\_\_\_\_\_\_\_out of 14 Examined by****: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

***(Obtained Score / 140) x 14 (Name and Signature of lab instructor)***

**Affective Domain Rubrics Assessment**

**Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CATEGORY** | **Excellent (100% - 85%)** | **Good (84% - 75%)** | **Fair (74% - 60%)** | **Poor (Less than 60%)** |
| **Speaks Clearly** | Speaks clearly and distinctly all the time, and confidently. | Speaks clearly and distinctly most of the time, but is confused for a brief period of time, however, recovers. | Speaks clearly and distinctly most of the time, but seems not confident about what has been delivered. Shows lack of confidence. | Often mumbles or cannot be understood and clearly lacks confidence in delivering the content |
| **Points:** |  |  |  |  |
| **Preparedness** | Student is completely prepared and has obviously rehearsed. | Student seems pretty prepared but might have needed a couple more rehearsals. | The student is somewhat prepared, but it is clear that rehearsal was lacking. | Student does not seem at all prepared to present. |
| **Points** |  |  |  |  |
| **Answer back** | Student calmly listens to the questions and responds to the question confidently and correctly | Student calmly listens to the questions, responds confidently but some of the responses are incorrect. | Student shows anxiety while listening to the questions, and gives some correct responses, but some of the responses are incorrect. | Student shows anxiety while listening to the questions, and most of the responses are incorrect. |
| **Points:** |  |  |  |  |
| **Posture, Eye Contact & Speaking Volume** | Stands up straight, looks relaxed and confident. Establishes eye contact with everyone in the room during the presentation. Volume is loud enough to be heard by all members in the audience throughout the presentation. | Stands up straight and establishes eye contact with everyone in the room during the presentation. Volume is loud enough to be heard by the audience, but is sometimes not audible. | Sometimes stands up straight and establishes eye contact. Volume is loud enough to be heard by the audience, but many sentences spoken are not clear. | Lazy and informal posture. Does not look at people during the presentation. Volume is also too soft to be heard by the audience. |
| **Points:** |  |  |  |  |

***Overall Score: \_\_\_\_\_\_\_\_\_\_\_out of 14 Examined by****: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

***(Name and Signature of lab instructor)***

***Open Ended Lab Assessment Rubrics***

***Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria and Scales** | | | |
| **Excellent**  **(10-8)** | **Good**  **(7-5)** | **Average**  **(4-2)** | **Poor**  **(1-0)** |
| **Criterion 1:** **Understanding the Problem:** How well the problem statement is understood by the student | | | |
| Understands the problem clearly and clearly identifies the underlying issues. | Adequately understands the problem and identifies the underlying issues. | Inadequately defines the problem and identifies the underlying issues. | Fails to define the problem adequately and does not identify the underlying issues. |
| **Criterion 2: Research:** The amount of research that is used in solving the problem | | | |
| Contains all the information needed for solving the problem | Good research, leading to a successful solution | Mediocre research which may or may not lead to an adequate solution | No apparent research |
| **Criterion 3: Class Diagram:** The completeness of the class diagram | | | |
| Class diagram with complete notations | Class diagram with incomplete notations | Class diagram with improper naming convention and notations | No Class diagram |
| **Criterion 4: Code:** How complete and accurate the code is along with the assumptions | | | |
| Complete Code according to the class diagram of the given case with clear assumptions | Incomplete Code according to the class diagram of the given case with clear assumptions | Incomplete Code according to the class diagram of the given case with unclear assumptions | Wrong code and naming conventions |
| **Criterion 5: Report:** How thorough and well organized is the solution | | | |
| All the necessary information clearly organized for easy use in solving the problem | Good information organized well that could lead to a good solution | Mediocre information which may or may not lead to a solution | No report provided |

***Open Ended Lab Assessment Rubrics***

***Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria and Scales** | | | | |
| **Excellent**  **(10-8)** | **Good**  **(7-5)** | **Average**  **(4-2)** | **Poor**  **(1-0)** | **Total Marks**  **10** |
| **Criterion 1:**  **Understanding the Problem:** How well the problem statement is understood by the student | | | | |
| (10-8) | (7-5)% | (4-2)% | (1-0)% |  |
| **Criterion 2:**  **Research**: The amount of research that is used in solving the problem | | | | |
| (10-8) | (7-5)% | (4-2)% | (1-0)% |  |
| **Criterion 3:**  **Class Diagram:** The completeness of the class diagram | | | | |
| (10-8) | (7-5)% | (4-2)% | (1-0)% |  |
| **Criterion 4:**  **Code:** How complete and accurate the code is along with the assumptions | | | | |
| (10-8) | (7-5)% | (4-2)% | (1-0)% |  |
| **Criterion 5:**  **Report**: How thorough and well organized is the solution | | | | |
| (10-8) | (7-5)% | (4-2)% | (1-0)% |  |
| Total | | | | **(\_\_\_\_/5)** |

Total marks obtained: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name and Signature of lab instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Rubrics for Lab Project / CCA**

***Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Semester****: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Exceeds Expectations**  **(>=90%)** | **Meets Expectations (70%-89%)** | **Developing (50%-69%)** | **Unsatisfactory (<50%)** |
| **Project Presentation + Project Demonstration** | Ability to demonstrate the project with achievement of required objectives having clear understanding of project limitations and future enhancements. Hardware and/or Software modules are fully functional, if applicable. | Ability to demonstrate the project with achievement of required objectives but understanding of project limitations and future enhancements is insufficient.  Hardware and/or Software modules are functional, if applicable. | Ability to demonstrate the project with achievement of a\*t least 50% required objectives and insufficient understanding of project limitations and future enhancements.  Hardware and/or Software modules are partially functional, if applicable. | Ability to demonstrate the project with achievement of less than 50% required objectives and lacks in understanding of project limitations and future enhancements.  Hardware and/or Software modules are not functional, if applicable. |
| **Project Report** | All sections of the Project report are very well- written and technically accurate. | All sections of the Project report are technically accurate. | Few sections of the Project report contain technical errors. | Project report has several grammatical/ spelling errors and sentence construction is poor. |
| **Viva** | Able to answer the questions easily and  correctly across the project. | Able to answer the questions related to the project | Able to answer the questions but with mistakes | Unable to answer the questions |

Total marks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name and Signature of lab instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Project / CCA Rubric based Assessment**

**Course Name (Course Code): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Semester: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Project # | Score Allocation | | | |
| **Project Presentation + Project Demonstration**  **Marks (5)** | **Project Report**  **Marks (3)** | **Viva**  **Marks (3)** | **Total**  **Marks (10)** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| Total Obtained Score | | | |  |

Total marks obtained: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name and Signature of lab instructor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Final Lab Assessment**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment Tool** | **CLO-1 (20)** | **CLO-2 (20)** | **CLO-3 (10)** |
| **Lab Manual** |  |  |  |
| **Subject Project / Viva** |  |  |  |
| **Lab Exam / Viva** |  |  |  |
| **Score Obtained** |  |  |  |
| **Total Score: \_\_\_\_\_\_\_\_ out of 50** | | | |

***Examined by****:*

***(Name and Signature of concerned lab instructor)***