



**Bansilal Ramnath Agarwal Charitable Trust's**  
**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**  
**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**Academic Year 2024 – 25 – Semester-I**

**Assessment Details**

**S.Y. B.Tech.**

I. Courses with Theory, Lab and Tutorial

Sr. No.	Type of Assessment	Conduction	Marks
1	Presentation / Group Discussion/ Home Assignment	Week 5,6,7 and 8	30 Marks assessment (Part A)
2	Presentation / Group Discussion/ Home Assignment	End Semester Assessment	70 Marks assessment (Part B) Total 100 Marks (Part A + Part B) converted to 20 equivalent Marks
3	Laboratory Work	End Semester Assessment	100 Marks converted to 10 equivalent Marks
4	Course Project	End Semester Assessment	100 Marks converted to 20 equivalent Marks
5	Written Examination / MCQ	End Semester Assessment	60 Marks converted to 30 equivalent Marks
6	Comprehensive Viva Voce	End Semester Assessment	100 Marks converted to 20 equivalent Marks

II. Courses with Programming activity

Sr. No.	Type of Assessment	Conduction	Marks
1	Laboratory work	During laboratory turns	100 Marks converted to 10 equivalent Marks
2	Course Project	End Semester Assessment	100 Marks converted to 20 equivalent Marks
3	Comprehensive Viva Voce	End Semester Assessment	100 Marks converted to 20 equivalent Marks
4	Programming Practical	End Semester Assessment	100 Marks converted to 50 Marks

Note: Department wise list of courses is given separately in this document in Part IX.

III. 2 Credit Theory Course

Sr. No.	Type of Assessment	Conduction	Marks
1	Class Test-1	In 6 <sup>th</sup> Week, based on unit 1 and unit 2	35 Marks converted to 35 equivalent Marks
2	Class Test-2	In 12 <sup>th</sup> Week, based on unit 3 and unit 4	35 Marks converted to 35 equivalent Marks
3	Comprehensive Viva Voce	End Semester Assessment based on all Units	100 Marks converted to 30 equivalent Marks

IV. Engineering Design and Innovation Project

Sr. No.	Type of Assessment	Conduction	Marks
1	Project activity Presentation	Mid Semester	50 Marks converted to 30 equivalent Marks
2	Project activity Presentation & Demonstration	End Semester	100 Marks converted to 70 equivalent Marks



**Bansilal Ramnath Agarwal Charitable Trust's**

**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**

**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**V. Reasoning and Aptitude Development**

<b>Sr. No.</b>	<b>Type of Assessment</b>	<b>Conduction</b>	<b>Marks</b>
1	English Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 30 equivalent Marks
2	Logical Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 30 equivalent Marks
3	Quantitative Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 30 equivalent Marks
4	Automata Fix	In 14 <sup>th</sup> Week	100 Marks converted to 5 equivalent Marks
5	Automata Pro	In 14 <sup>th</sup> Week	100 Marks converted to 5 equivalent Marks

**T.Y. B.Tech.**

**I. Courses with Theory, Lab and Tutorial**

<b>Sr. No.</b>	<b>Type of Assessment</b>	<b>Conduction</b>	<b>Marks</b>
1	Presentation / Group Discussion / Home Assignment	Week 5,6,7 and 8	30 Marks assessment (Part A)
2	Presentation / Group Discussion / Home Assignment	End Semester Assessment	70 Marks assessment (Part B) Total 100 Marks (Part A + Part B) converted to 20 equivalent Marks
3	Laboratory Work	End Semester Assessment	100 Marks converted to 10 equivalent Marks
4	Course Project	End Semester Assessment	100 Marks converted to 20 equivalent Marks
5	Written Examination / MCQ	End Semester Assessment	60 Marks converted to 30 equivalent Marks
6	Comprehensive Viva Voce	End Semester Assessment	100 Marks converted to 20 equivalent Marks

**II. Courses with Programming activity**

<b>Sr. No.</b>	<b>Type of Assessment</b>	<b>Conduction</b>	<b>Marks</b>
1	Laboratory work	During laboratory turns	100 Marks converted to 10 equivalent Marks
2	Course Project	End Semester Assessment	100 Marks converted to 20 equivalent Marks
3	Comprehensive Viva Voce	End Semester Assessment	100 Marks converted to 20 equivalent Marks
4	Programming Practical	End Semester Assessment	100 Marks converted to 50 Marks

Note: Department wise list of courses is given separately in this document in Part IX.

**III. Engineering Design and Innovation Project**

<b>Sr. No.</b>	<b>Type of Assessment</b>	<b>Conduction</b>	<b>Marks</b>
1	Project activity Presentation	Mid Semester	50 Marks converted to 30 equivalent Marks
2	Project activity Presentation & Demonstration	End Semester	100 Marks converted to 70 equivalent Marks



**Bansilal Ramnath Agarwal Charitable Trust's**

**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**

**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

IV. A. Reasoning and Aptitude Development  
(For Computer, IT, AI&DS, CSE-AIML and CSE – AI Branches)

Sr. No.	Type of Assessment	Conduction	Marks
1	English Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks
2	Logical Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks
3	Quantitative Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks
4	Automata Fix	In 14 <sup>th</sup> Week	100 Marks converted to 10 equivalent Marks
5	Automata Pro	In 14 <sup>th</sup> Week	100 Marks converted to 10 equivalent Marks
6	Domain Specific Component	In 14 <sup>th</sup> Week	1000 Marks converted to 10 equivalent Marks
7	Node.JS	In 14 <sup>th</sup> Week	1000 Marks converted to 5 equivalent Marks
8	React.JS	In 14 <sup>th</sup> Week	1000ks converted to 5 equivalent Marks

IV. B. Reasoning and Aptitude Development  
(For E&TC, Instrumentation and Mechanical Branches)

Sr. No.	Type of Assessment	Conduction	Marks
1	English Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks
2	Logical Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks
3	Quantitative Ability	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks
4	Automata Fix	In 14 <sup>th</sup> Week	100 Marks converted to 10 equivalent Marks
5	Automata Pro	In 14 <sup>th</sup> Week	100 Marks converted to 10 equivalent Marks
6	Domain Specific Component	In 14 <sup>th</sup> Week	1000 Marks converted to 20 equivalent Marks

I. Final year B.Tech. Courses

Sr. No.	Type of Assessment	Conduction	Marks
1	MCQ Exam – Section I	Mid Semester	30 Marks converted to 30 equivalent Marks
2	Home Assignment	End of Semester	100 Marks converted to 10 equivalent Marks
3	MCQ Exam – Section II	End of Semester	30 Marks converted to 30 equivalent Marks
4	Comprehensive Viva Voce	End of Semester	100 Marks converted to 30 equivalent Marks

II. Coursera Track Certification (In semester-I)

Sr. No.	Type of Assessment	Conduction	Marks
1	End of module Quiz, Assignment, Module Project, Course Project, Track Project as applicable	Continuous Assessment till Semester End	100 Equivalent Marks Student to choose appropriate Track specialization. Applicable Assessment scheme under consideration for earning 100 equivalent Marks



**Bansilal Ramnath Agarwal Charitable Trust's**

**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**

**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

III. Major Project & Semester Internship

<b>Sr. No.</b>	<b>Type of Assessment</b>	<b>Conduction</b>	<b>Marks</b>
1	Project / Internship activity Presentation	Mid Semester	50 Marks converted to 30 equivalent Marks
2	Project/ Internship activity Presentation & Demonstration	End Semester	100 Marks converted to 70 equivalent Marks



**Bansilal Ramnath Agarwal Charitable Trust's**  
**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**  
**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**Assessment Rubrics**

**I. Presentation Assessment**

Details of Assessment – 100 Marks to be converted to 20 Marks.

Partial assessment to be conducted during the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> week of the Academic Semester for 50 marks

**Format for Assessment**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Marks</b>
1	Survey about the topic	15
2	Appropriateness and relevance of references	15
3	Technical content coverage	20
	<b>TOTAL</b>	<b>50</b>

50 marks to be converted to 30

AND

Summative assessment to be conducted during End of the Academic Semester for 100 marks

**Format for Assessment**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Marks</b>
1	Contents of slides	25
2	Understanding of concepts	25
3	Presentation Skills	25
4	Performance in Question-and-Answer Session	25
	<b>TOTAL</b>	<b>100</b>

100 Marks to be converted to 70 marks



## Bansilal Ramnath Agarwal Charitable Trust's

### VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

## II. Group Discussion

Details of Assessment – 100 Marks to be converted to 20 Marks.

Partial assessment to be conducted during the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> week of the Academic Semester for 50 marks

### Format for Assessment

Sr. No.	Parameter	Marks
1	Survey about the topic	15
2	Technical content coverage during discussion	20
3	Ability to express technical views	15
	<b>TOTAL</b>	<b>50</b>

50 Marks to be converted to 30 marks

AND

Summative assessment to be conducted during End of the Academic Semester for 100 marks

Sr. No.	Parameter	Marks
1	Level of Participation	25
2	Knowledge of the Topic	15
3	Communication skill and Vocabulary	25
4	Critical Thinking	25
5	Overall Impression of Examiner	10
	<b>TOTAL</b>	<b>100</b>

100 Marks to be converted to 70 marks

### Guidelines for assessment:

- Level of Participation:** The student has enthusiastically demonstrated that the knowledge of the topic acquired from Theory, Tutorial, Laboratory, Project, Supplementary reading is reflected in the statements and arguments made during the Group Discussions. Has been an active orator and a passive listener at appropriate times during the course of the Group Discussion
- Knowledge of the Topic:** The student is thorough in the content and concepts associated with the fundamental and applied aspects of the Topic. The participant contributed to clarify or synthesize other Group Discussion members' ideas. If disagreeing with other Group Discussion members' ideas, the student stated disagreement or objections consistent with the underlying technical concept clearly, yet politely.
- Communication skill and vocabulary:** The student effectively and politely communicated with the peers and the Moderator faculty, articulating the thoughts using appropriate Academic and Technical words. The student avoided the use of mixed or non-English vocabulary
- Critical Thinking:** The student is able to think clearly, and rationally and is able to logically connect various aspects of the topic being discussed. The student retained the ability to reason and stay focused, despite distractions, clutter and diversion experienced, if any, during the progress of the Group discussion. The student was able to think about the facts that emerged during the Group Discussion spontaneously. This ability is not the ability acquired by accumulation of facts and knowledge learned once in the past and used for ever.



## Bansilal Ramnath Agarwal Charitable Trust's

### VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37

(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

Overall impression of the moderator faculty: The moderator faculty would quantify their impression on the basis of parameters such as, but not limited to - Time management, response and respect to peers and moderator faculty, ethics followed, arguments and counter arguments losing the decorum of the activity etc.

### III. EDI Assessment

1. Mid Semester Assessment – 50 Marks to be converted to 30 Marks.
2. End Semester Assessment – 100 Marks to be converted to 70 Marks.

#### Format for Mid Semester Assessment

Sr. No.	Parameter	Marks
1	Problem Statement	10
2	Literature Review	10
3	Group formation and identification of individual responsibility	10
4	Objective of Project activity	10
5	Knowledge of domain, technology and tools being used	10
	<b>TOTAL</b>	<b>50</b>

#### Format for End Semester Assessment

Sr. No.	Parameter	Marks
1	Realization of project as per problem statement	10
2	Design & Testing	30
3	Documentation and Report Writing	20
4	Quality of Work	15
5	Performance in Question & Answers Session	15
6	Timely Completion of Project work	10
	<b>TOTAL</b>	<b>100</b>



**Bansilal Ramnath Agarwal Charitable Trust's**  
**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**  
**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**IV. Final Year B.Tech. Major Project**

1. Mid Semester Assessment – 50 Marks to be converted to 30 Marks.
2. End Semester Assessment – 100 Marks to be converted to 70 Marks.

**Format for Mid Semester Assessment**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Marks</b>
1	Problem Statement	10
2	Literature Review	10
3	Group formation and identification of individual responsibility	10
4	Objective of Project activity	10
5	Knowledge of domain, latest technology and modern tools being used	10
	<b>TOTAL</b>	<b>50</b>

**Format for End Semester Assessment**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Marks</b>
1	Realization of project as per problem statement	10
2	Design, Testing / Experimentation, Analysis / Validation	30
3	Documentation and Report Writing	20
4	Quality of Work	15
5	Performance in Question & Answers Session	15
6	Regular interaction with guide	10
	<b>TOTAL</b>	<b>100</b>





**Bansilal Ramnath Agarwal Charitable Trust's**  
**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**  
**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**V. Final Year Semester Internship**

1. Mid Semester Assessment – 50 Marks to be converted to 30 Marks.
2. End Semester Assessment – 100 Marks to be converted to 70 Marks.

**Format for Mid Semester Assessment**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Marks</b>
1	Problem Statement	10
2	Literature Review	10
3	Clarity about the objectives of Internship activity	10
4	Requirement Analysis, Internship Planning	10
5	Knowledge of domain, Latest technology and modern tools being used	10
	<b>TOTAL</b>	<b>50</b>

**Format for End Semester Assessment**

<b>Sr. No.</b>	<b>Parameter</b>	<b>Marks</b>
1	Realization of Internship as per problem statement	10
2	Design, Testing / Experimentation, Analysis / Validation	30
3	Documentation and Report Writing	20
4	Quality of Work	15
5	Performance in Question & Answers Session	15
6	Regular interaction with guide	10
	<b>TOTAL</b>	<b>100</b>

Note: For the End Semester Assessment, it is expected that the Internship company guide is also involved. The Department is required to set up communication with the Internship company guide regarding the End Semester Assessment, requesting their availability, in the interest of fair and rigorous assessment. No remuneration is to be paid to Internal company guide. They are expected to be involved along with Examiner/s in the finalization of Marks. The participation from the Internship company guide is voluntary. If the company guide opts not to join the assessment activity, it may then be done by the appointed examiner/s only.



**Bansilal Ramnath Agarwal Charitable Trust's**  
**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**  
**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**VI. Comprehensive Viva Voce**

1. End Semester Assessment – 100 Marks to be converted to 20 Marks.

Guidelines for assessment:

- The CVV enables a dialectic communication between the examiner/s and the student, providing invaluable experience for career interviews in future.
- The Comprehensive Viva Voce is a summative assessment. It is based on verbal interaction between Examiner/s and the students, covering the entire course contents.
- The student may be encouraged to explain the applicable concepts, ideas, views with the help of pen and paper/ Whiteboard screen/ Paint etc. if required.
- A balanced set of questions invoking diverse abilities such as analysis, synthesis, application, comparison, correlation, summary, classification, explanation, illustration, description etc. be set up, while covering entire course contents.
- Sufficient time is to be given for every student during the Viva Voce, to demonstrate the requisite abilities before arriving at the summative assessment score.



**Bansilal Ramnath Agarwal Charitable Trust's**

**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**

**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

## **VIII. Design Thinking**

**Scope:**

Applicable for S.Y. B.Tech. ,T.Y. B.Tech. in both Semesters and for Final Year B.Tech. students (in Seventh Semester only) as 1 credit group activity

**Objective:**

To provide ecosystem to students for paper publication and patent filing

**Outcome:**

Publication of paper or filing of patent

**Assessment and Grading:**

Students will be assessed on the basis of the outcome, i.e., published paper or status of patent.

Grades to be awarded at the end of the Semester will be on the following basis –

<b>Grade</b>	<b>Basis for Grade allocation</b>
A+	Paper published in High impact Journals (Top 50 journal list will be given) / Patent Granted
A	Paper published in any SCI/Scopus/Web of science Journal/conference or Patent Published
B+	Paper Accepted for publication in SCI/Scopus/Web of science Journal/conference or patent filed
B	Paper published in UGC Listed Journal
C+	International Conference Paper Publication (Non-Scopus and Non-SCI)
C	National Conference Paper Publication (Non-Scopus and Non-SCI)
D	Paper submitted to any Journal / Conference
F	No publication / No patent



**Bansilal Ramnath Agarwal Charitable Trust's**  
**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**  
**(An Autonomous Institute Affiliated to Savitribai Phule Pune University)**

**IX. Courses with Programming activity**

<b>Program</b>	<b>Course Code</b>	<b>Course Name</b>
IT	IT 2265	Advanced Data Structures
	IT 3221	Operating System
AI & DS	AI2021	Data Structures
	AI 2003	Computer Network
	AI 3002	Operating System
Computer	CS 3051	Operating System
	CS 3215	Web technology
	CS 2202	Data Structures
E & TC	ET 2270	Advanced Data Structure
	ET 3272	Design and Analysis of Algorithm
	ET 3221	Computer Vision
Mechanical	Nil	Nil
Instrumentation	IC 2222	Advanced Data Structure
Chemical	Nil	Nil
SY Common (DOME)	CS 2218	Object Oriented Programming Systems

  
Prof. (Dr.) Ashutosh Marathe  
Dean - Academics