GOVERNMENT POLYTECHNIC, KOLHAPUR

(An Autonomous Institute of Government of Maharashtra)

MPECS 2023 Curriculum Implementation Manual

OUTCOME BASED – LEARNING, TEACHING AND ASSESSMENT (OB-LTA) PROFORMAS

Preface

Government Polytechnic Kolhapur is an academically autonomous institute of the Government of Maharashtra. Being an autonomous institute, the curriculum is revised every three to four years in accordance with industry requirements and emerging technological advancements.

The latest revision of the curriculum MPEC2023 emphasizes the philosophy of Outcome-Based Education (OBE) advocated by National Board of Accreditation and is aligned with the vision of the National Education Policy 2020 and the guidelines of the National Credit Framework (NCrF).

The process of OBE-based curriculum revision follows a reverse design approach. In this approach, Programme Outcomes (POs), Course Outcomes (COs), and Practical Outcomes are defined first, and thereafter the learning experiences and course contents are designed to achieve these outcomes effectively.

The OBE philosophy is based on the 5D approach:

Define the Outcomes

Develop the Curriculum

Deliver Instructions and Impart Skills

Document the Results

Decide Future Course of Action for Continuous Improvement

The objective of introducing six-month Industrial Training is to prepare students for employment in their respective disciplines. It gives students industrial exposure and practical experience under the guidance of skilled and experienced professionals within the organization. It enables students to understand industrial practices, work culture, and the practical application of technical knowledge.

During curriculum implementation, teachers analyze the course content and accordingly develop appropriate learning experiences, teaching methodologies, and assessment strategies to ensure the attainment of the desired outcomes.

Effective implementation of this curriculum requires well-defined curriculum implementation and assessment guidelines for both teachers and students. Assessment and evaluation are intended not merely to prove learning, but to improve it. The assessment and evaluation process should align with the Programme Outcomes (POs) and Course Outcomes (COs) of the programme and individual courses.

A programme comprises diverse learning experiences conducted through classrooms, laboratories, libraries, field visits, industrial training, and other relevant learning environments. Achievement of learning outcomes is measured through systematic assessment processes designed to evaluate and provide constructive feedback on student learning. Continuous feedback benefits both learners and faculty members, enabling students to improve their performance and faculty to adopt suitable teaching methodologies for effective learning.

Various formats required for curriculum implementation and assessment are provided in this document.

Student Assessment Guidelines

Government Polytechnic Kolhapur has implemented the "MPEC2023 Scheme" curriculum for diploma engineering programs, aligning with the National Education Policy (NEP) 2020. This scheme emphasizes Outcome-Based Education (OBE), holistic assessment, and skill development to enhance students' employability.

Philosophy of Assessment

The MPEC2023 Scheme follows a comprehensive, outcome-oriented assessment approach based on the following principles:

- Outcome-Based Education (OBE):
  Focus on measurable learning outcomes aligned with industry expectations to enhance employability.
- Continuous and Comprehensive Evaluation:
  Assessment includes formative (continuous) and summative (end-semester) components, covering theory, practicals, and self-learning activities to track overall student progress.
- Skill Development and Practical Exposure:
  Integration of hands-on learning through laboratory work, project-based learning, and internships to bridge theory with practice.
- Integration of Learning Domains:
  Evaluation covers Cognitive (knowledge), Psychomotor (skills), and Affective (attitudes/values) domains for holistic development.
- Flexibility and Personalization:
  The credit-based curriculum and elective options support personalized learning paths aligned with students' interests and career goals.
- Key Components of the Assessment

Formative Assessment (FA): Formative Assessment is a continuous evaluation process used during the learning phase to monitor students' progress, provide feedback, and improve learning outcomes. Formative assessment is assessment for learning rather than just assessment of learning. It tracks how well students are learning during the course, helps identify strengths and gaps, and guides teachers to provide timely support.

Key Features of formative assessment -

- Continuous & Ongoing: Conducted throughout the semester, not just at the end.
- Diagnostic Purpose: Identifies learning gaps and helps teachers adjust teaching strategies.
- Feedback-Oriented: Provides constructive feedback to students for improvement.
- Learner-Centric: Encourages active participation and self-reflection in the learning process.
- Linked to Course Outcomes (COs): Measures how well students are achieving specific learning outcomes.

Examples

- ❖ Class Tests / Unit Tests
- ❖ Assignments or Problem Sheets
- ❖ Micro Projects / Mini Projects
- ❖ Quizzes or Viva Voce

- ❖ Practical Skill Demonstrations / Lab Work Evaluations
- ❖ Surveys or Case Studies

Formative Assessment for Theory (FA-TH) = 2 internal tests (30 marks each, average counted).
Formative Assessment for Practical (FA-PR) = Continuous lab evaluation of skills, journal, and viva. Process and Product based Evaluation.

Summative Assessment (SA): Summative Assessment is an evaluation method conducted at the end of an instructional period (semester, unit, or course) to measure how much a student has learned and achieved against the defined learning outcomes or course objectives. In simple terms, it is assessment *of* learning, whereas formative assessment is assessment *for* learning.

- Key Features of Summative Assessment

End-of-Instruction Evaluation: Conducted after completing a unit, module, or semester.
Cumulative Nature: Measures the total knowledge, skills, and competencies acquired.
Grading & Certification Purpose: Used to award grades, certify competency, or decide progression.
Linked to Course Outcomes (COs): Evaluates whether the intended learning outcomes of the course have been achieved.
Standardized & Formal: Typically involves structured exams, practicals, or projects assessed with clear marking schemes or rubrics.
End-Semester Theory Exam (SA-TH): 70 marks, testing knowledge, understanding, and application.
Practical Examination (SA-PR): Conducted at the end of the semester to evaluate hands-on skills, lab performance, and viva.
Final Capstone Project Evaluation: Comprehensive assessment of problem-solving and application skills.

Key Difference between Formative Assessment and Summative Assessment

Aspect	Formative Assessment (FA)	Summative Assessment (SA)
Purpose	Improve learning (diagnostic)	Evaluate final learning (certification)
Timing	Continuous during learning	At the end of term/semester
Feedback	Immediate & ongoing	After completion of course
Impact on Grades	Usually, partial contribution	Major contributor to final grade

Assessment Structure (Norms)

Norms for Theory Learning (Class room Learning) Assessment
The goal is to measure achievement of Course Outcomes (COs) using Revised Bloom's Taxonomy, ensuring measurement of knowledge, understanding, application and skills to promote outcome-oriented, meaningful, and lifelong learning.
Assessment Pattern: 30–70 Model (100 Marks)

Formative Assessment (FA-TH): Two internal tests of 30 marks each; average contributes to 30 marks.
Summative Assessment (SA-TH): 70-mark end-semester theory or online exam conducted by institute

Formative Assessment of Theory Learning (FA-TH)

In pursuit of academic excellence, Formative Assessment plays an important role in shaping the learning experience. FA-TH is conceived as a continuous learner centric approach designed to monitor and support theoretical learning progress. It helps in identifying learning gaps early and encourages continuous improvement. The assessment is to be aligned with course outcomes.

Formative Assessment (FA-TH) Norms:

Continuous learner-centric evaluation throughout the semester.

Identify learning gaps early and provide corrective measures.

Assessment strictly aligned with COs.

- Summative Assessment of Theory Learning (SA-TH) –

Prepare the question paper by using different levels of Bloom's Taxonomy. Make sure the question paper follows the specification table given in the curriculum.

Each question must be linked to the relevant Course Outcomes (COs) mentioned in the curriculum.

Norms for Practical Assessment-

Practical Assessments (FA-PR): Practical performed by students are continuously assessed in the laboratory based on the proper understanding of the concept, skill and the overall affective domain developed by the students. The marks allocated are as per the Learning Assessment scheme of the course.

Practical Assessment (SA-PR): Practical Exams are conducted at the end of the semester, and scores are awarded as per the performance of the students in knowledge and skill. The marks are allocated are as per the Learning Assessment scheme of the course

To evaluate hands-on skills, understanding practical concepts, and application of knowledge.

Each practical should be linked to the related Course Outcomes (COs).

Practical assessment should include the student's performance in the lab, journal completion, viva questions, and proper record keeping.

Practical should be evaluated using a fixed marking scheme, giving marks for steps followed, accuracy of work, final result, and how well the work is presented.

Evaluation should be done based on Rubrics mentioned in lab manual.

Formative Assessment of Practical (FA-PR) - Practical Competency is a vital aspect of student learning. The Formative Assessment for practical (FA-PR) is structured to ensure continuous evaluation of student's Psychomotor skills and application of knowledge in laboratory. Assessment of FA-PR encourages active participation, and build essential technical proficiencies aligned with course outcomes and Laboratory Learning Objectives. It emphasizes performance improvement throughout the semester progressively.

Summative Assessment of Practical (SA-PR) -The Summative Assessment of Practical is a critical component of the overall evaluation process, designed to assess a student's ability to apply theoretical knowledge in a hands-on environment. It provides comprehensive confirmation of the learner's skills, competencies, and understanding acquired throughout the semester during practical sessions.

This assessment ensures that students:

Demonstrate proficiency in performing practical tasks related to the curriculum.

Follow standard procedures and safety norms in laboratory or workshop settings.

Exhibit analytical thinking and problem-solving skills while interpreting results or troubleshooting tasks.

Communicate inferences effectively

Norms for Self-Learning Assessment (SLA) –

Self-learning activities include micro-projects, assignments, and other independent learning tasks assigned to students. These are designed to cultivate self-direction, analytical skills, and application of course learning outcomes. SLA hours are part of the notional learning hours calculation alongside Classroom Learning (CL), Lab/Workshop (LL), Tutorial (TL), etc. Self-Learning hours are not to be shown separately in the institute's timetable. Self-learning activities shall be a judicious blend of activities specified in the curriculum and those additionally designed by individual faculty members and SLA is a continuous process, with assessments conducted periodically throughout the semester.

Theory	Practical	Self-Learning
FA-TH is of 30 marks SA-TH is of 70 marks	FA-PR	SLA
Total of 40 (FA-TH+SA-TH) marks is required to pass the course.	Failure to submit practical work and secure minimum passing marks in practical assessments shall result in detention in the course.	Failure to submit SLA work and secure minimum passing marks in SLA may result in failure in the course.

Students Performance Evaluation- The objective is to ensure that students acquire not only academic knowledge but also develop technical, interpersonal, and professional skills required in the industry. The institute is expected to demonstrate initiatives taken to support slow and advanced learners, bridge learning gaps, and track student performance trends for continuous improvement. The main aim is to assess the effectiveness of academic planning, teaching methodologies, and support systems in improving learning outcomes using following indicators.

Success Index (SI) – it measures the pass percentage of students relative to enrolment, reflecting academic success.

Academic performance Index (API) – it assesses the overall academic achievement through average marks.

Placement Index (PI)- It indicates the effectiveness of the institution's efforts in securing employment or higher education opportunities for the students.

Assessment Norms and Rubrics for Courses with Internships, Projects, Seminars, Social and Life Skills, etc. -

Each Diploma Programme includes courses such as Internships, Projects, Seminars, and Social and Life Skills. The respective curriculum document provides the course contents, detailed guidelines,

assessment norms, and evaluation rubrics. All faculty shall strictly follow the prescribed formats and rubrics specified in the curriculum documents for the respective courses to ensure uniformity and transparency in evaluation.

For 16-Week Internships -

Students shall undergo internships for the entire semester, by adhering to the guidelines and assessment norms specified in the curriculum document.

For the Project Course, which is to be completed concurrently with the 16-week internship, the following approach shall be adopted:

A group of 3–6 students, under the guidance of a faculty mentor and with the consent of the industry, shall identify a problem statement at their workplace and undertake it as a project, following the guidelines and assessment norms specified in the curriculum document.

OR

Students may undertake an external project, utilizing college resources on Saturdays or industry-off days. Periodic reviews shall be conducted, at least once a month in offline mode and otherwise through online sessions.

Final demonstrations and presentations shall be conducted at the institute in the presence of an External Examiner.

Index of Proformas

F1: Academic Activities Calendar

GOVERNMENT POLYTECHIC, KOLHAPUR

Department of _____

STUDENTS ACTVITIES CALENDER

Academic Year- ……..

S. N.	Activity	Date(s)	Category CU/CC/EC	Faculty In-Charge

Departmental Co-coordinator **Head of the Department**

CU- Curricular Activities
CC- Co-curricular Activities
EC- Extra Curricular Activities

F2: Teaching Plan (Theory)

GOVERNMENT POLYTECHNIC, KOLHAPUR

Teaching Plan for Course

Course Name with Code:	**Semester:**	**Programme:**
Lectures per week:	**Total no. of Lectures for the Semester:**	
Name of the Faculty:		

Unit No	Allocated hrs	CO number	Lecture no	Title of Topic/ Sub topics	Pedagogy used (Teaching Method / Media)	Planned Dates	Actual Dates of Conduction	Remarks (Topic complete / Deviation) Details Given for SLA /IKS	Lecture or Session Outcome

Name & Signature of the Faculty

Name & Sign of Head of the Department

F3: Lesson Plan

GOVERNMENT POLYTECHNIC, KOLHAPUR

Lesson Plan for Theory Lecture

(Based on Lecture-wise Teaching Plan for the Course)

Programme: Academic Year:

Course name with code: Class:

Lecture No: CO:

Teaching Resources Required: Notes, chalk -board Sub-topic:

Lecture / Session Outcome:

S. N.	Phase	Events and Activities	Time to be allotted
1.	Introduction	1.1 1.2	
2.	Development	2.1 2.2 2.3	
3.	Consolidation	3.1 3.2 3.3	

After delivery of the Lecture: To what extent could I follow the Lesson Plan (%):

Reasons for deviation from the lesson plan:

…….....

.....

……..

Name & Signature of Faculty

F4: Laboratory Plan (Practical)

GOVERNMENT POLYTECHNIC, KOLHAPUR

Planning for Practical

Course Name With Code:	**Semester:**	**Programme:**
Practical Session: Hrs/week	**Sessions/week:**	**No. of sessions per Semester:**
Name of the Faculty:		

Practical. No.	Name of Experiment/Practical	CO	Batch	Planned Date	Actual Date of Conduction	Remarks if any
			A			
			B			
			C			
			A			
			B			
			C			
			A			
			B			
			C			
			A			
			B			
			C			
			A			
			B			
			C			
			A			
			B			
			C			
			A			
			B			
			C			
			A			
			B			
			C			

Name & Signature of the Faculty **Name & Signature of the Head of Department**

F5: Formative Assessment of Practical (FA PR)

GOVERNMENT POLYTECHNIC, KOLHAPUR

Course Name With Code:	**Semester:**	**Programme:**
Practical Session: Hrs/week	**Sessions/week:**	**No. of sessions per Semester:**
Name of the Faculty:		

Roll No.	Name of the Student	Practical / Tutorial (Marks out of 25 per Experiment)											Total Marks (25 x No. of Expt.)	FA Marks of Practical Converted according to L-A Scheme (Max Marks. .....)	Signature of Student
1	**2**	**3**											**4**	**5**	**6**
		1	2	3	4	5									
		CO1	CO2	CO3											

Name and Signature of Faculty **Name and Signature of Head of the Department**

Note: 1. Fractional marks in Col 5 shall be rounded to next full number
2. Faculty shall add more columns as per requirement

Failure to submit practical work and secure minimum passing marks in practical assessments FA PR shall result in detention in the course.

F6: Self-Learning Assessment (SLA)

GOVERNMENT POLYTECHNIC, KOLHAPUR

Course Name With Code:	**Semester:**	**Programme:**
Practical Session: Hrs/week	**Sessions/week:**	**No. of sessions per Semester:**
Name of the Faculty:		

Roll No.	Name of the Student	Self learning Assignments (Marks out of 25 per assignment)											Total Marks (25 x No. of Expt.)	SLA Marks of Practical Converted according to L-A Scheme (Max Marks. .....)	Signature of Student
1	**2**	**3**											**4**	**5**	**6**
		1	2	3	4	5									
		CO1	CO2	CO3											

Name and Signature of Faculty **Name and Signature of Head of the Department**

Note: 1. Fractional marks in Col 5 shall be rounded to next full number
2. Faculty shall add more columns as per requirement

Failure to submit SLA work and secure minimum passing marks in SLA may result in failure in the course.

F7: Summative Assessment of Practical (SA PR)

GOVERNMENT POLYTECHNIC KOLHAPUR

Performance for Final Assessment of PRACTICAL / ORAL

Course Code & Course Name:-_____

Programme:-_____

Summer/Winter Exam-20_____Date:-_____

Sr. No.	Roll No./ Exam. Seat No.	Performance of Term End PR/OR by Internal Examiner **(P1)** (25M)	Performance of Term End PR/OR by External Examiner **(P2)** (25M)	Total Marks Out of 50 Internal + External (50M)	Converted Marks As per Evaluation Scheme (as mention in LA Scheme)

Internal Examiner
Signature:-
Name:-

External Examiner
Signature:-
Name:-
Institute:-

1. **Same format should be used for only internal as well as internal + external examiner.**
2. **For only internal, P2 will be blank and total will be out of 25 instead of 50.**

P1

GOVERNMENT POLYTECHNIC,KOLHAPUR

Performance for Final Assessment of PRACTICAL / ORAL

By Internal Examiner

Course Code & Course Name:-_____

Programme:-_____

Summer/Winter Exam-20_____Date:-_____

Sr. No.	Roll No./ Exam. Seat No.	Knowledge about the course (5M)	Preparedness for practical (5M)	Neat & complete Diagram/ write up (5M)	Communication /Presentation (5M)	Performance in practical Exam. (5M)	Total marks (25M)	Converted Marks As per Evaluation Scheme (as mention in LA Scheme)

Internal Examiner

Signature:- -

Name:-

-

P2

GOVERNMENT POLYTECHNIC,KOLHAPUR

Performance for Final Assessment of PRACTICAL / ORAL

By External Examiner

Course Code & Course Name:-_____

Programme:-_____

Summer/Winter Exam-20_____Date:-_____

Sr. No.	Roll No./ Exam. Seat No.	Knowledge about the course (5M)	Preparedness for practical (5M)	Neat & complete Diagram/ write up (5M)	Communication /Presentation (5M)	Performance in practical Exam. (5M)	Total marks (25M)	Converted Marks As per Evaluation Scheme (as mention in LA Scheme)

External Examiner

Signature:- **-**

Name:-

Institute :-

F8: Formative Assessment Theory (FA TH)

Government Polytechnic Kolhapur

Programme:- Course Code & Course Name:-

Name of Faculty:- Class:- Academic Year:- Odd/Even 20

Roll No.	Enrollment No.	Name of the Student	Marks of Class Test-1 (Out of 30)	Marks of Class Test-2 (Out of 30)	Average of 4 & 5	FA marks of Theory out of 30	Signature of Student
1	**2**	**3**	**4**	**5**	**6**	**7**	8

Signature of Faculty
Name

Signature of HoD
Name

F9: Unit test Result and Attainment Analysis

GOVERNMENT POLYTECHNIC KOLHAPUR

Analysis of FA TH Unit test 1 / Unit test 2 Result

Programme: **Exam: UT1 / UT2**
Academic Year: **Semester:**
Course Name & Code: **Faculty:**
Course Outcome:
CO1 :
CO2 :
CO3:
CO4 :
CO5 :
CO6 :

	Ques 1 (5*2M) or Ques 1 (3*4M)								Ques 2 (5*4M) or Ques 2 (3*6M)								Total marks
	a	b	c	d	e	f	g	h	a	b	c	d	e	F	g	h	
CO==>>																	
Bit wise Marks =>>																	
Roll No ⇓																	

Total marks (CO wise distribution as per question paper)

CO1	CO2	CO3	CO4	CO5	CO6

Attainment of Cos

CO number	CO1	CO2	CO3	CO4	CO5	CO6
Target Attainment						
Actual Attainment						

Attainment Analysis

Q. No	Sub Q No	CO number	Reason / Findings for poor attainment	Remedial Measures

Name and Signature of Faculty **Name and Signature of HoD**

Note: Use separate proforma for UT 1 & UT 2

F10: Identification of Weak/Bright Students

GOVERNMENT POLYTECHNIC, KOLHAPUR

Identification of Bright and Weak Students through Result Analysis of UT1 / UT2

Date of Examination: Academic Year:

Course Code and Name: Semester :

Name of Faculty: Exam : UT1 / UT2

Total number of students appeared :

Range of Marks Obtained	Roll No of Students	No. of Students	% of Students
Above ____ % ***(Considered to be bright)**			
Below ____% ***(Considered to be weak)**			

*Faculty should decide these percentage depending upon difficulty level of question paper.

- Probable reasons for poor performance:
  _____
  _____
  _____

- Remedial measures/action taken for improvement:
  _____
  _____
  _____

- Task / Targets given to Bright students for motivation:
  _____
  _____
  _____

Name & Signature of Faculty

Note: Use separate proforma for UT 1 & UT 2

F11: Detention Report

GOVERNMENT POLYTECHNIC, KOLHAPUR

Term End Examination Detention Report

Academic Year: **Examination: SUMMER/WINTER ……**

Programme:

Course Code and Name:

Type	Total Students	Student Roll Numbers
DETAIN		
TERM GRANTED		

Name and Signature of Faculty

Name and Signature of Programme HOD

F12: Industrial Visits Details

GOVERNMENT POLYTECHNIC, KOLHAPUR
Industry Visit Details

Programme:

Academic Year: Semester:

Sr No	Name of Industry, Address and Contact details	Semester	Course Name	Name of Coordinator	Date of Conduction of Activity	Number of Beneficiaries	Relevance to POs and PSOs (Numbers)

Name & Signature of Coordinator **Name & Signature of HOD**

F13: Expert Lectures Details

GOVERNMENT POLYTECHNIC, KOLHAPUR
Expert Lecture Details

Programme:

Academic Year: Semester:

Sr No	Name, Designation, Organization of Expert Along with Contact Details & Email ID	Date of conduction	Year / Semester	Topic	Name of Coordinator	No. of Beneficiaries	Relevance to POs and PSOs (Numbers)

Name & Signature of Coordinator **Name & Signature of HOD**

F14 Placement Details

GOVERNMENT POLYTECHNIC KOLHAPUR

Placement Details

Programme: **Academic Year:**

Sr. No.	Name of Industry & address	Nature of the Industry Service/Manufacturing/ process/Any other specify	No. of students Placed	Salary

Signature of Department TPO **Signature of HoD**

Name **Name**

GOVERNMENT POLYTECHNIC KOLHAPUR

Details of Student Placement

Programme: **Academic Year:**

Sr. No.	Name of Student	Nature of placement (Higher Studies/ Recruitment/ Self-employment)	Name of Organization/Industry	Remark

Signature of Department TPO **Signature of HoD**

Name **Name**

Note: The department shall maintain records of students who pursue higher education as well as those who opt for self-employment.

F15: Faculty / Staff Training

GOVERNMENT POLYTECHNIC KOLHAPUR

Details of Faculty / Staff Training Attended

Programme: **Academic Year:**

Sr. No.	Name and Designation of Faculty/Staff	Details of training (Industrial / Content Updating / Soft Skill / Any Other)	Mode of Training (Online/Offline)	Duration of Training in days/weeks / months	Date /schedule	Organizing Body	Organizing Institute

Signature of Department SDC **Signature of HoD**

Name **Name**

F16: Resource Development

GOVERNMENT POLYTECHNIC KOLHAPUR

Details of Resources Developed

(Laboratory, Infrastructure, Teaching Aids)

Programme: **Academic Year:**

Sr. No.	Details of Resources Available for teaching learning process in Classroom/Laboratory	Effective Utilization

Signature of Dept. Academic Coordinator

Name:

Signature of Head of Department

Name:

F17: Details of Co-curricular Activity

Government Polytechnic Kolhapur

Details of Co-curricular Activity

Programme: **Academic Year:**

Sr. No.	Date	Type of Activity & Details (Paper Presentation / Project / Quiz / etc.)	Organizing Body/ Conducted by Level (Winner / Participation)				Name/s and Enroll No of the Participant	Award/ Prize	No of Participant	Relevance to PO's / PSO's (Only nos.)
			Institute	MSBTE	DTE	Any Other				

Signature of Dept. Academic Coordinator

Name:

Signature of Head of Department

Name:

F18: Details of Extra-curricular Activity

Government Polytechnic Kolhapur

Details of Extra-curricular Activity

Programme: **Academic Year:**

Sr. No.	Date	Type of Activity & Details (Paper Presentation / Project / Quiz / etc.)	Organizing Body/ Conducted by Level (Winner / Participation)				Name/s and Enroll No of the Participant	Award/ Prize	No of Participant	Relevance to PO's / PSO's (Only nos.)
			Institute	MSBTE	DTE	Any Other				

Signature of Dept. Academic Coordinator

Name:

Signature of Head of Department

Name:

F19: Laboratory Details

Government Polytechnic Kolhapur

Laboratory Details

Programme: **Academic Year:**

Name of the Laboratory:

Sr. No.	Semester wise course Codes assigned to this Lab	Details of Facility / Equipment's Available	Quantity	Remarks Mention deficiency / Adequateness

Signature of Laboratory Assistant

Name:

Signature of Head of Department

Name:

Note: Provide the details of the facilities & Specifications of Major / Essential Equipment's available for conduction of practical as per curriculum. Prepare separate sheet for each laboratory

F20: Other Dept. Facilities like CoE

OTHER DEPARTMENT FACILITIES like CoE /Virtual / Industry Sponsored Labs /Special Software platforms, etc.

Programme: **Academic Year:**

Sr. No.	Semester wise course Codes assigned to this Lab	Details of Facility / Equipment's Available	Quantity	Remarks (Utilization Details)

Signature of Coordinator

Name:

Signature of Head of Dept.

Name:

F21: Academic Progress Report (Theory) **Government Polytechnic Kolhapur**

Academics Progress Report (Theory)

Programme: **Academic Year:**

Class: **Division:** **Class Teacher:**

No of weeks:

Sr. No.	Course Code and Course Name	No of lectures expected till date	No of lectures conducted till date	Expected % of curriculum coverage till date	Actually covered % of curriculum till date	Remedial measure to cover gap in curriculum coverage	Roll no of students whose attendance is less than 50%	Roll no of students whose attendance is less than 75%	Signature of course teacher
1									
2									

Signature of Class teacher
Name:

Signature of Head of Department
Name:

Note: This report should be prepared after every 4 weeks and it should be notified to all students and should be conveyed to parents of defaulter students by class teacher.

F22: Academic Progress Report (Practical) **Government Polytechnic Kolhapur**

Academic Progress Report (Practical)

Programme: **Academic Year:**
Class: **Division:** **Class Teacher:**
No of weeks:

Sr. No.	Course Code and Course Name	Batch No	No of practicals expected till date	No of practicals conducted till date	Expected number of experiments to be completed till date	Actually number of experiments completed till date	Remedial measure to cover gap in experiments completion	Roll no of students whose attendance is less than 50%	Roll no of students whose attendance is less than 75%	Signature of course teacher
1		1								
		2								
		3								
2		1								
		2								
		3								

Signature of Class teacher
Name:

Signature of Head of Department
Name:

Note: This report should be prepared after every 4 weeks and it should be notified to all students and should be conveyed to parents of defaulter students by class teacher.

F23: Analysis of Term End examination Result

GOVERNMENT POLYTECHNIC, KOLHAPUR

Analysis of Term End Examination Result

Programme: **Academic Year:**

Exam: Summer / Winter

Sr. No.	Course Code	Name of Course	Passing Head	Average Marks	No. of students above average	No. of students Appeared	No. of student Passed	% Pass	% of students above 60%
			FA-TH						
			SA-TH						
			FA-PR						
			SA-PR						
			SLA						
			FA-TH						
			SA-TH						
			FA-PR						
			SA-PR						
			SLA						
			FA-TH						
			SA-TH						
			FA-PR						
			SA-PR						
			SLA						

Signature of Dept. Academic Co-Ordinator **Signature of HoD**

Name: **Name:**

Note: Consider only Regular (R) students for the result analysis

F24: Student Feedback

Sr No	Description=>	Very Poor	Poor	Good	Very Good	Excellent
	Points =>	**1**	**2**	**3**	**4**	**5**
1	Has the Teacher covered entire Syllabus as prescribed by University/ College/ Board?					
2	Has the Teacher covered relevant topics beyond syllabus					
3	Effectiveness of Teacher in terms of :					
	(a) Technical content/course content					
	(b) Communication skill:					
	(c) Use of teaching aids					
4	Pace on which contents were covered					
5	Motivation and inspiration for students to learn					
6	Support for the development of Students' skill					
	(i) Practical demonstration					
	(ii) Hands on training					
7	Clarity of expectations of students					
8	Feedback provided on Students' progress					
9	Willingness to offer help and advice to students.					
	Total:					

This feedback facility is made available in institute MIS. Mid term and End semester feedback about faculty are collected from student MIS login and then it is made available in HoD login.

F25: Student Enrolment Ratio

Government Polytechnic Kolhapur

Enrolment Ratio

Programme: **Academic year-**

Year	N	N1	N2	Enrolment ratio (N1+N2)/N*100
CAY				
CAYm1				
CAYm2				
Average Enrolment Ratio				

N = *Sanctioned intake strength of the program*

N1= Total *number of students, admitted through state level counselling*

N2 = *Number of students, admitted through Institute level quota*

CAY – Current Academic Year

CAYm1- Current Academic Year minus1= Current Assessment Year

CAYm2 - Current Academic Year minus2=Current Assessment Year minus 1

Signature of Dept. Academic Coordinator Signature of HoD

Name: Name:

F26: Success Index (SI)

Government Polytechnic Kolhapur

Success Index

Programme: **Academic Year:**

Current Academic Year (CAY):

a) Success rate without backlogs in any year of study

SI= (Number of students who have passed from the program without backlog)/ (Number of students admitted in the first year of that batch plus actually admitted in 2nd year via lateral entry)

Item	CAYm3 (admitted)	CAYm4 (admitted)	CAYm5 (admitted)
Total number of students admitted (Through state level counselling + admitted through Institute level quota+ actually admitted through lateral entry) ie. (*N*1 + *N*2 + *N3*)			
Number of students who have passed without backlogs in the stipulated period			
Success index (SI)= No of students passed without backlog in stipulated period / (N1+N2+N3)			
Average SI (a)			

CAY – Current Academic Year
CAYm1- Current Academic Year minus1= Current Assessment Year
CAYm2 - Current Academic Year minus2=Current Assessment Year minus 1
CAYm3 - Current Academic Year minus3=Current Assessment Year minus 2
CAYm4 - Current Academic Year minus4=Current Assessment Year minus 3
CAYm5 - Current Academic Year minus5=Current Assessment Year minus 4

b) Success rate with backlog in any year of study:

Item	CAYm3 (admitted)	CAYm4 (admitted)	CAYm5 (admitted)
Total number of students admitted (Through state level counselling + admitted through Institute on level quota+ actually admitted through lateral entry) ie. (*N*1 + *N*2 + *N3*)			
Number of students who have passed with backlogs in the stipulated period			
Success index (SI)= No of students passed in stipulated period / (N1+N2+N3)			
Average SI (b)			

SI = Mean of SI(a) and SI(b) =

Signature of Dept. Academic Coordinator **Signature of HoD**

Name: **Name:**

F27: Academic Performance Index (API)

Government Polytechnic Kolhapur

Programme: **Academic Year:**

Current Academic Year (CAY):

a) **Academic performance Third year:** *API =(Mean of the percentage of marks of all successful students in Final Year/10)* x (*successful students/number of students appeared in the examination*)

Academic Performance	**CAYm3 (admitted)**	**CAYm4 (admitted)**	**CAYm5 (admitted)**
Mean Percentage of all successful students (X) /10			
Total no. of successful students (Y)			
Total no. of students appeared in the examination (Z)			
API = x* (Y/Z)			
Average API = (AP1 + AP2 + AP3)/3			

b) **Academic performance Second year:** *API = (Mean of the percentage of marks of all successful students in Second Year/ 10)) x (successful students/number of students appeared in the examination)*

Academic Performance	**CAYm2 (admitted)**	**CAYm3 (admitted)**	**CAYm4 (admitted)**
Mean Percentage of all successful students (X) /10			
Total no. of successful students (Y)			
Total no. of students appeared in the examination (Z)			
API = x* (Y/Z)			
Average API = (AP1 + AP2 + AP3)/3			

c) **Academic performance First year:** *API = (Mean of the percentage of marks of all successful students in First Year/ 10)) x (successful students/number of students appeared in the examination)*

Academic Performance	**CAYm1 (admitted)**	**CAYm2 (admitted)**	**CAYm3 (admitted)**
Mean Percentage of all successful students (X) /10			
Total no. of successful students (Y)			
Total no. of students appeared in the examination (Z)			
API = x* (Y/Z)			
Average API = (AP1 + AP2 + AP3)/3			

Academic Performance	**API**
Academic performance in First year = 2.5 x Average API	
Academic performance in Second year = 2.0 * Average API	
Academic performance in Third year = 1.5 * Average API	

Name & Signature of Departmental Academic Coordinator **Name & Signature of HoD**

F28: Placement Index

Government Polytechnic Kolhapur

Placement Index

Programme: **Academic Year:**

Item	CAYm3 (admitted)	CAYm4 (admitted)	CAYm5 (admitted)
Total No. of Final Year Students (N)			
No. of students placed in companies or Government Sector (X)			
No. of students admitted to higher studies (Y)			
No. of students turned entrepreneur in the respective field of engineering /technology (Z)			
Placement Index (P): (1.25X + Y +Z)/N			
Average placement Index = (P1 + P2 + P3)/3			

Signature of Dept. TPO **Signature of HoD**

Name: **Name:**

F29: Student Faculty Ratio (SFR)

Government Polytechnic Kolhapur

Student Faculty Ratio

Programme: **Academic Year:**

Current Academic Year (CAY):

Name of the Faculty Member	Qualification	University and Year of Graduation	Designation and date of Joining the institution	Distribution of Teaching Load (%)		Academic Research		Years of experience	Nature of Association (Regular/ contract)	Date of leaving
				a	b	Research Paper Publications	Faculty Receiving M.Tech/ Ph.D. during the Assessment Year			
Total										

Year	N	F	SFR=N/F
CAY			
CAYm*1*			
CAYm2			
Average SFR			

N: Number of students = (Sanctioned Intake *3) + (10% of sanctioned Intake *2)

F: Number of faculties contributing for programme = a+b

a: Faculty of the specific program/ department considering fractional load

b: Faculty serving this program from other Program / department considering fractional load

Name & Signature of Departmental Academic Coordinator **Name & Signature of HoD**

F30: Format of Unit Test exam question paper

GOVERNMENT POLYTECHNIC, KOLHAPUR

(An Autonomous Institute of Government of Maharashtra)

UNIT TEST EXAMINATION No.: ___

PROGRAMME: **DATE:**

COURSE CODE AND COURSE NAME: **CLASS & DIV:**

MAX. MARKS: 30 **TIME: 01 Hour 30 Min**

[**Abbreviations :** *QN* – Question No., *SQN* – Sub-question No., *R*-Remembering, *U*-Understanding, *A*-Application, *CO* – Course Outcome]

QN	SQN	Question text	Level R/U/A	CO Code	Marks out of
1	⇨	***Attempt any five***			**10**
	a				
	b				
	c				
	d				
	e				
	f				
	g				
2	⇨	***Attempt any five***			**20**
	a				
	b				
	c				
	d				
	e				
	f				
	g				

F31: Format for Term End Theory Examination Question Paper

GOVERNMENT POLYTECHNIC, KOLHAPUR

(An Autonomous Institute of Government of Maharashtra)

ODD/EVEN TERM END EXAM MONTH/YEAR

EXAM SEAT NO: | | | | | | |

COURSE CODE:
COURSE NAME:
MAX MARKS: **TIME:** **DATE:**

Instructions:

1) Answers must be written in the main answer book provided (and Supplements, if required)
2) Illustrate your answers with sketches wherever necessary
3) Use of non-programmable pocket calculator is permissible
4) Mathematics and other tables shall be made available on request
5) Assume and mention additional suitable data if necessary
6) Use of Mobile strictly prohibited
7) QN:- Question Number, SQN- Sub Question Number, R- Remembering, U-Understanding, A-Application

SECTION I

QN	SQN	Question text	Cognition Level R/U/A	CO Code	Marks out of
1	⇨	**Attempt any THREE out of five (3*2)**			06
	a				
	b				
	c				
	d				
	e				
2	⇨	**Attempt any FOUR out of six (4*4)**			16
	a				
	b				
	c				
	d				
	e				
	f				
3	⇨	**Attempt any TWO out of three (2*6))**			12
	a				
	b				
	c				

SECTION II

QN	SQN	Question text	Cognition Level R/U/A	CO Code	Marks out of
1	⇨	**Attempt any FOUR out of Six (4*2)**			08
	a				
	b				
	c				
	d				
	e				
	f				
2	⇨	**Attempt any FOUR out of six (4*4)**			16
	a				
	b				
	c				
	d				
	e				
	f				
3	⇨	**Attempt any TWO out of three (2*6)**			12
	a				
	b				
	c				

F32: Student Achievements

Government Polytechnic Kolhapur

Programme: **Academic Year:**

Sr. No.	Roll No	Name of Student	Class	Date	Details about achievement

Name & Signature of HoD

Achievements: winner / Participation in various quizzes, paper presentation, project competition, sports etc.

F33: Faculty / Staff Achievements

Government Polytechnic Kolhapur

Programme: **Academic Year:**

Sr. No.	Name of Faculty / Staff	Date	Details about achievement

Name & Signature of HoD

Achievements: Paper publications, Patents, any award, Delivery of expert lecture in other institutes, resource person for any workshop etc.

F34: Departmental Mentoring Report

DEPARTMENTAL MENTORING REPORT

1. **Basic Information**

- **Name of the Department: -**
- **Academic Year:**
- **Number of Faculty Mentors: -**
- **Total Number of Mentees: -**
- **Mentoring Coordinator (if any): -**

2. Objectives of the Mentoring Program (Tick policy practiced in your department)

- To support students academically and personally
- To monitor academic progress and attendance
- To identify slow and advanced learners
- To provide career guidance and counselling
- To promote overall student development

3. Structure of the Mentoring System (Mention policy practiced in your department)

- **Mentor–Mentee Ratio:** (e.g., 1:20) =
- **Method of Allotment:** (Roll Number-wise / Class-wise / Random) =
- **Frequency of Mentoring Meetings:** (Weekly / Monthly / Bimonthly or as required) =
- **Mode of Mentoring:** (Offline / Online / Hybrid) =

4. Details of Mentoring Activities Conducted : - e.g.

Sr.No	Date	Activity/ Discussion Topic	Number of Students	Name of Teacher
1		Academic progress review		
2		Personal counselling		
3		Career guidance		
4		Addressing attendance issues		
5		Stress management / motivation		
6				
7				

5. Academic Monitoring and Support (Mention policy practiced in your department)

- Identification of **slow learners** and **advanced learners**
- Remedial classes suggested / arranged
- Academic improvement plans prepared

6. Career Guidance and Skill Development (Mention policy practiced in your department)

- Guidance for higher education
- Competitive exams awareness
- Internship and placement guidance
- Skill enhancement suggestions

7. Personal and Psycho-Social Support (Mention policy practiced in your department)

- Counselling for personal / emotional issues
- Support for stress, anxiety, or adjustment problems
- Referral to professional counselling (if required)

8. Outcomes of the Mentoring Program

- Improvement in academic performance
- Better attendance and discipline
- Increased student confidence and motivation
- Enhanced student–teacher interaction

9. Challenges Faced

- Irregular student participation
- Time constraints
- Large mentor–mentee ratio
- Other challenges (if any)

10. Best Practices

- One-to-one mentoring
- Continuous follow-up with students
- Parent interaction (if applicable)

11. Conclusion (Write conclusion as per experience with mentees. The following is the sample conclusion.)

The mentoring program for the academic year 2025-26 was effectively implemented in the department and contributed significantly to students' academic progress, personal development, and career planning.

12. Supporting Documents (Annexures)

- Mentor–Mentee allotment list
- Attendance sheets of mentoring meetings
- Photographs (if any)

Name & Signature of Head of the Department
Date:-

F35: Student Profile for Mentoring

Government Polytechnic Kolhapur
Student Profile
(ProformaM2)

Recent passportsize color photograph

StudentEnrollment Number:_____

Program/Branch:_____Year of Admission:_____

Name of Student:_____

(Surname) (First name) (Father's name)

Date of Birth:_____Nationality: _____Gender:M/F

Contact No. (Land Line):_____Mobile Number of student:_____

Email ID: _____BloodGroup

_____Hobbies:_____

_____

Medical history about any illness:-_____

Address for Correspondence:

Local Address	Permanent Address

Parent Details:-

	Name	Occupation	Contact Number	Email ID
Father				
Mother				
Guardian				

I) Educational Details:

Sr.No	Name of Examination	Year of Passing	Percentage	Division
1.	SSC(10^{th})			
2.	HSC/ MCVC/ ITI			

II) Academic Performance in Diploma:

- First Year

First Semester			
Course Name	UT1	UT2	End Sem

Second Semester			
Course Name	UT1	UT2	End Sem

- Second Year

Third Semester			
Course Name	UT1	UT2	End Sem

Fourth Semester			
Course Name	UT1	UT2	End Sem

- Third Year

Fifth Semester			
Course Name	UT1	UT2	End Sem

Sixth Semester			
Course Name	UT1	UT2	End Sem

End sem exam(Write any student-specific inputs like a failure, good score etc.)

Remarks about overall attendance semester wise(Satisfactory/not satisfactory)

Semester	After 4weeks	After 8weeks	After 12weeks	Overall
First				
Second				
Third				
Fourth				
Fifth				
Sixth				

III) Technical Skills Acquired from external courses:

Sr.No.	Nameof Course	Institute/Industry	Duration	From-To	POs achieved

IV) Participation in Technical Paper/Poster Presentation and Project Competitions

Sr.No.	Name of Event	Title of Presentation/Project	Date	Standing/ Ranking	POs achieved

V) Expert Lecture/Seminar/Workshop Attended:

Sr. No.	Name of Seminar/ workshop	Organizing Body	Topics covered	Date	POs achieved

VI) Extra Curricular(e.g.debate, quiz, online gaming, music, artetc):

Sr.No.	Nameof Event	Date	Standing/ranking	POs achieved

VII) Summer/Winter In-plant Training:

Sr. No.	Name and address of industry	Year	Duration	Exposure to Technology/Process/Department

VIII) Member of Professional Societies(For example ISTE etc)

Sr. No.	Name of the Society	Duration of subscription	Designation	Milestones of event organized

IX) Sports/games participated:

Sr. No.	Event	Participated As	Date	Place	Position

X) Technical/Allied Events Organized:

Sr. No.	Name of the Event	Place	Duration/ Date	Worked as	Milestones of event organized

Note:-

- Student Should attach xerox copies of10^{th}, 12^{th} and end semester marksheets.
- Participation in any activities should be supported with certificates