



GOVERNMENT OF TAMILNADU  
DIRECTORATE OF TECHNICAL EDUCATION, CHENNAI

**STATE PROJECT COORDINATION UNIT**

*(Established Under Canada India Institutional Cooperation Project)*

**CURRICULUM**

<b>Course Name</b>	<b>PRIMAVERA</b>
Course Code	CE / 2020 / 009
Course Duration	40 Hours
Minimum Eligibility Criteria and Pre-requisites (if any)	10 <sup>th</sup> / +2/Diploma/Graduates
Course Objectives	<p>Training Module has been designed for the Participants to</p> <ul style="list-style-type: none"> <li>• Know that Oracle's primavera p6 project management gives solution to planning, managing and executing projects</li> <li>• Plan, control and organize project activities</li> <li>• Expertise in project scheduling, maintenance of project and analysis of projects</li> </ul>
Course Outcomes	<p>At the end of the training, participants will be able to</p> <ul style="list-style-type: none"> <li>• Create project work breakdown structure</li> <li>• Manage the project time constraints</li> <li>• Report critical tasks and develop various structure reports</li> <li>• Organize data by use of codes</li> <li>• Create relationship between tasks and workout project schedule</li> </ul>
Expected Job Roles	<ul style="list-style-type: none"> <li>• Project manager</li> <li>• Project control engineer</li> <li>• Project coordinator</li> </ul>

**TEACHING AND SCHEME OF EXAMINATION**

Course Code	Course Name	Hours		Assessment Marks		Duration of Examination
				Min	Max	
CE / 2020 / 009	PRIMAVERA	Theory	12	10	20	3 Hours
		Practical	28	40	80	
		<b>Total</b>	<b>40</b>	<b>50</b>	<b>100</b>	

**DETAILED SYLLABUS**

Unit No	Modules	No. of Hours	
		Theory	Practical
<b>1</b>	<b>INTRODUCTION TO PRIMAVERA</b>		
1.1	What is primavera? - Use of primavera in project management	02	---
1.2	Project life cycle –Initiation – Planning – Execution – Control- Closing		
1.3	Activities- Resources		
<b>2</b>	<b>GETTING STARTED</b>		
2.1	Project Management Process and Overview -User define- New Project	02	04
2.2	Setting user preferences -Format time - Format dates-Setting currency- Changing password-Setting Profile and spreadsheet- Setting calculation options for resources		
<b>3</b>	<b>STRUCTURING OF PROJECTS</b>		
3.1	Setting up enterprise project structure – Define EPS	02	05
3.2	Setting organization breakdown structure		
3.3	Define resources and roles -Review work breakdown structure- Define budget		
3.4	Project codes- Creating Calendars		
<b>4</b>	<b>SCHEDULING</b>		
4.1	Activities overview, Adding, Copying and Pasting	02	06
4.2	Assign resources, Roles, Work Products, Activity code		
4.3	View contract management document - Renumbering activity IDS		
4.4	Cost account and expense overview– Add expenses and entering cost information - Setup cost structure - Analyze costs – Estimate the project		
<b>5</b>	<b>MANAGE SCHEDULE</b>		
5.1	Managing baseline – create and maintain baseline – Assigning baselines to projects - Update	02	06
5.2	Updating –Scheduling-Leveling		
5.3	Summarizing projects- Project issues and thresholds		
5.5	Managing risks – Tracking projects- Comparing projects- Checking projects in& out		
<b>6</b>	<b>CUSTOMIZING PROJECTS</b>		
6.1	Working layouts - Grouping – Sorting- Filtering	01	04
6.2	Customizing layouts– Reports – Printing layouts and reports - Publishing project on web		

<b>7</b>	<b>IMPORT AND EXPORT DATA</b>		
7.1	Link project management and Contract management	01	03
7.2	Transfer data to other project management module		
7.3	Transfer data using Microsoft Project- Microsoft Excel files-Export project and resources		
<b>TOTAL THEORY AND PRACTICAL HOURS</b>		<b>12</b>	<b>28</b>
<b>TOTAL HOURS</b>		<b>40</b>	

<b>PRACTICAL EXERCISES (28 HOURS)</b>	
<b>S.NO.</b>	<b>List of Experiments</b>
1.	Schedule for Simple Project
2.	Create Work Break Down Structure for a New House
3.	Create Activity Entry for a Project
4.	Monitoring the project using Primavera
5.	Controlling the project using Primavera
6.	Critical Path Analysis and Verify Project Planned Finish Date
7.	Resource Handling in P6
8.	Reporting the project using Primavera
9.	Export and Import Project Data

## HARDWARE REQUIREMENT

SL. NO.	LIST OF TOOLS / EQUIPMENTS / MATERIALS
1.	CPU – 64 bit Intel® or AMD® multi-core processor
2.	RAM - 2 GB of RAM minimum (8 GB or more recommended)
3.	DISK SPACE -6 GB of free disk space for install
4.	VGA MONITOR
5.	USB KEYBOARD
6.	USB OPTICAL MOUSE

## SOFTWARE REQUIREMENT

SL. NO.	NAME OF THE SOFTWARE
1.	ORACLE'S PRIMAVERA P6

## REFERENCE BOOKS

SL. NO	NAME OF THE BOOK	AUTHOR	PUBLISHER
1.	Oracle Primavera P6 version 8 project and Portfolio management	Daniel Williams	PACKT Publishing
2.	Construction Scheduling with Primavera P6	Jongpil Nam	Author House, UK Ltd.,
3.	Project Planning and Control using Primavera	Paul Eastwood Harris	Eastwood Harris Pvt., Ltd.,

## ASSESSMENT AND CERTIFICATION

S.No	Criteria for Assessment
1.	A trainee will be assessed based on the performance in End Examination for Theory and Practical conducted internally in the CIICP Project Polytechnic College for a duration of 3 hours
2.	A trainee must have 75% of attendance to appear for End examination in Theory and Practical.
3.	The assessment for theory part will be based on the marks scored in the end examination on the knowledge bank of questions (1 Word/ Objective type questions).
4.	The assessment for practical part will be based on the marks scored in the end examination conducted by the CIICP Project Polytechnic and assessed by the Examiners approved by Strategic Plan Implementation Committee (SPIC) of the project polytechnic.
5.	The passing criteria for successful completion of training is every trainee should score 50% of marks in the End Theory and Practical examination.
6.	On successful completion of training, Certificate will be issued to the participants by the Directorate of Technical Education through the Project Polytechnics.

### END EXAMINATION

#### ALLOCATION OF MARKS

S. No.	Description	Maximum Marks
1.	THEORY EXAM	20
2.	PRACTICAL EXAM	
	a. PROCEDURE	20
	b. PLANNING / ASSIGNING	15
	c. SCHEDULING / CONTROLLING	15
	d. RESULT / OUTPUT	10
	e. RECORD	20
<b>Total</b>		<b>100</b>

## THEORY MODEL QUESTION PAPER - I

CE / 2020 / 009 – PRIMAVERA  
(Maximum Marks: 20)

(N.B: Answer any **Twenty** Questions)

**20 x 1 = 20 Marks**

1. What is primavera?
2. What is portfolio management?
3. What is programme management?
4. What is the Primavera reporting database?
5. What is Primavera analytics?
6. What is the difference between Free Float and Total Float?
7. What is the difference between Float and Slack?
8. What is a constraint in primavera?
9. How can you define the critical path in Primavera?
10. What is WBS?
11. What is an open end activity in primavera?
12. How to measure & compare the progress using Primavera?
13. What is Resource allocation and Resource Levelling?
14. What is the difference between Flag and Milestone Activity in Primavera?
15. What is a good use of lag in a Project?
16. Write the Abbreviation of CPM, PERT?
17. What are the advantages of Primavera?
18. What is an open and end activity?
19. List the industries where Primavera is significantly used?
20. Explain the Primavera Schedule?
21. What are the advantages of using Primavera?
22. What is meant by critical path methods?
23. Write the various methods that are used to schedule the projects?
24. What is meant by Slake & variance of time in Primavera?
25. What is the difference between MS-Project and Primavera?

## THEORY MODEL QUESTION PAPER - II

CE / 2020 / 009 – PRIMAVERA

(Maximum Marks: 20)

(N.B: Answer any **Twenty** Questions)

**20 x 1 = 20 Marks**

**1. Identify one project intense industries where Primavera has a significant presence.**

- a) Oil and Gas
- b) Communications
- c) Health Sciences
- d) Tax

**2. What is the significance of assigning the Responsible Manager to an EPS Node?**

- a) It assigns a generic resource to the EPS
- b) It assigns a named resource to the EPS
- c) It links the EPS to an OBS element
- d) It links the EPS to management reports

**3. Identify the field that must be unique in Primavera.**

- a) Project Name
- b) Project Description
- c) Project ID
- d) Project Manager

**4. Identify a relevant use case for applying a Must Finish By date to a project.**

- a) Compare Scheduled Finish to Must Finish By dates to negotiate realistic Finish dates
- b) Apply Must Finish By dates to shorten the duration of the schedule
- c) Apply Must Finish By dates to build case for requesting resources
- d) Compare Must Finish By date to Actual Finish Date to negotiate realistic Finish dates

**5. Identify one example of Enterprise specific data.**

- a) Enterprise Project Structure
- b) Activities
- c) Baselines
- d) Expenses

**6. Identify the True statement regarding the Enterprise Project Structure.**

- a) It is defined during installation and cannot be changed
- b) It is the default filing system for projects
- c) Activities represent the lowest level of the hierarchy
- d) It is defined and maintained in the Optional Client

**7. An activity has an Original Duration of 10 and a Remaining Duration of 10. The Actual Start is assigned to the activity. Physical % is updated to equal 80%. What is the Remaining Duration for this activity?**

- a) 80
- b) 10
- c) 2
- d) 8

**8. What takes the highest precedence during Resource Leveling?**

- a) Leveling priority
- b) Mandatory constraint
- c) Topological sequent
- d) Resource Calendar

**9. Cost Variance is calculated as .....**

- a) Earned Value Cost - Actual Cost
- b) The Actual Cost of Work Performed
- c) The Budgeted Cost of Work Scheduled
- d) Budget at Completion - Earned Value Cost

**10. Where are "User Defined Fields" typically maintained?**

- a) in the Web interface, in the preferences section
- b) in the Client interface by the system administrator
- c) in the Web interface, on the Activities tab
- d) in the Client interface under Admin Preferences

**11. You are coaching a set of new Primavera users that are entering data into an Activity View. They are concerned because they are not able to view Activity Details. What could be the cause of the problem?**

- a) They don't have sufficient security to view Activity Details
- b) They have not selected an Activity in the project plan
- c) Activity Details have been removed from the plan
- d) They are using an EPS View for Activities

**12. Select the true statement regarding Global Preferences in Primavera P6 EPPM Web Interface.**

- a) Global Preferences are shared among all users.
- b) Global Preferences are customized at the user level.
- c) Global Preferences are controlled by the System Administrator
- d) Global Preferences are controlled by Global Security Profiles.

**13. You are a Portfolio Manager looking for a new portfolio that you manually created for you have clicked the Group By drop-down list in Portfolios. Which option should you select to quickly find your portfolio?**

- a) Global Portfolio
- b) Global Filtered Portfolio
- c) User Portfolio
- d) User Filtered Portfolio

**14. You are coaching a new Primavera user that is attempting to create a project. They navigate to the EPS page. However, they do not see the sub-node where the project should be created. Identify the easiest way for the User to see sub-nodes in the EPS page.**

- a) Obtain security assignments at Read Only to all nodes
- b) Click on View, Expand All and scroll to locate the sub node
- c) Click on each Node and expand it to the lowest level
- d) Click "Add" button, so that all nodes are expanded, and then cancel.

**15. The Project Manager selects the Update unit when cost change on resource assignment ± option on Calculations tab in Project Details. The Budgeted Cost is \$2,000 and the Budgeted Units is 80 for the resource on an activity. If the User assigns the activity an Actual Cost of \$1,000, what is the Actual Units for the resource?**

- a) 70
- b) 40
- c) 60
- d) 80

**16. What is a good use of lag on a project?**

- a) Quality issues
- b) Traditionally we should avoid lag as much as possible
- c) Both are correct
- d) None of the above

**17. What is an open end activity in primavera?**

- a) The open end activity is the activity that does not have any successor. Generally, they should be avoided
- b) Open ended activities are best moved to processes instead of projects
- c) Both are correct
- d) None of the above

**18. What is an S – Curve and how to create S Curve in PRIMAVERA?**

- a) An S-curve is the cumulative cost function plotted on a histogram
- b) The Activity Usage Profile
- c) Both are correct
- d) None of the above

**19. What is Primavera, exactly?**

- a) Primavera is a suite of products
- b) Primavera is a tool for project planning
- c) Primavera is owned by Microsoft and is used for editing documents
- d) None of the above

**20. What is resource allocation and resource leveling?**

- a) Resource levelling is an activity to reduce the burden on resource
- b) Resource allocation is an activity to assign tasks to resources
- c) Allocation leads to Levelling need; and Levelling might either ask for more resources or extend schedule
- d) All are correct

**21. What are the differences between P6 EPPM and P6 PPM?**

- a) Architecture
- b) Reporting
- c) Connectivity
- d) All of the above

**22. How can you define the Critical Path in PRIMAVERA?**

- a) It is the longest path through the project with the least amount of float, Filter the activities with total float equal to or less than 0
- b) Critical path is the shortest path to accomplish longest set of activities
- c) Critical path is not defined by the path duration, it is only set of activities with 0 float
- d) None of the above

**23. What is the different between Float and Slack?**

- a) No difference
- b) Float refers to the time left to complete the work and Slack is the relaxing time we can use
- c) Float is the time used from buffer so far and Slack is the buffer time left.
- d) None of the above

**24. How do you measure & compare the progress using primavera?**

- a) This is not possible in Primavera
- b) Using Earned value management concepts
- c) We will need calculator to do this
- d) Gantt Charts

## 25. Difference between free float and total float

- a) "Free Float is the amount of time, an activity can be delayed without delaying the successor activity. Total Float is the amount of time, an activity can be delayed without delaying the project finish date."
- b) "Free Float: Amount of time, an activity can be delayed without delaying the Project Total Float: Amount of time, an activity can be delayed without delaying the Successor"
- c) Only Free Float Is in hands of Project Manager
- d) Only Total Float is in hands of Project Manager

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