



Written Assessment Evidence Guides

for

“Assistant Digger Operator”

Level-5

(Formative)

Written Assessment Guide

For

“Operational Supervisor”

Level-5

Develop Project Management Life Cycle
(Formative Assessment)

6th–10th September 2021



National Vocational & Technical
Training Commission

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| Title of Qualification: National Vocational Certificate Level 5, in (Digging Operation/Technology) "Operational Supervisor" | CS Code: | Level: 05 | Version: 01 |
| Competency Standard Title: <ul style="list-style-type: none"> Develop Project Management Life Cycle Practice Professionalism | Assessment Date (DD/MM/YY): Assessment Time: 30 min | | |

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| Question | Candidate's answer |
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| 1. Define project? | A. Project is defined as an individual or collaborative enterprise that is carefully planned to achieve a particular aim. |
| 2. What is a feasibility report? | A. Feasibility studies help project managers determine the viability of a project or business venture by identifying the factors that can lead to its success. |
| 3. What are the objectives of project management? | A. Budget Time constraints Scope |
| 4. What are the different stages involved in project management? | A. Planning stage, designing stage, tendering stage and execution stage. |
| 5. Enlist the types of civil engineering projects? | A. The five types of civil engineering projects are construction and management, geotechnical, structural, transport, water, and architecture. |
| 6. How do you lead a project? | A. Clearly define the scope of your project. Carefully select the members of your team. Outline your goals and keep them SMART. Manage your data. Monitor progress daily. Engender internal motivation in your team. Manage your resources wisely and rudently. |
| 7. Enlist the 5 pillars of project management? | A. Plan, People, Process, Polish-off, and Post-completion. |

| Question | Candidate's answer |
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| 8. What are the essential qualities of project manager? | A. Effective communication skills. Strong leadership skills. Good decision maker. Technical expertise. Inspires a shared vision. Team-building skills. Cool under pressure |
| 9. Define project management? | A. Project management is the application of processes, methods, skills, knowledge and experience to achieve specific project objectives according to the project acceptance criteria within agreed parameters. |
| 10. What are the 5 stages of project management? | A. Initiation Planning Execution monitoring, Closure |
| 11. What does CPM stands for? | A. Critical Path Method |
| 12. Define CPM? | A. The critical path method is a standard technique used to identify and schedule the sequence of critical tasks and events that determine the duration and completion of a project. |
| 13. Define permit to work in HSE? | A. Permit to work system ensures that hazardous high risk activities, i.e. tasks that have the potential to cause serious injury or death, are carried out under specific permission (permit) from an authorized competent person. |

Written Assessment Guide

For

“Operational Supervisor”

Level-5

Develop the Project Plan
(Formative Assessment)

6th–10th September 2021



National Vocational & Technical
Training Commission

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| 1. What is importance of scheduling? | A. In order to meet the delivery dates the sequence of operations is properly planned |
| 2. What is predecessor activity? | A. A predecessor is an activity that must start or finish before another activity can start or finish. |
| 3. What is the difference between successor and predecessor? | A. Successor and predecessor are called after number and before number respectively |
| 4. What is most suitable between PERT and CPM? | A. PERT technique is best suited for a high precision time estimate, whereas CPM is appropriate for a reasonable time estimate. |
| 5. What is a Gantt chart? | A. A Gantt chart is a type of bar chart that illustrates a project schedule. |
| 6. What is the purpose of flow chart? | B. A flowchart visually displays the sequence of activities in a process and who is responsible for those activities |
| 7. What are the elements of a flowchart? | A. start and end nodes ,project development stages ,decision nodes and connectors |
| 8. Define start and end nodes in flow chart? | A. times when the project starts or ends |
| 9. What is horizontal axis in Gantt chart? | A. This chart lists the tasks to be performed on the vertical axis. |
| 10. What does width of the horizontal bars show in GANTT chart? | A. The width of the horizontal bars in the graph shows the duration of each activity |
| 11. “Float” is also called? | A. slack |
| 12. What are the five key areas of a feasibility study? | A. A project's total float is the difference between the finish date of the last task on the critical path and the project completion date |

| Question | Candidate's answer |
|--|---|
| 13. What are the reasons of crashing a project? | A. Time to market pressures. Unforeseen delays. Incentives for early completion. Imposed deadlines. Pressures to move resources elsewhere. |
| 14. Enlist construction machinery? | A. Excavators · Backhoe · Dragline Excavator · Bulldozers · Graders · Wheel Tractor Scraper · Trenchers · Loaders etc. |
| 15. What is the use of Tower cranes in tall structures? | A. Heavy materials like pre-stressed concrete blocks, steel trusses, frames etc. can be easily lifted to required height using this equipment. |
| 16. How crashing is done? | A. Crashing is done by increasing the resources to the project. |
| 17. What are the professional skills for workplace? | A. 1. Communication · 2. Public Speaking · 3. Teamwork · 4. Time Management · 5. Leadership · 6. Flexibility |

Written Assessment Guide

For

“Operational Supervisor”

Level-5

Supervise on-site projects
(Formative Assessment)

6th–10th September 2021



National Vocational & Technical
Training Commission

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| Title of Qualification: National Vocational Certificate Level 5, in (Digging Operation/Technology) "Operational Supervisor" | CS Code: | Level: 05 | Version: 01 |
| Competency Standard Title: <ul style="list-style-type: none"> Supervise on-site projects Practice Professionalism | Assessment Date (DD/MM/YY): Assessment Time: 30 min | | |

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WRITTEN ASSESSMENT

| Question | Candidate's answer |
|--|---|
| 1. What are the tools used in Quality Management? | A. Flowchart. Check Sheet. Cause-Effect Diagram. Pareto Chart. Control Charts. Histogram. Scatter Diagram. |
| 2. What is significance of quality management tools? | A. Quality Management tools play a crucial role in improving the quality of products and services. |
| 3. What is the Customer Focus in Quality management? | A. The primary focus of quality management is to meet customer requirements and to strive to exceed customer expectations. |
| 4. What is the need of inspection? | A. Inspections ensure machines are working correctly and helps prevent equipment downtime. |
| 5. What are the stages in the inspections process? | A. Planning, Overview meeting, Preparation, Inspection meeting, Rework and Follow-up |
| 6. What is M book? | A. M book is the short form of the Measurement Book |
| 7. What is a site order book? | A. Instructions by the executive engineers. Construction measurements. Issue of store equipments |
| 8. What is (PDA)? | A. Project Defect Analysis |

| Question | Candidate's answer |
|---|--|
| 9. What are the methods of quality control? | A. The methods are: 1. Inspection 2. Statistical Quality Control (SQC). |
| 10. What is the first step of quality assurance? | A. Identification of customer need is the first step of QA. |
| 11. Examples of codes of practice? | A. First aid in the workplace. Construction work. Preventing falls in housing construction. Managing electrical risks at the workplace. Managing risks of hazardous chemicals. Managing risks of plant in the workplace. Safe design of structures. Excavation work |
| 12. How do you manage and improve performance of project? | A. Set clear expectations and communicate them well, then continue to manage expectations. |
| 13. Enlist construction machinery? | A. Excavators · Backhoe · Dragline Excavator · Bulldozers · Graders · Wheel Tractor Scraper · Trenchers · Loaders etc |
| 14. What is the use of Tower cranes in tall structures? | A. Heavy materials like pre-stressed concrete blocks, steel trusses, frames etc. can be easily lifted to required height using this equipment. |
| 15. What are the professional skills for workplace? | A. 1. Communication · 2. Public Speaking · 3. Teamwork · 4. Time Management · 5. Leadership · 6. Flexibility |

Written Assessment Guide

For

“Operational Supervisor”

Level-5

Plan the Project in Primavera P6
(Formative Assessment)

6th–10th September 2021



**National Vocational & Technical
Training Commission**

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| Competency Standard Title: <ul style="list-style-type: none"> Plan the Project in Primavera P6 Create Technical Documentation Practice Professionalism | Assessment Date (DD/MM/YY): Assessment Time: 30 min | | |

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| Competency Standard Title: <ul style="list-style-type: none"> Plan the Project in Primavera P6 Create Technical Documentation Practice Professionalism | Assessment Date (DD/MM/YY): Assessment Time: 30 min | | |

WRITTEN ASSESSMENT

| Question | Candidate's answer |
|---|---|
| 1. What is the role of planning engineer in a project? | A. Planning Engineer can work along with the project team to develop a complete time schedule including cost of resources. |
| 2. What is the importance of Primavera? | A. Primavera p6 is a software that helps organisations manage any type of portfolio and gives numerous ways to organise, projects, filter and sort activities and resources. |
| 3. What is a Gantt chart in Primavera? | A. It's a type of bar chart showing the start and finish dates of a project's elements such as resources, planning and dependencies. |
| 4. What does WBS stands for in Primavera? | A. Work Breakdown Structure |
| 5. What is a constraint in Primavera? | A. Constrains in primavera is to fix the early or late start or finish dates of an activity. |
| 6. What is the difference between recovery schedule and revised schedule? | A. The main difference between the both schedules is the completion date. Revised schedule changes the original completion date while the recovery schedule does not. |
| 7. How can you define the Critical Path in primavera? | A. Simply filter the activities with Zero Total Float. |
| 8. How can you differentiate Total Float and Free float? | A. Total Float represents the number of days that can be delayed without affecting the completion of the project, whereas Free Float determines the number of days that can be delayed without affecting the successor activity |
| 9. How will you make a manpower loading for your schedule? | A. $\text{Required Man Hours} = \text{QTY} / (\text{Productivity Rate})$ |
| 10. What are the methods of calculating EV (earned value)? | A. Updating actual cost of activities Updating the actual budgeted units of activities Updating the actual resources comparing to budgeted ones |

| Question | Candidate's answer |
|--|---|
| 11. What does SDK in Primavera stands for? | A. Software Development Kit |
| 12. How do you start planning without any information on hand? | A. Gather the necessary Materials, such as the Scope requirements, project start and finish dates and any documents needed to produce project objective. |
| 13. How do you explain project delay if earned value is more than planned value? | A. The contractor has performed better in areas which are not on longest path "The Critical Path". In another words, the contractor executed the right quantity in the wrong place. |
| 14. What does CPI stands for? | A. Cost Performance Index |
| 15. What does SPI stands for? | A. Schedule Performance Index |

Written Assessment Guide

For

“Operational Supervisor”

Level-5

Create Technical Documentation
(Formative Assessment)

6th–10th September 2021



National Vocational & Technical
Training Commission

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WRITTEN ASSESSMENT

| Question | Candidate's answer |
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| 1. What is the importance of documentation? | A. Documentation help ensure consent and expectations. It helps to tell the narrative for decisions made, and how the client responded to different situations. In this same manor, it is important to record information that can help support the proper treatment plan and the reasoning for such services. |
| 2. What are the documentation skills? | A. The grammar, spelling, and sentence structuring. |
| 3. What are the major types of system documentation? | A. Document, source code document, quality assurance documentation, software architecture documentation, solution instructions and a help guide for advanced users. |
| 4. What are the types of documentation? | A. Emails. Business Letters. Business Reports. Transactional Documents. Financial Reports and Documents. |
| 5. What is the main purpose of documentation? | A. The purpose of documentation is to: Describe the use, operation, maintenance, or design of software or hardware through the use of manuals, listings, diagrams, and other hard- or soft-copy written and graphic materials. |

| Question | Candidate's answer |
|--|---|
| 6. What are the 7C's of technical writing? | A. Complete. Clear. Concise. Consistent. Correct. Considerate. Convincing. |
| 7. What are the 4C's of report writing? | A. Clarity Coherence Control Credibility |
| 8. What is clarity in communication? | A. Clarity means you, as a sender of a message, will deliver a specific message. |
| 9. What is correctness in effective communication? | A. Correctness in communication implies that there are no grammatical errors in communication. |

A blue geometric graphic consisting of several overlapping triangles and trapezoids, creating a layered, triangular shape that points to the right. It is positioned on the left side of the page, behind the first line of text.

Written Assessment Evidence Guides

for

“Assistant Digger Operator”

Level-5

(Summative)

Written Assessment Guide

For

“Operational Supervisor”

Level-5

(Summative Assessment)

6th–10th September 2021



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| 25. What are the professional skills for workplace? | B. 1. Communication · 2. Public Speaking · 3. Teamwork · 4. Time Management · 5. Leadership · 6. Flexibility |
| 26. What is importance of scheduling? | A. In order to meet the delivery dates the sequence of operations is properly planned |
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