higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE (VOCATIONAL)

DRAWING OFFICE PROCEDURES AND TECHNIQUES

(First paper)

NQF LEVEL 4

28 November 2023

This marking guideline consists of 4 pages.

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QUESTION 1: PLANNING AND SCHEDULING WORKFLOW

1.1
1.1.1 True. ✓✓
1.1.2 True. ✓✓
1.1.3 True. ✓✓
1.1.4 False. ✓✓
1.1.5 True. ✓✓
1.1.6 True. ✓✓
1.1.7 True. ✓✓
1.1.8 False. ✓✓
1.1.9 True. ✓✓
1.1.10 True. ✓✓

(20)

1.2
- Internal paperwork. ✓
- Numbering of drawings and contracts. ✓
- Coding of parts and assemblies. ✓
- Production planning for component manufacturing. ✓
- Quality control and inspection. ✓
- Updating, modification, and reissuing of drawings. ✓ (6)

1.3
- Identify your resources. ✓
- List out the tasks that should be accomplished. ✓
- Find out who is accountable for each step and assign roles. ✓
- Create a workflow diagram to visualise the process. ✓
- Test the workflow you created. ✓
- Train your team on the new workflow. ✓
- Deploy the new workflow. ✓ (7)

1.4
- Input. ✓
- Transformation. ✓
- Output. ✓ (3)

1.5
- A workflow consists of an orchestrated and repeatable pattern of business activity. ✓
- This is enabled by the systematic organisation of resources into processes. ✓
- These transform materials, provide services, or process information and it can be depicted as a sequence of operations. ✓
- Declared as work of a person or group, in an organisation. ✓ (4)

[40]

QUESTION 2 DRAWING OFFICE PROJECT ESTIMATING AND PLANNING

2.1
2.1.1 E. ✓
2.1.2 D. ✓
2.1.3 A. ✓
2.1.4 B. ✓
2.1.5 C. ✓
(5)

2.2
2.2.1 Planning is an in-depth proposal of something that is to be made or achieved. ✓ (1)

2.2.2 In construction, it is the thorough skeletal description of a building or structure that is to be built. ✓ (1)

2.2.3 Estimation is outlining a rough idea of the costs involved in the process of constructing the building. ✓ (1)

2.3
- Ballpark Estimate. ✓
- Detailed Estimate. ✓
- Flexible Estimate. ✓ (3)

2.4 Step 1: Compile a list of tasks and the resources required to complete them. ✓
Step 2: Identify and allocate resources to tasks based on your team's capacity. ✓
Step 3: Estimate the task length to create a project schedule. ✓
Step 4: Calculate the project cost based on a chosen estimation method. ✓ (4)

2.5 **Project Estimation** is the process of analysing available data to predict the:
- Time.✓
- Cost. ✓
- Resources needed to complete a project.✓ (3)

2.6
- Project planning is a process.✓
- Addresses how to complete a project in a certain timeframe.✓
- This is usually with defined stages and designated resources.✓ (3)

2.7
- **Project scheduling** is important as it determines the timeline, resources needed, and reality of the delivery of the project.✓✓
- **Project estimation** is important as it dictates the tasks, effort and investment required to complete a project.✓✓ (4)

2.8
- Define your project goals. ✓
- Identify all stakeholders. ✓
- Determine your final deadline. ✓
- List each step or task. ✓
- Assign a team member responsible for each task. ✓ (5)

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QUESTION 3: PROJECT MANAGEMENT IN A DRAWING OFFICE ENVIRONMENT

3.1 3.1.1 The length of time that it takes to complete an activity. ✓✓

3.1.2 The incurred costs that are charged to the project budget and for which payment has been made or accrued. ✓✓

3.1.3 An approximate estimate is prepared in the early stages of a project to establish financial viability or to secure resources. ✓✓

3.1.4 A high-level outline (strategic specification) of stakeholders' (customers', clients') needs and requirements for a project. ✓✓

3.1.5 An agreement made between two or more parties that creates legally binding obligations between them. The contract sets out those obligations and the actions that can be taken if they are not met. ✓✓

3.1.6 The length of time needed to complete the project or activity. ✓✓

(12)

3.2
- Planning. ✓
- Organising. ✓
- Leading. ✓
- Coordinating. ✓
- Controlling. ✓

(5)

3.3
- True. ✓

(1)

3.4
- Negotiation. ✓
- Relevant technical skills. ✓
- Writing. ✓
- Organisation. ✓
- Prioritisation and goal setting
- Project planning. ✓
- Delegating. ✓
- Budget management. ✓

(8)

3.5
- Planning. ✓
- Build-up. ✓
- Implementation. ✓
- Closeout. ✓

(4)

[30]

TOTAL: 100

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