CPCCBC4013A
PREPARE AND EVALUATE TENDER DOCUMENTATION

THEORY EXAM INSTRUCTIONS

- This exam will occur under standard assessment conditions.
  - An oral examination may be allowed under certain circumstances, whereby the Participant's answers will be documented by a party other than the Participant. This must be acknowledged in writing (e.g. [illegible] and Assessor Comments)
- Participants must provide enough detail in their responses to demonstrate their knowledge and skills.
- Please fill in the details below, providing your name, signature and date of assessment.
  - Your signature acknowledges that this is your own work.
- Assessors are to complete marking in pen of a different colour to the Participant.
- If a Participant initially answers a question incorrectly but modifies their response, they must follow the instructions below:
  - If a Participant changes their response in writing, they must put their initials next to the written change.
  - If a Participant changes their response verbally, this must be noted on the exam paper by the assessor.

ANSWERS

Participant name ______________________

Participant signature ______________________

Date ______________________

Assessor name ______________________

Assessor signature ______________________

Date ______________________

Number of questions	Number of questions answered correctly	Task outcome (Tick)	
		Satisfactory	Not Yet Satisfactory
26		☐	☐

Assessor Comments:

Q1. **Describe each of the listed types of building contract.**

Answer

Contract	Description
Cost-plus	Not often used, but takes two forms: The builder is entitled to be paid the cost of the work plus a commission or the builder is paid the cost plus a fixed fee
Lump sum	The builder is to complete the works according to specification, within an agreed timeframe and for an agreed sum. There are two types: 'fixed/firm' or 'subject to rise and fall'.
Nominated subcontract	A subcontract within the scope of the main contract for works, whereby the subcontractor is chosen by the architect
Schedule of rates	The cost of the work is calculated by applying an agreed schedule of rates to the work actually performed, which is measured.

Q2. **Name and describe four (4) documents that may be referred to by a builder considering submitting a tender.**

Answer

Tender document	Description
	Assessor's discretion. May include: Drawings and specifications, Bill of quantities, Project parameters (e.g. cost schedules, estimated timeframes), Site layout information, Human resource details
	Assessor's discretion
	Assessor's discretion
	Assessor's discretion

Q3. **Identify five (5) risks that should be considered by a builder interested in submitting a tender.**

Answer

Assessor's discretion. May include:

- Breaches of contract
- Circumstances, such as delivery delays, delays in progress payments, labour shortages, weather
- Disputes over payments
- Exposure through clauses that work against the organisation
- Failure to adequately anticipate labour or materials costs
- Inappropriate funding levels and funding shortfalls
- Industrial disputes through misunderstandings or over action
- Risk of default or non-performance of key players

Q4. **Describe two (2) company policies that may impact on whether a contract is selected for tender.**

Answer

Policy	Description
1	Assessor's discretion
2	Assessor's discretion

Q5. **Identify two (2) financial guidelines and two (2) administrative guidelines that must be observed when considering a tender.**

Answer

Guidelines	Description
Financial	Assessor's discretion
Administrative	Assessor's discretion

Q6. **Which of the following are considered direct costs? Tick all that apply.**

Answer

Choice	Possible Answers
✓	Labour costs
✓	Material costs
	Office overheads
✓	Plant costs
	Profit
	Site overheads
✓	Subcontract costs

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Q7. **Which of the following are considered indirect costs? Tick all that apply.**

Answer

Choice	Possible Answers
	Labour costs
	Material costs
✓	Office overheads
	Plant costs
	Profit
✓	Site overheads
	Subcontract costs

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Q8. **Explain how labour costs are established, referring to:**

- **Labour constant**
- **Labour quantities**
- **Labour rates**

Answer

The labour constant is the anticipated time required for a particular item of work (e.g. 2 hours/m^3 to excavate trench). The labour quantities are the amounts of work required (e.g. 20m^3 to be excavated). The labour rate is the monetary rate for work performed (e.g. $x per m^3 of trench excavated or $y per hour). So, the total cost is calculated by multiplying the labour constant by the labour quantity by the labour rate.

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Q9. **Explain the following types of direct material waste that must be considered when calculating material costs.**

Answer

Type	Description
Design	Where waste occurs due to the design of the item – e.g. a particular shape or amount is required to be ordered, which must then be modified/reduced for the job at hand
Rejection	Material is wasted as it does not meet the quality requirements of the job
Mishandling	Material is wasted as it is damaged when handled (e.g. breakage waste)

Q10. **Explain the following types of indirect material waste that must be considered when calculating material costs.**

Answer

Type	Description
Substitution	Where materials have been used in a way other than originally intended, thus requiring more material to be ordered
Production	Occurs when the construction techniques originally planned have changed, thus causing unforeseen wasted materials
Negligence	Where waste occurs due to mistakes in production or in the estimation/planning phase
Criminal actions	Where materials have been stolen or vandalised

Q11. **Identify three (3) costs that must be considered when calculating plant costs.**

Answer

Mobilisation (costs to bring the item to site and set it up for use, as well as remove it from site); Plant purchase or hire costs; Running and maintenance costs; Labour or operator costs

Q12. **List the two ways in which subcontractors may provide a price for their work.**

Answer

All-inclusive price

Per unit rate

Q13. **Identify ten (10) trades that may be required for a residential or commercial building project.**

Answer

Earthworks; Site works; Concrete work; Brickwork; Carpentry and joinery; Plastering and tiling; Structural steelwork; Metalwork; Specialised areas (e.g. plumbing and drainage, glazing, painting, electrical, air-conditioning)

Q14. **True or False (Tick your response): Each subcontractor is individually responsible to the client for a job tendered by a builder.**

Answer

	True
✓	False

Q15. **Name one (1) type of project costing software.**

Answer

Assessor’s discretion

Q16. **True or False (Tick your response): Using costing software can assist builders undertake calculations in short timeframes during the tendering process.**

Answer

✓	True
	False

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Q17. **True or False (Tick your response): Profit is usually calculated as a percentage of the total, rather than on each item throughout the tender.**

Answer

✓	True
	False

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Q18. **True or False (Tick your response): Each level of government (i.e. federal, state and local) has its own rules regarding tender submissions.**

Answer

✓	True
	False

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Q19. **Identify one (1) example of each of the following documents that impacts on building work conducted in Queensland.**

Answer

Type	Description
Building and Construction Code	Assessor's discretion. May include: National Construction Code, Building Code of Australia
Standard	Assessor's discretion. For example: Termite management standards (AS3660.1—Termite Management Part 1: New Building Work)
Government regulation	Assessor's discretion. May include: *Building Regulation 2006* (Qld)

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Q20. **Identify four (4) types of supporting documentation that you may include with a tender submission.**

Answer

Artist's impressions; Organisational information; Product information; Promotional materials; Reports/findings beneficial to the organisation; Additional drawings and specifications (as required)

Q21. **Explain the importance of checking the accuracy of a tender.**

Answer

Once a tender is accepted, a contractual arrangement comes into existence. If the information in the tender is incorrect, this may have significant financial implications for the successful tenderer.

Q22. **Identify an appropriate staff member within an organisation who may approve/endorse/modify a tender prior to submission to the client.**

Answer

Management or another designated person

Q23. **True or False (Tick your response): There is a general rule for how long tenders are called for, so specific due dates are not listed.**

Answer

	True
✓	False

Q24. **You have a formwork job that will take three (3) weeks to complete. You are required to hire a range of materials, according to the Bill of Quantities listed below. Allow 15% for loss and damage.**

Complete the calculations to determine the costs for the required materials.

Materials	Quantity	Hire rate per week
Frame 1	18	$0.60
Frame 2	18	$0.55
Brace	2 x 30	$0.20
Base plate	36	$0.10
'U' plate	36	$0.30
Pin	36	$0.10
Bearer	39.6m	$0.20
Joints	165m	$0.15

Answer

Frame 1: 18 x 3 x $0/60 = $32.40

Frame 2: 18 x 3 x $0.55 = $29.70

Brace: 2 x 30 x 3 x $0.20 - $36.00

Base plate: 26 x 3 x $.010 = $10.80

'U' plate 36 x 3 x $0.30 = $32.40

Pin: 36 x 3 x $0.10 = $10.80

Bearer: 36.9m x 3 $0.20 = $23.76

Joints: 165 x 3 x $0.15 = $74.25

Total = $250.11 (plus $37.52 for loss and damage)

Materials total = $287.63

Q25. **For the job in Q24. you must also hire workers to install the plywood for the formwork, at a rate of $15/hour. There is $70m^2$ of plywood to be installed. Assume the labour constant is $1.10hrs/m^2$.**

Complete the labour calculations.

Answer

$70m^2$ x 1.10 x $15/hour = $1155.00

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Q26. **For the job in Q24. and Q25. you have determined that the overheads and profit will constitute 10% of the materials and labour cost.**

Calculate the total project cost.

Answer

Subtotal = $287.63 + $1155.00 = $1442.63

Overheads and profit = 10% = $1586.89

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