

CPCBC4005A

PRODUCE LABOUR AND MATERIAL SCHEDULES FOR ORDERING

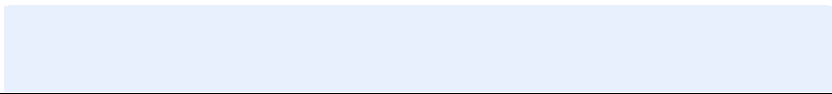
THEORY EXAM INSTRUCTIONS

- This exam will occur under standard assessment conditions.
 - An oral examination may be allowed under certain circumstances. Answers will be documented and FT003 (Oral examination declaration form) must be completed.
- 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.
- 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.

Participant name Courtney Stallard

Participant signature 

Assessor name _____

Assessor signature 

Date 16/09/2019

Number of questions	Number of questions answered correctly	Satisfactory?	
		Yes	No
30		☐	☐

ASSESSOR COMMENTS

Q1. Which of the following contractual requirements will influence orders and labour and material schedules? Tick all that apply.

Answer	Choice	Possible Answers	☐
	☒	Commencement date	
	☒	Completion date	
	☒	Contract price	

Q2. Identify three (3) suppliers and three (3) contractors that you may need to work with when undertaking a building project.

Answer	Suppliers	Contractors	☐
	Appliances	Carpenter	
	Windows and Doors	Plumber	
	Floor Coverings	Electrician	

Q3. Explain the difference between employees and contractors and how they are influenced by scheduling.

Answer	An employee is employed to work solely for the builder. A contractor may undertake contract work for a number of different builders. It is important to schedule tasks, as builders will not always have employees on hand who have the specialist skills required to complete a project. Generally, a contractor is someone who runs their own business and provides services to other businesses or individuals. An employee works in and is part of a business. • A builder can closely direct the work to be undertaken by an employee • A contractor can decide what work they do, how it is to be carried out and the hours when the work is to be completed	☐

Q4. Identify one (1) local government authority and one (1) regulatory body that must be considered when producing schedules.

Answer	Local Council and QBCC	☐

Q5. Why should colour selections be included on the schedules?

Answer There is a lot to consider within your schedule and so it is important to factor in the owners' requirements for colour schemes and selections. Some colour requests may require a special order to be made.



Q6. True or False (Tick your response): If a project is in a heritage protected area, the council may specify the colours that should be used.

Answer

☒	True
☐	False



Q7. Identify your local council's requirements regarding working hours and days. Explain how these requirements may affect your schedules.

Answer

<u>Column 1</u> Machine, Appliance or Equipment	<u>Column 2</u> Specified Hours
Part A:- Residential Premises -	
.. Lawnmowers	10.00 pm - 6.00 am
.. Powered Tools (limited to Saws, Drills, Jack Hammers, Riveters, Sanders, Grinders, Edge/Weed Cutters)	10.00 pm - 6.00 am
.. Hammer	10.00 pm - 6.00 am
<u>Column 1</u> Machine, Appliance or Equipment	<u>Column 2</u> Specified Hours
Part B:- Residential construction Site -	
.. Air Compressors	10.00 pm - 7.00 am
.. Concreting Equipment	10.00 pm - 7.00 am
.. Powered Tools (limited to Saws, Drills, Jack Hammers, Riveters, Sanders, Grinders, Edge/Weed Cutters)	10.00 pm - 7.00 am
.. Vibratory Equipment	10.00 pm - 7.00 am
.. Hammer	10.00 pm - 7.00 am



Q8. Identify three (3) common drawings/specifications commonly used in the industry. Explain what information is provided by each document and how this influences labour and material schedules for ordering.

Answer

Drawing/Specification	Information provided for labour and material schedules
Elevations	Drawings of the building showing what it looks like from north, south, east and west



Material specifications	Include details of the type, strength and size of material to be used
Product specifications	Include items such as whitegoods, electrical goods, lights and switch types

Q9. What three (3) things should a builder do when variations are made to a contract for a project?

- Answer
- Put it in writing- Client/subbies must agree to before commencement of work
 - Only exception for not putting it in writing is if it is not practical to produce a document before work commences (but it then **MUST** be done within 24 hours)
 - All subsequent documentation must be completed by the client/subbies within 5 business days of when the variation was agreed to



Q10. Identify two (2) variations that may be raised by the client and explain how it would affect the schedules.

Answer

Variation	Effect on schedules
Changing the Cooktop from Electric to Gas	Requires a gas connection to be plumbed to the house. Changes the model of hot water system to be ordered.
Changing the Bath from Built-In Hob Bath to a Freestanding Bath	Requires no timber material or carpenter labour to build the hob. Extra tiles required to the floor.



Q11. Identify two (2) variations that may be raised by the builder and explain how it would affect the schedules.

Answer

Variation	Effect on schedules
Additional Yard Gullies to be installed to provide sufficient drainage	Extra Yard Gullies & labour to install is required
Update to discontinued tapware	Update tapware needs to be added to schedules for ordering.



Q12. Order the following steps from 1 to 5 to outline how a builder should select a supplier/contractor.

Answer

Step Number	Steps
1	Builder to seek quotes from suppliers/contractors
3	Builder to note supplier/contractor details and ordering times on schedule
4	Builder to accept a tender
2	Suppliers/Contractors tender prices back to the builder
5	Parties to sign agreement



Q13. What is an 'overlay drawing'?

Answer

Overlay drawings are drawings that show further detail on top of any existing plans and specifications. Overlay drawings are generally designed to: • Provide more visual clarity about a building process • Provide advice if there have been changes that require subsequent engineering redesign/specialist changes (e.g. from architects, soil experts)



Q14. Which of the following individuals may sketch overlay drawings? Tick all that apply.

Answer

Choice	Possible Answers
☒	Architects
☒	Builder
☒	Draftsmen
☒	Engineers

☐

Q15. Identify three (3) details that should be included on a work order and reflected on the labour schedule.

Answer

• Work • Time period • Agreed rates

☐

Q16. Identify nine (9) details that should be included on a purchase order.

Answer	Order date and delivery date Purchase order number Supplier details Delivery details Supplier contact information Project manager details Product description Terms and conditions Total order cost	☐
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Q17. What is a 'call forward sheet'?

Answer	A call forward sheet is a sheet used to track when materials are needed and when they should be ordered. This tool allows site personnel to schedule and coordinate activities that are to be undertaken on-site.	☐
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Q18. True or False (Tick your response): A builder would usually complete all the purchase orders before preparing a call forward sheet.

Answer	<table border="1"> <tr> <td style="text-align: center;">☐</td> <td style="text-align: center;">True</td> </tr> <tr> <td style="text-align: center;">☒</td> <td style="text-align: center;">False</td> </tr> </table>	☐	True	☒	False	☐
☐	True					
☒	False					

Q19. Identify two (2) approved plans that should be included with the site documents.

Answer	Foundation Engineering Bracing Engineering Working Drawings	☐
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Q20. Match the site files and definitions below by writing the appropriate letter next to each number in the centre column.

Answer	Document	Answers	Definition	
	1 Permits	1 - B	A May include engineering data	
	2 Quotes	2 - E	B Council inspectors may issue a stop work notice until these documents are produced	
	3 Reports	3 - A	C Changes requested using a standard form in writing. Need to be signed by both builder and client.	
	4 Specifications	4 - D	D List the materials to be used, fittings and fixtures to be installed, and types of finishing required.	
	5 Variations	5 - C	E Used to ensure purchase orders are developed using the correct price.	

Q21. In the table below, estimates for labour and actual costs for each trade are listed. Calculate the cost difference for each trade.

Answer	Trade	Estimate	Actual cost	Cost difference	
	Carpentry	10,000	8,500	-1,500	
	Electrical	3,000	4,250	1,250	
	Painting	4,000	3,900	-100	
	Plumbing	8,000	8,000	0	
	Tiler	4,500	4,750	250	

Q22. In the table below, the Prime Cost (PC) sums from a contract and actual costs for items are listed. Calculate the cost difference for each item.

Answer	Item	PC sum	Actual cost	Cost difference	
	Basin taps	100	130	30	
	Oven	2,500	1,500	-1000	
	Rangehood	500	900	400	
	Shower bases	250	265	15	
	Shower screen	400	350	-50	
	Shower taps	150	120	-30	
	Stove	900	1,200	300	

- Q23. Where the actual costs are higher than the estimated costs due to a client variation, who is responsible to pay the difference?
Tick your response.

Answer

Choice	Possible Answers
☐	Builder
☒	Client
☐	Supplier

- Q24. Where the actual costs are higher than the estimated costs due to price increases of materials, who is responsible to pay the difference?
Tick your response.

Answer

Choice	Possible Answers
☒	Builder
☐	Client
☐	Supplier

- Q25. You are given the following table containing the costs for each month of the project.

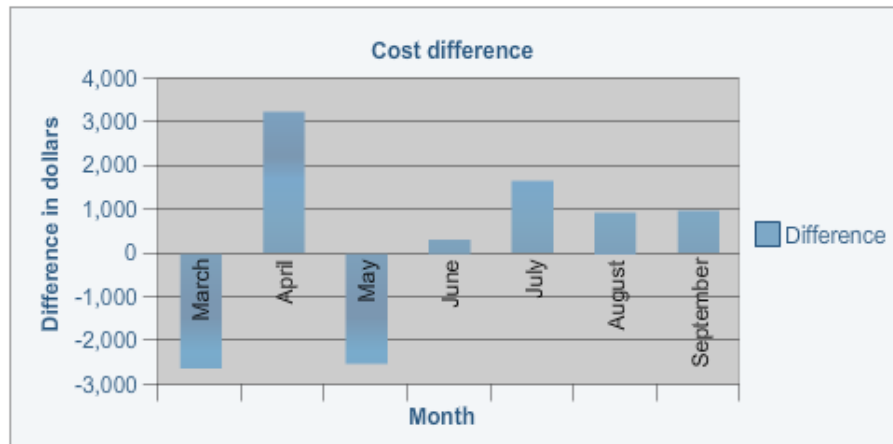
Month	Estimated cost	Actual cost
March	\$36,450	\$38,980
April	\$65,560	\$62,350
May	\$62,450	\$64,960
June	\$61,340	\$61,050
July	\$40,590	\$38,990
August	\$42,650	\$42,550
September	\$35,780	\$34,750
Total	\$344,820	\$343,630

Using the information in this table, how would you find out in which month the builder actually spent the most? Tick your response.

Answer

Choice	Possible Answers
☐	Plot both the estimated and actual costs on a graph
☒	Plot the actual cost on a graph
☐	Work out the difference between the estimated and actual costs

Q26. The following graph is a visual representation of the difference in each month.



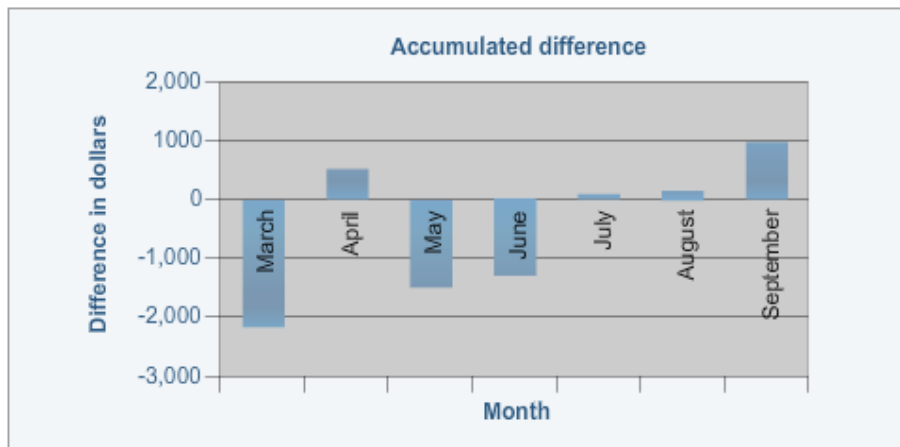
By looking at this graph can you see if the overall project was overestimated or underestimated? Tick your response.

Answer

Choice	Possible Answers
☐	No, you cannot see this directly from the graph
☒	Yes, you can see this from the graph

☐

Q27. The following graph is a visual representation of the accumulated difference across the project.



Overall, was the project overestimated or underestimated? Tick your response.

Answer

Choice	Possible Answers
☒	Overestimated
☐	Underestimated

☐

Refer to the following scenario and house plan to respond to Q28. to Q30.

SCENARIO

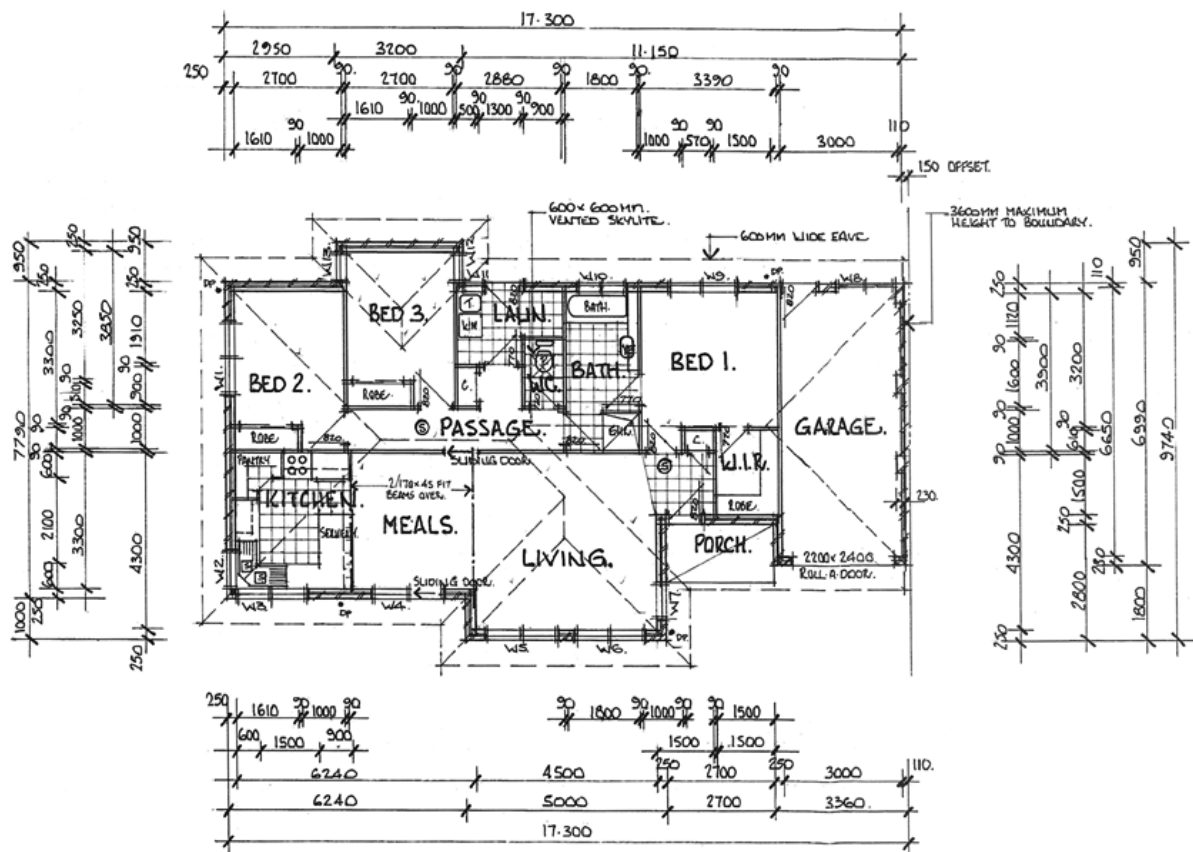
You are a site supervisor of a small residential project, as outlined below:

- The building is to be constructed using brick veneer.
- The building has a floor area of 133 square metres including garage.
- The concrete slab floor with garage floor is incorporated.
- The building will be constructed using hand built wall frame and prefabricated roof trusses.
- The building will have a cement tiled roof and powder coated aluminium windows in timber reveals.
- The driveway and landscaping are to be provided.
- Services are available directly in front of the site.
- The site is almost flat and will only need a scrape with minimal excavation.
- The contract period is 120 days.
- The total job has been pre-costed at \$136,500.

Note: You are not required to estimate the quantity required.

FLOOR AREA:

PROPOSED RESIDENCE	111.59 SQ.M.	1200 SQ. FT.
PROPOSED GARAGE	21.74 SQ.M.	234 SQ. FT.



Q28. Using the list of materials prepared, find the following information for four (4) materials of your choice:

Answer

Material	Lead-in time	Delivery date	Order date	Delivery requirements/ special considerations
Timber Trusses	2 weeks	30/9/19	16/9/19	Stack at rear of property
Roof Tiles	1 month	16/10/19	16/9/19	None
Brick	2 weeks	28/10/19	16/9/19	Clean up all mortar & debris on site
Windows	3 weeks	24/10/19	16/9/19	Grey Tint Glass



Q29. Describe the process of ordering the following materials for your project. Be sure to consider the things that need to be considered:

Answer

Material	Ordering process	Considerations
External cladding	Calculate perimeter x ceiling height to determine quantity of cladding sheets required	Cladding Type & Sheet Size
Wall frame	Provide plans to frame & truss manufacturer to provide quote & send purchase order as per quote	Different Suppliers quotes/quality/lead time
Windows	Provide plans to window manufacturer to provide quote & send purchase order as per quote	Different Suppliers quotes/quality/lead time



Q30. While excavating one corner of the project, you find the soil below is unsuitable for supporting the foundation. Refer to the relevant Building Regulator and complete their standard builder variation request documentation to be presented to the client.

Answer As Per QBCC Requirements: Provide additional concrete piers to North-Western corner of slab as per Engineers Design – Extra \$1567.00

