

CPCCBC4014A

PREPARE SIMPLE BUILDING SKETCHES AND DRAWINGS

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. Participant 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.

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
23		☐	☐

Q1. Identify three (3) two-dimensional drawings/sketches that may be used to clarify or communicate ideas to clients or other parties. For each drawing/sketch, identify four (4) key features that may be shown.

Answer	Drawing/sketch type	Key features	☐
	Assessor's discretion. May include: Floor plan; Land boundaries and footprint of building; Orthographic drawings; Sectional views	Assessor's discretion. May include: Ceiling heights and variations; Doors; Light fittings and power supplies; Services; Wall penetrations; Walls	
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	Assessor's discretion. May include: Floor plan; Land boundaries and footprint of building; Orthographic drawings; Sectional views	Assessor's discretion. May include: Ceiling heights and variations; Doors; Light fittings and power supplies; Services; Wall penetrations; Walls	

Q2. Name two (2) advantages of a three-dimensional sketch/drawing.

Answer Assessor's discretion. May include: 3D drawings/sketches give you a better understanding of the scale of a space, particularly volumes and spatial relationships. It can give a realistic impression of what the volume or space will look like in reality. ☐

Q3. Name one (1) individual you might contact to establish the scope and standard of the job being undertaken.

Answer Assessor's discretion. May include: Client, supervisor. ☐

Q4. You need to inspect the relevant area to take measurements for your drawings/sketches. Identify two (2) safety requirements you would need to observe on site.

Answer Assessor's discretion. May include: Understanding hazards in the area; ☐
Using PPE

Q5. Identify two (2) types of tools/equipment you would use when inspecting the area to take measurements.

Answer Assessor's discretion. May include: Measuring tape, Levels ☐

Q6. Identify two (2) types of tools/equipment you might need when completing sketches/drawings.

Answer Assessor's discretion. May include: Computer, digital camera, pen and paper. ☐

Q7. What action should be taken if any of the tools/equipment identified in Q5. and Q6. are found to be defective? Tick your response.

Answer ☐

Choice	Possible Answers
	Report, Record
	Stop, Report, Record
✓	Stop, Tag, Report, Record
	Stop, Fix, Report, Record

Q8. True or False (Tick your response): It is best practice to double check measurements before recording them.

Answer ☐

✓	True
	False

Q9. Explain the purpose of the scale on sketches/drawings.

Answer ☐ Assessor's discretion. Should resemble: So plans do not need to be drawn at the real size, a scale is used to indicate at what rate the drawings are reduced or enlarged from the real size.

Q10. You have measured a wall that is 2.4m high. Using a scale of 1:100, what size will this be drawn? Provide your answer in mm. Show your workings.

Answer ☐ 2.4m to mm $\rightarrow 2.4 \times 1000 = 2400\text{mm}$
Scale of 1:100 $\rightarrow 2400 \div 100 = 24\text{mm}$

Q11. Explain the purpose of a key or legend on sketches/drawings.

Answer ☐ Assessor's discretion. Should resemble: A key or legend is used to explain or define a symbol or mark shown on sketches/drawings, particularly where a symbol or mark has more than one meaning.

**Q12. Which of the following are true about drawing contours?
Tick all that apply.**

Answer ☐

Choice	Possible Answers
☒	Equally spaced contour lines indicate uniform slope
☐	Closely spaced contour lines indicate flat surface
☒	Closely spaced contour lines indicate steep ground
☒	Concentric closed contours with decreasing values toward the centre indicate a pond
☐	Concentric closed contours with decreasing values toward the centre indicate a hill

Q13. Identify the Volume and Parts of the NCC that relate to metal sheet roof cladding for Classes 1 and 10, and Classes 2 to 9.

Answer

Classes 1 and 10	Classes 2 to 9
Volume 2, Parts 3.5.1.0 and 3.5.5.0	Volume 1, Parts B1.4 and F1.5



Q14. Which Australian Standard is referenced in the NCC with regards to the requirements for the design and installation of metal sheet roof cladding?

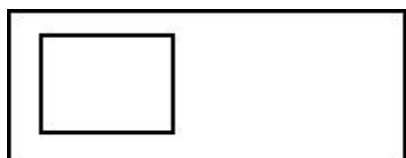
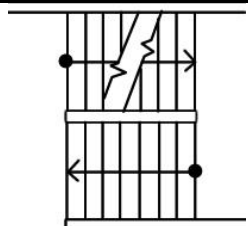
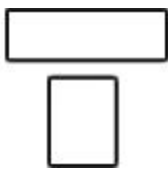
Answer

AS 1562



Q15. Sketch the following standard design symbols.

Answer

Item	Sketch
Compass (North)	
Sink with one bowl	
Stairs	
Toilet	



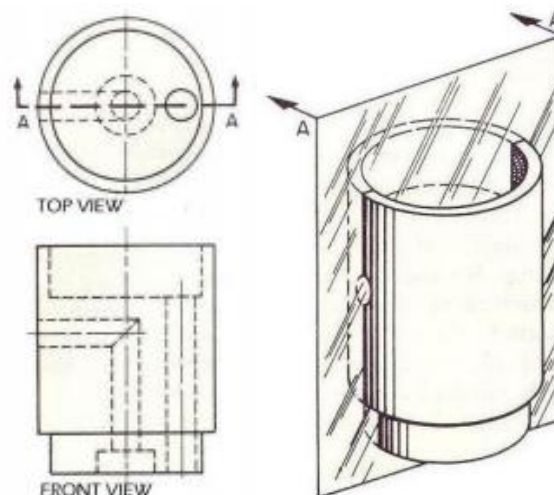
Q16. Explain the meaning of the abbreviations in the table below.

Answer

Abbreviation	Meaning
BK	Brick
CBD / CPD	Cupboard
DP	Down Pipe
INSUL	Insulation
KIT	Kitchen
MSB	Master Switch Board
PBD	Plasterboard
RWT	Rainwater Tank
SHR	Shower
TEL	Telephone
WC	Water closet / Toilet



Q17. True or False (Tick your response): The dashed/chain lines on the section view shown below represent the portions that have been in contact with the cutting plane.



Source: https://www.mcvts.net/cms/lib/NJ01911694/Centricity/Domain/131/Section_Views.pdf

Answer

✓	True
	False



Q18. Explain the use of hatching lines for sectional drawings.**Answer**

Assessor's discretion. Should resemble: Hatching lines are thin lines normally drawn 45° to the horizontal, right or left. They indicate materials that have come in contact with the cutting plane. A key/legend can be used for lines representing different materials.

☐**Q19. True or False (Tick your response): In an offset sectional drawing, the cutting plane does not travel in a straight line.****Answer**

✓	True
	False

☐**Q20. Which of the following information should be included in the title block for a sketch/drawing? Tick all that apply.****Answer**

Choice	Possible Answers
✓	Client details
✓	Contact details for person who prepared drawings
✓	Date drawing was completed
✓	Drawing number
✓	Drawing title
✓	Job number
✓	Project name and address
✓	Revisions / Amendments (if applicable)
✓	Scale

☐**Q21. True or False (Tick your response): Amendments usually have to be signed or initialled by both the builder and the client to show they both agree.****Answer**

✓	True
	False

☐

Q22. Explain why it is good practice to have a single repository for sketches/drawings.

Answer

Assessor's discretion. Should resemble: Having a central location where documents are stored means there is a reference point to check that the sketches/drawings being used are the most current. The title block of a document, provides the history of that document, but not if any future changes have been made.



Q23. Name the Regulation and identify the section that outlines the requirement for structure designers to produce a safety report. Briefly describe the requirements.

Answer

Section of Regulation	Requirements
Assessor's discretion. In Queensland: <i>Work Health and Safety Regulation 2011 (Qld)</i> s295	The designer of a structure must give the PCBU who has commissioned the design a written report that specifies the hazards relating to the design which create a risk to those carrying out construction work.

