

6: Construction measurement principles

Multiple choice questions (learner)

1. Who benefits from accurate measurements?
 - a) Contractors
 - b) Customers
 - c) Workers
 - d) All of the above
2. Inaccurate measurements could potentially lead to what?
 - a) No issues, the labour on site will sort it out
 - b) Safety issues as calculations based on dimensions may be incorrect
 - c) The job finishes early
 - d) More profits being made
3. If a site measurement is given as 25m with a tolerance of $\pm 0.5\%$, what is the permissible range of measurement?
 - a) 20m – 30m
 - b) 24.75m – 25.75m
 - c) 24.875m – 25.125m
 - d) 24.25m – 25.25m
4. When producing an estimate, ABC refers to?
 - a) All building contracts
 - b) Activity-based costing
 - c) Accounting by calculation
 - d) A basic calculation
5. Batch costing is ...
 - a) A method of costing when an identical product, task or component is produced in a large number at a time. All units produced at one time are collectively known as a batch. The cost is divided by the number of units to establish item costs.
 - b) The process of compiling all costs that the owner or producer of an asset will incur over its lifespan. These costs include the initial investment, future additional investments and annually recurring costs, minus any salvage value.

- c) A methodology used to track the expense of creating a unique product. Due to the fact that certain projects require different operations, accountants use this methodology to trace the expenses of each job.
- d) Work is charged at a standard labour rate per hour, plus the actual cost of materials used. The cost is calculated when the job is complete.
6. The most appropriate way to measure the length of a trench for pipework between buildings with multiple bends is?
- a) Laser
- b) Fabric tape measure
- c) Pace it out
- d) Measuring wheel
7. What does SI stand for when referring to SI units?
- a) Simple indicators
- b) Standards international
- c) Systeme international
- d) Systeme indicators
8. What is the SI unit for distance?
- a) Millimetre
- b) Centimetre
- c) Metre
- d) Kilometre
9. What is the SI unit for time?
- a) Second
- b) Minute
- c) Hour
- d) Day
10. If a room measures 5800mm by 8600mm, what is the floor area?
- a) 49.9cm²
- b) 49.9m²
- c) 4.99m²
- d) 499cm²
11. If a water tank has internal measurements of 600mm by 800mm by 400mm and is full of water (1 litre weighs 1kg) how much would all the water weigh when the tank is full?

- a) 1.92kg
- b) 19.kg
- c) 192kg
- d) 1920kg

12. The unit of pressure using SI units is?

- a) PSI (pounds per square inch)
- b) BAR
- c) Newtons per square metre (N/m²)
- d) Kilograms per square metre (kg/m²)

13. Ensuring the viability of a project from construction to decommissioning is known as?

- a) Batch costing
- b) Life span costing
- c) Project costing
- d) Life-cycle costing

14. Incorrect calculations when working from drawings could result in?

- a) Additional costs in rectifying mistakes
- b) Pre-manufactured components and equipment not fitting
- c) Dangerous structures
- d) All of the above

15. The British Standard used for referencing construction drawings is?

- a) BS1192
- b) BS1992
- c) BS7671
- d) BS1292

16. On a scale drawing at 1:1250, a measurement of 64mm represents what length in the real world?

- a) 80km
- b) 80m
- c) 8km
- d) 8m

17. On a drawing reference number, the level code ZZ indicates?

- a) No levels
- b) Bedrooms

- c) Mezzanine floor
- d) Multiple levels

18. If a drawing is specified to be produced at A2 but is printed at A3, the resulting measurements and calculations would

- a) Still be correct
- b) Be too large
- c) Be too small
- d) Need to be converted to imperial measurements

19. A suitable scale to show the layout of an individual room would be

- a) 1:1
- b) 1:20
- c) 1:250
- d) 1:1250

20. Why is it important to ensure you have the most recent revision of a drawing to work from?

- a) Alterations may affect your work due to the changes made
- b) Others may not have a copy and want to borrow yours
- c) It is not important, you quoted for the original plan
- d) To see what everyone else is doing