

2. Construction science principles

Multiple choice questions (learner)

1. Mortar is best mixed by?

- a. Weight
- b. Bags
- c. Volume
- d. Silo

2. When a beam deflects under a load the force in the top of the beam is called?

- a. Shear
- b. Bending
- c. Tension
- d. Compression

3. Which is the test for workability of concrete?

- a. Compaction
- b. Slump
- c. Silt
- d. Cube

4. In order for rust to occur in a ferrous metal, water, iron and what must be present?

- a. Air
- b. Copper
- c. Oxygen
- d. Carbon

5. The definition of work is?

- a. Gravity x distance
- b. Conversion to power
- c. Rate of energy
- d. Energy transferred by force

6. A type of renewable fuel used to produce energy is?
- a. Gas
 - b. Wind
 - c. Nuclear
 - d. Coal
7. Domestic voltage use is?
- a. 12v
 - b. 110v
 - c. 230v
 - d. 400v
8. The two components in the calculation of stress are force and?
- a. Area
 - b. Volume
 - c. Weight
 - d. Mass
9. What part of the building regulations govern the structure?
- a. B
 - b. A
 - c. R
 - d. E
10. A U-value is used to measure what from a building element?
- a. Heat gain
 - b. Long-term maintenance
 - c. Economic stability
 - d. Heat loss
11. The orientation of a building maximises?

- a. Sunshine
- b. Shading
- c. Daylight
- d. Cooling

12. Sound is measured in units of?

- a. Newtons
- b. Decibels
- c. Pressure
- d. Volume

13. The approved document that deals with the reduction of sound is?

- a. E
- b. F
- c. G
- d. J

14. Low energy artificial lighting is called?

- a. Incandescent
- b. Halogen
- c. Fluorescent
- d. LED

15. Condensation can be removed from a home by?

- a. Additional heating
- b. Closing all windows
- c. Extract ventilation
- d. Management of Data Regulations

16. A hole for services should be drilled through a beam at the?

- a. Beam top
- b. Neutral axis
- c. Ends
- d. Middle

17. A bending moment is force x?

- a. Gravity
- b. Reaction
- c. Width
- d. Distance

18. Reaction forces have to equal what force?

- a. Opposite
- b. Shear
- c. Gravitational
- d. Strain

19. The average time for curing concrete is how many days?

- a. 5
- b. 6
- c. 7
- d. 8

20. A test to determine how much water a brick can hold is known as a?

- a. Corrosion test
- b. Gauging test
- c. Compressive test
- d. Absorption test