

2025 SHS1 END OF SEMESTER EXAM APPLIED TECHNOLOGY 1

PAPER ONE

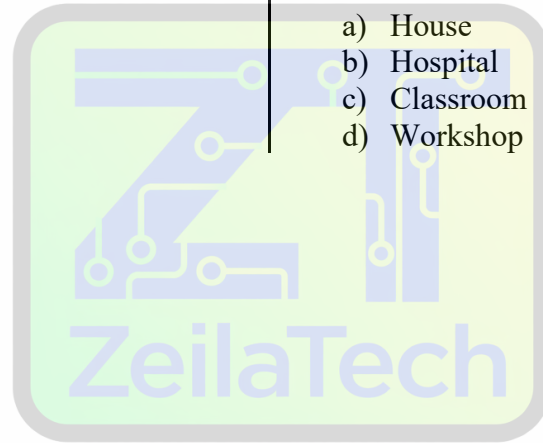
1 HOUR

Answer all questions in this section

1. Thermal power plants in Ghana primarily rely on
 - a) Fossil fuels
 - b) Solar energy
 - c) Water
 - d) Wind energy
2. The company responsible for power transmission is the
 - a) GRADCO
 - b) GREDCO
 - c) GRIDCO
 - d) GRUDCO
3. In Ghana, which of the following companies is responsible for power distribution in the Northern sector of Ghana?
 - a) ECG
 - b) NEDCO
 - c) VRA
 - d) None of the above
4. The highest voltage level used in Ghana's transmission systems is
 - a) 240 kV
 - b) 300 kV
 - c) 400 kV
 - d) 500 kV
5. The final stage in the delivery of electricity is the
 - a) Distribution of electricity
 - b) Generation of electricity
 - c) Transmission of electricity
 - d) None of the above
6. An automobile engine converts chemical energy into _____, which powers the vehicle.
 - a) Chemical energy
 - b) Electrical energy
 - c) Light energy
 - d) Mechanical energy
7. Which of the following is known to be the heart of vehicles?
 - a) The accelerator
 - b) The brakes
 - c) The engine
 - d) The wheels
8. Which of the following is known to power the earliest vehicles and trains?
 - a) External combustion engines
 - b) Compression ignition engines
 - c) Internal combustion engines
 - d) Spark-ignition engines
9. Which of the following components is known as the voltage-variable diode?
 - a) P-n junction diode
 - b) Light emitting Diode
 - c) Varacter diode
 - d) Zener diode
10. The _____ is specially designed to work as light- detector.
 - a) Light emitting diode
 - b) P-n junction diode
 - c) Photo diode
 - d) Varactor diode
11. The engine power that drives the car is transmitted from the crankshaft through the transmission system to the road wheels is the ____
 - a) Camshaft
 - b) Crankshaft
 - c) Connecting rod
 - d) Piston
12. Which of the following is not a part of the engine block?
 - a) Bosses
 - b) Camshaft housing
 - c) Deck
 - d) Exhaust manifold
13. Which of the following houses the spark plug in an automobile engine?
 - a) The camshaft
 - b) The cylinder
 - c) The cylinder head
 - d) The piston
14. Which of the following seals the passages that carry coolant and engine oil, preventing them from entering the combustion chamber?
 - a) Camshaft pulley
 - b) Distributor
 - c) Gasket
 - d) Water pump
15. The cylinder liner is made of _____
 - a) Aluminium
 - b) Cast iron
 - c) Sodium
 - d) Silicon
16. The positive terminal of a diode is called the
 - a) Anode
 - b) Base
 - c) Cathode
 - d) Emitter.

17. The circular metal rings fitted into grooves around the piston is the _____
- Cylinder rings
 - Gasket rings
 - Piston rings
 - Connecting rings
18. Which of the following vehicles uses a compression ignition engine?
- Hyundai accent
 - Kia Picanto
 - Motorcycle
 - Waste Trucks (Zoomline)
19. Which type of current is used in most power transmission systems?
- Alternating current (A.C)
 - Direct current (D.C)
 - Pulsed current
 - Both AC and DC
20. What is the main risk of overloading an electrical outlet?
- It can cause the outlet to become discoloured.
 - It can lead to overheating and potentially cause a fire.
 - It can increase your electricity bill.
 - It can cause the outlet to stop working
21. Who among the following professionals is responsible for the designs and preparation of working drawings and specifications at the pre - construction stage?
- The quantity surveyor
 - The client
 - The architect
 - The contractor
22. The preparation of the Bill of Quantity is a major role played by
- The architect
 - The structural engineer
 - The quantity surveyor
 - The building contractor
23. Which of the following professionals is not a member of the design team in a construction project?
- The contractor
 - The architect
 - The quantity surveyor
 - The structural engineer
24. Which of the following mechanical plants is used for the removal of trees and topsoil during clearing of site?
- Backhoe
 - Grader
 - Bulldozer
 - Dumper
25. Among the mechanical plants used at the construction site, which of them is used to finish the upper surface and also used as follow – up operation to bulldozing or scraping
- Excavator
 - Grader
 - Trencher
 - Backhoe
26. The mechanical plants used for digging foundation trenches and for dredging rivers and handing out materials are
- Graders
 - Scrapers
 - Excavators
 - Bulldozers
27. The equipment which is used for measuring the quantity of aggregates for concrete works is
- Shovel
 - Spade
 - Gauge box
 - Concrete mixer
28. The brick or block laying tool which is used to check the level of vertical and horizontal surfaces is the
- Builder's square
 - Wooden float
 - Spirit level
 - Tape measure
29. The brick or block laying tool which is used to achieve a perfect right angle at the corner of a wall is
- Spirit level
 - Line and pins
 - Builder's square
 - Tape measure
30. Who is the contractor's representative on a construction site
- The clerk of works
 - The agent
 - The sub-contractor
 - The architect
31. Timber from gymnosperm is called
- Dry timber
 - Green timber
 - Soft wood
 - Hardwood
32. Which part of the tree is easily attacked by insects?
- Pith
 - Heartwood
 - Sapwood
 - Bark

33. The dead part of the tree is
- a) pith
 - b) Heartwood
 - c) Sapwood
 - d) Bark
34. Which of the following can give an appropriate age of the tree?
- a) Sapwood
 - b) Heartwood
 - c) Rays
 - d) Rings
35. One disadvantage of felling of trees is
- a) To make money
 - b) Produce timber
 - c) Afforestation
 - d) Deforestation
36. All these are geometric tools except
- a) Rule
 - b) Marking knife
 - c) Sliding bevel
 - d) Saw
37. Tools should be oiled after use to prevent them from
- a) Safety
 - b) Working
 - c) Rusting
 - d) Breaking
38. A natural product of solid wood which has been sawn to sizes is called
- a) Tree
 - b) Timber
 - c) Stick
 - d) Wood
39. The tree besides producing logs, also serves all these purposes except
- a) Fuel
 - b) Food
 - c) Shade
 - d) Degrading the environment
40. When an accident occurs in the workshop, after administering first aid, the injured person has to be taken to the
- a) House
 - b) Hospital
 - c) Classroom
 - d) Workshop



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