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Basic Technology Exam Questions and Answers Pack

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# QUESTIONS

## TOPIC: APPLIED ELECTRICITY AND ELECTRONICS

***DIRECTION: Choose the correct answer from the lettered options.***

1. \_\_\_\_\_ are used to protect the hands during electrical wirings.
  - A. Metal clips
  - B. Hand gloves
  - C. Masking tapes
  - D. Table clothes
  
2. A \_\_\_\_\_ is an example of a domestic electrical consumer.
  - A. University
  - B. home
  - C. warehouse
  - D. hospital
  
3. Which of the following is an electrical wiring tool?
  - A. Saw
  - B. File
  - C. Plier
  - D. Pulley
  
4. Socket outlets provide means of connecting to live, neutral and \_\_\_\_\_ terminals.
  - A. negative
  - B. positive
  - C. earth
  - D. static

5. Electrical accessories are coated with protective substances in order to make them \_\_\_\_\_.

- A. resistant to pests and diseases
- B. waterproof in moist environments
- C. suitable for possible environmental hazards
- D. able to provide a complete pathway for current flow

6. A potential difference (pd) of 15 volts is applied to a lamp of 125 ohms resistance. What current (I) will flow in the circuit?

- A. 0.15 Amps
- B. 0.12 Amps
- C. 10 Amps
- D. 1.2 Amps

7. For household wirings, points of light are done in \_\_\_\_\_.

- A. parallel
- B. spiral
- C. circuit
- D. groups

8. \_\_\_\_\_ are wiring tools used for holding, cutting and joining cables.

- A. Pliers
- B. Hammer
- C. Cutter
- D. Screws

9. Which is the odd one out?

- A.  $R=V/I$
- B.  $I=V/R$
- C.  $V=IR$
- D.  $I=R+V$

10. Electricity consuming appliances are generally referred to as \_\_\_\_\_ .

- A. circuit regulators
- B. electronics
- C. electrical loads
- D. conducting items

11. An electric circuit is a complete path through which \_\_\_\_\_ flows.

- A. magma
- B. voltage
- C. air
- D. current

12. Which of the following is NOT an electrical accessory?

- A. Ceiling switches
- B. Joint boxes
- C. Lamp holder
- D. Light bulb

13. Exposed conductors are covered with \_\_\_\_\_ to prevent electric shocks during and after electrical wirings.

- A. black sole tapes
- B. super glue
- C. emery cloths
- D. metal chips

14. The summary estimation of schedules made for the wiring of a is called \_\_\_\_\_.

- A. Gross analysis
- B. bill of quantity
- C. estimation bill
- D. grand estimate

15. Which of the following is NOT a safety regulation observed in house wiring?

- A. Ensure the continuity and durability of earthing system.
- B. Always use current conducting tools during wiring.
- C. Avoid working on live circuits.
- D. Avoid exposing current carrying conductors where insulators are expected.

16. Which of the following is a safety regulation in house wiring?

- A. Use appropriate sizes, ratings and types of accessories.
- B. All single pole devices must not be connected in the live conductors of the supply.
- C. Plastic wires and cables can be used in place of copper wires.
- D. Observe the safety regulations given by NAFDAC.

17. Which of the following is a component of an electric circuit?

- A. Battery
- B. Wood
- C. Mixer
- D. Glue

18. Electric components used to regulate current in an electric circuit are known as \_\_\_\_\_ .

- A. adaptors
- B. switches
- C. controls
- D. batteries

19. One of the ways by which the design and estimation of the cost of wiring a is carried out is by \_\_\_\_\_ .

- A. inspecting the for holes and punctures before wiring
- B. costing the heavier wirings first before the lighter ones
- C. making a rough sketch of the estimated price for designs
- D. selecting watertight fittings for wet and exposed areas

20. Holes are made on walls with \_\_\_\_\_ to allow the passage of cables from one apartment to another during wiring.

- A. files
- B. drills
- C. punches
- D. screwdrivers



21. \_\_\_\_\_ are used to determine the presence of current in a live wire.

- A. Detectors
- B. Testers
- C. Pliers
- D. Cables

22. The \_\_\_\_\_ is the cable or wire used in connecting other components in an electric circuit.

- A. generator
- B. conductor
- C. load
- D. control

23. The two electric circuits observed in simple electric wiring are \_\_\_\_\_ and \_\_\_\_\_ circuits.

- A. horizontal, vertical
- B. receiver, terminal
- C. current, voltage
- D. series, parallel

24. \_\_\_\_\_ is the power source of an electric circuit.

- A. Resistor
- B. Switch
- C. Battery
- D. Fuse

25. Which of the following is an electrical wiring material?

- A. Abrasive
- B. Sickle
- C. Knife
- D. Cable

26. \_\_\_\_\_ are used to cut wires during electrical wirings.

- A. Knives
- B. Sickle
- C. Scissors
- D. Cutter

27. A current ( $I$ ) of 0.5 A flows through a bulb of potential difference (pd), 10 volts. What will be the resistance ( $R$ ) of the bulb?

- A. 40 Ohms
- B. 75 Ohms
- C. 20 Ohms
- D. 18 Ohms

28. Electrical accessories are rated for the \_\_\_\_\_ they are designed to withstand without undue overheating or failure.

- A. extreme heat
- B. maximum voltage
- C. minimum load
- D. extra elasticity

29. A current (I) of 0.75A flows in a circuit with resistance (R), 20 ohms. Calculate the potential difference (Pd) within the circuit.

- A. 15 volts
- B. 30 volts
- C. 25 volts
- D. 5 volts

30. Household wiring starts from the \_\_\_\_\_ .

- A. meter
- B. joint boxes
- C. adaptors
- D. fuse boxes

31. The two classes of electrical consumers are \_\_\_\_\_ and \_\_\_\_\_ consumers.

- A. domestic, industrial
- B. natural, artificial
- C. rural, urban
- D. living, non-living

## TOPIC: BUILDING

**DIRECTION:** Choose the correct answer from the lettered options.

1. Which of the following is a characteristic of sandy soil?

- A. They are very compressible.
- B. They absorb and loose water easily.
- C. They support erosion and water logging.
- D. They can be easily worked on and cultivated.

2. The bedroom is a major part of a \_\_\_\_\_ .

- A. site preparation
- B. working drawing
- C. housing unit
- D. symbols

3. This window type is known as \_\_\_\_\_ window.



- A. double glazed
- B. sliding
- C. basement
- D. semicircular headed

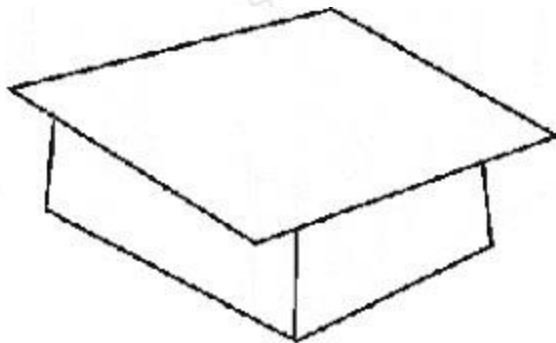
4. Concrete floors can be made by mixing aggregate with sand and \_\_\_\_\_ .

- A. peat
- B. gravel
- C. cement
- D. water

5. Which of the following is a material for the making of wall ?

- A. Lead
- B. Cotton
- C. Stone
- D. Paper

6. What kind of roof is this?



- A. Hip
- B. Gambrel
- C. Monitor
- D. Shed

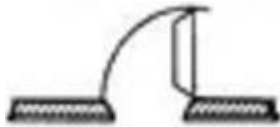
7. Which of the following pairs provide barrier to danger and protection of lives and properties?

- A. Doors and windows
- B. Foundation and floors
- C. Lintels and polythene sheets
- D. Curtains and furniture

8. The type of foundation used to transmit load through soft soil, streams and rivers is called \_\_\_\_\_ .

- A. rift
- B. pile
- C. raft
- D. pad

9. The symbol represents a \_\_\_\_\_ in a plan.



- A. window
- B. door
- C. socket
- D. sink

10. The \_\_\_\_\_ plan shows the drainage and sewage systems of the building.

- A. plumbing
- B. electrical
- C. floor
- D. domestic

11. This equipment is used for \_\_\_\_\_ .



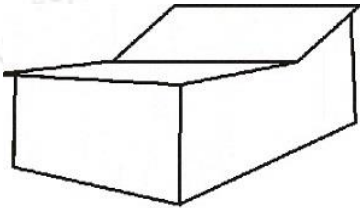
- A. ground levelling
- B. site preparation
- C. excavation purposes
- D. concrete mixing

12. What is the name of this equipment?



- A. Tilting drum
- B. Mechanical mixer
- C. Tractor wheel
- D. Transmit mixer

13. What kind of roof is this?



- A. Arched
- B. Marred
- C. Butterfly
- D. Pit

14. Walls that do not support other loads except their own are called \_\_\_\_\_ walls.

- A. load supporting
- B. non-load bearing
- C. mono supporting
- D. compartmental

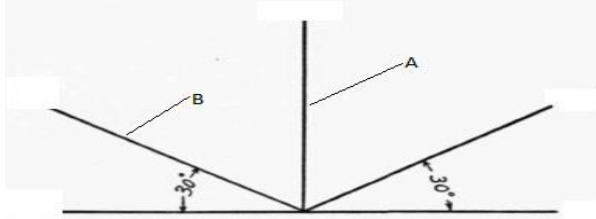
The correct answer is option [B]



## TOPIC: DRAWING PRACTICE

**DIRECTION:** Choose the correct answer from the lettered options.

1. The line marked A is called \_\_\_\_\_ line.



- A. vertical
- B. straight
- C. oblique
- D. centre

2. There is \_\_\_\_\_ angle between axes in an isometric axes

- A. 45o
- B. 180o
- C. 90o
- D. 120o

3. Principal views of orthographic projections are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ elevations.

- A. First, second, third
- B. vertical, horizontal, profile
- C. front, end, plan
- D. ground, visual, edge

4. The two planes in orthographic projection intersect producing \_\_\_\_\_ quadrants.

- A. 2
- B. 4
- C. 3
- D. 5

5. Orthographic drawing is most widely accepted because it shows the true shape, size and \_\_\_\_\_ of objects.

- A. face
- B. colour
- C. length
- D. angles

6. An isometric drawing is constructed using a pair of \_\_\_\_\_.

- A. tee-squares
- B. scissors
- C. projectors
- D. set squares

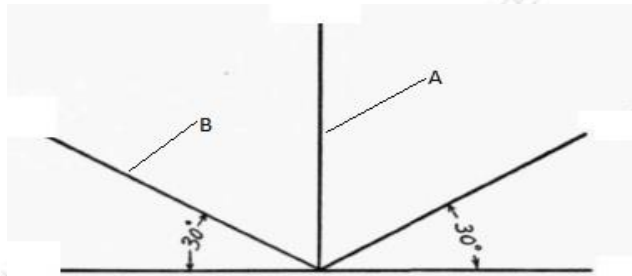
7. The main angles of an orthographic projection are \_\_\_\_\_ and \_\_\_\_\_ angle projections.

- A. First, third
- B. front, side
- C. vertical, horizontal
- D. visual, non-visual

8. \_\_\_\_\_ is a way of drawing an object by means of plane views.

- A. Isomeric axes
- B. Orthographic projection
- C. Oblique drawing
- D. Cavalier oblique

9. The line marked B is called \_\_\_\_\_ line.



- A. vertical
- B. receding
- C. invisible
- D. oblique

10. \_\_\_\_\_ drawing is most widely accepted for technical drawing.

- A. Oblique
- B. Isometric
- C. Orthographic
- D. Freehand

11. Methods of oblique projection are \_\_\_\_\_ and \_\_\_\_\_ projections.

- A. tin, orbital
- B. twist, straight
- C. cavalier, cabinet
- D. surface, diagonal

12. A pictorial drawing with one face parallel to the horizontal plane and the receding lines inclined at  $45^\circ$  to the horizontal plane is called \_\_\_\_\_ drawing.

- A. oblique
- B. isometric
- C. orthographic
- D. technical

13. Isometric axes are made up of a vertical line and \_\_\_\_\_ receding lines.

- A. 3
- B. 4
- C. 2
- D. 1

14. A pictorial drawing method which shows the 3 faces of an object together is called \_\_\_\_\_ drawing.

- A. parallel
- B. oblique
- C. isometric
- D. technical

## TOPIC: ENERGY AND POWER

**DIRECTION:** Choose the correct answer from the lettered options.

1. \_\_\_\_ is used to reduce the wearing of metal surfaces.
  - A. Water
  - B. Lubricant
  - C. Pads
  - D. Chips
  
2. Which of the following is a use of gears?
  - A. They are used for changing the speed of rotation of connected shafts.
  - B. They protect the internal engines of a rotor.
  - C. They are used as tools for balancing during wheel alignment.
  - D. They provide the machine with adequate room for air flow
  
3. Which of the following is NOT an advantage of friction?
  - A. Sharpening of knives and cutting stones
  - B. Wear and tear of motor engines
  - C. Designing and construction of motor-vehicle brakes
  - D. Ability to walk or run without falling
  
4. There are \_\_\_\_ kinds of belts and pulleys.
  - A. 1
  - B. 2
  - C. 3
  - D. 4

5. \_\_\_\_\_ helps us walk, run and ride bicycles without slipping or falling.

- A. Shoes
- B. Sand
- C. Friction
- D. Pressure

6. The instrument for measuring atmospheric pressure is the \_\_\_\_\_ .

- A. thermometer
- B. anemometer
- C. barometer
- D. stereoscope

7. Which of the following is a disadvantage of the belt drive?

- A. It can break if excess load is placed on it.
- B. It does not function in the presence of heat.
- C. It causes air pollution when running.
- D. It disallows the use of certain lubricants.

8. Mathematically, pressure is represented as \_\_\_\_ .

- A.  $P = F / A$
- B.  $P = F \times A$
- C.  $P = A / F$
- D.  $P = F - A$

9. The valve of a bicycle pump is referred to as a "non-return valve" because \_\_\_\_\_ .

- A. it allows for the passage of air into the tube only
- B. air passes in and out at the same time
- C. it allows for the passage of air in opposite directions
- D. it allows for the back passage of air into the pump

10. Friction produces \_\_\_\_\_ .

- A. heat
- B. pressure
- C. moisture
- D. cold

11. For fluids to flow out freely through a punched hole in a container, the pressure inside the container must be \_\_\_\_\_ .

- A. lower or equal to the external pressure of surrounding air
- B. equal to or greater than the external velocity of surrounding air
- C. lower than the external pressure of the surrounding air
- D. equal to or greater than the external pressure of surrounding air

12. The unit of pressure is \_\_\_\_\_ .

- A. joule
- B. Pascal
- C. newton
- D. meter

13. The three major constituent of air are \_\_\_\_\_ .

- A. nitrogen, hydrogen and oxygen
- B. hydrogen, helium and argon
- C. nitrogen, oxygen and other gases
- D. oxygen, hydrogen and other gases

14. Which of the following machines make use of the belt and chain drive in its operation?

- A. Computer
- B. Blender
- C. Bicycle
- D. Cooker

15. When air is heated, it \_\_\_\_\_ .

- A. expands and becomes less dense
- B. compresses and becomes more dense
- C. compresses and becomes less dense
- D. expands and becomes more dense

16. Which of the following is a property of air?

- A. Hue
- B. Luster
- C. Elasticity
- D. Weight



17. When air moves fast, \_\_\_\_\_ .

- A. space increases
- B. objects drop
- C. pressure drops
- D. weight increases

18. All vehicle transmission systems utilize clutches between the engine cranshaft and the \_\_\_\_\_ .

- A. hand brake
- B. gear box
- C. lever pull
- D. brake pads

19. \_\_\_\_\_ are used to control the motion of a vehicle.

- A. Pulleys
- B. Carburetors
- C. Brakes
- D. Gears

20. Advantage of the chain drive over belt drive is that the chain drive can withstand \_\_\_\_\_ .

- A. extreme temperature
- B. high pressure
- C. excess lubrication
- D. extreme load

21. We can reduce friction by \_\_\_\_\_ the surfaces concerned.

- A. watering
- B. cracking
- C. washing
- D. lubricating

22. In which of the following activities is friction NOT involved?

- A. Walking
- B. Filing
- C. Sharpening
- D. Burning

23. Human beings are able to withstand external air pressure because of \_\_\_\_\_ .

- A. weight of body clothes and accessories
- B. the internal pressure exerted by the blood
- C. internal weight exerted by the body organs
- D. internal and external microbial activities

24. Which of the following does NOT represent a technological application of air?

- A. Airships
- B. Kite
- C. Vacuum cleaners
- D. Clock

25. \_\_\_\_\_ is defined as the force per unit area.

- A. Speed
- B. Pressure
- C. Mass
- D. Velocity

26. \_\_\_\_\_ is a disadvantage of friction.

- A. Wearing of metal surfaces
- B. Cracking of walls
- C. Slipping of metal surfaces
- D. Breaking of wooden objects

27. \_\_\_\_\_ is a kind of belts and pulleys.

- A. Universal belt and pulley
- B. Vee belt and pulley
- C. Square belt and pulley
- D. Tee belt and pulley

28. Which of the following is an example of a pneumatic device?

- A. Dentists' drill
- B. Bench vice
- C. Computer
- D. Screwdriver

29. Which of the following is a type of lubricant used in reducing friction in metals?

- A. Herringbone
- B. Dusting powder
- C. Genteel gel
- D. Lanolin

30. The pressure exerted by air at sea level is approximately \_\_\_\_\_ .

- A. 200kg/m<sup>2</sup>
- B. 500kj/m<sup>2</sup>
- C. 500kg/m<sup>2</sup>
- D. 200kj/m<sup>2</sup>

31. Breathing is difficult as we go higher because of \_\_\_\_\_ .

- A. increase in air pressure
- B. decrease in body weight
- C. decrease in air pressure
- D. increase in body weight

32. A gear is a drive mechanism used to transmit \_\_\_\_\_ power from one point to another.

- A. electrical
- B. nuclear
- C. mechanical
- D. solar

33. Air has a density of \_\_\_\_ kg/m<sup>3</sup>

- A. 1.2
- B. 7.5
- C. 1.08
- D. 2.5

34. Which of the following vices work on the same principle as the screw jack?

- A. The hacksaw
- B. The G-clamp
- C. Soldering bit
- D. Square file

35. Moving gears must be lubricated with suitable oil to reduce \_\_\_\_ .

- A. tear
- B. burn
- C. burst
- D. pressure

36. The types of friction brakes we have are \_\_\_\_ and \_\_\_\_ brakes.

- A. drum, disc
- B. stationary, rotating
- C. Powell, piston
- D. cable, lever

37. We can increase the pressure of a constant mass of air by \_\_\_\_\_ .

- A. increasing the column of space occupied by air
- B. expanding the size of the container
- C. adding more columns to the available space
- D. decreasing the column of space that it occupies

38. The \_\_\_\_\_ is a power implement operated by compressed air.

- A. power wrench
- B. compressed air machine
- C. electrical power tool
- D. pneumatic device

39. A body is said to be in motion when it changes its position with\_\_\_\_\_.

- A. space
- B. time
- C. mass
- D. speed

40. Air contains \_\_\_\_\_ .

- A. 50% Nitrogen and 50% Oxygen
- B. 78% Nitrogen, 21% Oxygen
- C. 21% Nitrogen, 78% Oxygen
- D. 20% Nitrogen, 80% Oxygen

41. When two gears mesh, one is called the \_\_\_\_\_, while the other is called the \_\_\_\_\_ gear.

- A. rotator, rotating
- B. exhibitor, inhibitor
- C. rider, ridden
- D. driver, driven

42. The inside of an aircraft is pressurized at high altitude because of \_\_\_\_\_ .

- A. reduced pressure on ground level
- B. increased pressure at high altitude
- C. reduced body weight at high altitude
- D. reduced pressure at high altitude

43. Surrounding cold air pushes a hot-air balloon up because \_\_\_\_\_ .

- A. cold air is heavier than hot air
- B. cold air is lighter than hot air
- C. hot air travels faster than cold air
- D. hot air is heavier than cold air

44. The motion of any machine can be described in terms of \_\_\_\_\_ motions.

- A. standard and classic
- B. front and rear
- C. pedal and push
- D. linear and pure rotary

45. \_\_\_\_\_ exists as a force that tends to stop movement between any two surfaces which are moving over each other.

- A. Pulley
- B. Bearing
- C. Friction
- D. Grafting



## TOPIC: MAINTENANCE

**DIRECTION: Choose the correct answer from the lettered options.**

1. The types of practices are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ maintenance.
  - A. preventive, selective, protective
  - B. predictive, preventive, corrective
  - C. constructive, corrective, predictive
  - D. corrective, selective, periodic
  
2. Instruments used for fault detection are \_\_\_\_\_ and \_\_\_\_\_ .
  - A. adhesives, rope
  - B. drum sanders, files
  - C. multimedia, dust blower
  - D. theodolite, dumpy level
  
3. Fault detection is also known as \_\_\_\_\_ .
  - A. preventive
  - B. corrective
  - C. constructive
  - D. predictive
  
4. The carried out on an equipment even before the need arises is called \_\_\_\_\_ maintenance.
  - A. corrective
  - B. constructive
  - C. predictive
  - D. selective

5. Which of these is used for measuring voltages and resistances across electronic components?



A. A

B. B

C. C

D. D

6. \_\_\_\_\_ is an example of preventive maintenance.

A. of new equipment

B. Repair of broken down parts of equipment

C. Replacement of worn out parts of equipment

D. Frequent servicing of an equipment

7. \_\_\_\_\_ is done to machine parts that rub against each other for effective performance.

A. Overhauling

B. Scrubbing

C. Lubricating

D. Washing

8. \_\_\_\_\_ is repairing, replacing and fixing parts of an equipment when it breaks down.

- A. Fault detection
- B. Constructive
- C. Body activity
- D. Renovative work

9. The repair work carried out on an equipment after it is broken down is known as \_\_\_\_\_ maintenance.

- A. corrective
- B. predictive
- C. periodic
- D. preventive

10. Which of these is used for melting and applying solder on metals?



- A. A
- B. B
- C. C
- D. D

11. Which of the following is NOT a practice?

- A. Overhauling
- B. Maintained
- C. Lubricating
- D. Cleaning

12. Which equipment is used to remove screws that hold down electronic panels?



A. C

B. B

C. A

D. D

13. What is the use of this equipment?



A. Washing

B. Cleaning

C. Brushing

D. Dusting

14. Which of the following is an advantage of keeping a record of equipment?

A. It helps in accessing the price of new products in the market.

B. Equipment in bad condition can be sold off.

C. Machines can be auctioned at high prices if well maintained.

D. It helps in recollecting when last a activity was done on an equipment.

15. The practice of maintaining equipment from time to time is known as \_\_\_\_\_ maintenance.

- A. periodic
- B. corrective
- C. selective
- D. primary

## TOPIC: MATERIALS AND PROCESSING

**DIRECTION:** Choose the correct answer from the lettered options.

1. Timber is obtained from the \_\_\_\_\_ of trees.

- A. leaves and stems
- B. roots and twigs
- C. flowers and seeds
- D. trunk and branches

2. Steel with carbon content above 0.8% is called \_\_\_\_\_ steel.

- A. hard
- B. mild
- C. core
- D. tool

3. Articles made from clay are called \_\_\_\_\_ .

- A. blocks
- B. glass
- C. rubber
- D. ceramics

4. Concave or convex curve along length of a plank is a wood defect called \_\_\_\_\_ .

- A. twist
- B. bow
- C. cup
- D. check

5. \_\_\_\_\_ method is a way of making thermoplastics.

- A. Kiln
- B. Pinch
- C. Injection
- D. Plunger

6. The diagram represents a \_\_\_\_\_ sawn wood.



- A. half
- B. rift
- C. plain
- D. quarter

7. \_\_\_\_\_ is a piece of wood used for various domestic and industrial woodwork.

- A. Profile
- B. Board
- C. Timber
- D. Stake

8. When wood is light in weight, it helps for easy \_\_\_\_\_ .

- A. polishing
- B. transporting
- C. preserving
- D. conversion

9. \_\_\_\_\_ are removed from clay during preparation in order to prevent explosion of article.

- A. Water and stones
- B. Dust and pebbles
- C. Latex and chalk
- D. Air and sand

10. Gilding metal is an alloy of \_\_\_\_\_ copper and \_\_\_\_\_ zinc.

- A. 90%, 10%
- B. 60%, 40%
- C. 50%, 50%
- D. 10%, 90%

11. \_\_\_\_\_ is the process of reducing the moisture content in wood.

- A. Seasoning
- B. Heating
- C. Burning
- D. Jestig



12. The process of splitting logs at the sawmill into marketable sizes is called \_\_\_\_\_.

- A. timber splitting
- B. wood conversion
- C. log processing
- D. wood sawing

13. The strength of steel depends on the quantity of \_\_\_\_\_ it contains.

- A. air
- B. carbon
- C. water
- D. impurities

14. The separation of wood along the grain of a board is a wood defect called \_\_\_\_\_.

- A. cup
- B. heart
- C. star
- D. check

15. Which of the following is an artificial wood defect?

- A. Star shake
- B. Twist
- C. Knot
- D. Cup shake

16. The methods of making veneer are \_\_\_\_\_ methods.

- A. cutting and dredge
- B. hacking and scratching
- C. bracing and slashing
- D. rotary and slicing

17. Brass is an alloy of \_\_\_\_\_.

- A. tin and silicon
- B. manganese and zinc
- C. magnesium and sulphur
- D. copper and zinc

18. \_\_\_\_\_ is mainly used for kitchen furniture and paneling.

- A. Hardwood
- B. Plywood
- C. Clipboard
- D. Blackboard

19. Which of the following is a natural wood defect?

- A. Heart shake
- B. Twist
- C. Check
- D. Bow

20. The heating of metal ore to a liquid form is called \_\_\_\_\_ .

- A. casting
- B. smelting
- C. distillation
- D. extraction

21. Bronze is an alloy of \_\_\_\_\_.

- A. zinc and sulphur
- B. aluminum and tin
- C. manganese and lead
- D. copper and tin

22. The carbon content in pig iron escapes as \_\_\_\_\_ during wrought iron production.

- A. carbon (iv) oxide
- B. carbon (ii) oxide
- C. carbon (vi) oxide
- D. carbon (iii) oxide

23. Chain and gates are products of \_\_\_\_\_ .

- A. mild steel
- B. aluminum
- C. zinc
- D. wrought iron

24. A slice of sheet obtained from wood is called a \_\_\_\_ .

- A. profile
- B. board
- C. veneer
- D. stake

25. A branch enclosed within a growing tree is a wood defect called \_\_\_\_ .

- A. knot
- B. check
- C. twist
- D. cup

26. The methods of wood conversion are plain sawn and \_\_\_\_ .

- A. scale sawn
- B. half sawn
- C. quarter sawn
- D. full sawn

27. The quantity of \_\_\_\_ in steel determines its strength.

- A. hydrogen
- B. lead
- C. carbon
- D. sodium

28. Brass can be used for taps and pipes because of its high resistance to \_\_\_\_\_.

- A. heat
- B. pressure
- C. pests
- D. corrosion

29. Concave curvatures across the face of timber is a wood defect known as \_\_\_\_\_.

- A. cup
- B. bow
- C. twist
- D. spiral

30. \_\_\_\_\_ is produced by refining pig iron in furnace.

- A. Steel
- B. Cast iron
- C. Ceramic
- D. Brass

31. Abnormal features in a tree which reduces its quality and market value are called \_\_\_\_\_.

- A. blights
- B. spots
- C. abscess
- D. defects

32. Steels with carbon content Between 0.05% to 0.15% are known as \_\_\_\_\_ steel.

- A. tool
- B. core
- C. mild
- D. medium

33. Chemicals used to prevent pests from affecting wood are called \_\_\_\_\_ .

- A. stabilizers
- B. preservatives
- C. conservatives
- D. decomposers

34. Cast iron is produced by burning pig iron and limestone in \_\_\_\_\_ .

- A. carbon monoxide
- B. magnesium fire
- C. sulfuric acid
- D. coke fire

35. Synthetic rubber is produced from \_\_\_\_\_ .

- A. mineral ore
- B. carbon black
- C. latex of rubber trees
- D. petroleum products

36. Steel is made up of \_\_\_\_\_ .

- A. iron and carbon
- B. coal and sulphur
- C. silica and tar
- D. tin and duralumin

37. Manufactured wood have advantage over solid wood because \_\_\_\_\_.

- A. they are readily available in the southern regions.
- B. their growth is rapid and plenteous
- C. they do not check and warp like solid wood
- D. it is easier to sell them better than solid wood

38. Steel with carbon content of 0.2% to 0.5% is known as \_\_\_\_\_ steel .

- A. mild
- B. core
- C. medium
- D. hard

39. The \_\_\_\_\_ machine is an equipment used for cutting and shaping of wood.

- A. chain
- B. lathe
- C. theodolite
- D. reciprocating

40. Production of ceramics involves clay preparation, molding and \_\_\_\_\_.

- A. casting
- B. blasting
- C. firing
- D. stretching

41. Steel with carbon content between \_\_\_\_\_ are called mild steel.

- A. 0.8-1.0%
- B. 0.05-0.15%
- C. 0.25-0.75%
- D. 1.25-2.05%

42. Metals can be produced from their ores through the processes of extraction, smelting and \_\_\_\_\_.

- A. casting
- B. flashing
- C. heating
- D. smoldering

43. Timbers are found in the southern region of Nigeria because of \_\_\_\_\_.

- A. north-south wind
- B. heavy rainfalls
- C. harmattan
- D. dry vegetation



44. Natural rubber is made from \_\_\_\_\_ of rubber trees.

- A. apex
- B. root
- C. latex
- D. trunk

45. Which of the following is NOT a process of wood production?

- A. Furniture making
- B. Felling of trees
- C. Wood preservation
- D. Wood conversion

46. In veneer making, logs are steamed before cutting to \_\_\_\_\_ the fibers.

- A. toughen
- B. soften
- C. break
- D. darken

47. Woods are seasoned in order to make them \_\_\_\_\_ .

- A. stronger
- B. wider
- C. longer
- D. darker

48. \_\_\_\_\_ is a specialized oven used for drying timber logs.

- A. Kiln
- B. Chimney
- C. Cache
- D. Hoard

49. Spiral form of distortion along the length of a plank is a wood defect known as \_\_\_\_\_ .

- A. curve
- B. knot
- C. twist
- D. bow

50. Steel with carbon content of \_\_\_\_\_ are known as medium steel.

- A. 0.05% to 0.75%
- B. 0.2% to 0.5%
- C. 0.5% to 1.0%
- D. 0.75% to 1.2%

51. \_\_\_\_\_ is a board manufactured from wood chips.

- A. Hardboard
- B. Clipboard
- C. Plywood
- D. Blackboard

52. Metals occur in combined states called \_\_\_\_\_ .

- A. metal alloys
- B. compounds
- C. impurities
- D. mineral ore

53. \_\_\_\_\_ is made from mashed wood with hardeners and holding agents.

- A. Blackboard
- B. Plywood
- C. Laminated board
- D. Hardboard

54. Steel with carbon content above \_\_\_\_\_ are known as tool steel.

- A. 0.8%
- B. 0.25%
- C. 1.5%
- D. 0.12%

55. Wood preservatives are applied either by spraying or \_\_\_\_\_ .

- A. flaming
- B. painting
- C. brushing
- D. plastering

56. Pests attack wood due to the presence of \_\_\_\_\_ in it.

- A. starch and glucose
- B. vitamins and minerals
- C. fats and oil
- D. sugar and water

57. \_\_\_\_\_ is added to rubber products to make them stronger.

- A. Soot oil
- B. Carbon black
- C. Coal tar
- D. Natural fiber

58. The methods of making clay are \_\_\_\_\_ and \_\_\_\_\_ .

- A. pinch pot, potter's wheel
- B. induction furnace, cupola
- C. pudding furnace, fitters
- D. smelting, mortise

59. Steels with carbon content above \_\_\_\_\_ can be hardened by heating.

- A. 2.5%
- B. 0.5%
- C. 0.8%
- D. 1.75%

60. What is carbon black?

- A. Carbon in its pure form
- B. Incompletely burnt carbon
- C. Fine carbon got from wood and bones
- D. Carbon and its impurities

61. \_\_\_\_\_ is a chemical used in wood preservation.

- A. Acephate
- B. Diazinum
- C. Methyl
- D. Creosote

62. Duralumin is an alloy with \_\_\_\_\_ aluminums content.

- A. 60%
- B. 94.5%
- C. 55%
- D. 2.25%

63. Which of the following is a reason why wood is preserved?

- A. Reduction of moisture content.
- B. Wood beautification.
- C. of colour.
- D. Increased resistance to pests.

64. Examples of trees that produce timber are \_\_\_\_\_ trees.

- A. hemlock and pine
- B. spruce and fir
- C. pines and cedar
- D. mahogany and oak

65. The thickness of veneer gotten from wood is of the range \_\_\_\_\_ .

- A. 0.5 to 3mm
- B. 0.25 to 5mm
- C. 1.05 to 3.50
- D. 2.25 to 4.25

66. Wood seasoning is by \_\_\_\_\_ or \_\_\_\_\_ drying methods.

- A. fire, sun
- B. oven, fan
- C. air, kiln
- D. furnace, sun

67. The difference between blackboard and plywood is that blackboard CANNOT be \_\_\_\_\_.

- A. bent
- B. preserved
- C. burnt
- D. felled

68. Cast iron contains \_\_\_\_\_ of carbon.

- A. 5-10%
- B. 10-15%
- C. 2-5%
- D. 3-7%

69. The cooling and solidifying of liquid metal with moulds is known as \_\_\_\_\_.

- A. molding
- B. grafting
- C. casting
- D. wrighting

70. The first stage of metal production is the \_\_\_\_\_ stage.

- A. extraction
- B. smoldering
- C. blasting
- D. casting

71. \_\_\_\_\_ are obtained when two or more metals are mixed .

- A. Mixtures
- B. Alloys
- C. Compounds
- D. Elements

## TOPIC: TOOLS AND MACHINES

**DIRECTION:** Choose the correct answer from the lettered options.

1. What is the difference between a bench drill and a hand drill?
  - A. The bench drill is for heavy woods while the hand drill is for light woods.
  - B. The bench drill is fixed to the bench while the hand drill is not.
  - C. The bench drill is electronic while the hand drill is manual.
  - D. The bench drill is for large scale work while the hand drill is for small scale work.
  
2. Joints used in joining two or more boards together in order to produce wider boards are called \_\_\_\_\_ joints.
  - A. spectrum
  - B. surface
  - C. plain glued
  - D. base
  
3. The \_\_\_\_\_ machine is used for making holes.
  - A. disc saw
  - B. sanders
  - C. fret saw
  - D. hand drill



4. Articles used for bonding two surfaces together are called \_\_\_\_\_ .

- A. tapes
- B. adhesives
- C. ropes
- D. bond fluids

5. What is the name of this power tool?



- A. Fret saw
- B. Band saw
- C. Circular saw
- D. Hand saw

6. What is the name of this power tool?

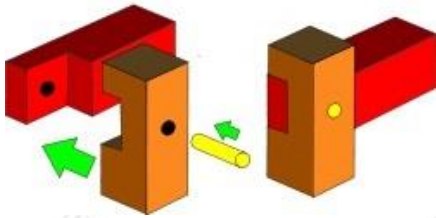


- A. Disc sanders
- B. Hand drill
- C. Jacksaw
- D. Thicknesser

7. Smoothing of woodwork with coated abrasives is known as \_\_\_\_\_ .

- A. levelling
- B. grading
- C. sanding
- D. brushing

8. This diagram shows a \_\_\_\_\_ joint.



- A. plain tee
- B. tee halving
- C. corner halving
- D. plain lap

9. \_\_\_\_\_ is the strongest form of joint in wood construction.

- A. Dovetail tee halving
- B. Chain and box
- C. Tongue and groove
- D. Mortise and tenon

10. What is the name of this power tool?



- A. Sanders
- B. Fret saw
- C. Drum stick
- D. Hand drill

11. \_\_\_\_\_ is a type of sanders used for smoothening in woodwork.

- A. Orbital sanders
- B. Reverse sanders
- C. Fret sanders
- D. Flat faced sanders

12. The \_\_\_\_\_ joint is used where members cross each other and the faces of the pieces are flushed.

- A. cross halving
- B. chain parting
- C. plain glued
- D. chest cross

13. Which of the following is a type of lock used in woodwork?

- A. Stock lock
- B. Lathe lock
- C. Spindle lock
- D. Wardrobe lock

14. The \_\_\_\_\_ is used in making complex shapes and curves in plywood and veneers.

- A. flat drill
- B. belt sander
- C. fret-saw
- D. hacksaw

15. This diagram shows a \_\_\_\_\_ joint.



- A. comb and box
- B. dovetail
- C. tee halving
- D. mortise and tenon

16. A machine that shapes wood by turning it against a circular edge is called \_\_\_\_\_ .

- A. wood lathe
- B. circular drill
- C. planex jack
- D. bench plane

17. The \_\_\_\_\_ joint is used for fixing shelves and partitioning.

- A. square
- B. corner
- C. pivot
- D. housed

18. Which of the following is a halving joint?

- A. Angle-lap joint
- B. Cross joint
- C. Socket joint
- D. Tee joint

19. Which of the following is a form of dovetail joint?

- A. Lapped dovetail
- B. Cross halving
- C. Tee bridle
- D. Plain glued

20. Which of these is an abrasive of protein origin?

- A. Corundum
- B. Calcium carbonate
- C. Uric acid
- D. Blood albumin

21. \_\_\_\_drill is a type of hand drill used in metal work.

- A. Flake
- B. Belt
- C. Circular
- D. Twist

22. A part of woodwork that involves joining pieces of wood together to make furniture is called \_\_\_\_ .

- A. pivot
- B. joint
- C. edge
- D. fork

23. Which of the following is a safety hint in the use of woodwork machines?

- A. Regular replacement of working tools with latest versions.
- B. Switching on machines with both feet wide apart.
- C. Regular oiling and greasing of bearings.
- D. Use of machines by the "trial and error" practice.

24. The \_\_\_\_\_ joint is frequently referred to as open mortise and tenon.

- A. chain
- B. corner bridle
- C. tee dovetail
- D. rebuttet but

25. \_\_\_\_\_ is a heavy machine used for smoothening in woodwork.

- A. Wood lathe
- B. Fret saw
- C. Monitor
- D. Jack plane

26. What is this power tool used for?



- A. Cutting
- B. Drilling
- C. Smoothening
- D. Shaping

27. What is the name of this machine?

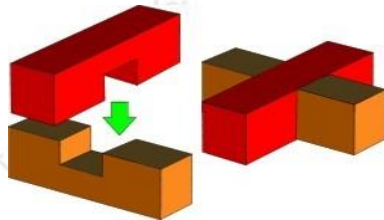


- A. Circular saw
- B. Drum sanders
- C. Surface planner
- D. Wood lathe

28. In corner halving joint, the end and edge of pieces to be joined usually meet to form a/an \_\_\_\_\_ angle.

- A. right
- B. acute
- C. obtuse
- D. straight

29. The diagram shows a \_\_\_\_\_ joint.



- A. dovetail
- B. tee halving
- C. cross halving
- D. plain face



30. \_\_\_\_ is a type of nail used in woodwork.

- A. Tummel
- B. Groove
- C. Cut clasp
- D. Ring end

31. \_\_\_\_\_ is a synthetic adhesive.

- A. Skin milk
- B. Resorcinol
- C. Soya bean
- D. Casein

32. The \_\_\_\_ joint is used in the making of cheap furniture and carcasses for veneer work.

- A. corner
- B. half lap
- C. plain lap
- D. chain

33. Abrasives of organic origin, solidified by chemical reaction and polymerization are called \_\_\_\_ .

- A. synthetic resins
- B. natural adhesives
- C. inorganic minerals
- D. casein

34. Which of the following is NOT a material in woodwork?

- A. Abrasives
- B. Sanders
- C. Triode
- D. Nails

35. Tools held in the hand and operated with electric current are called \_\_\_\_\_ tools.

- A. automatic
- B. portable power
- C. Manual
- D. electronic

36. Joints used in cabinet work are classified into widening, framing and \_\_\_\_\_ joints.

- A. parallel
- B. box
- C. chain
- D. groove

37. Which of the following is NOT a form of the mortise and tenon joint?

- A. Barefaced
- B. Hunched
- C. Groove
- D. Common

## TOPIC: TOOLS AND PROCESSING

**DIRECTION:** Choose the correct answer from the lettered options.

1. Image B is a \_\_\_\_\_ tool.



- A. drilling
- B. boring
- C. cutting
- D. filing

2. The \_\_\_\_\_ snips are used for cutting circular shapes and internal curves.

- A. round
- B. straight
- C. vice
- D. bent

3. The \_\_\_\_\_ file is used for finishing squares and rectangular holes.

- A. square
- B. round
- C. curved
- D. hand

4. \_\_\_\_\_ soldering is achieved when the solder melts below red heat.

- A. Hard
- B. Dry
- C. Hydrous
- D. Soft

5. \_\_\_\_\_ Fluids are solutions of salt and other minerals in water.

- A. Aqueous
- B. Anhydrous
- C. Soluble
- D. Water-base

6. \_\_\_\_\_ is a material used in soldering.

- A. Source of heat
- B. Hammer
- C. Jack plane
- D. Grease

7. Image C is a \_\_\_\_\_ tool.



- A. drilling
- B. bending
- C. filing
- D. cutting

8. \_\_\_\_\_ are mineral oils treated to form an emulsion when added to water.

- A. Emery fluids
- B. Water-base fluids
- C. Soluble oils
- D. Soft oils

9. Cutting tools used in metal work include \_\_\_\_\_ .

- A. tin snips
- B. tin file
- C. tin saw
- D. tin bits

10. The \_\_\_\_\_ is used for applying heat and soft solder to a metal.

- A. metal tinner
- B. hot tong
- C. Bunsen burner
- D. soldering bit

11. The basic rule in soldering is that the melting point of solder being used must be \_\_\_\_\_ the melting point of metals being soldered.

- A. stronger than
- B. below
- C. same as
- D. above

12. The tool that does the work of scissors in metal work is known as \_\_\_\_\_ .

- A. file
- B. knife
- C. shears
- D. tin snips

13. Which of the following is NOT a whole making process?

- A. Punching
- B. Drilling
- C. Boring
- D. Filing

14. \_\_\_\_\_ soldering is achieved when the solder melts at or above red heat.

- A. Hard
- B. Anhydrous
- C. Hot
- D. Liquid

15. The \_\_\_\_ is used for bending or folding sheet metals usually at right angles.

- A. wire gauge
- B. bench vice
- C. folding bar
- D. tungsten rings

16. Soldering is the process of joining metal surfaces by means of an alloy called \_\_\_\_\_ .

- A. bronze
- B. solder
- C. lead
- D. uranium

17. The purpose of a wired edge in a metal sheet is to give it extra strength, safety and \_\_\_\_\_ .

- A. good appearance
- B. weight
- C. sharpness
- D. dimension

18. Cutting fluids are used to \_\_\_\_\_ .

- A. protect tools against corrosion
- B. cut metals to a nice finish
- C. melt metals into fluids
- D. prevent ageing of metal tools

19. If the wire diameter of a metal edge is 2mm, then the wiring allowance is \_\_\_\_\_. (Allowance = 2.5mm)

- A. 4.5mm
- B. 0.8mm
- C. 5mm
- D. 0.5mm

20. An example of soft soldering is the soldering of \_\_\_\_ .

- A. wire terminals in TV sets
- B. metal tables
- C. iron gates
- D. wrought iron

21. The \_\_\_\_ file is used for filing all kinds of flat surfaces.

- A. square
- B. round
- C. triangular
- D. flat

22. The \_\_\_\_ solder is used for soldering plumbing joints.

- A. bench
- B. blow pipe
- C. tinsmith
- D. plumbers

23. Care of files include \_\_\_\_ .

- A. using new files on hard steel
- B. folding the file after use
- C. cleaning the teeth as soon as they are clogged
- D. storing them in moist environment



24. What type of tin snip is this?



- A. Universal snip
- B. Bent snip
- C. Straight snip
- D. Lethal snip

25. A machine tool is a machine that cuts \_\_\_\_\_ .

- A. ceramics
- B. metals
- C. wood
- D. bricks

26. The \_\_\_\_ file is used for filing faces that are less than 90o.

- A. hand
- B. triangular
- C. round
- D. half round

27. The first step to take in bending a sheet metal with a bench vice is to \_\_\_\_\_ .

- A. insert the metal piece to be bent between the vice jaws
- B. insert the vice jaw caps on both jaws of the vice
- C. bend the metal piece into any desired shape
- D. use a mallet to knock at the light gauge metals

28. \_\_\_\_\_ is added to soft solder to provide strength and hardness.

- A. Tin
- B. Titanium
- C. Antimony
- D. Lead

29. What type of tin snip is this?



- A. Straight snip
- B. Universal snip
- C. Lethal snip
- D. Bent snip

30. Image D is a \_\_\_\_\_ tool.



- A. drilling
- B. bending
- C. cutting
- D. filling

31. \_\_\_\_\_ is the production of conical shapes from a metal in which one end is bigger than the other.

- A. Wood sanding
- B. Metal sharpening
- C. Tread milling
- D. Taper turning

32. Silica carbide is best suitable for grinding materials of low tensile strength such as \_\_\_\_\_.

- A. steel
- B. titanium
- C. Kevlar
- D. brass

33. Abrasives used in metal working are \_\_\_\_\_ .

- A. aluminum oxide and silicon carbide
- B. calcium carbonate and silica
- C. aluminum hydroxide and pepsin
- D. calcium hydrogen phosphate and zeolite

34. There are \_\_\_\_\_ major kinds of soft solder.

- A. 3
- B. 2
- C. 1
- D. 4

35. Image A is a \_\_\_\_\_ tool.



- A. bending
- B. drilling
- C. cutting
- D. grafting

36. The higher the proportion of tin a solder has, the \_\_\_\_\_ it is and the \_\_\_\_\_ its melting point.

- A. harder, lower
- B. softer, lower
- C. harder, higher
- D. softer, higher

37. The higher the proportion of \_\_\_\_\_ a solder has, the harder the solder and the higher its melting point.

- A. tin
- B. antimony
- C. lead
- D. titanium

38. There are \_\_\_\_\_ categories of files.

- A. 2
- B. 4
- C. 6
- D. 3

39. The bench vice is a \_\_\_\_\_ tool.

- A. cutting
- B. bending
- C. filing
- D. joining

40. During surfacing, a \_\_\_\_\_ face is produced when the cutting tool moves parallel to the axis of rotation of the work piece.

- A. straight
- B. good
- C. plain
- D. rough

41. Which of the following tool is used in achieving folded edge for a metal sheet?

- A. Hacksaw
- B. Hammer
- C. Tin snip
- D. Folding bar

42. Which of the following is NOT a type of metalwork machine?

- A. Sharper and planer
- B. Drill press
- C. Fret-saw
- D. Metal lathe

43. Which of the following pairs are ways of joining metal pieces together?

- A. Soldering and welding
- B. Screwing and tinning
- C. Knotting and tying
- D. Fastening and bolting

44. Brazing is another name for \_\_\_\_\_ .

- A. cutting fluids
- B. hard soldering
- C. soldering bit
- D. tinning out

45. The type of soldering to be used on a metal is determined by the \_\_\_\_\_ of the metal being joined.

- A. polarity
- B. colour
- C. nature
- D. length

46. Coolants are divided into \_\_\_\_\_ main classes.

- A. 4
- B. 3
- C. 2
- D. 5

47. Bending in sheet metalwork means \_\_\_\_\_ .

- A. changing an original metal shape into another
- B. causing the flat metal sheet to have curves or angles
- C. folding of sheet metal edges inward
- D. bending flat metal sheets into angles 60 and 90 respectively

48. Which of the following is NOT a material used in soldering?

- A. Flux
- B. Nail
- C. Furnace
- D. File

49. The \_\_\_\_ snips are used to cut sheet metals into various shapes.

- A. universal
- B. round
- C. bent
- D. straight

50. Soft solder is basically composed of \_\_\_\_ .

- A. antimony and zinc
- B. brass and copper
- C. bronze and lithium
- D. tin and lead

51. Types of soldering are \_\_\_\_ and \_\_\_\_ soldering.

- A. hydrous, anhydrous
- B. dry, wet
- C. soft, hard
- D. cold, hot

52. The types of metal lathes are \_\_\_\_ lathes.

- A. plain and screw cutting
- B. soft and hard type
- C. ferrous and non-ferrous
- D. cut clasp and panel



## TOPIC: YOU AND TECHNOLOGY

**DIRECTION:** Choose the correct answer from the lettered options.

1. This image is designed by the \_\_\_\_ .



- A. craftsman
- B. architect
- C. farmer
- D. artist

2. The \_\_\_\_ engineer is engaged in exploration, development and processing of oil and gas.

- A. computer
- B. petroleum
- C. civil
- D. nuclear

3. The \_\_\_\_ translates the abstract model of an into a set of architectural drawings.

- A. artisan
- B. architect
- C. mechanic
- D. draughtsman

4. The \_\_\_\_\_ engineer is engaged in development of farm machinery and implements.

- A. civil
- B. chemical
- C. agricultural
- D. nuclear

5. The diagram shows a \_\_\_\_\_ engineer at work.



- A. computer
- B. mechanical
- C. nuclear
- D. petroleum

6. The \_\_\_\_\_ carries out structural designs to make sure that infrastructures are well planned, designed and accurately constructed.

- A. estate manager
- B. quantity surveyor
- C. civil engineer
- D. draughtsman

7. The \_\_\_\_\_ engineer is a professional involved in oil and gas.

- A. web
- B. chemical
- C. civil
- D. computer

8. Which of the following is a professional involved in an aircraft?

- A. An aeronaut
- B. A surgeon
- C. An architect
- D. A draughtsman

9. The diagram shows a \_\_\_\_\_ engineer at work.



- A. computer
- B. nuclear
- C. chemical
- D. metallurgical

10. The \_\_\_\_ engineer is involved in automobile construction and designing.

- A. civil
- B. designer
- C. mechanical
- D. software

11. Technology involves technicians, scientists and \_\_\_\_ .

- A. lawyers
- B. artists
- C. politicians
- D. engineers

12. Which of the following is a technology related career?

- A. Animal husbandry
- B. Web technology
- C. Sewing and embroidery
- D. House keeping

13. The engineers put their knowledge of \_\_\_\_\_ in solving practical problems in a creative manner.

- A. science and mathematics
- B. aesthetics and landscapes
- C. chemicals and materials
- D. speech and languages

14. Professions in technology are involved with the development and \_\_\_\_\_ of technological products.

- A. production
- B. specialization
- C. privatization
- D. branding

15. The \_\_\_\_\_ engineer is engaged in design, development and of computer systems.

- A. civil
- B. petroleum
- C. chemical
- D. computer

16. The \_\_\_\_\_ engineer can work in an iron and steel industry.

- A. agricultural
- B. nuclear
- C. metallurgical
- D. aeronautical

17. Technology is a family of \_\_\_\_\_ .

- A. governments
- B. academics
- C. professions
- D. politics

18. The diagram shows \_\_\_\_ engineers at work.



- A. petroleum
- B. agricultural
- C. aeronautical
- D. civil

19. Which of the following is a professional involved in construction?

- A. An orthopedic
- B. A web designer
- C. An aeronaut
- D. A draughtsman

20. An aeronaut can work in a/an \_\_\_\_\_ .

- A. airline
- B. farm
- C. hospital
- D. bank

21. The \_\_\_\_\_ engineer is engaged in the generation, transmission and distribution of electric energy.

- A. electrical
- B. aeronautical
- C. chemical
- D. metallurgical

22. An electrical engineer can work in \_\_\_\_\_ .

- A. banks
- B. telecommunications
- C. farms
- D. sewage industries

23. The act of producing or introducing something new is known as \_\_\_\_\_ .

- A. establishment
- B. conception
- C. innovation
- D. production

24. The \_\_\_\_\_ produces theoretical models of buildings which are translated to a set of architectural drawings.

- A. entomologist
- B. aeronaut
- C. architect
- D. metallurgist

25. A graduate engineer is referred to as \_\_\_\_\_ engineer.

- A. pupil
- B. fresh
- C. baby
- D. student

26. Which of the following is NOT a step involved in becoming a professional engineer?

- A. Good grades in sciences and mathematics.
- B. Engineering courses in university.
- C. Gaining work experience in related field.
- D. Attending socio-economic seminars.

27. \_\_\_\_\_ is NOT a career in technology.

- A. Midwifery
- B. Web development
- C. Civil engineering
- D. Metallurgy



# ANSWERS

## TOPIC: APPLIED ELECTRICITY AND ELECTRONICS

**DIRECTION: Choose the correct answer from the lettered options.**

1. \_\_\_\_\_ are used to protect the hands during electrical wirings.

- A. Metal clips
- B. Hand gloves
- C. Masking tapes
- D. Table clothes

The correct answer is option [B]

2. A \_\_\_\_\_ is an example of a domestic electrical consumer.

- A. University
- B. home
- C. warehouse
- D. hospital

The correct answer is option [B]

3. Which of the following is an electrical wiring tool?

- A. Saw
- B. File
- C. Plier
- D. Pulley

The correct answer is option [C]

4. Socket outlets provide means of connecting to live, neutral and \_\_\_\_\_ terminals.

- A. negative
- B. positive
- C. earth
- D. static

The correct answer is option [C]

5. Electrical accessories are coated with protective substances in order to make them \_\_\_\_\_.

- A. resistant to pests and diseases
- B. waterproof in moist environments
- C. suitable for possible environmental hazards
- D. able to provide a complete pathway for current flow

The correct answer is option [C]

6. A potential difference (pd) of 15 volts is applied to a lamp of 125 ohms resistance. What current (I) will flow in the circuit?

- A. 0.15 Amps
- B. 0.12 Amps
- C. 10 Amps
- D. 1.2 Amps

The correct answer is option [B]

7. For household wirings, points of light are done in \_\_\_\_ .

- A. parallel
- B. spiral
- C. circuit
- D. groups

The correct answer is option [A]

8. \_\_\_\_\_ are wiring tools used for holding, cutting and joining cables.

- A. Pliers
- B. Hammer
- C. Cutter
- D. Screws

The correct answer is option [A]

9. Which is the odd one out?

- A.  $R=V/I$
- B.  $I=V/R$
- C.  $V=IR$
- D.  $I=R+V$

The correct answer is option [D]

10. Electricity consuming appliances are generally referred to as \_\_\_\_ .

- A. circuit regulators
- B. electronics
- C. electrical loads
- D. conducting items

The correct answer is option [C]

11. An electric circuit is a complete path through which \_\_\_\_\_ flows.

- A. magma
- B. voltage
- C. air
- D. current

The correct answer is option [D]

12. Which of the following is NOT an electrical accessory?

- A. Ceiling switches
- B. Joint boxes
- C. Lamp holder
- D. Light bulb

The correct answer is option [D]

13. Exposed conductors are covered with \_\_\_\_\_ to prevent electric shocks during and after electrical wirings.

- A. black sole tapes
- B. super glue
- C. emery cloths
- D. metal chips

The correct answer is option [A]

14. The summary estimation of schedules made for the wiring of a is called \_\_\_\_\_.

- A. Gross analysis
- B. bill of quantity
- C. estimation bill
- D. grand estimate

The correct answer is option [B]

15. Which of the following is NOT a safety regulation observed in house wiring?

- A. Ensure the continuity and durability of earthing system.
- B. Always use current conducting tools during wiring.
- C. Avoid working on live circuits.
- D. Avoid exposing current carrying conductors where insulators are expected.

The correct answer is option [B]

16. Which of the following is a safety regulation in house wiring?

- A. Use appropriate sizes, ratings and types of accessories.
- B. All single pole devices must not be connected in the live conductors of the supply.
- C. Plastic wires and cables can be used in place of copper wires.
- D. Observe the safety regulations given by NAFDAC.

The correct answer is option [A]

17. Which of the following is a component of an electric circuit?

- A. Battery
- B. Wood
- C. Mixer
- D. Glue

The correct answer is option [A]

18. Electric components used to regulate current in an electric circuit are known as \_\_\_\_\_ .

- A. adaptors
- B. switches
- C. controls
- D. batteries

The correct answer is option [C]

19. One of the ways by which the design and estimation of the cost of wiring a is carried out is by \_\_\_\_\_ .

- A. inspecting the for holes and punctures before wiring
- B. costing the heavier wirings first before the lighter ones
- C. making a rough sketch of the estimated price for designs
- D. selecting watertight fittings for wet and exposed areas

The correct answer is option [D]

20. Holes are made on walls with \_\_\_\_\_ to allow the passage of cables from one apartment to another during wiring.

- A. files
- B. drills
- C. punches
- D. screwdrivers

The correct answer is option [C]

21. \_\_\_\_\_ are used to determine the presence of current in a live wire.

- A. Detectors
- B. Testers
- C. Pliers
- D. Cables

The correct answer is option [B]

22. The \_\_\_\_\_ is the cable or wire used in connecting other components in an electric circuit.

- A. generator
- B. conductor
- C. load
- D. control

The correct answer is option [B]



23. The two electric circuits observed in simple electric wiring are \_\_\_\_\_ and \_\_\_\_\_ circuits.

- A. horizontal, vertical
- B. receiver, terminal
- C. current, voltage
- D. series, parallel

The correct answer is option [D]

24. \_\_\_\_\_ is the power source of an electric circuit.

- A. Resistor
- B. Switch
- C. Battery
- D. Fuse

The correct answer is option [C]

25. Which of the following is an electrical wiring material?

- A. Abrasive
- B. Sickle
- C. Knife
- D. Cable

The correct answer is option [D]

26. \_\_\_\_\_ are used to cut wires during electrical wirings.

- A. Knives
- B. Sickle
- C. Scissors
- D. Cutter

The correct answer is option [D]

27. A current ( $I$ ) of 0.5 A flows through a bulb of potential difference (pd), 10 volts. What will be the resistance ( $R$ ) of the bulb?

- A. 40 Ohms
- B. 75 Ohms
- C. 20 Ohms
- D. 18 Ohms

The correct answer is option [C]

28. Electrical accessories are rated for the \_\_\_\_\_ they are designed to withstand without undue overheating or failure.

- A. extreme heat
- B. maximum voltage
- C. minimum load
- D. extra elasticity

The correct answer is option [B]

29. A current ( $I$ ) of 0.75A flows in a circuit with resistance ( $R$ ), 20 ohms. Calculate the potential difference ( $Pd$ ) within the circuit.

- A. 15 volts
- B. 30 volts
- C. 25 volts
- D. 5 volts

The correct answer is option [A]

30. Household wiring starts from the \_\_\_\_\_ .

- A. meter
- B. joint boxes
- C. adaptors
- D. fuse boxes

The correct answer is option [A]

31. The two classes of electrical consumers are \_\_\_\_\_ and \_\_\_\_\_ consumers.

- A. domestic, industrial
- B. natural, artificial
- C. rural, urban
- D. living, non-living

The correct answer is option [A]

## TOPIC: BUILDING

**DIRECTION: Choose the correct answer from the lettered options.**

1. Which of the following is a characteristic of sandy soil?

- A. They are very compressible.
- B. They absorb and loose water easily.
- C. They support erosion and water logging.
- D. They can be easily worked on and cultivated.

The correct answer is option [B]

2. The bedroom is a major part of a \_\_\_\_\_.

- A. site preparation
- B. working drawing
- C. housing unit
- D. symbols

The correct answer is option [C]

3. This window type is known as \_\_\_\_\_ window.



- A. double glazed
- B. sliding
- C. basement
- D. semicircular headed

The correct answer is option [D]

4. Concrete floors can be made by mixing aggregate with sand and \_\_\_\_\_ .

- A. peat
- B. gravel
- C. cement
- D. water

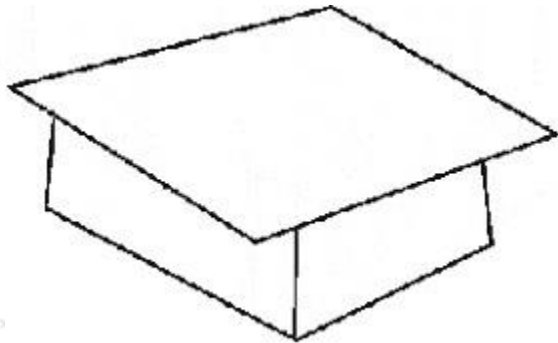
The correct answer is option [C]

5. Which of the following is a material for the making of wall ?

- A. Lead
- B. Cotton
- C. Stone
- D. Paper

The correct answer is option [C]

6. What kind of roof is this?



- A. Hip
- B. Gambrel
- C. Monitor
- D. Shed

The correct answer is option [D]

7. Which of the following pairs provide barrier to danger and protection of lives and properties?

- A. Doors and windows
- B. Foundation and floors
- C. Lintels and polythene sheets
- D. Curtains and furniture

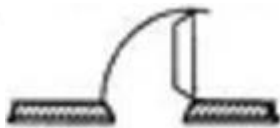
The correct answer is option [A]

8. The type of foundation used to transmit load through soft soil, streams and rivers is called \_\_\_\_\_ .

- A. rift
- B. pile
- C. raft
- D. pad

The correct answer is option [B]

9. The symbol represents a \_\_\_\_\_ in a plan.



- A. window
- B. door
- C. socket
- D. sink

The correct answer is option [B]

10. The \_\_\_\_\_ plan shows the drainage and sewage systems of the building.

- A. plumbing
- B. electrical
- C. floor
- D. domestic

The correct answer is option [A]

11. This equipment is used for \_\_\_\_\_ .



- A. ground levelling
- B. site preparation
- C. excavation purposes
- D. concrete mixing

The correct answer is option [D]

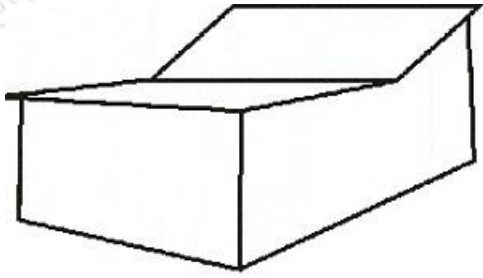
12. What is the name of this equipment?



- A. Tilting drum
- B. Mechanical mixer
- C. Tractor wheel
- D. Transmit mixer

The correct answer is option [A]

13. What kind of roof is this?



- A. Arched
- B. Marred
- C. Butterfly
- D. Pit

The correct answer is option [C]

14. Walls that do not support other loads except their own are called \_\_\_\_\_ walls.

- A. load supporting
- B. non-load bearing
- C. mono supporting
- D. compartmental

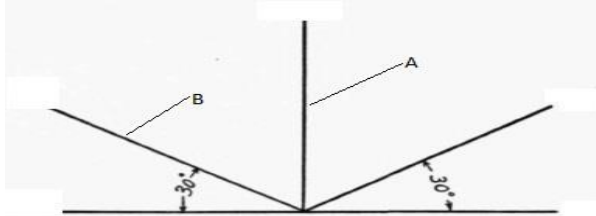
The correct answer is option [B]



## TOPIC: DRAWING PRACTICE

**DIRECTION:** Choose the correct answer from the lettered options.

1. The line marked A is called \_\_\_\_\_ line.



- A. vertical
- B. straight
- C. oblique
- D. centre

The correct answer is option [A]

2. There is \_\_\_\_\_ angle between axes in an isometric axes

- A. 45o
- B. 180o
- C. 90o
- D. 120o

The correct answer is option [D]

3. Principal views of orthographic projections are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ elevations.

- A. First, second, third
- B. vertical, horizontal, profile
- C. front, end, plan
- D. ground, visual, edge

The correct answer is option [C]

4. The two planes in orthographic projection intersect producing \_\_\_\_\_ quadrants.

- A. 2
- B. 4
- C. 3
- D. 5

The correct answer is option [B]

5. Orthographic drawing is most widely accepted because it shows the true shape, size and \_\_\_\_\_ of objects.

- A. face
- B. colour
- C. length
- D. angles

The correct answer is option [D]

6. An isometric drawing is constructed using a pair of \_\_\_\_\_.

- A. tee-squares
- B. scissors
- C. projectors
- D. set squares

The correct answer is option [D]

7. The main angles of an orthographic projection are \_\_\_\_ and \_\_\_\_ angle projections.

- A. First, third
- B. front, side
- C. vertical, horizontal
- D. visual, non-visual

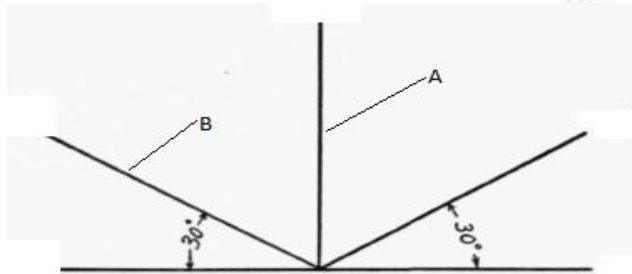
The correct answer is option [A]

8. \_\_\_\_\_ is a way of drawing an object by means of plane views.

- A. Isomeric axes
- B. Orthographic projection
- C. Oblique drawing
- D. Cavalier oblique

The correct answer is option [B]

9. The line marked B is called \_\_\_\_ line.



- A. vertical
- B. receding
- C. invisible
- D. oblique

The correct answer is option [B]

10. \_\_\_\_\_ drawing is most widely accepted for technical drawing.

- A. Oblique
- B. Isometric
- C. Orthographic
- D. Freehand

The correct answer is option [C]

11. Methods of oblique projection are \_\_\_\_\_ and \_\_\_\_\_ projections.

- A. tin, orbital
- B. twist, straight
- C. cavalier, cabinet
- D. surface, diagonal

The correct answer is option [C]

12. A pictorial drawing with one face parallel to the horizontal plane and the receding lines inclined at  $45^\circ$  to the horizontal plane is called \_\_\_\_\_ drawing.

- A. oblique
- B. isometric
- C. orthographic
- D. technical

The correct answer is option [A]

13. Isometric axes are made up of a vertical line and \_\_\_\_\_ receding lines.

- A. 3
- B. 4
- C. 2
- D. 1

The correct answer is option [C]

14. A pictorial drawing method which shows the 3 faces of an object together is called \_\_\_\_ drawing.

- A. parallel
- B. oblique
- C. isometric
- D. technical

The correct answer is option [C]

## TOPIC: ENERGY AND POWER

**DIRECTION: Choose the correct answer from the lettered options.**

1. \_\_\_\_ is used to reduce the wearing of metal surfaces.

- A. Water
- B. Lubricant
- C. Pads
- D. Chips

The correct answer is option [B]

2. Which of the following is a use of gears?

- A. They are used for changing the speed of rotation of connected shafts.
- B. They protect the internal engines of a rotor.
- C. They are used as tools for balancing during wheel alignment.
- D. They provide the machine with adequate room for air flow

The correct answer is option [A]

3. Which of the following is NOT an advantage of friction?

- A. Sharpening of knives and cutting stones
- B. Wear and tear of motor engines
- C. Designing and construction of motor-vehicle brakes
- D. Ability to walk or run without falling

The correct answer is option [B]

4. There are \_\_\_\_\_ kinds of belts and pulleys.

- A. 1
- B. 2
- C. 3
- D. 4

The correct answer is option [C] They are flat belt and pulley, variable belt and pulley, and vee belt and pulley

5. \_\_\_\_\_ helps us walk, run and ride bicycles without slipping or falling.

- A. Shoes
- B. Sand
- C. Friction
- D. Pressure

The correct answer is option [C]

6. The instrument for measuring atmospheric pressure is the \_\_\_\_\_ .

- A. thermometer
- B. anemometer
- C. barometer
- D. stereoscope

The correct answer is option [C]

7. Which of the following is a disadvantage of the belt drive?

- A. It can break if excess load is placed on it.
- B. It does not function in the presence of heat.
- C. It causes air pollution when running.
- D. It disallows the use of certain lubricants.

The correct answer is option [A]

8. Mathematically, pressure is represented as \_\_\_\_ .

- A.  $P = F / A$
- B.  $P = F \times A$
- C.  $P = A / F$
- D.  $P = F - A$

The correct answer is option [A]

9. The valve of a bicycle pump is referred to as a "non-return valve" because \_\_\_\_ .

- A. it allows for the passage of air into the tube only
- B. air passes in and out at the same time
- C. it allows for the passage of air in opposite directions
- D. it allows for the back passage of air into the pump

The correct answer is option [A]

10. Friction produces \_\_\_\_ .

- A. heat
- B. pressure
- C. moisture
- D. cold

The correct answer is option [A]

11. For fluids to flow out freely through a punched hole in a container, the pressure inside the container must be \_\_\_\_ .

- A. lower or equal to the external pressure of surrounding air
- B. equal to or greater than the external velocity of surrounding air
- C. lower than the external pressure of the surrounding air
- D. equal to or greater than the external pressure of surrounding air



The correct answer is option [D]

12. The unit of pressure is \_\_\_\_\_ .

- A. joule
- B. Pascal
- C. newton
- D. meter

The correct answer is option [B]

13. The three major constituent of air are \_\_\_\_\_ .

- A. nitrogen, hydrogen and oxygen
- B. hydrogen, helium and argon
- C. nitrogen, oxygen and other gases
- D. oxygen, hydrogen and other gases

The correct answer is option [C]

14. Which of the following machines make use of the belt and chain drive in its operation?

- A. Computer
- B. Blender
- C. Bicycle
- D. Cooker

The correct answer is option [C]

15. When air is heated, it \_\_\_\_\_ .

- A. expands and becomes less dense
- B. compresses and becomes more dense
- C. compresses and becomes less dense
- D. expands and becomes more dense

The correct answer is option [A]

16. Which of the following is a property of air?

- A. Hue
- B. Luster
- C. Elasticity
- D. Weight

The correct answer is option [D]

17. When air moves fast, \_\_\_\_\_ .

- A. space increases
- B. objects drop
- C. pressure drops
- D. weight increases

The correct answer is option [C]

18. All vehicle transmission systems utilize clutches between the engine cranshaft and the \_\_\_\_\_ .

- A. hand brake
- B. gear box
- C. lever pull
- D. brake pads

The correct answer is option [B]

19. \_\_\_\_\_ are used to control the motion of a vehicle.

- A. Pulleys
- B. Carburetors
- C. Brakes
- D. Gears

The correct answer is option [C]

20. Advantage of the chain drive over belt drive is that the chain drive can withstand \_\_\_\_\_ .

- A. extreme temperature
- B. high pressure
- C. excess lubrication
- D. extreme load

The correct answer is option [D]

21. We can reduce friction by \_\_\_\_\_ the surfaces concerned.

- A. watering
- B. cracking
- C. washing
- D. lubricating

The correct answer is option [D]

22. In which of the following activities is friction NOT involved?

- A. Walking
- B. Filing
- C. Sharpening
- D. Burning

The correct answer is option [D]

23. Human beings are able to withstand external air pressure because of \_\_\_\_\_ .

- A. weight of body clothes and accessories
- B. the internal pressure exerted by the blood
- C. internal weight exerted by the body organs
- D. internal and external microbial activities

The correct answer is option [B]

24. Which of the following does NOT represent a technological application of air?

- A. Airships
- B. Kite
- C. Vacuum cleaners
- D. Clock

The correct answer is option [D]

25. \_\_\_\_\_ is defined as the force per unit area.

- A. Speed
- B. Pressure
- C. Mass
- D. Velocity

The correct answer is option [B]

26. \_\_\_\_\_ is a disadvantage of friction.

- A. Wearing of metal surfaces
- B. Cracking of walls
- C. Slipping of metal surfaces
- D. Breaking of wooden objects

The correct answer is option [A]

27. \_\_\_\_\_ is a kind of belts and pulleys.

- A. Universal belt and pulley
- B. Vee belt and pulley
- C. Square belt and pulley
- D. Tee belt and pulley

The correct answer is option [B]

28. Which of the following is an example of a pneumatic device?

- A. Dentists' drill
- B. Bench vice
- C. Computer
- D. Screwdriver

The correct answer is option [A]

29. Which of the following is a type of lubricant used in reducing friction in metals?

- A. Herringbone
- B. Dusting powder
- C. Genteel gel
- D. Lanolin

The correct answer is option [D]

30. The pressure exerted by air at sea level is approximately \_\_\_\_\_ .

- A. 200kg/m<sup>2</sup>
- B. 500kj/m<sup>2</sup>
- C. 500kg/m<sup>2</sup>
- D. 200kj/m<sup>2</sup>

The correct answer is option [C]

31. Breathing is difficult as we go higher because of \_\_\_\_\_ .

- A. increase in air pressure
- B. decrease in body weight
- C. decrease in air pressure
- D. increase in body weight

The correct answer is option [C]

32. A gear is a drive mechanism used to transmit \_\_\_\_\_ power from one point to another.

- A. electrical
- B. nuclear
- C. mechanical
- D. solar

The correct answer is option [C]

33. Air has a density of \_\_\_\_\_ kg/m<sup>3</sup>

- A. 1.2
- B. 7.5
- C. 1.08
- D. 2.5

The correct answer is option [A]

34. Which of the following vices work on the same principle as the screw jack?

- A. The hacksaw
- B. The G-clamp
- C. Soldering bit
- D. Square file

The correct answer is option [B]

35. Moving gears must be lubricated with suitable oil to reduce \_\_\_\_\_ .

- A. tear
- B. burn
- C. burst
- D. pressure

The correct answer is option [A]

36. The types of friction brakes we have are \_\_\_\_\_ and \_\_\_\_\_ brakes.

- A. drum, disc
- B. stationary, rotating
- C. Powell, piston
- D. cable, lever

The correct answer is option [A]

37. We can increase the pressure of a constant mass of air by \_\_\_\_\_ .

- A. increasing the column of space occupied by air
- B. expanding the size of the container
- C. adding more columns to the available space
- D. decreasing the column of space that it occupies

The correct answer is option [D]

38. The \_\_\_\_\_ is a power implement operated by compressed air.

- A. power wrench
- B. compressed air machine
- C. electrical power tool
- D. pneumatic device

The correct answer is option [D]

39. A body is said to be in motion when it changes its position with\_\_\_\_\_.

- A. space
- B. time
- C. mass
- D. speed

The correct answer is option [B]



40. Air contains \_\_\_\_\_ .

- A. 50% Nitrogen and 50% Oxygen
- B. 78% Nitrogen, 21% Oxygen
- C. 21% Nitrogen, 78% Oxygen
- D. 20% Nitrogen, 80% Oxygen

The correct answer is option [B]

41. When two gears mesh, one is called the \_\_\_\_\_, while the other is called the \_\_\_\_\_ gear.

- A. rotator, rotating
- B. exhibitor, inhibitor
- C. rider, ridden
- D. driver, driven

The correct answer is option [D]

42. The inside of an aircraft is pressurized at high altitude because of \_\_\_\_\_ .

- A. reduced pressure on ground level
- B. increased pressure at high altitude
- C. reduced body weight at high altitude
- D. reduced pressure at high altitude

The correct answer is option [D]

43. Surrounding cold air pushes a hot-air balloon up because \_\_\_\_\_ .

- A. cold air is heavier than hot air
- B. cold air is lighter than hot air
- C. hot air travels faster than cold air
- D. hot air is heavier than cold air

The correct answer is option [A]

44. The motion of any machine can be described in terms of \_\_\_\_\_ motions.

- A. standard and classic
- B. front and rear
- C. pedal and push
- D. linear and pure rotary

The correct answer is option [D]

45. \_\_\_\_\_ exists as a force that tends to stop movement between any two surfaces which are moving over each other.

- A. Pulley
- B. Bearing
- C. Friction
- D. Grafting

The correct answer is option [C]

## TOPIC: MAINTENANCE

**DIRECTION: Choose the correct answer from the lettered options.**

1. The types of practices are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ maintenance.

- A. preventive, selective, protective
- B. predictive, preventive, corrective
- C. constructive, corrective, predictive
- D. corrective, selective, periodic

The correct answer is option [B]

2. Instruments used for fault detection are \_\_\_\_\_ and \_\_\_\_\_ .

- A. adhesives, rope
- B. drum sanders, files
- C. multimedia, dust blower
- D. theodolite, dumpy level

The correct answer is option [C]

3. Fault detection is also known as \_\_\_\_\_ .

- A. preventive
- B. corrective
- C. constructive
- D. predictive

The correct answer is option [B]

4. The carried out on an equipment even before the need arises is called \_\_\_\_\_ maintenance.

- A. corrective
- B. constructive
- C. predictive
- D. selective

The correct answer is option [C]

5. Which of these is used for measuring voltages and resistances across electronic components?



- A. A
- B. B
- C. C
- D. D

The correct answer is option [A]

6. \_\_\_\_\_ is an example of preventive maintenance.

- A. of new equipment
- B. Repair of broken down parts of equipment
- C. Replacement of worn out parts of equipment
- D. Frequent servicing of an equipment

The correct answer is option [D]

7. \_\_\_\_\_ is done to machine parts that rub against each other for effective performance.

- A. Overhauling
- B. Scrubbing
- C. Lubricating
- D. Washing

The correct answer is option [C]

8. \_\_\_\_\_ is repairing, replacing and fixing parts of an equipment when it breaks down.

- A. Fault detection
- B. Constructive
- C. Body activity
- D. Renovative work

The correct answer is option [A]

9. The repair work carried out on an equipment after it is broken down is known as \_\_\_\_\_ maintenance.

- A. corrective
- B. predictive
- C. periodic
- D. preventive

The correct answer is option [A]

10. Which of these is used for melting and applying solder on metals?



A. A

B. B

C. C

D. D

The correct answer is option [C]

11. Which of the following is NOT a practice?

A. Overhauling

B. Maintained

C. Lubricating

D. Cleaning

The correct answer is option [B]

12. Which equipment is used to remove screws that hold down electronic panels?



A. C

B. B

C. A

D. D

The correct answer is option [B]

13. What is the use of this equipment?



- A. Washing
- B. Cleaning
- C. Brushing
- D. Dusting

The correct answer is option [D] It is called a dust blower. It blows at high pressure when turned on and is used to remove dust from the surface of an electronic circuit panel.

14. Which of the following is an advantage of keeping a record of equipment?

- A. It helps in accessing the price of new products in the market.
- B. Equipment in bad condition can be sold off.
- C. Machines can be auctioned at high prices if well maintained.
- D. It helps in recollecting when last a activity was done on an equipment.

The correct answer is option [D]

15. The practice of maintaining equipment from time to time is known as \_\_\_\_\_ maintenance.

- A. periodic
- B. corrective
- C. selective
- D. primary

The correct answer is option [A]

## TOPIC: MATERIALS AND PROCESSING

**DIRECTION:** Choose the correct answer from the lettered options.

1. Timber is obtained from the \_\_\_\_\_ of trees.

- A. leaves and stems
- B. roots and twigs
- C. flowers and seeds
- D. trunk and branches

The correct answer is option [D]

2. Steel with carbon content above 0.8% is called \_\_\_\_\_ steel.

- A. hard
- B. mild
- C. core
- D. tool

The correct answer is option [D]

3. Articles made from clay are called \_\_\_\_\_ .

- A. blocks
- B. glass
- C. rubber
- D. ceramics

The correct answer is option [D]



4. Concave or convex curve along length of a plank is a wood defect called \_\_\_\_\_ .

- A. twist
- B. bow
- C. cup
- D. check

The correct answer is option [B]

5. \_\_\_\_\_ method is a way of making thermoplastics.

- A. Kiln
- B. Pinch
- C. Injection
- D. Plunger

The correct answer is option [A]

6. The diagram represents a \_\_\_\_\_ sawn wood.



- A. half
- B. rift
- C. plain
- D. quarter

The correct answer is option [C]

7. \_\_\_\_\_ is a piece of wood used for various domestic and industrial woodwork.

- A. Profile
- B. Board
- C. Timber
- D. Stake

The correct answer is option [C]

8. When wood is light in weight, it helps for easy \_\_\_\_\_ .

- A. polishing
- B. transporting
- C. preserving
- D. conversion

The correct answer is option [B]

9. \_\_\_\_\_ are removed from clay during preparation in order to prevent explosion of article.

- A. Water and stones
- B. Dust and pebbles
- C. Latex and chalk
- D. Air and sand

The correct answer is option [D]

10. Gilding metal is an alloy of \_\_\_\_\_ copper and \_\_\_\_ zinc.

- A. 90%, 10%
- B. 60%, 40%
- C. 50%, 50%
- D. 10%, 90%

The correct answer is option [A]

11. \_\_\_\_\_ is the process of reducing the moisture content in wood.

- A. Seasoning
- B. Heating
- C. Burning
- D. Jestig

The correct answer is option [A]

12. The process of splitting logs at the sawmill into marketable sizes is called \_\_\_\_\_.

- A. timber splitting
- B. wood conversion
- C. log processing
- D. wood sawing

The correct answer is option [B]

13. The strength of steel depends on the quantity of \_\_\_\_\_ it contains.

- A. air
- B. carbon
- C. water
- D. impurities

The correct answer is option [B]

14. The separation of wood along the grain of a board is a wood defect called \_\_\_\_\_ .

- A. cup
- B. heart
- C. star
- D. check

The correct answer is option [D]

15. Which of the following is an artificial wood defect?

- A. Star shake
- B. Twist
- C. Knot
- D. Cup shake

The correct answer is option [B]

16. The methods of making veneer are \_\_\_\_\_ methods.

- A. cutting and dredge
- B. hacking and scratching
- C. bracing and slashing
- D. rotary and slicing

The correct answer is option [D]

17. Brass is an alloy of \_\_\_\_\_.

- A. tin and silicon
- B. manganese and zinc
- C. magnesium and sulphur
- D. copper and zinc

The correct answer is option [D]

18. \_\_\_\_\_ is mainly used for kitchen furniture and paneling.

- A. Hardwood
- B. Plywood
- C. Clipboard
- D. Blackboard

The correct answer is option [C]

19. Which of the following is a natural wood defect?

- A. Heart shake
- B. Twist
- C. Check
- D. Bow

The correct answer is option [A]

20. The heating of metal ore to a liquid form is called \_\_\_\_\_ .

- A. casting
- B. smelting
- C. distillation
- D. extraction

The correct answer is option [B]

21. Bronze is an alloy of \_\_\_\_\_.

- A. zinc and sulphur
- B. aluminum and tin
- C. manganese and lead
- D. copper and tin

The correct answer is option [D]

22. The carbon content in pig iron escapes as \_\_\_\_\_ during wrought iron production.

- A. carbon (iv) oxide
- B. carbon (ii) oxide
- C. carbon (vi) oxide
- D. carbon (iii) oxide

The correct answer is option [B]

23. Chain and gates are products of \_\_\_\_\_ .

- A. mild steel
- B. aluminum
- C. zinc
- D. wrought iron

The correct answer is option [D]

24. A slice of sheet obtained from wood is called a \_\_\_\_\_ .

- A. profile
- B. board
- C. veneer
- D. stake

The correct answer is option [C]

25. A branch enclosed within a growing tree is a wood defect called \_\_\_\_\_ .

- A. knot
- B. check
- C. twist
- D. cup

The correct answer is option [A]

26. The methods of wood conversion are plain sawn and \_\_\_\_\_ .

- A. scale sawn
- B. half sawn
- C. quarter sawn
- D. full sawn

The correct answer is option [C]

27. The quantity of \_\_\_\_\_ in steel determines its strength.

- A. hydrogen
- B. lead
- C. carbon
- D. sodium

The correct answer is option [C]

28. Brass can be used for taps and pipes because of its high resistance to \_\_\_\_\_.

- A. heat
- B. pressure
- C. pests
- D. corrosion

The correct answer is option [D]

29. Concave curvatures across the face of timber is a wood defect known as \_\_\_\_\_.

- A. cup
- B. bow
- C. twist
- D. spiral

The correct answer is option [A]

30. \_\_\_\_\_ is produced by refining pig iron in furnace.

- A. Steel
- B. Cast iron
- C. Ceramic
- D. Brass

The correct answer is option [B]

31. Abnormal features in a tree which reduces its quality and market value are called \_\_\_\_\_ .

- A. blights
- B. spots
- C. abscess
- D. defects

The correct answer is option [D]



32. Steels with carbon content Between 0.05% to 0.15% are known as \_\_\_\_\_ steel.

- A. tool
- B. core
- C. mild
- D. medium

The correct answer is option [C]

33. Chemicals used to prevent pests from affecting wood are called \_\_\_\_\_ .

- A. stabilizers
- B. preservatives
- C. conservatives
- D. decomposers

The correct answer is option [B]

34. Cast iron is produced by burning pig iron and limestone in \_\_\_\_\_ .

- A. carbon monoxide
- B. magnesium fire
- C. sulfuric acid
- D. coke fire

The correct answer is option [D]

35. Synthetic rubber is produced from \_\_\_\_\_.

- A. mineral ore
- B. carbon black
- C. latex of rubber trees
- D. petroleum products

The correct answer is option [D]

36. Steel is made up of \_\_\_\_\_.

- A. iron and carbon
- B. coal and sulphur
- C. silica and tar
- D. tin and duralumin

The correct answer is option [A]

37. Manufactured wood have advantage over solid wood because \_\_\_\_\_.

- A. they are readily available in the southern regions.
- B. their growth is rapid and plenteous
- C. they do not check and warp like solid wood
- D. it is easier to sell them better than solid wood

The correct answer is option [C]

38. Steel with carbon content of 0.2% to 0.5% is known as \_\_\_\_\_ steel .

- A. mild
- B. core
- C. medium
- D. hard

The correct answer is option [C]

39. The \_\_\_\_\_ machine is an equipment used for cutting and shaping of wood.

- A. chain
- B. lathe
- C. theodolite
- D. reciprocating

The correct answer is option [B]

40. Production of ceramics involves clay preparation, molding and \_\_\_\_\_.

- A. casting
- B. blasting
- C. firing
- D. stretching

The correct answer is option [C]

41. Steel with carbon content between \_\_\_\_\_ are called mild steel.

- A. 0.8-1.0%
- B. 0.05-0.15%
- C. 0.25-0.75%
- D. 1.25-2.05%

The correct answer is option [B]

42. Metals can be produced from their ores through the processes of extraction, smelting and \_\_\_\_\_.

- A. casting
- B. flashing
- C. heating
- D. smoldering

The correct answer is option [A]

43. Timbers are found in the southern region of Nigeria because of \_\_\_\_\_.

- A. north-south wind
- B. heavy rainfalls
- C. harmattan
- D. dry vegetation

The correct answer is option [B]

44. Natural rubber is made from \_\_\_\_\_ of rubber trees.

- A. apex
- B. root
- C. latex
- D. trunk

The correct answer is option [C]

45. Which of the following is NOT a process of wood production?

- A. Furniture making
- B. Felling of trees
- C. Wood preservation
- D. Wood conversion

The correct answer is option [A]

46. In veneer making, logs are steamed before cutting to \_\_\_\_\_ the fibers.

- A. toughen
- B. soften
- C. break
- D. darken

The correct answer is option [B]

47. Woods are seasoned in order to make them \_\_\_\_\_ .

- A. stronger
- B. wider
- C. longer
- D. darker

The correct answer is option [A]

48. \_\_\_\_\_ is a specialized oven used for drying timber logs.

- A. Kiln
- B. Chimney
- C. Cache
- D. Hoard

The correct answer is option [A]

49. Spiral form of distortion along the length of a plank is a wood defect known as \_\_\_\_\_ .

- A. curve
- B. knot
- C. twist
- D. bow

The correct answer is option [C]

50. Steel with carbon content of \_\_\_\_\_ are known as medium steel.

- A. 0.05% to 0.75%
- B. 0.2% to 0.5%
- C. 0.5% to 1.0%
- D. 0.75% to 1.2%

The correct answer is option [B]

51. \_\_\_\_\_ is a board manufactured from wood chips.

- A. Hardboard
- B. Clipboard
- C. Plywood
- D. Blackboard

The correct answer is option [B]

52. Metals occur in combined states called \_\_\_\_\_ .

- A. metal alloys
- B. compounds
- C. impurities
- D. mineral ore

The correct answer is option [D]

53. \_\_\_\_\_ is made from mashed wood with hardeners and holding agents.

- A. Blackboard
- B. Plywood
- C. Laminated board
- D. Hardboard

The correct answer is option [D]

54. Steel with carbon content above \_\_\_\_\_ are known as tool steel.

- A. 0.8%
- B. 0.25%
- C. 1.5%
- D. 0.12%

The correct answer is option [A]

55. Wood preservatives are applied either by spraying or \_\_\_\_\_ .

- A. flaming
- B. painting
- C. brushing
- D. plastering

The correct answer is option [C]

56. Pests attack wood due to the presence of \_\_\_\_\_ in it.

- A. starch and glucose
- B. vitamins and minerals
- C. fats and oil
- D. sugar and water

The correct answer is option [A]

57. \_\_\_\_\_ is added to rubber products to make them stronger.

- A. Soot oil
- B. Carbon black
- C. Coal tar
- D. Natural fiber

The correct answer is option [B]

58. The methods of making clay are \_\_\_\_\_ and \_\_\_\_\_.

- A. pinch pot, potter's wheel
- B. induction furnace, cupola
- C. pudding furnace, fitters
- D. smelting, mortise

The correct answer is option [A]

59. Steels with carbon content above \_\_\_\_\_ can be hardened by heating.

- A. 2.5%
- B. 0.5%
- C. 0.8%
- D. 1.75%

The correct answer is option [C]

60. What is carbon black?

- A. Carbon in its pure form
- B. Incompletely burnt carbon
- C. Fine carbon got from wood and bones
- D. Carbon and its impurities

The correct answer is option [C]



61. \_\_\_\_\_ is a chemical used in wood preservation.

- A. Acephate
- B. Diazinum
- C. Methyl
- D. Creosote

The correct answer is option [D]

62. Duralumin is an alloy with \_\_\_\_\_ aluminums content.

- A. 60%
- B. 94.5%
- C. 55%
- D. 2.25%

The correct answer is option [B]

63. Which of the following is a reason why wood is preserved?

- A. Reduction of moisture content.
- B. Wood beautification.
- C. of colour.
- D. Increased resistance to pests.

The correct answer is option [D]

64. Examples of trees that produce timber are \_\_\_\_\_ trees.

- A. hemlock and pine
- B. spruce and fir
- C. pines and cedar
- D. mahogany and oak

The correct answer is option [D]

65. The thickness of veneer gotten from wood is of the range \_\_\_\_\_ .

- A. 0.5 to 3mm
- B. 0.25 to 5mm
- C. 1.05 to 3.50
- D. 2.25 to 4.25

The correct answer is option [A]

66. Wood seasoning is by \_\_\_\_\_ or \_\_\_\_\_ drying methods.

- A. fire, sun
- B. oven, fan
- C. air, kiln
- D. furnace, sun

The correct answer is option [C]

67. The difference between blackboard and plywood is that blackboard CANNOT be \_\_\_\_\_.

- A. bent
- B. preserved
- C. burnt
- D. felled

The correct answer is option [A]

68. Cast iron contains \_\_\_\_\_ of carbon.

- A. 5-10%
- B. 10-15%
- C. 2-5%
- D. 3-7%

The correct answer is option [C]

69. The cooling and solidifying of liquid metal with moulds is known as \_\_\_\_\_.

- A. molding
- B. grafting
- C. casting
- D. wrighting

The correct answer is option [C]

70. The first stage of metal production is the \_\_\_\_\_ stage.

- A. extraction
- B. smoldering
- C. blasting
- D. casting

The correct answer is option [A]

71. \_\_\_\_\_ are obtained when two or more metals are mixed .

- A. Mixtures
- B. Alloys
- C. Compounds
- D. Elements

The correct answer is option [B]

## TOPIC: TOOLS AND MACHINES

**DIRECTION: Choose the correct answer from the lettered options.**

1. What is the difference between a bench drill and a hand drill?

- A. The bench drill is for heavy woods while the hand drill is for light woods.
- B. The bench drill is fixed to the bench while the hand drill is not.
- C. The bench drill is electronic while the hand drill is manual.
- D. The bench drill is for large scale work while the hand drill is for small scale work.

The correct answer is option [B]

2. Joints used in joining two or more boards together in order to produce wider boards are called \_\_\_\_\_ joints.

- A. spectrum
- B. surface
- C. plain glued
- D. base

The correct answer is option [C]

3. The \_\_\_\_\_ machine is used for making holes.

- A. disc saw
- B. sanders
- C. fret saw
- D. hand drill

The correct answer is option [D]

4. Articles used for bonding two surfaces together are called \_\_\_\_\_ .

- A. tapes
- B. adhesives
- C. ropes
- D. bond fluids

The correct answer is option [B]

5. What is the name of this power tool?



- A. Fret saw
- B. Band saw
- C. Circular saw
- D. Hand saw

The correct answer is option [A]

6. What is the name of this power tool?



- A. Disc sanders
- B. Hand drill
- C. Jacksaw
- D. Thicknesser

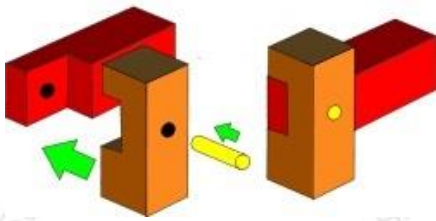
The correct answer is option [B]

7. Smoothing of woodwork with coated abrasives is known as \_\_\_\_\_ .

- A. levelling
- B. grading
- C. sanding
- D. brushing

The correct answer is option [C]

8. This diagram shows a \_\_\_\_\_ joint.



- A. plain tee
- B. tee halving
- C. corner halving
- D. plain lap

The correct answer is option [B]

9. \_\_\_\_\_ is the strongest form of joint in wood construction.

- A. Dovetail tee halving
- B. Chain and box
- C. Tongue and groove
- D. Mortise and tenon

The correct answer is option [D]

10. What is the name of this power tool?



- A. Sanders
- B. Fret saw
- C. Drum stick
- D. Hand drill

The correct answer is option [A]

11. \_\_\_\_\_ is a type of sanders used for smoothening in woodwork.

- A. Orbital sanders
- B. Reverse sanders
- C. Fret sanders
- D. Flat faced sanders

The correct answer is option [A]

12. The \_\_\_\_\_ joint is used where members cross each other and the faces of the pieces are flushed.

- A. cross halving
- B. chain parting
- C. plain glued
- D. chest cross

The correct answer is option [A]

13. Which of the following is a type of lock used in woodwork?

- A. Stock lock
- B. Lathe lock
- C. Spindle lock
- D. Wardrobe lock

The correct answer is option [D]

14. The \_\_\_\_\_ is used in making complex shapes and curves in plywood and veneers.

- A. flat drill
- B. belt sander
- C. fret-saw
- D. hacksaw

The correct answer is option [C]

15. This diagram shows a \_\_\_\_\_ joint.



- A. comb and box
- B. dovetail
- C. tee halving
- D. mortise and tenon

The correct answer is option [D]



16. A machine that shapes wood by turning it against a circular edge is called \_\_\_\_\_ .

- A. wood lathe
- B. circular drill
- C. planex jack
- D. bench plane

The correct answer is option [A]

17. The \_\_\_\_\_ joint is used for fixing shelves and partitioning.

- A. square
- B. corner
- C. pivot
- D. housed

The correct answer is option [D]

18. Which of the following is a halving joint?

- A. Angle-lap joint
- B. Cross joint
- C. Socket joint
- D. Tee joint

The correct answer is option [D]

19. Which of the following is a form of dovetail joint?

- A. Lapped dovetail
- B. Cross halving
- C. Tee bridle
- D. Plain glued

The correct answer is option [A]

20. Which of these is an abrasive of protein origin?

- A. Corundum
- B. Calcium carbonate
- C. Uric acid
- D. Blood albumin

The correct answer is option [D]

21. \_\_\_\_drill is a type of hand drill used in metal work.

- A. Flake
- B. Belt
- C. Circular
- D. Twist

The correct answer is option [D]

22. A part of woodwork that involves joining pieces of wood together to make furniture is called \_\_\_\_ .

- A. pivot
- B. joint
- C. edge
- D. fork

The correct answer is option [B]

23. Which of the following is a safety hint in the use of woodwork machines?

- A. Regular replacement of working tools with latest versions.
- B. Switching on machines with both feet wide apart.
- C. Regular oiling and greasing of bearings.
- D. Use of machines by the "trial and error" practice.

The correct answer is option [C]

24. The \_\_\_\_\_ joint is frequently referred to as open mortise and tenon.

- A. chain
- B. corner bridle
- C. tee dovetail
- D. rebuttet but

The correct answer is option [B]

25. \_\_\_\_\_ is a heavy machine used for smoothening in woodwork.

- A. Wood lathe
- B. Fret saw
- C. Monitor
- D. Jack plane

The correct answer is option [A]

26. What is this power tool used for?



- A. Cutting
- B. Drilling
- C. Smoothening
- D. Shaping

The correct answer is option [C]

27. What is the name of this machine?



- A. Circular saw
- B. Drum sanders
- C. Surface planner
- D. Wood lathe

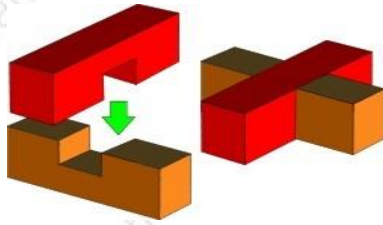
The correct answer is option [D]

28. In corner halving joint, the end and edge of pieces to be joined usually meet to form a/an \_\_\_\_\_ angle.

- A. right
- B. acute
- C. obtuse
- D. straight

The correct answer is option [A]

29. The diagram shows a \_\_\_\_\_ joint.



- A. dovetail
- B. tee halving
- C. cross halving
- D. plain face

The correct answer is option [C]

30. \_\_\_\_\_ is a type of nail used in woodwork.

- A. Tummel
- B. Groove
- C. Cut clasp
- D. Ring end

The correct answer is option [C]

31. \_\_\_\_\_ is a synthetic adhesive.

- A. Skin milk
- B. Resorcinol
- C. Soya bean
- D. Casein

The correct answer is option [B]

32. The \_\_\_\_\_ joint is used in the making of cheap furniture and carcasses for veneer work.

- A. corner
- B. half lap
- C. plain lap
- D. chain

The correct answer is option [C]

33. Abrasives of organic origin, solidified by chemical reaction and polymerization are called \_\_\_\_\_ .

- A. synthetic resins
- B. natural adhesives
- C. inorganic minerals
- D. casein

The correct answer is option [A]

34. Which of the following is NOT a material in woodwork?

- A. Abrasives
- B. Sanders
- C. Triode
- D. Nails

The correct answer is option [C]

35. Tools held in the hand and operated with electric current are called \_\_\_\_\_ tools.

- A. automatic
- B. portable power
- C. Manual
- D. electronic

The correct answer is option [B]

36. Joints used in cabinet work are classified into widening, framing and \_\_\_\_\_ joints.

- A. parallel
- B. box
- C. chain
- D. groove

The correct answer is option [B]

37. Which of the following is NOT a form of the mortise and tenon joint?

- A. Barefaced
- B. Hunched
- C. Groove
- D. Common

The correct answer is option [C]

## TOPIC: TOOLS AND PROCESSING

**DIRECTION:** Choose the correct answer from the lettered options.

1. Image B is a \_\_\_\_\_ tool.



- A. drilling
- B. boring
- C. cutting
- D. filing

The correct answer is option [D]

2. The \_\_\_\_\_ snips are used for cutting circular shapes and internal curves.

- A. round
- B. straight
- C. vice
- D. bent

The correct answer is option [D]

3. The \_\_\_\_\_ file is used for finishing squares and rectangular holes.

- A. square
- B. round
- C. curved
- D. hand

The correct answer is option [A]



4. \_\_\_\_\_ soldering is achieved when the solder melts below red heat.

- A. Hard
- B. Dry
- C. Hydrous
- D. Soft

The correct answer is option [D]

5. \_\_\_\_\_ Fluids are solutions of salt and other minerals in water.

- A. Aqueous
- B. Anhydrous
- C. Soluble
- D. Water-base

The correct answer is option [D]

6. \_\_\_\_\_ is a material used in soldering.

- A. Source of heat
- B. Hammer
- C. Jack plane
- D. Grease

The correct answer is option [A]

7. Image C is a \_\_\_\_ tool.



- A. drilling
- B. bending
- C. filing
- D. cutting

The correct answer is option [A]

8. \_\_\_\_ are mineral oils treated to form an emulsion when added to water.

- A. Emery fluids
- B. Water-base fluids
- C. Soluble oils
- D. Soft oils

The correct answer is option [C]

9. Cutting tools used in metal work include \_\_\_\_ .

- A. tin snips
- B. tin file
- C. tin saw
- D. tin bits

The correct answer is option [A]

10. The \_\_\_\_\_ is used for applying heat and soft solder to a metal.

- A. metal tinner
- B. hot tong
- C. Bunsen burner
- D. soldering bit

The correct answer is option [D]

11. The basic rule in soldering is that the melting point of solder being used must be \_\_\_\_\_ the melting point of metals being soldered.

- A. stronger than
- B. below
- C. same as
- D. above

The correct answer is option [B]

12. The tool that does the work of scissors in metal work is known as \_\_\_\_\_ .

- A. file
- B. knife
- C. shears
- D. tin snips

The correct answer is option [D]

13. Which of the following is NOT a whole making process?

- A. Punching
- B. Drilling
- C. Boring
- D. Filing

The correct answer is option [D]

14. \_\_\_\_\_ soldering is achieved when the solder melts at or above red heat.

- A. Hard
- B. Anhydrous
- C. Hot
- D. Liquid

The correct answer is option [A]

15. The \_\_\_\_ is used for bending or folding sheet metals usually at right angles.

- A. wire gauge
- B. bench vice
- C. folding bar
- D. tungsten rings

The correct answer is option [C]

16. Soldering is the process of joining metal surfaces by means of an alloy called \_\_\_\_\_ .

- A. bronze
- B. solder
- C. lead
- D. uranium

The correct answer is option [B]

17. The purpose of a wired edge in a metal sheet is to give it extra strength, safety and \_\_\_\_\_ .

- A. good appearance
- B. weight
- C. sharpness
- D. dimension

The correct answer is option [A]

18. Cutting fluids are used to \_\_\_\_\_ .

- A. protect tools against corrosion
- B. cut metals to a nice finish
- C. melt metals into fluids
- D. prevent ageing of metal tools

The correct answer is option [A]

19. If the wire diameter of a metal edge is 2mm, then the wiring allowance is \_\_\_\_\_. (Allowance = 2.5mm)

- A. 4.5mm
- B. 0.8mm
- C. 5mm
- D. 0.5mm

The correct answer is option [C]

20. An example of soft soldering is the soldering of \_\_\_\_\_ .

- A. wire terminals in TV sets
- B. metal tables
- C. iron gates
- D. wrought iron

The correct answer is option [A]

21. The \_\_\_\_ file is used for filing all kinds of flat surfaces.

- A. square
- B. round
- C. triangular
- D. flat

The correct answer is option [D]

22. The \_\_\_\_ solder is used for soldering plumbing joints.

- A. bench
- B. blow pipe
- C. tinsmith
- D. plumbers

The correct answer is option [D]

23. Care of files include \_\_\_\_\_.

- A. using new files on hard steel
- B. folding the file after use
- C. cleaning the teeth as soon as they are clogged
- D. storing them in moist environment

The correct answer is option [C]

24. What type of tin snip is this?



- A. Universal snip
- B. Bent snip
- C. Straight snip
- D. Lethal snip

The correct answer is option [C]

25. A machine tool is a machine that cuts \_\_\_\_\_ .

- A. ceramics
- B. metals
- C. wood
- D. bricks

The correct answer is option [B]

26. The \_\_\_\_ file is used for filing faces that are less than 90o.

- A. hand
- B. triangular
- C. round
- D. half round

The correct answer is option [B]

27. The first step to take in bending a sheet metal with a bench vice is to \_\_\_\_\_ .

- A. insert the metal piece to be bent between the vice jaws
- B. insert the vice jaw caps on both jaws of the vice
- C. bend the metal piece into any desired shape
- D. use a mallet to knock at the light gauge metals

The correct answer is option [B]

28. \_\_\_\_\_ is added to soft solder to provide strength and hardness.

- A. Tin
- B. Titanium
- C. Antimony
- D. Lead

The correct answer is option [C]

29. What type of tin snip is this?



- A. Straight snip
- B. Universal snip
- C. Lethal snip
- D. Bent snip

The correct answer is option [B]



30. Image D is a \_\_\_\_\_ tool.



- A. drilling
- B. bending
- C. cutting
- D. filling

The correct answer is option [B]

31. \_\_\_\_\_ is the production of conical shapes from a metal in which one end is bigger than the other.

- A. Wood sanding
- B. Metal sharpening
- C. Tread milling
- D. Taper turning

The correct answer is option [D]

32. Silica carbide is best suitable for grinding materials of low tensile strength such as \_\_\_\_\_.

- A. steel
- B. titanium
- C. Kevlar
- D. brass

The correct answer is option [D]

33. Abrasives used in metal working are \_\_\_\_\_ .

- A. aluminum oxide and silicon carbide
- B. calcium carbonate and silica
- C. aluminum hydroxide and pepsin
- D. calcium hydrogen phosphate and zeolite

The correct answer is option [A]

34. There are \_\_\_\_\_ major kinds of soft solder.

- A. 3
- B. 2
- C. 1
- D. 4

The correct answer is option [A]

They are tinsmith solder, blow-pipe solder and plumber's solder

35. Image A is a \_\_\_\_\_ tool.



- A. bending
- B. drilling
- C. cutting
- D. grafting

The correct answer is option [C]

36. The higher the proportion of tin a solder has, the \_\_\_\_\_ it is and the \_\_\_\_\_ its melting point.

- A. harder, lower
- B. softer, lower
- C. harder, higher
- D. softer, higher

The correct answer is option [B]

37. The higher the proportion of \_\_\_\_\_ a solder has, the harder the solder and the higher its melting point.

- A. tin
- B. antimony
- C. lead
- D. titanium

The correct answer is option [C]

38. There are \_\_\_\_\_ categories of files.

- A. 2
- B. 4
- C. 6
- D. 3

The correct answer is option [C]

They are flat, square, hand, round, triangular, and half-round files.

39. The bench vice is a \_\_\_\_\_ tool.

- A. cutting
- B. bending
- C. filing
- D. joining

The correct answer is option [B]

40. During surfacing, a \_\_\_\_\_ face is produced when the cutting tool moves parallel to the axis of rotation of the work piece.

- A. straight
- B. good
- C. plain
- D. rough

The correct answer is option [C]

41. Which of the following tool is used in achieving folded edge for a metal sheet?

- A. Hacksaw
- B. Hammer
- C. Tin snip
- D. Folding bar

The correct answer is option [D]

42. Which of the following is NOT a type of metalwork machine?

- A. Sharper and planer
- B. Drill press
- C. Fret-saw
- D. Metal lathe

The correct answer is option [C]

43. Which of the following pairs are ways of joining metal pieces together?

- A. Soldering and welding
- B. Screwing and tinning
- C. Knotting and tying
- D. Fastening and bolting

The correct answer is option [A]

44. Brazing is another name for \_\_\_\_\_ .

- A. cutting fluids
- B. hard soldering
- C. soldering bit
- D. tinning out

The correct answer is option [B]

45. The type of soldering to be used on a metal is determined by the \_\_\_\_\_ of the metal being joined.

- A. polarity
- B. colour
- C. nature
- D. length

The correct answer is option [C]

46. Coolants are divided into \_\_\_\_\_ main classes.

- A. 4
- B. 3
- C. 2
- D. 5

The correct answer is option [B]

They are soluble oils, straight oils and water-base fluids

47. Bending in sheet metalwork means \_\_\_\_\_ .

- A. changing an original metal shape into another
- B. causing the flat metal sheet to have curves or angles
- C. folding of sheet metal edges inward
- D. bending flat metal sheets into angles 60 and 90 respectively

The correct answer is option [B]

48. Which of the following is NOT a material used in soldering?

- A. Flux
- B. Nail
- C. Furnace
- D. File

The correct answer is option [B]

49. The \_\_\_\_ snips are used to cut sheet metals into various shapes.

- A. universal
- B. round
- C. bent
- D. straight

The correct answer is option [A]

50. Soft solder is basically composed of \_\_\_\_ .

- A. antimony and zinc
- B. brass and copper
- C. bronze and lithium
- D. tin and lead

The correct answer is option [D]

51. Types of soldering are \_\_\_\_ and \_\_\_\_ soldering.

- A. hydrous, anhydrous
- B. dry, wet
- C. soft, hard
- D. cold, hot

The correct answer is option [C]

52. The types of metal lathes are \_\_\_\_ lathes.

- A. plain and screw cutting
- B. soft and hard type
- C. ferrous and non-ferrous
- D. cut clasp and panel

The correct answer is option [A]

## TOPIC: YOU AND TECHNOLOGY

**DIRECTION:** Choose the correct answer from the lettered options.

1. This image is designed by the \_\_\_\_ .



- A. craftsman
- B. architect
- C. farmer
- D. artist

The correct answer is option [B]

2. The \_\_\_\_\_ engineer is engaged in exploration, development and processing of oil and gas.

- A. computer
- B. petroleum
- C. civil
- D. nuclear

The correct answer is option [B]



3. The \_\_\_\_\_ translates the abstract model of an into a set of architectural drawings.

- A. artisan
- B. architect
- C. mechanic
- D. draughtsman

The correct answer is option [D]

4. The \_\_\_\_\_ engineer is engaged in development of farm machinery and implements.

- A. civil
- B. chemical
- C. agricultural
- D. nuclear

The correct answer is option [C]

5. The diagram shows a \_\_\_\_\_ engineer at work.



- A. computer
- B. mechanical
- C. nuclear
- D. petroleum

The correct answer is option [A]

6. The \_\_\_\_\_ carries out structural designs to make sure that infrastructures are well planned, designed and accurately constructed.

- A. estate manager
- B. quantity surveyor
- C. civil engineer
- D. draughtsman

The correct answer is option [C]

7. The \_\_\_\_\_ engineer is a professional involved in oil and gas.

- A. web
- B. chemical
- C. civil
- D. computer

The correct answer is option [B]

8. Which of the following is a professional involved in an aircraft?

- A. An aeronaut
- B. A surgeon
- C. An architect
- D. A draughtsman

The correct answer is option [A]

9. The diagram shows a \_\_\_\_\_ engineer at work.



- A. computer
- B. nuclear
- C. chemical
- D. metallurgical

The correct answer is option [D]

10. The \_\_\_\_\_ engineer is involved in automobile construction and designing.

- A. civil
- B. designer
- C. mechanical
- D. software

The correct answer is option [C]

11. Technology involves technicians, scientists and \_\_\_\_\_ .

- A. lawyers
- B. artists
- C. politicians
- D. engineers

The correct answer is option [D]

12. Which of the following is a technology related career?

- A. Animal husbandry
- B. Web technology
- C. Sewing and embroidery
- D. House keeping

The correct answer is option [B]

13. The engineers put their knowledge of \_\_\_\_\_ in solving practical problems in a creative manner.

- A. science and mathematics
- B. aesthetics and landscapes
- C. chemicals and materials
- D. speech and languages

The correct answer is option [A]

14. Professions in technology are involved with the development and \_\_\_\_\_ of technological products.

- A. production
- B. specialization
- C. privatization
- D. branding

The correct answer is option [A]

15. The \_\_\_\_\_ engineer is engaged in design, development and of computer systems.

- A. civil
- B. petroleum
- C. chemical
- D. computer

The correct answer is option [D]

16. The \_\_\_\_\_ engineer can work in an iron and steel industry.

- A. agricultural
- B. nuclear
- C. metallurgical
- D. aeronautical

The correct answer is option [C]

17. Technology is a family of \_\_\_\_\_ .

- A. governments
- B. academics
- C. professions
- D. politics

The correct answer is option [C]

18. The diagram shows \_\_\_\_ engineers at work.



- A. petroleum
- B. agricultural
- C. aeronautical
- D. civil

The correct answer is option [C]

19. Which of the following is a professional involved in construction?

- A. An orthopedic
- B. A web designer
- C. An aeronaut
- D. A draughtsman

The correct answer is option [D]

20. An aeronaut can work in a/an \_\_\_\_\_ .

- A. airline
- B. farm
- C. hospital
- D. bank

The correct answer is option [A]

21. The \_\_\_\_\_ engineer is engaged in the generation, transmission and distribution of electric energy.

- A. electrical
- B. aeronautical
- C. chemical
- D. metallurgical

The correct answer is option [A]

22. An electrical engineer can work in \_\_\_\_\_ .

- A. banks
- B. telecommunications
- C. farms
- D. sewage industries

The correct answer is option [B]

23. The act of producing or introducing something new is known as \_\_\_\_\_ .

- A. establishment
- B. conception
- C. innovation
- D. production

The correct answer is option [C]

24. The \_\_\_\_\_ produces theoretical models of buildings which are translated to a set of architectural drawings.

- A. entomologist
- B. aeronaut
- C. architect
- D. metallurgist

The correct answer is option [C]

25. A graduate engineer is referred to as \_\_\_\_\_ engineer.

- A. pupil
- B. fresh
- C. baby
- D. student

The correct answer is option [A]

26. Which of the following is NOT a step involved in becoming a professional engineer?

- A. Good grades in sciences and mathematics.
- B. Engineering courses in university.
- C. Gaining work experience in related field.
- D. Attending socio-economic seminars.

The correct answer is option [D]

27. \_\_\_\_\_ is NOT a career in technology.

- A. Midwifery
- B. Web development
- C. Civil engineering
- D. Metallurgy

The correct answer is option [A]



