

Answer **all** the questions.

Each question is followed by four options lettered **A** to **D**. Find the **correct** option for **each** question and shade in **pencil** on your answer sheet the space which bears the same letter as the option you have chosen. Give only **one** answer to **each** question. An example is given below.

Which of the following substances is **not** an element?

- A. Aluminium
- B. Ammonia
- C. Oxygen
- D. Sodium

The correct answer is Ammonia, which is lettered **B** and therefore answer space **B** would be shaded.

A

B

C

D

E

Think carefully before you shade the answer spaces. Erase completely any answer you wish to change.

Do all rough work on this question paper.

Now answer the following questions.

1. The energy transformation that takes place in a solar cell is
 - A. light to chemical.
 - B. light to electrical.
 - C. electrical to heat.
 - D. electrical to light.
2. All flowering plants end their life cycle with
 - A. seed formation.
 - B. seed development.
 - C. seed dispersal.
 - D. seed germination.
3. *Soil texture* is a term used to describe the
 - A. amount of water soil can hold.
 - B. arrangement of soil particles in a given soil.
 - C. proportion of sand, silt and clay in a sample of soil.
 - D. mixture of all soil particles.
4. Which of the following processes is an example of a physical change?
 - A. Fermentation of food
 - B. Respiration
 - C. Magnetization of iron
 - D. Lighting a match

5. An example of a storage pest is
- yam beetle.
 - capsid.
 - army worm.
 - weevil.
6. The solid component found on the filter paper and the liquid component that flows into a container during filtration are respectively called
- filtrate and residue.
 - condensate and residue.
 - residue and filtrate.
 - residue and condensate.
7. A capacitor is connected in a series circuit with LED, a battery and a switch. When the circuit is closed, the LED
- comes on and stays on.
 - flashes and goes off.
 - does not come on.
 - flashes and stays on.
8. The ion that causes hardness in water is
- CO_3^{2-} .
 - Mg^{2+} .
 - Na^+ .
 - OH^- .
9. Which of the following substances are matter?
- Hydrogen
 - Air
 - Stone
- I and II only
 - I and III only
 - II and III only
 - I, II and III
10. The main reason for staking tomato is to ensure
- bigger fruit development.
 - air circulation on the farm.
 - upright growth of the plant.
 - that fruits do not get rotten.
11. Which of the following statements about clayey soil is **not** true? It
- swells when dry and shrinks when wet.
 - has high water retention.
 - is difficult to plough when dry.
 - is compact when dry.
12. It is **not** advisable to use old electrical gadgets because they
- are not efficient.
 - are dangerous.
 - produce sparks.
 - waste energy.
13. Which of the following planets are closer to the sun than the Earth?
- Venus and Mars
 - Venus and Mercury
 - Mercury and Mars
 - Venus and Saturn

14. Which of the following statements about pressure in liquids is /are **correct**?

- I. Pressure in liquids at the same level acts equally in all directions.
- II. Pressure in liquids depend on the area of the liquid.
- III. Pressure in liquids decreases with depth.

- A. I only
- B. II only
- C. I and III only
- D. I, II and III

15. Soil depletion is **not** caused by

- A. erosion.
- B. afforestation.
- C. leaching.
- D. illegal mining.

16. What force makes a ripe mango to fall from a tree?

- A. Force of tension
- B. Magnetic force
- C. Electrostatic force
- D. Gravitational force

17. Urea is a good source of

- A. phosphorus in the soil.
- B. calcium in the soil.
- C. sodium in the soil.
- D. nitrogen in the soil.

18. Which of the following statements are reasons for conserving energy?

- I. Insufficient production of energy
- II. Increasing demand of energy
- III. Limiting production of carbon (IV) oxide

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

19. A force meter measures

- A. mass.
- B. temperature.
- C. weight.
- D. work.

20. Which of the following bodies are **natural** sources of light?

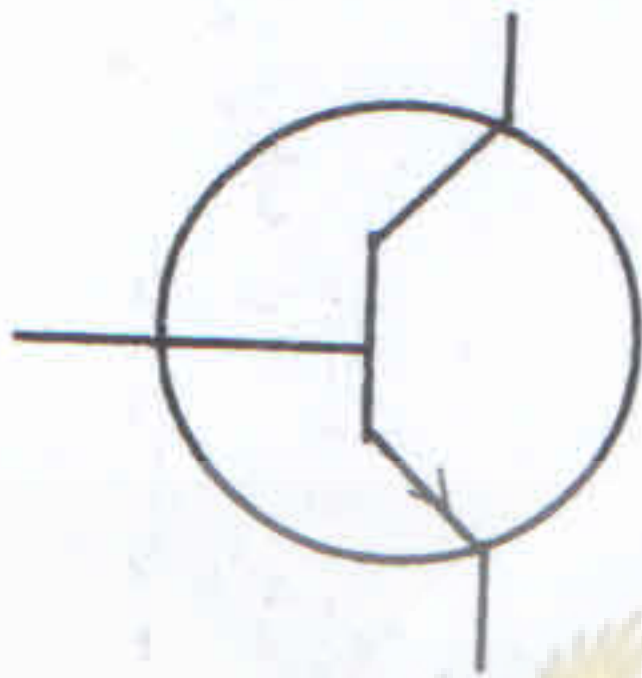
- I. Moon
- II. Sun
- III. Glow Worm

- A. I and II only
- B. I and III only
- C. II and III only
- D. I, II and III

21. Which of the following characteristics is/are of the image formed in a pinhole camera? The image is
- inverted.
 - virtual.
 - diminished.
- I only
 - II and III only
 - I and III only
 - I, II and III
22. The floor of a room has length 20 m and breadth 15 m. Determine the area of the floor.
- 35 m^2
 - 200 m^2
 - 250 m^2
 - 300 m^2
23. Rainfall is as a result of
- low pressure.
 - strong wind.
 - cold wind.
 - low humidity.
24. An example of a first class lever is
- bottle opener.
 - crow bar.
 - wheel barrow.
 - fishing rod.
25. Green plants have the ability to make their own food hence they are known as
- producers.
 - parasites.
 - consumers.
 - decomposers.
26. The periodic table is an arrangement of elements according to increasing
- atomic number.
 - mass number.
 - nucleon number.
 - neutron number.
27. The number required to make the following chemical equation balanced is:
- $$\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$$
- $\frac{1}{2}$.
 - 1.
 - $\frac{1}{3}$.
 - 3.

28. The ovary, style and stigma are collectively known as the
- stamen.
 - pistil.
 - fruit.
 - stem.
29. A mixture of alcohol and water can **best** be separated by
- filtration.
 - condensation.
 - distillation.
 - evaporation.
30. An atom ${}_{11}^{23}\text{X}$ forms bond by losing one electron, the charge on the ion formed is
- 1.
 - 2.
 - +1.
 - +2.
31. The hard outer surface of a tooth is called
- root.
 - dentine.
 - cement.
 - enamel.
32. People who travel in space are called
- geologists.
 - astronauts.
 - space shuttlers.
 - astronomist.
33. The practice of growing cowpea and maize on a piece of land at the same time is known as
- mixed farming.
 - mixed cropping.
 - land rotation.
 - crop rotation.
34. A lunar eclipse may occur when the
- moon is between the earth and the sun.
 - sun is between the earth and the moon.
 - earth is between the sun and the moon.
 - moon is positioned far away from the earth.
35. Which of the following instruments can be used to measure the diameter of a circle?
- A metre- rule
 - A thermometer
 - An ammeter
 - A string

36. When gases are heated they
- melt.
 - sublime
 - decrease in volume.
 - decrease in intermolecular forces
37. The shoot system of a flowering plant develops from the
- radicle.
 - plumule.
 - cotyledon.
 - endosperm.
38. The diagram below is an illustration of a transistor.



The arrow shows the direction of:

- electron movement.
 - hole movement.
 - electron and hole movement.
 - negative charge movement.
39. Digestion of protein begins in the stomach and ends in the
- large intestine.
 - small intestine.
 - appendix.
 - caecum.
40. Which of the following substances is a compound?
- Copper
 - Diamond
 - Sucrose
 - Sulphur

END OF PAPER