

**OBJECTIVE TEST**

**1 hour**

1. The S.I. unit for measuring the work done by a force is
  - A. J.
  - B. K.
  - C. N.
  - D. W.
  
2. The chemical formula of a compound describes the
  - A. number of molecules in the compound
  - B. type of bonding in the compound
  - C. ratio in which the elements are combined
  - D. state of the compound
  
3. Which of the following life processes is represented by the equation  
Glucose + oxygen  $\rightarrow$  carbon dioxide + water + energy
  - A. Digestion
  - B. Excretion
  - C. Photosynthesis
  - D. Respiration
  
4. Each layer of soil profile is known as
  - A. horizon
  - B. litter
  - C. regolith
  - D. solum
  
5. When the p-n junction of a transistor is reverse biased
  - A. current flows from the p-type to the n-type
  - B. no current flows from the p-type to the n-type
  - C. conduction of current occurs
  - D. current flows from the n-type to the p-type
  
6. When a solid-liquid mixture is filtered, the liquid that separates out into the container is called
  - A. filtrate
  - B. residue
  - C. sediment
  - D. solution

7. Which of the following processes involves the solid state of matter?

- A. Boiling
- B. Condensation
- C. Evaporation
- D. Melting

8. Which of the following farming systems is most effective in maintaining soil fertility?

- A. Crop rotation
- B. Land rotation
- C. Mixed cropping
- D. Monoculture

9. The disease in humans which is associated with insufficient intake of calcium is

- A. goiter
- B. kwashiorkor
- C. rickets
- D. scurvy

10. The arrow in the circuit symbol of either n-p-n or p-n-p transistor is always on the

- A. base lead
- B. collector lead
- C. emitter lead
- D. receiver lead

11. Which of the following insect pests of crops has piercing and sucking mouthparts?

- A. Aphids
- B. Grasshoppers
- C. Stem borers
- D. Termites

12. A reflex action involves the

- A. brain and muscles
- B. brain and nerves
- C. spinal cord and muscles
- D. spinal cord and nerves

13. The type of image formed in a plane mirror is always

- A. diminished
- B. enlarged
- C. real
- D. virtual

14. Which of the following statements about acids are correct?

- I. They turn red litmus paper blue
  - II. They can be classified as either organic or mineral acids
  - III. They can be neutralized by bases
- A. I and II only
  - B. I and III only
  - C. II and III only
  - D. I, II and III

15. A transistor is said to operate in an active region when

- A. one p-n junction is forward biased and the other is reversed biased
- B. base-emitter junctions are reversed biased
- C. both p-n junctions are reversed biased
- D. base-collector junction is forward biased

16. Tuberculosis is spread

- A. through eating of contaminated food
- B. when an infected person coughs openly into the air
- C. through shaking of hands of infected persons
- D. through sharing of contaminated syringes

17. One function of engine oil in the engine of a tractor is to

- A. warm the engine
- B. enhance air intake
- C. ensure proper mixing of fuel
- D. lubricate the engine parts

18. Black pod is a disease of

- A. cocoa
- B. coffee
- C. guava
- D. mango

19. The efficiency of a machine is always less than 100% because part of the energy input is used to

- A. stop the machine after working
- B. perform useful work on the load
- C. overcome friction
- D. lift the machine up

20. Which of the following electronic components are used to produce oscillator circuits?

- I. Transistor
- II. Inductor
- III. Capacitor

- 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 sources of light is natural?

- A. Filament bulb
- B. Fluorescent tube
- C. Glow worm
- D. Fire cracker

22. Which of the following substances are carried by the blood?

- I. Hormones
- II. Urine
- III. Oxygen
- IV. Carbon dioxide

23. The practice of starting new organization in response to identified opportunities is termed

- A. agribusiness
- B. business enterprise
- C. entrepreneurship
- D. management

24. The sub-atomic particle with zero charge in the nucleus of an atom is called

- A. electron
- B. ion
- C. neutron
- D. proton

25. Which of the following management practices greatly helps in record keeping?

- A. Culling
- B. Debeaking
- C. Dehorning
- D. Identification

26. In the pin-hole camera, when the size of the pin-hole is increased, the image formed is

- A. blurred
- B. erect
- C. magnified
- D. virtual

27. Non-reactive metals are preferred in making ornaments and jewellery because they

- A. are attractive
- B. do not react with atmospheric oxygen
- C. do not retain their lustre
- D. are corrosive

28. Producers in an ecosystem are plants that

- A. attract insects
- B. feed on other plants
- C. manufacture their own food
- D. trap insects

29. The use of resistant varieties of crop in controlling diseases is described as

- A. biological control method
- B. chemical control method
- C. cultural control method
- D. physical control method

30. The chemical formula for aluminium oxide is represented as  $Al_xO_y$ . The values of x and y are

respectively

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

31. In electrical circuits, the component that protects appliances against very high currents is the

- A. capacitor
- B. fuse
- C. resistor
- D. switch

32. One benefit of technology to industrialization is

- A. environmental pollution
- B. reduction in skilful labour
- C. provision of machinery
- D. increase in cost of production of goods

33. Which of the following factors contribute to early parenthood?

- I. Poverty
- II. Illiteracy
- III. Lack of parental care
- IV. Peer pressure

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

34. Which of the following examples of fertilizers improves soil texture?

- A. Compost
- B. NPK
- C. Sulphate of ammonia
- D. Urea

35. The reaction between hydrochloric acid and sodium hydroxide produces

- A. sodium oxide only
- B. sodium chloride only
- C. sodium oxide and water
- D. sodium chloride and water

36. In modern electrical wirings the colour code for the live wire is

- A. blue
- B. brown
- C. green
- D. green and yellow

37. An example of soil minor nutrient is

- A. calcium
- B. iron
- C. nitrogen
- D. phosphorus

38. The complete development of a human foetus in the womb normally takes

- A. 7 months
- B. 8 months
- C. 9 months
- D. 10 months

39. A material that allows a small amount of light energy to pass through it but cannot be seen through is referred to as

- A. opaque
- B. reflective
- C. translucent
- D. transparent

40. The leads of the transistor responsible for activation is the

A. amplifier

B. base

C. collector

D. emitter