ZIAUDDIN UNIVERSITY
EXAMINATION BOARD

CLASS X (GENERAL SCIENCE)
SECTION A
MULTIPLE CHOICE QUESTIONS
Total Marks:100
Time:2 Hours

Each question carries 1.5 marks. (Total 48 marks)

1. An instrument used for measuring current, potential difference and resistance at the same time is called

a) Ammeter
b) Barometer
c) Voltmeter
d) Ohmmeter

2. Energy is defined as

a) Force
b) Work
c) Fuel
d) Ability of a body to do work

3. A fuse is used in electrical appliances to save the

a) Power
b) Circuit
c) Current
d) Voltage

4. Which of the following states the law of conservation of energy?

a) Energy can be created and destroyed
b) Energy cannot be created nor destroyed
c) Energy can be created but not destroyed
d) Energy cannot be created but it can be destroyed

5. The unit of Capacity is known as:

a) Coulomb
b) Volt
c) Ohm
d) Farad

6. All of the following are the examples of renewable source of energy EXCEPT

a) Solar energy
b) Wind energy
c) Nuclear energy
d) Geothermal energy

7. Which one is connected in series with the live wire in the electric circuit of a house?

a) Galvanometer
b) Voltmeter
c) Fuse
d) Ammeter

8. A p-type substance is formed when a semiconductor crystal is doped with a ___ element.

a) Trivalent
b) Tetravalent
c) Pentavalent
d) None of the above

9. During which century many advances were made in different fields of science.

a) 17th
b) 18th
c) 19th
d) 20th

10. Which of the following was the first artificial satellite sent into the space by Pakistan?

a) Sina -1
b) Badr- 1
c) Sputnik-1
d) Red-east-1

11. National science council of Pakistan was setup in

a) 1962
b) 1964
c) 1979
d) 1954

12. When a ball is dropped from a height, its potential energy changes into10

a) Heat energy
b) Sound energy
c) Kinetic energy
d) Chemical energy

13. While making an electric circuit if the resistance is decreased, then (AC) alternating current is not used in a/an10

a) Torch
b) Heater
c) Room cooler
d) Air conditioner

14. The instrument that is used to measure the amount of current, voltage and resistance in a/an electric circuit is:

a) Ammeter
b) Voltmeter
c) Ohmmeter
d) Multimeter

15. Atmosphere extends above the earth up to a distance of:

a) 65Km
b) 650Km
c) 6500Km
d) 605Km

16. Charge carriers in p-type material are

a) Holes

b) Neutrons

c) Electrons

d) Alpha particles

17. Radio waves are used for

a) Therapy

b) Scanning

c) Diagnosis

d) Communication

18. X-rays cannot pass through

a) Iron

b) Nylon

c) Clothes

d) Plastics

19. All of the following are used in vehicles in place of petroleum EXCEPT

a) Natural gas

b) Solar Energy

c) Electric power

d) Nuclear energy

20. Which of the following modern methods of medical diagnosis is effective in diagnosing kidney stones?

a) E.C.G

b) E.T.T

c) C.T scans

d) Ultrasound

21. The first artificial satellite was sent in to space by
a) China
b) Russia
c) America
d) Germany

22. Which of the following materials provides the highest resistance in the flow of current?
a) Insulators
b) Conductors
c) Semi-conductors
d) Super-conductors

23. Damaged insulation of electric wires can cause
a) Overheating.
b) Overloading.
c) Short circuit.
d) High voltage.

24. The sun's rays carry
a) Radiant energy.
b) Chemical energy.
c) bio-mass energy.
d) Mechanical energy.

25. The energy possessed by a body at some height is called
a) Elastic energy.
b) Kinetic energy.
c) Chemical energy.
d) Potential energy.
26. Radio-wave is a type of radiation which belongs to the
a) Light spectrum.
b) Mass spectrum.
c) Energy spectrum.
d) Electromagnetic spectrum.
27. Which of the following artificial satellites, placed directly over the equator, revolves in the same direction as on the earth?
a) Astronomical satellite
b) Geostationary Satellite
c) Remote sensing satellite
d) Space exploration satellite
28. The absolute source of energy for a living body is
a) Healthy food.
b) Regular exercise.
c) Timely medication.
d) Daily vitamin intake.
29. The total number of charges passing through a conductor in one second is called
a) current.
b) Voltage.
c) Resistance.
d) Capacitance.
30. A resistor is an electrical device which is used to
a) Store charges in an appliance.
b) Increase voltage in the circuit.
c) Maintain the flow of current in the circuit.
d) Provide opposition in the flow of current in an appliance.
31. Pakistan established many nuclear power plants to
a) Purify sea water.
b) Produce electricity.
c) Make nuclear weapons.
d) Diagnose genetic diseases.
32. The first artificial satellite, Badr-I, was sent into space to
a) Locate gold reservoirs.
b) Enhance digital communication.
c) Calculate the real land field area.
d) Note the variation in temperature.

SECTION B

Each question carries four marks. (Attempt any seven)

Q1: "Internet is a tool for exchanging information globally"
List any four uses of internet.
Q2: Describe salient Feature of Pakistan's space Programme?
Q3: Energy crisis is one of the major problems of our country nowadays. Energy conservation is one of the solutions to overcome these crises.
Write ways in which energy can be conserved.
Q4: Define open circuit and close circuit. Construct a labeled diagram of series circuit.
Q5: Write a short note on conservation of wild life.
Q6: Write any two differences between Alternating current (A.C) and Direct current (D.C).
Q7: Mention any four renewable energy resources.
Q8: List any two uses of nuclear energy in health sector.
Q9: Define Ohms Law and voltage.

SECTION C

Each question carries 11 marks. (Attempt any two)

Q1: A) Laser light is used to display shapes in space. It also has many other applications in today's world. Explain any five applications of laser light.
B) Write any three uses of X-rays.
C) Define Ultrasound and Angiography.
Q2: A) Differentiate between p-type and n-type substances and also explain their junction.
B) Describe briefly about the uses of Radio and Television with respect to their timeline.
Q3: A) Define energy and also explain how energies are interconverted from one form to another.
B) What are the sources of Energy?
C) Define the following terms
i. Geothermal Energy
ii. Tidal Energy
iii. Solar Energy