FIRST TERM EXAM

Time: 90 Min. **PAPER CODE: S - 1031** **SUB: SCIENCE (E)**

Total number of Questions : 40 **Max. Marks : 40**

Instructions: (i) The question paper consist of 40 multiple choice objective type questions.

(ii) All questions are compulsory.

(iii) Every question has four choices for its answers (A), (B) (C) and (D) and Only one of them is correct answer.

(iv) Select the one that you consider to be the most appropriate answer among the four choices.

(v) Each correct answer will carry one mark.

(vi) There will be no negative marking for the wrong answer.

Q.1. Calcium oxide reacts vigorously with water to produce slaked lime. The molecular formula of slaked lime is _____

A.$Ca(OH)_2$

B. $CaCO_3$

B. CaO

C. CaOH

Q2. When lead nitrate powder is heated in a boiling tube, brown fumes of _____is emitted.

A. nitrogen dioxide

B. lead oxide

C. Nitrous oxide

D. Oxygen

Q3. If a substance gains oxygen or loses hydrogen during a chemical reaction, it is said to be _____

A. oxidised

B. reduced

C. oxidised and reduced

D. displaced

Q4. In the reaction : $Cu + xHNO_3 \longrightarrow Cu(NO_3)_2 + yNO_2 + 2H_2O$

The value of x and y are _____

A. X=4, y=2

B. x=2, y=4

C. x=2, y=2

D. x=3 , y=4

Q5.The Sodium compound which is used for softening hard water is _____

A. $NaHCO_3$

B. NaCl

C. NaOH

D. Na_2CO_3

Q6. From the following an example of olfactory indicator is _____

A. Turmeric

B. Methyl Orange

C. Vanilla

D. Litmus

Q7. Gas generated by all acids on reacting with metals is _____

A. Chlorine

B. Nitrogen

C. Hydrogen

D. Oxygen.

Q8. pH paper on testing with a solution X, showed dark blue colour. Therefore, the solution x should be _____

A. Very acidic

B. Very alkaline

C. mild acidic

D. Neutral

Q9.Care must be taken while mixing Nitric acid or Sulphuric acid with water because _____

A. It results in decrease in concentration of ions.

B. The process is highly endothermic one.

C. It generates H^+ (aq) ions.

D. It generates OH^- ion

Q10. The ability of metals to be drawn into thin wires is called _____

A. malleability
B. ductility
C. lustre
D. Sonorous

Q11. An example of metal oxide which react with both acids and bases to produce salt and water is _____

A. Aluminium oxide
B. Magnesium oxide
C. Sodium Oxide
D. Copper Oxide

Q12. Metal sulphides are converted into metal oxides by heating strongly in the presence of excess air, This process is known as _____

A. Enrichment
B. Roasting
C. Calcination
D. Concentration

13. Method which is suitable for preventing rusting of an iron frying pan is _____

A. Applying grease
B. Applying paint
C. Applying coating of Zinc
D. All of the given

Q14. The gap between two neurons is called a _____ .

A. Dendrite
B. Axon
C. Synapse
D. Impulse

Q15. The part of the brain that maintains the posture and balance of the body is _____.

A. Cerebrum
B. Cerebellum
C. Medulla
D. Spinal cord

Q16. The plant hormone that promotes cell division is _____.
A. Cytokinins
B. Auxins
C. Gibberellins
D. Abscisic acid

Q17. The growth of pollen grain towards ovules is an example of _____.
A. Geotropism
B. Phototropism
C. Chemotropism
D. Hydrotropism

Q18. The hormone that regulates carbohydrates, Proteins and fats metabolism in the body is _____.
A. Insulin
B. Oestrogen
C.Growth
D. Thyroxine

Q19. Ramesh is extremely short as compared to his friend of his age the gland that is responsible for his imbalance is _____.
A. Adernal gland
B. Pituitary gland
C. Thyroid gland
D. Pineal gland

Q20. The Anther contains _____

A.Sepals
B. Ovules
C. Pollen Grain
D. Carpel

Q21. Fertilization in humans occurs in _____

A. Uterus
B. Fallopian Tube
C. Vagina
D. Urethra

Q22. In Amoeba reproduction takes place by the Fission of a mother Amoeba into two new daughter Amoebae, this mode of reproduction is _____

A. Sexual reproduction

B. Asexual Reproduction

C. Regeneration

D. Budding

Q23. The function of testes at puberty is _____

(i) Formation of germ cells

(ii) Secretion of testosterone

(iii) Development of placenta

(iv) Secretion of estrogen

A. (i) and(ii)

B. (ii) and(iii)

C. (iii) and(iv)

D. (i) and(iv)

Q24.Which of the following method of contraception protects from acquiring sexually transmitted diseases?

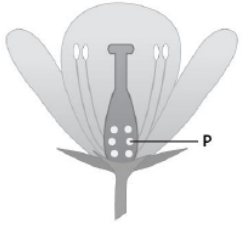
A. Surgery

B. Condoms

C. Copper-T

D. Oral-pills

Q25.The image shows the structure of a flower.



Which process will likely be disturbed or not occur, if the labelled part is removed from the flower?

A. Formation of fruit

B. Transport of pollen

C. Formation of pollen

D. Formation of male germ cells

Q26. Which of the following statements on the reproduction of humans is correct?

I. All eggs are fertilized externally

II. One female egg can be fertilized by many sperms

III. After fertilization the embryo will develop into a young baby

IV. Males produce sperms and females produce eggs.

A. I and II

B. I and III

C. II, III, and IV

D. III and IV

Q27.Coulomb is the SI unit of _____

A. Current
B. Potential difference
C. Resistance
D. Charge

Q28. A device that helps to maintain a potential difference across a conductor is _____

A. Voltmeter
B. Ammeter
C. Battery
D. Switch

Q29. Two special characteristics of a heater coil in an electric iron are _____

A. High Resistivity and Low Melting point
B. High Resistivity and High Melting point
C. Low Resistivity and Low Melting point
D. Low Resistivity and High Melting point

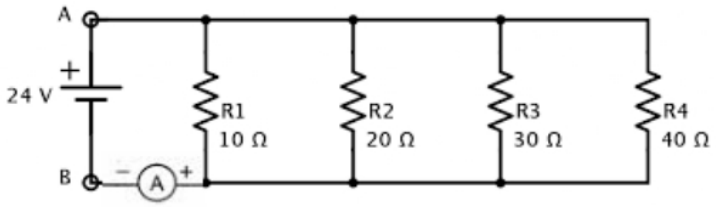
Q30.A Car headlight bulb working on a 12 Volt Car Battery draws a current of 0.5 Ampere. Therefore, the power of the bulb is _____

A. 6 watt
B. 8 watt
C. 9 watt
D. 3 watt

Q31.Two Resistances are connected in series gives an equivalent resistance of 10 Ohm. When connected in parallel gives 2.1 Ohm. Then, the individual resistance are _____

A. 6 Ohm and 4 Ohm
B. 8 Ohm and 2 Ohm
C. 7 Ohm and 3 Ohm
D. 5 Ohm and 5 Ohm

Q32.The current flowing through the 20 Ohm resistor in the following circuit is _____



A. 0.2 A
B. 1.2 A
C. 2.0 A
D. 2.4 A

Q33. A rectangular coil of copper wire is rotated in a magnetic field. The direction of induced current changes once in each _____

A. two revolutions
B. one revolution
C. half revolution
D. one fourth revolution

Q34. At the time of short circuit, the current in the circuit _____

A. reduces substantially
B. does not change
C. increases heavily
D. varies continuously

Q35. To convert an AC generator into a DC generator _____

A. a split-ring type commutator must be used
B. slip rings and brushes must be changed
C. a stronger magnetic field has to be used
D. a rectangular wire loop has to be used.

Q36. The most important safety method used for protecting home appliances from short circuit and overloading is _____

A. earthing
B. use of fuse
C. use of stabilizers
D. use of electric meter

Q37. In Flemings right hand rule, the middle finger will show the direction of _____

A. force
B. motion
C. magnetic field
D. induced current

Q38. A wind mill to function the minimum wind velocity required is _____

A. Less than 15 Km/hr
B. Minimum 13 Km/hr
C. More than 5 Km/hr
D. More than 15 Km/hr

Q39. A student constructed a box type solar cooker. He noticed that the Green-house effect produced by it is very effective . The part of the solar cooker responsible for green house effect is _____

A. Mirror
B. Outer cover of the solar cooker
C. Black colour coating outside the box
D. Glass sheet

Q40. In nuclear electricity generation, the process used currently involves the fission of _____

A. Uranium-325 nuclei bombarding with electrons
B. Uranium-325 nuclei bombarding with protons
C. Uranium-325 nuclei bombarding with neutrons
D. Uranium-325 nuclei bombarding with ions