



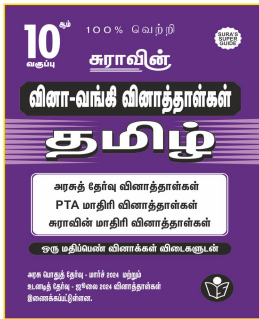
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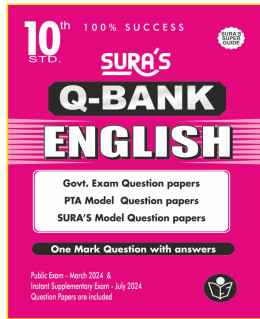
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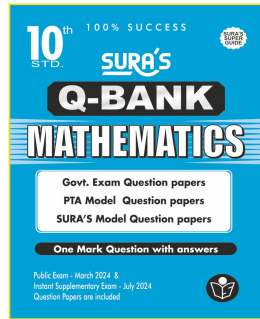
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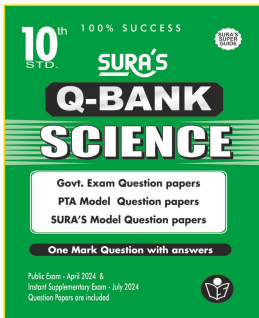
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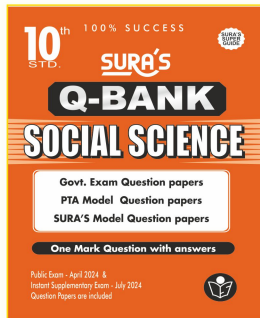
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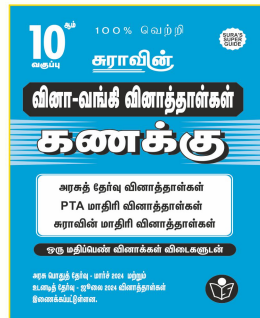
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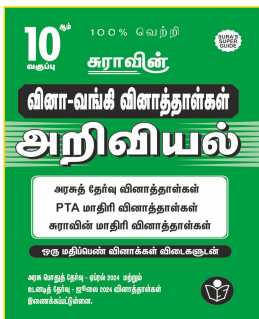
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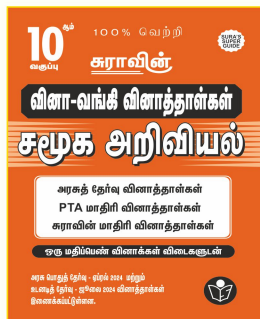
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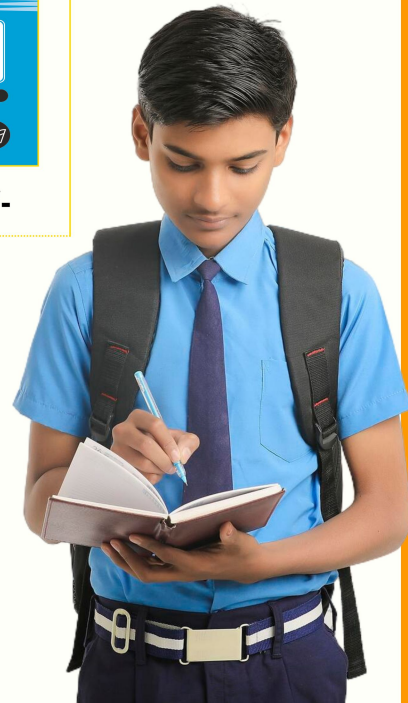


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15/07/2024

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10th
STD**INSTANT SUPPLEMENTARY EXAM - JULY 2024**
PART - III - SCIENCE

Time Allowed : 3.00 Hours]

[Maximum Marks : 75

PART - I**Note:** (i) Answer **all** the questions. **(12 × 1 = 12)**(ii) Choose the most appropriate answer from the given **four** alternatives and write the option code and the corresponding answer.

1. _____ isotope is used for the treatment of cancer.
 - (a) Radio Iodine
 - (b) Radio Carbon
 - (c) Radio Cobalt
 - (d) Radio Nickel
2. If the Power of a lens is $-4D$, then its Focal length is :
 - (a) 4m
 - (b) $-40m$
 - (c) $-0.25m$
 - (d) $-2.5m$
3. To project the rockets, which of the following principle(s) is / (are) required?
 - (a) Newton's third law of motion
 - (b) Newton's Law of gravitation
 - (c) Law of conservation of linear momentum
 - (d) Both (a) and (c)
4. _____ is a relative periodic property.
 - (a) Atomic radius
 - (b) Ionic radius
 - (c) Electron affinity
 - (d) Electronegativity
5. Rectified spirit is an aqueous solution which contains about _____ of ethanol.
 - (a) 95.5%
 - (b) 75.5%
 - (c) 55.5%
 - (d) 45.5%
6. Solubility is the amount of solute dissolved in _____ of solvent.
 - (a) 50g
 - (b) 100g
 - (c) 40g
 - (d) 200g
7. _____ is called as 'Heart of heart'.
 - (a) SA node
 - (b) AV node
 - (c) Purkinje fibres
 - (d) Bundle of His
8. LH is secreted by :
 - (a) Adrenal gland
 - (b) Thyroid gland
 - (c) Anterior pituitary
 - (d) Hypothalamus
9. Himgiri developed by hybridisation and selection for disease resistance against rust pathogens is a variety of :
 - (a) Chilli
 - (b) Maize
 - (c) Sugarcane
 - (d) Wheat
10. Metastasis is associated with :
 - (a) Malignant tumour
 - (b) Benign tumour
 - (c) Both (a) and (b)
 - (d) Crown gall tumour

11. Vomiting centre is located in :
 (a) Medulla oblongata (b) Stomach
 (c) Cerebrum (d) Hypothalamus
12. A renewable source of energy is :
 (a) Petroleum (b) Coal
 (c) Nuclear Fuel (d) Trees

PART - II

Note : Answer **any seven** questions. Question No. 22 is **Compulsory**. (7 × 2 = 14)

13. Define moment of a couple.
 14. Differentiate - Convex lens and Concave lens.
 15. State Boyle's law.
 16. Why does the reaction rate of a reaction increase on raising the temperature?
 17. True or False. (If false give the correct statement)
 (i) The pH of rain water containing dissolved gases like SO₃, CO₂, NO₂ will be less than 7.
 (ii) Noble gases are Diatomic.
 18. What is photosynthesis and where in a cell does it occur?
 19. What is Scratch?
 20. What are Okazaki fragments?
 21. Draw and Label the structure of oxysomes.
 22. Calculate the resistance of a conductor through which a current of 2 A passes, when the potential difference between its ends is 30V.

PART - III

Note : Answer **any seven** questions. Question No. 32 is **Compulsory**. (7 × 4 = 28)

23. List any four properties of light.
 24. Give the applications of universal law of gravitation.
 25. (i) Mention the two cases in which there will be no Doppler effect in sound.
 (ii) What is stellar energy?
 26. Write down the salient features of "Modern Atomic Theory".
 27. (i) Calculate the pH of 1.0 × 10⁻⁴ molar solution of HNO₃.
 (ii) Define Hydrated salt.
 28. What is transpiration? Write the importance of transpiration.
 29. Write the physiological effects of Gibberellins.
 30. (i) State the applications of DNA fingerprinting technique.
 (ii) Why is Archaeopteryx considered to be a connecting link?
 31. Define Ethnobotany and write its importance.
 32. (i) Calculate the number of moles in 27g of Al.
 (ii) Calculate the gram molecular mass of CO₂.

PART - IV

Note : Answer all the questions. Draw diagrams wherever necessary.

(3 × 7 = 21)

33. (a) (i) What is refractive index?
(ii) Differentiate the eye defects Myopia and Hypermetropia.
(OR)
- (b) (i) Distinguish between the resistivity and conductivity of a conductor.
(ii) List the merits of LED bulb.
(iii) How does an astronaut float in a space shuttle?
34. (a) (i) How is ethanol manufactured from sugarcane?
(ii) Define the term solution.
(OR)
- (b) (i) Differentiate - soaps and detergents.
(ii) What is chemical equilibrium? What are its characteristics?
35. (a) (i) Write the events involved in the sexual reproduction of flowering plants.
(ii) Discuss the first event and write the types.
(iii) Mention the advantages and disadvantages of that event.
(OR)
- (b) (i) What are the agents of soil erosion?
(ii) What are the effects of hybrid vigour in animals?
(iii) Name the types of stem cells.

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10th
STD**PUBLIC EXAMINATION APRIL - 2024**
PART - III - SCIENCE

Time Allowed : 3.00 Hours]

[Maximum Marks : 75

PART - I

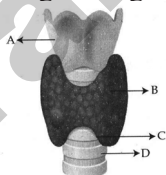
- Note:** (i) Answer **all** the questions. (12 × 1 = 12)
(ii) Choose the most appropriate answer from the given **four** alternatives and write the option code and the corresponding answer.
- The endarch condition is the characteristic feature of :
(a) Root (b) Stem (c) Leaves (d) Flowers
 - TFM in soaps represents _____ content in soap.
(a) Mineral (b) Vitamin
(c) Fatty matter (d) Carbohydrate
 - The value of Universal Gas Constant :
(a) 3.81 J mol⁻¹ K⁻¹ (b) 8.03 J mol⁻¹ K⁻¹
(c) 1.38 J mol⁻¹ K⁻¹ (d) 8.31 J mol⁻¹ K⁻¹
 - Kilowatt hour is the unit of :
(a) resistivity (b) conductivity
(c) electrical energy (d) electrical power
 - An enzyme which cuts DNA is :
(a) Protease (b) Restriction endonuclease
(c) DNA Ligase (d) RNAase
 - One mole of any substance contains _____ molecules.
(a) 6.023 × 10²³ (b) 6.023 × 10⁻²³
(c) 3.0115 × 10²³ (d) 12.046 × 10²³
 - Which one is referred as “Master gland”?
(a) Pineal gland (b) Pituitary gland
(c) Thyroid gland (d) Adrenal gland
 - Which among the following is not the characteristic of anemophilous plants?
(a) the flowers produce enormous amount of pollen grains.
(b) the stigmas are large and protruding.
(c) the flowers are brightly coloured, have smell and nectar.
(d) pollen grains are small and dry.
 - Inertia of a body depends on :
(a) Weight of the object (b) Acceleration due to gravity of planet
(c) Mass of the object (d) Both (a) and (b)

10. Which is the correct sequence of blood flow?
 (a) Ventricle → Atrium → Vein → Arteries
 (b) Atrium → Ventricle → Vein → Arteries
 (c) Atrium → Ventricle → Arteries → Vein
 (d) Ventricle → Vein → Atrium → Arteries
11. Which of the following is not an “element + element → compound” type reaction?
 (a) $C_{(s)} + O_{2(g)} \longrightarrow CO_{2(g)}$ (b) $2K_{(s)} + Br_{2(l)} \longrightarrow 2KBr_{(s)}$
 (c) $2CO_{(g)} + O_{2(g)} \longrightarrow 2CO_{2(g)}$ (d) $4Fe_{(s)} + 3O_{2(g)} \longrightarrow 2Fe_2O_{3(s)}$
12. Cancer of the epithelial cell is called as _____.
 (a) Leukaemia (b) Sarcoma
 (c) Carcinoma (d) Lipoma

PART - II

Note : Answer **any seven** questions. Question No. 22 is **compulsory**. (7 × 2 = 14)

13. What is coefficient of apparent expansion?
 14. Why is tungsten metal used in bulbs but not used as fuse wires?
 15. What is rust? Give the equation for the formation of rust.
 16. What is stage?
 17. Why is sinoatrial node called as pacemaker of heart?
 18. What are the parts of the hind brain?
 19. Identify the parts A, B, C, and D in the given figure.



20. What is colostrum? How is milk production hormonally regulated?
 21. What is metastasis?
 22. If the pH of a solution is 4.5, find the value of its pOH.

PART - III

Note : Answer **any seven** questions. Question No. 32 is **compulsory**. (7 × 4 = 28)

23. Explain the various types of inertia with examples.
 24. (a) Write any three features of natural and artificial radioactivity.
 (b) Name any two devices, which are working on the heating effect of current.
 25. (a) What happens when $MgSO_4 \cdot 7H_2O$ is heated? Write the appropriate equation.
 (b) Define : Solubility.
 26. (a) What is Respiratory Quotient?
 (b) Why should the light dependent reaction occur before light independent reaction during photosynthesis?
 27. Write the dental formula of rabbit.

PART - IV

Note : Answer all the questions. Draw diagrams wherever necessary.

(3 × 7 = 21)

33. (a) (i) State Joule's Law of Heating.
(ii) An alloy of nickel and chromium is used as the heating element. Why?
(iii) How does a fuse wire protect electrical appliances?
(OR)
- (b) (i) What is a longitudinal wave?
(ii) What is a nuclear reactor? Explain its essential parts with their functions.
34. (a) (i) Define : Atomicity.
(ii) Calculate the percentage of sulphur in H₂SO₄.
(iii) In what way hygroscopic substances differ from deliquescent substances.
(OR)
- (b) (i) Differentiate reversible and irreversible reaction.
(ii) What is neutralization reaction? Give an example.
(iii) Give any three characteristics of homologous series.
35. (a) (i) Which hormone induces parthenocarpy in tomatoes?
(ii) Why is thyroid hormone referred as 'personality hormone'?
(iii) Explain Lamarck's theories of evolution.
(OR)
- (b) (i) Which enzyme cuts DNA at specific sites?
(ii) Name two maize hybrids rich in amino-acid, lysine.
(iii) Explain smoking hazards and the harmful effects of tobacco.

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PART - IV

Answer all the questions in detail.

(3 × 7 = 21)

33. (a) Explain the construction and working of a compound microscope.
(OR)
(b) (i) What is the role of the earthwire in domestic circuits?
(ii) List the merits of LED bulb (any four)
34. (a) Derive the relationship between relative molecular mass and vapour density.
(OR)
(b) Write notes on various factors affecting solubility.
35. (a) (i) Enumerate the functions of blood.
(ii) How are the arteries and veins structurally different from one another?
(OR)
(b) (i) Write the physiological effects of gibberellins.
(ii) What is the role of parathormone?

10th
STDSURA'S MODEL QUESTION PAPER - 8
PART - III - SCIENCE

Time Allowed : 3.00 Hours]

[Maximum Marks : 75

PART - I

Note: (i) Answer **all** the questions.**(12 × 1 = 12)**(ii) Choose the most appropriate answer from the given **four** alternatives and write the option code and the corresponding answer.

- The eye defect 'Presbyopia' can be corrected by :
 - Convex lens
 - Concave lens
 - Convex mirror
 - Bifocal lenses
- The value of Avogadro number is _____/mol.
 - 6.023×10^{-23}
 - 6.024×10^{24}
 - 6.023×10^{23}
 - 6.024×10^{-24}
- Identify the non-aqueous solution.
 - Sodium chloride in water
 - Glucose in water
 - Copper sulphate in water
 - Sulphur in carbon disulphide
- An electric heater of resistance 5Ω is connected to an electric source. If a current of 6 A flows through the heater. find the amount of heat produced in 5 minutes.
 - 48000 J
 - 54000 J
 - 45000 J
 - 84000 J
- $C_2H_5OH + 3O_2 \rightarrow 2CO_2 + 3H_2O$ is :
 - Reduction of ethanol
 - Combustion of ethanol
 - Oxidation of ethanoic acid
 - Oxidation of ethanal
- Which is formed during anaerobic respiration?
 - Carbohydrate
 - Ethyl Alcohol
 - Acetyl CoA
 - Pyruvate
- Who is regarded as the "Father of Modern Physiology"?
 - His-Atrio
 - William Harvey
 - Karl Landsteiner
 - Edward C. Kendal
- Node of Ranvier is found in _____
 - Muscles
 - axons
 - dendrites
 - cyton
- _____ is found abundantly in liquid endosperm of coconut.
 - Auxin
 - Cytokinin
 - Gibberellins
 - Ethylene
- We can cut the DNA with the help of :
 - Scissors
 - Restriction enzymes
 - Knife
 - DNA ligases

11. Match the following :

- | | |
|------------------------|--|
| (1) Polyvinyl chloride | (i) Affects brain development in children |
| (2) Cadmium | (ii) Affects the growth of reproductive system |
| (3) Lead | (iii) Asthmatic bronchitis |
| (4) Chromium | (iv) Neural damage |

- a) (1)-(i), (2)-(iii), (3)-(iv), (4)-(ii)
 b) (1)-(ii), (2)-(i), (3)-(iii), (4)-(iv)
 c) (1)-(iii), (2)-(ii), (3)-(iv), (4)-(i)
 d) (1)-(ii), (2)-(iv), (3)-(i), (4)-(iii)

12. Find the correct pair.

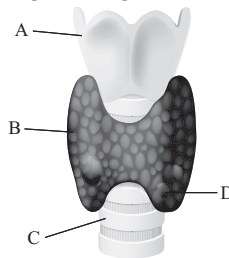
- | | |
|--------------------|---|
| a) Acrocentric | - (i) The centromere is found near the centre of the chromosome with two unequal arms |
| b) Sub metacentric | - (ii) The centromere is found on the proximal end. |
| c) Metacentric | - (iii) The centromere occurs in the centre of the chromosome and forms two equal arms. |
| d) Telocentric | - (iv) The centromere is found at one end with a short arm and a long arm. |

PART - II

Note : Answer any seven questions: Q.No. 22 is compulsory

(7 × 2 = 14)

13. Write short notes on gears.
 14. Mention two cases in which there is no Doppler effect in sound.
 15. Define co-efficient of real expansion and mention its unit.
 16. Write a reaction which is used for the identification of alcohol.
 17. Name the three types of neurons and find its location.
 18. Identify the parts A, B, C and D in the given figure.



19. How can you determine the age of fossils?
 20. State the applications of DNA fingerprinting technique.
 21. What is "Stage" in Scratch editor?
 22. A beam of light passing through a diverging lens of focal length 0.3 m appears to be focused at a distance 0.2 m behind the lens. Find the position of the object.

PART - III

Note : Answer any seven questions Q.No. 32 is compulsory:

(7 × 4 = 28)

23. Describe rocket propulsion.
 24. What are the uses of Simple microscope?

25. a) What do you understand by the term 'Ultrasonic waves'?
- b) What are the medical applications of echo?
26. What are the methods of preventing Corrosion?
27. Differentiate soaps and detergents.
28. Differentiate between Monocot root and Dicot root.
29. Draw the external structure of human heart and label the parts.
30. Define Ethnobotany and write its importance.
31. Explain about Gene Therapy.
32. (a) A solution was prepared by dissolving 25 g of sugar in 100 g of water. Calculate the mass percentage of solute.
- (b) True or false (If false give the correct statement).
- (i) In our daily life, solution of syrups, mouth wash, antiseptic solutions, household disinfectants etc., the concentration of ingredients of solution is expressed as w/w.
- (ii) In Ointments, antacids, soaps etc., the concentration of solution is expressed as v/v.

PART - IV

Note : Answer all the question. Draw diagram wherever necessary

(3 × 7 = 21)

33. a) Explain about domestic electric circuits.

(OR)

- b) Compare the properties of alpha, beta and gamma radiations.

34. a) (i) Give the salient features of "Modern atomic theory".
- (ii) Write any two applications of "Avogadro's Law".

(OR)

- b) (i) Explain single displacement reaction with examples.
- (ii) Explain the types of double displacement reactions with examples.

35. a) (i) Why are the rings of cartilage found in trachea of rabbit?
- (ii) Write a note on UTL.

(OR)

- b) (i) what is the biological significance of DNA?
- (ii) What precautions can be taken for preventing heart diseases?
- (iii) Mention any two approaches for protection of an Abused child.

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10th
STD**SURA'S MODEL QUESTION PAPER - 9**
PART - III - SCIENCE

Time Allowed : 3.00 Hours]

[Maximum Marks : 75

PART - I**Note:** (i) Answer **all** the questions.**(12 × 1 = 12)**

(ii) Choose the correct answer from the four alternatives and write the option code and the corresponding answer.

- The value of universal gas constant
 - 3.81 J mol⁻¹K⁻¹
 - 8.03 J mol⁻¹ K⁻¹
 - 1.38 J mol⁻¹K⁻¹
 - 8.31 J mol⁻¹K⁻¹
- Kilowatt hour is the unit of
 - resistivity
 - conductivity
 - electrical energy
 - electrical power
- When a sound wave travels through air, the air particles
 - vibrate along the direction of the wave motion
 - vibrate but not in any fixed direction
 - vibrate perpendicular to the direction of the wave motion
 - do not vibrate
- The isotope which cures anaemia
 - Sodium-24
 - Iodine-131
 - Iron-59
 - Cobalt-60
- _____ group contains the member of halogen family.
 - 17th
 - 15th
 - 18th
 - 16th
- Match the following :

1) Pollination by wind	i) Hydrophily
2) Pollination by insects	ii) Anemophily
3) Pollination by water	iii) Zoophily
4) Pollination by animals	iv) Entomophily

 - (1)-(ii), (2)-(i), (3)-(iii), (4)-(iv)
 - (1)-(i), (2)-(iii), (3)-(ii), (4)-(iv)
 - (1)-(ii), (2)-(iv), (3)-(i), (4)-(iii)
 - (1)-(iv), (2)-(i), (3)-(ii), (4)-(iii)
- Powdered CaCO₃ reacts more rapidly than flaky CaCO₃ because of _____.
 - large surface area
 - high pressure
 - high concentration
 - high temperature
- Kreb's cycle takes place in
 - chloroplast
 - mitochondrial matrix
 - stomata
 - inner mitochondrial membrane
- The outermost of the cranial meninges is
 - arachnoid membrane
 - piamater
 - duramater
 - myelin sheath

10. Bipolar neurons are found in
- | | |
|------------------|---------------------------|
| a) retina of eye | b) cerebral cortex |
| c) embryo | d) respiratory epithelium |
11. Anemophilous flowers have _____.
- | | |
|--------------------|--------------------------|
| a) Sessile stigma | b) Small smooth stigma |
| c) Coloured flower | d) Large feathery stigma |
12. The centromere is found at the centre of _____ chromosome.
- | | |
|--------------------|----------------|
| a) telocentric | b) metacentric |
| c) sub-metacentric | d) acrocentric |

PART - II

Note : Answer any seven questions: Q.No. 22 is compulsory (7 × 2 = 14)

13. When and where was the first nuclear reactor built?
14. What is the action of copper with dil. HCl and H₂SO₄? Write the equation.
15. Calculate the molar mass of Ca₃(PO₄)₂.
16. How does pH play an important role in everyday life?
17. i) What does ANS stands for?
ii) What does ANS comprise of?
18. Write a note about any two methods of preventing corrosion.
19. Mention any two importance of fossils.
20. Define genetic engineering.
21. What are the main parts of Script Editor?
22. Calculate the resistance of a conductor through which a current of 2A passes, when the potential difference between its ends is 30V.

PART - III

Note : Answer any seven questions Q.No. 32 is compulsory: (7 × 4 = 28)

23. i) State Boyle's law.
ii) Distinguish between ideal gas and real gas.
24. i) What is role of the earth wired in domestic circuits?
ii) List the merits of LED bulb.
25. a) Write the IUPAC names and its structural formula for the following:
i) CH₃CH₂OH ii) CH₃COOH
b) Calculate the volume of ethanol in 200 ml solution of 20% V/V aqueous solution of ethanol.
26. i) What are oxysomes? Draw its structure.
ii) What is photosynthesis? Write the reaction for photosynthesis.
27. i) Explain how locomotion take places in Leech.
ii) What are the medicinal values of Leech?
28. What is Reflex action? Explain the types of Reflex action.
29. A pure tall plant (TT) is crossed with pure dwarf plant (tt), what would be the F₁ and F₂ generations? Explain.

30. Define Ethnobotany and write its importance.
31. How are stem cells useful in regenerative process?
32. An organic compound 'A' is widely used as a preservative and has the molecular formula $C_2H_4O_2$. This compound reacts with ethanol to form a sweet smelling compound 'B'.
- Identify the compounds 'A' and 'B'.
 - Write the chemical equation for its reaction with ethanol to form compound 'B'.
 - Name the process.

PART - IV

Note : Answer all the question.

(3 × 7 = 21)

(Draw diagram wherever necessary)

33. a) i) State and prove the Law of Conservation of Momentum.
ii) Calculate the velocity of a moving body of mass 5 kg whose linear momentum is 2.5 kgms^{-1} .
- (OR)
- b) Differentiate the following :
- Myopia and Hypermetropia.
 - Convex lens and Concave lens.
34. a) i) Mention the ores of Aluminium with its formula.
ii) Explain the extraction of Aluminium from its ore by Baeyer's process and Hall's process.
- (OR)
- b) i) In what way hygroscopic substances differ from deliquescent substances?
ii) Classify the following substances into deliquescent, hygroscopic, Conc. Sulphuric acid, Copper sulphate pentahydrate, Silica gel, Calcium chloride and gypsum salt.
iii) A solution is prepared by dissolving 45g of sugar in 180g of water. Calculate the mass percentage of solute.
35. a) i) Which is 'Life saving' hormone? Why it is called so?
ii) Write any two physiological effects of gibberellins.
iii) Enumerate the functions of blood.
- (OR)
- b) i) How does rainwater harvesting structures recharge ground water?
ii) What is POCSO Act? What are the objectives of this Act?

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10th
STD**SURA'S MODEL QUESTION PAPER - 10**
PART - III - SCIENCE

Time Allowed : 3.00 Hours]

[Maximum Marks : 75

PART - I**Note:** (i) Answer **all** the questions.**(12 × 1 = 12)**(ii) Choose the most appropriate answer from the given **four** alternatives and write the option code and the corresponding answer.

- If a substance is heated or cooled, the change in mass of that substance is
 - positive
 - negative
 - zero
 - none of the above
- In _____ Law, when the pressure of gas is kept constant, the volume of a gas is directly proportional to the temperature of the gas
 - Boyle's Law
 - Charles's Law
 - Avogadro's Law
 - Newton's Law
- _____ is the longest period in the periodical table.
 - 1st period
 - 3rd period
 - 4th period
 - 6th period
- Salt dissolves in water to form a _____ mixture.
 - homogeneous
 - heterogeneous
 - homogeneous and heterogeneous
 - non-homogeneous
- SI Unit of resistance is _____
 - joule
 - ohm
 - ampere
 - volt
- _____ is an example of Deliquescence substances.
 - C₆H₆
 - NaOH
 - CuSO₄
 - MgSO₄
- In _____ pathway, the movement of water occurs through the intercellular spaces and the walls of the cell.
 - Apoplast
 - Symplast
 - Apoplast and Symplast
 - None of the above
- A patient with blood group 'O' was injured in an accident and has blood loss. Which blood group the doctor should effectively use for transfusion in this condition?
 - 'O' group
 - 'AB' group
 - A or B group
 - All blood group
- Application of _____ delays the process of ageing in plants.
 - Ethylene
 - Cytokinins
 - Auxins
 - Gibberellins

10. _____ is called as personality hormone.
- (a) Insulin (b) Thyroxine
(c) Adrenaline (d) Glucagon
11. Embryosac of the ovule contains _____ cells and _____ nuclei.
- (a) 3,3 (b) 7,8 (c) 8,7 (d) 3, 2
12. Which cause the stability to the chromosomes ?
- (a) Centromere (b) DNA
(c) Telomere (d) Satellite

PART - II

Note : Answer any 7 of the following. Q No. 22 is compulsory (7 × 2 = 14)

13. State Boyle's Law.
14. The work done in moving a charge of 10 C, across two points in a circuit is 100 J. What is the potential difference between the points?
15. State any four properties of metals.
16. True (or) False (if false give the correct statement)
- (a) An alloy is a heterogeneous mixture of metals
(b) Moseley's periodic table is based on atomic mass
17. (a) The SI unit of electric power is _____
(b) One kilowatt hour = _____ watt hour.
18. What are the Agranulocytes in blood?
19. Define - Bolting.
20. Write any four functions of thyroid hormones.
21. Draw the structure of pollen grains and label its parts.
22. Phenotypic ratio of Monohybrid and Dihybrid cross are _____, _____ as per the experiment done by Gregor Johann Mendel.

PART - III

Note : Answer any 7 of the following questions. Q.No. 32 is compulsory. (7 × 4 = 28)

23. (a) States Avogadro's Law
(b) How is the Avogadro's number defined?
24. Define Ohm's Law
25. (a) Write the formula of Joule's law of heating.
(b) Write any two properties of the heat produced in any resistor, according to the Joules Law of heating.
26. (a) Write a note on amalgam.
(b) Write the reasons for the alloying.
27. Write the difference between the hygroscopic and deliquescence substances.
28. Write any four importance of Transpirations.
29. Write about the various types of blood, groups.

30. (a) Write the types of auxins.
(b) Write any four physiological effects of Auxins.
31. Write the three Mendel's Law of Heredity.
32. Draw and label the L.S. of ovule.

PART - IV

Note : Answer all the questions. Draw a diagram wherever necessary.

(3 × 7 = 21)

33. (a) (i) What is real gases ? In which conditions the real gases behaves as Ideal gases. State the reasons.
(ii) Define Ideal gases.
- (OR)
- (b) (i) Write notes on electrical conductance and electrical conductivity.
(ii) Give two examples for Conductor and Insulator.
34. (a) (i) Write about Hydrated salts and water of crystallization with examples.
(ii) Define : Concentrated solutions and dilute solutions.
- (OR)
- (b) (i) What is Metal Corrosion ?
(ii) Write the methods of preventing corrosions.
35. (a) (i) Write a note on pancreas.
(ii) Explain the functions of Pancreatic hormones.
- (OR)
- (b) (i) Explain about the Mendel's Dihybrid cross experiments.
(ii) Write the phenotypic ratio of Dihybrid cross.

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One Mark Answers

INSTANT SUPPLEMENTARY EXAM - JULY 2024

1. (c)	2. (c)	3. (d)	4. (d)	5. (a)	6. (b)	7. (a)	8. (c)	9. (d)	10. (a)	11. (a)	12. (d)
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PUBLIC EXAMINATION APRIL - 2024

1. (b)	2. (c)	3. (d)	4. (c)	5. (b)	6. (a)	7. (b)	8. (c)	9. (c)	10. (c)	11. (c)	12. (c)
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INSTANT SUPPLEMENTARY EXAM - JULY 2023

1. (d)	2. (c)	3. (c)	4. (b)	5. (c)	6. (b)	7. (d)	8. (a)	9. (a)	10. (b)	11. (a)	12. (c)
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PUBLIC EXAMINATION APRIL - 2023

1. (c)	2. (a)	3. (c)	4. (c)	5. (c)	6. (a)	7. (b)	8. (a)	9. (c)	10. (a)	11. (c)	12. (b)
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INSTANT SUPPLEMENTARY EXAM AUGUST - 2022

1. (d)	2. (c)	3. (b)	4. (c)	5. (d)	6. (c)	7. (a)	8. (a)	9. (c)	10. (c)	11. (b)	12. (c)
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PUBLIC EXAM MAY - 2022

1. (c)	2. (c)	3. (a)	4. (c)	5. (a)	6. (b)	7. (c)	8. (a)	9. (b)	10. (d)	11. (b)	12. (b)
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SUPPLEMENTARY EXAMINATION SEPTEMBER - 2021

1. (d)	2. (c)	3. (b)	4. (d)	5. (d)	6. (d)	7. (b)	8. (c)	9. (b)	10. (a)	11. (c)	12. (b)
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PTA MODEL QUESTION PAPER - 1

1. (c)	2. (c)	3. (c)	4. (c)	5. (a)	6. (a)	7. (d)	8. (b)	9. (a)	10. (a)	11. (a)	12. (a)
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PTA MODEL QUESTION PAPER - 2

1. (d)	2. (b)	3. (c)	4. (a)	5. (b)	6. (c)	7. (b)	8. (b)	9. (a)	10. (b)	11. (a)	12. (b)
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PTA MODEL QUESTION PAPER - 3

1. (c)	2. (d)	3. (c)	4. (c)	5. (b)	6. (c)	7. (b)	8. (a)	9. (c)	10. (a)	11. (d)	12. (d)
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PTA MODEL QUESTION PAPER - 4

1. (d)	2. (c)	3. (a)	4. (c)	5. (a)	6. (c)	7. (c)	8. (d)	9. (b)	10. (b)	11. (a)	12. (a)
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PTA MODEL QUESTION PAPER - 5

1. (c)	2. (d)	3. (a)	4. (a)	5. (a)	6. (b)	7. (a)	8. (c)	9. (c)	10. (d)	11. (c)	12. (c)
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PTA MODEL QUESTION PAPER - 6

1. (d)	2. (b)	3. (b)	4. (c)	5. (c)	6. (c)	7. (a)	8. (b)	9. (d)	10. (c)	11. (a)	12. (c)
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SURA'S MODEL QUESTION PAPER - 1

1. (d)	2. (c)	3. (b)	4. (d)	5. (d)	6. (d)	7. (b)	8. (c)	9. (b)	10. (a)	11. (b)	12. (c)
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SURA'S MODEL QUESTION PAPER - 2

1. (d)	2. (c)	3. (d)	4. (b)	5. (b)	6. (b)	7. (b)	8. (b)	9. (b)	10. (b)	11. (d)	12. (c)
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SURA'S MODEL QUESTION PAPER - 3

1. (d)	2. (c)	3. (d)	4. (c)	5. (b)	6. (a)	7. (a)	8. (b)	9. (b)	10. (d)	11. (a)	12. (b)
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SURA'S MODEL QUESTION PAPER - 4

1. (c)	2. (c)	3. (a)	4. (c)	5. (a)	6. (b)	7. (c)	8. (a)	9. (b)	10. (d)	11. (b)	12. (b)
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SURA'S MODEL QUESTION PAPER - 5

1. (c)	2. (c)	3. (b)	4. (d)	5. (b)	6. (c)	7. (b)	8. (a)	9. (c)	10. (c)	11. (d)	12. (b)
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SURA'S MODEL QUESTION PAPER - 6

1. (d)	2. (c)	3. (c)	4. (a)	5. (c)	6. (b)	7. (a)	8. (d)	9. (a)	10. (a)	11. (b)	12. (d)
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SURA'S MODEL QUESTION PAPER - 7

1. (c)	2. (d)	3. (b)	4. (d)	5. (a)	6. (a)	7. (b)	8. (c)	9. (c)	10. (b)	11. (d)	12. (a)
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SURA'S MODEL QUESTION PAPER - 8

1. (d)	2. (c)	3. (d)	4. (b)	5. (b)	6. (b)	7. (b)	8. (b)	9. (b)	10. (b)	11. (d)	
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12. a-(iv), b-(i), c-(iii), d-(ii).

SURA'S MODEL QUESTION PAPER - 9

1. (d)	2. (c)	3. (a)	4. (c)	5. (a)	6. (c)	7. (a)	8. (b)	9. (c)	10. (a)	11. (d)	12. (b)
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SURA'S MODEL QUESTION PAPER - 10

1. (c)	2. (b)	3. (d)	4. (a)	5. (b)	6. (b)	7. (a)	8. (a)	9. (b)	10. (b)	11. (b)	12. (c)
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