INFORMATION BULLETIN ResoFAST 2025
Currently Studying in Class X (NEET)

About ResoFAST

ResoFAST is a knowledge and aptitude test which is conducted by Resonance Schools, Hyderabad to assess the student's current academic performance and prospects.

For Foundation aspiring students ResoFAST would provide bench marking along with a real world feel of competitive spirit. It helps the student to showcase his/her talent in competitive exam pattern which will boost his/her confidence to perform well in future competitive examinations & make way for a bright career ahead.

Who can attend ResoFAST?

Students currently Studying 5th to 10th Classes are eligible to write ResoFAST exam.

How will ResoFAST help you?

- Students will get a comprehensive report, covering all domains in terms of subjects and aptitude, along with areas requiring improvement & percentile score.
- ResoFAST will evaluate your Analytical Skills & guide Students further to improve upon.
- Have a clear & personalised picture of your subject preparation concept wise.
- Qualify for a Resonance Schools and Colleges Classroom Programmes across all branches in Telugu states.

How to apply for ResoFAST ?

Students who want to apply for ResoFAST can login to **www.resofast.com** and apply by paying registration fee.

Registration Fee:

- Rs. 300/- per student – Payable Online using our secure payment gateway using Internet Banking, Debit/Credit card or any other online payment service
- You can also contact with ResoFAST Co-ordination Call for Registration Assistance on **9121219858 (9 AM to 7 PM)**

ResoFAST: Exam Process

ResoFAST exam is conducted in offline mode across all in Hyderabad as per the specific dates mentioned in website.

Disclaimer:

ResoFAST is an open excellence Test for motivating and rewarding students. Resonance doesn't ensure unconditional admissions on qualifying ResoFAST. Registration fee is nonrefundable. Resonance keeps all right for keeping details of the students confidential. Exam results cannot be challenged and reviewed.

ResoFAST 2025 Exam Pattern
Currently Studying in Class X (NEET)

1. The question paper contains a total of **40 Multiple Choice Questions**, numbered from **Q1 to Q40**.

2. **Pattern & Marking Scheme of each section:**

Parts	Subject	No. of questions	Questions Range	Marks
Part-A	Physics	10	Q1 to Q10	40 M
Part-B	Chemistry	10	Q11 to Q20	40 M
Part-C	Mathematics	05	Q21 to Q25	20 M
Part-D	Biology	15	Q26 to Q40	60 M
	Total	**40**	**Q1 to Q40**	**160 M**

3. Attempt all questions, each having only one correct answer.

4. Each question carries **4 marks**.

5. Candidates must ensure that the **OMR Sheet is not folded or damaged** in any way. Avoid making any **stray marks** on the OMR sheet. **Do not** write your **Roll Number** anywhere except in the designated space provided in the OMR Sheet.

6. The use of **white correction fluid** is **strictly prohibited** on the OMR Sheet.

7. The use of **blank papers, clipboards, log tables, slide rules, calculators, mobile phones**, or **any other electronic gadgets** is **strictly not permitted** inside the examination hall.

8. There are empty pages left at the end of this question paper for **rough work**.

SUBJECT: PHYSICS	
Chapter Name	**Topics**
Motion	Describing Motion, Measuring the Rate of Motion, Rate of Change of Velocity, Graphical Representation of Motion, Equations of Motion by Graphical Method, Uniform Circular Motion
Force and laws of motion (NLM)	Balanced And Unbalanced Forces, First Law of Motion, Inertia and Mass, Second Law of Motion, Third Law of Motion, Conservation of Momentum
Gravitation	Gravitation, Free Fall, Mass, Weight
Fluid	Thurst and Pressure of The Liquid, Atmospheric Pressure, Upthurst and Buoyancy, Archimedes Principle, Density, Determination of Relative Density by Archimedes Principle, Using A Beam, Balance, Principle of Flatation, Laws of Flatation, Hydrometer
Work, Energy & Power	Work, Energy, Rate of Doing Work
Light	Reflection Of Light, Spherical Mirrors, Refraction of Light, The Human Eye, Defects of Vision and Their Correction, Refraction of Light Through a Prism, Dispersion of White Light by a Glass Prism, Atmospheric Refraction, Scattering of Light
Electricity	Electric Current and Circuit, Electric Potential and Potential Difference, Circuit Diagram, Ohm's Law, Factors on Which the Resistance of A, Conductor Depends, Resistance of a System of Resistors, Heating Effect of Electric Current, Electric Power

SUBJECT: CHEMISTRY

Chapter Name	Topics
Matter in our surroundings	Physical Nature of Matter, Characteristics of Particles of Matter, States of Matter, Can Matter Change Its State? And Evaporation
Is matter around us pure	What is a Mixture?, What is a Solution?, Separating the Components of a Mixture, Physical and Chemical Changes, What are the Types of Pure Substances?
Structure of atom	Charged Particles in Matter, Thomson's, Rutherford's and Bohr's Model of an Atom, How Are Electrons Distributed in Different Orbits (Shells)?, Atomic Number, Mass Number, Isobars
Atoms and Molecules	Laws Of Chemical Combination, What is an Atom and a Molecule?, Writing Chemical Formulae, Molecular Mass and Mole Concept
Chemical Reactions & Equations	Chemical Equations, Types of Chemical Reactions and Have You Observed the Effects of Oxidation Reactions in Everyday Life?
Acids, Bases & Salts	Understanding The Chemical Properties of Acids and Bases, What do all Acids and All Bases Have in Common?, How Strong Are Acid or Base Solutions? And More About Salts
Metal & Non-metals	Physical Properties, Chemical Properties of Metals, How Do Metals and Non-Metals React?, Occurrence of Metals and Corrosion

SUBJECT: MATHEMATICS

Chapter Name	Topics
Triangles	Criteria for congruence of tringles, congruence of triangles, other congruence rules, some properties of a triangle, some more criteria for congruency of triangles, inequalisties in a triangle
Area of Prallelogram and Triangles	Area of Planar Regions, Area of Rectangle, figures on the same base and between the Same Parallels, Parallelograms on the same base and Between the Same Parall, Triangles on the Same Base and Between the Same Parallels
Circles	Angle subtended by a chord at a point on the circle, perpendicular from the centre to a chord, the three point that describe a circle, Chords and their distance from the centre of the circle, angle subtended by an arc of a circle, Angle subtended by an arc at a point on remaining part of circle, Angles in the same segment, cyclic quadrilateral
Polynomials	Degree of a polynomial, value of a polynomial, zeroes of a polynomial, relationship between zeroes and coefficients of a polynomial, cubic polynomials, division algorithm for polynomials
Pair of Linear Equations in Two variables	Solutions of pairs of linear equations in two variables, graphical method of finding solution of a pair of linear equations, relation between coefficients and nature of system of equations, algebraic methods of finding the solutions for a pair of linear equations, substitution and elimination methods, equations reducible to a pair of linear equations in two variables
Quadratic Equations	quadratic equations, solution of a quadratic equation, nature of roots

SUBJECT: BIOLOGY	
Chapter Name	**Topics**
The Fundamental unit of Life (Cell)	Typical Cell, Cell membrane or Plasma membrane, Observing the cell membrane, Cell wall, Nucleus, Cytoplasm, Protoplasm vs. cytoplasm, Cell organelles, Endoplasmic reticulum, Golgi body or Golgi apparatus, Lysosome, Mitochondria, observing mitochondria, Ribosomes, Plastids, Observation of chloroplast in red leaf, observing chloroplast in algae, Vacuole, observing vacuoles, are cells fact, where do cells come from
Tissue	Are plants and animals made of same types of tissues?, plant tissues, animal tissues
Diversity of Living Organism	What is the basis of classification?, classification and evolution, the hierarchy of classification- groups, plantae, animalia, nomenclature
Why do we fall ill	Health and its failure, disease and its causes, infectious diseases
Natural Resources	Situation in two villages Vanaparthy and Vaddicherla of Warangal District, Area under irrigation, Status after five years, Income on crops, Water for all, A Study of Kothapally Village, an example of water management effort, Community-based interventions, Farmer-based interventions, Wasteland development and tree plantation, Source of irrigation water in Andhra Pradesh, Natural resources around us, Forest: an important renewable resource, Soil, Biodiversity, Fossil Fuels, Minerals, Conservation – A vital concern, Conservation Groups
Life Process	What are life processes?, nutrition, respiration, transportation, excretion
Control and Co-Ordination	Animals – nervous system, coordination in plants, hormones in animals
Heredity and Evolution	Accumulation of variation during reproduction, heredity, speciation, evolution and classification, evolution should not be equated with 'progress'

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MEGA
ResoFAST
Resonance Future Achievers Scholarship Test

Class: Currently Studying in Class X (NEET)

Maximum Marks: 160 M

Duration: 60 Min.

Resonance Future Achievers Scholarship Test

Important Instructions to the Students

1. The question paper contains a total of **40 Multiple Choice Questions**, numbered from **Q1 to Q40**.

2. This question paper contains **FOUR PARTS**. **Part-A** is *Physics*, **Part-B** is *Chemistry,* **Part-C** is *Mathematics,* **Part-D** is *Biology.*

3. The question paper consists of **10 questions** each from **Physics, and Chemistry, 05 questions** from **Mathematics,** and **15 questions** from **Biology,** attempt all questions, each having only one correct answer.

4. For any question:

   - Each **correct answer** is awarded **+4 marks**.

   - Each **incorrect answer** will result in a deduction of **0 mark**.

   - **No marks (0)** will be awarded if the question is left unanswered.

5. **Pattern & Marking Scheme of each section:**

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All the Best

1. *Force in action: When time ticks twice, can you find the power behind the motion*

   A constant force acts on a body of mass m at rest for t seconds and then ceases to act. In next t seconds the body travels a distance x, magnitude of force is:

   (A) $\frac{mx}{t^2}$ (B) $\frac{mx}{t}$ (C) mxt   (D) mxt^2
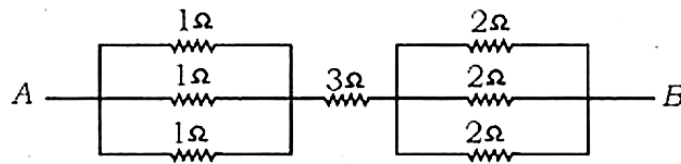
2. *Standing behind the object, can you reflect on how far the image really is?*

   An object A is placed at a distance d in front of a plane mirror. If one stands directly behind the object at distance S from the mirror, then the distance of the image of A from the individual is:

   (A) 2 S   (B) 2 d   (C) $S + d$ (D) $S + 2d$

3. *Resist the confusion! Can you crack the code between points A and B?*

   What is the equivalent resistance of the given circuit between points A and B?

   (A) 10Ω (B) 4Ω (C) $14/3\Omega$ (D) $17/6\Omega$

4. *Can your brain pump out the power needed to lift that tank?*

   The power of a pump which takes 10 s to lift 100 kg of water tank situated at a height of 20 m is:

   (A) 2×10^4 N   (B) 2×10^3 W   (C) 2×10^2 W   (D) None of these

5. *Tick-Tock, the Last-Second Drop!*

   A body starts falling from height 'h' and travels distance $h/2$ during the last second of motion. The time of travel (in sec.) is:

   (A) $\sqrt{2}-1$ (B) $2+\sqrt{2}$ (C) $\sqrt{2}+\sqrt{3}$ (D) $\sqrt{3}+2$

6. *From G to g — What's the Right Unit Key?*

   The units for G/g will be: (symbols have their usual meanings)

   (A) m^2/kg (B) kg/m (C) Kg/m^2 (D) m/kg

7. *Floating Facts: What doesn't tip the Buoyant Balance?*

   The buoyant force on an object submerged in a fluid does not depend on.

   (A) The volume of the fluid displaced   (B) The density of the fluid

   (C) The weight of the object   (D) The temperature of the object

8. *Mirror, Mirror with a Negative Power — What's your Focal Power?*

   What is the focal length of a concave mirror with a power of -4 D?

   (A) -4 m   (B) -0.25 m   (C) +0.25 m   (D) +4 m

9. *Air to water, speed takes a hit — the ray bends towards, that's the perfect fit*

   When a ray of light passes from air into water, it:
   (A) Bends away from the normal   (B) Bends towards the normal
   (C) Passes straight through   (D) Reflects back into the air

10. *Small force in, big force out — that's what hydraulics are all about*

    In a hydraulic press, a force of 10 N is applied on a piston of area 2 cm². If the area of the second piston is 10cm², what is the force exerted on the second piston?

    (A) 20 N   (B) 50 N   (C) 100 N   (D) 200 N

11. *Metal Meets Water: The Fiery Reaction Revealed!"*

When a metal X is treated with cold water, it gives a base Y with molecular formula XOH (Molecular mass = 40) and liberates a gas Z which easily catches fire. Here X, Y and Z are

	X	Y	Z
(A)	Na	NaOH	H₂
(B)	H₂	NaOH	Na
(C)	H₂	Na	NaOH
(D)	NaOH	Na	H₂

12. *Electron Counts tell the tale: Metals vs Non-Metals*

The electronic configurations of three elements X, Y and Z are $X - 2, 8$; $Y - 2, 8, 7$ and $Z - 2, 8, 2$. Which of the following is correct?

(A) X is a metal.

(B) Y is a metal.

(C) Z is a non-metal.

(D) Y is a non-metal and Z is a metal.

13. *The Water-Resistant metal: Who Stays Dry?*

Which one of the following metals do not react with cold as well as hot water?

(A) Na (B) Ca (C) K (D) Cu

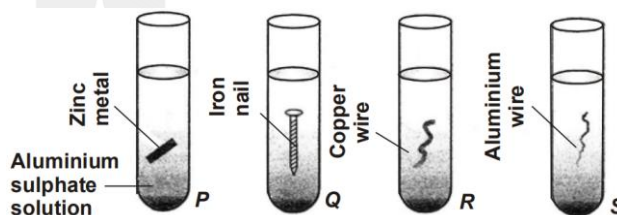**14.** *Calcium meets water: Gentle or Wild?*

What happens when calcium is treated with water?

1. It does not react with water.

2. It reacts more violently with water.

3. It reacts less violently with water.

4. Bubbles of hydrogen gas formed stick to the surface of calcium.

(A) 1 and 4 (B) 2 and 3 (C) 1 and 2 (D) 3 and 4

15. *Metal mix-up: Watch the colours change*

Four test tubes P, Q, R and S were taken and filled half with a solution of aluminium sulphate in water. Clean piece of metal zinc was placed in test tube P, iron nail in test tube Q, copper wire in test tube R and aluminium wire in test tube S. What colour change will be observed in all the four test tubes respectively?

(A) White, brown, blue, green

(B) Colourless, colourless, colourless, colourless

(C) Colourless, brown, blue, colourless

(D) Colourless, green, blue, colourless

16. *Melting Points and Currents: How Do Alloys Compare?*

As compared to the pure metal, the electrical conductivity and melting point of an alloy is
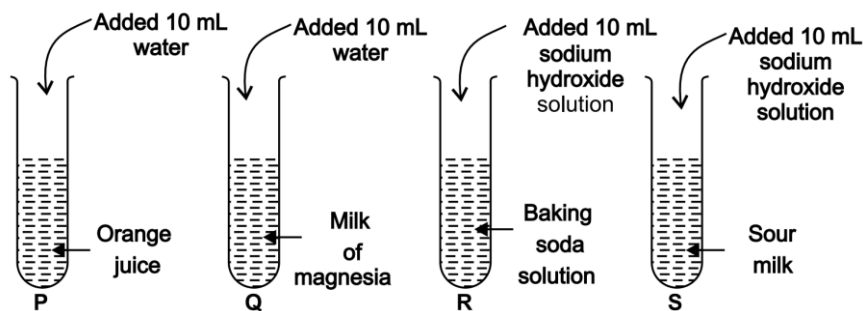
(A) More (B) Less (C) Equal (D) Can't generalize

17. *Nature of compound formed by Non-Metals*

Two non-metals X and Y combine with each other by sharing electrons to form compound Z. Which is the correct statement for compound?

(A) Undergoes ionic reactions and soluble in organic solvents.

(B) Undergoes ionic reactions and soluble in water.

(C) Undergoes molecular reactions and soluble in organic solvents.

(D) Undergoes molecular reactions and soluble in water.

18. **Methyl orange magic: which tube turns red**

Ashish took 4 test tubes **P**, **Q**, **R** and **S** each containing 10 mL of different solutions as shown in figure.

Few drops of methyl orange are added to each tube.

The solution in which tube will turn methyl orange to red?

(A) P   (B) Q   (C) R   (D) S

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19. **From fermentation to esters: The Journey of X, Y, and Z**

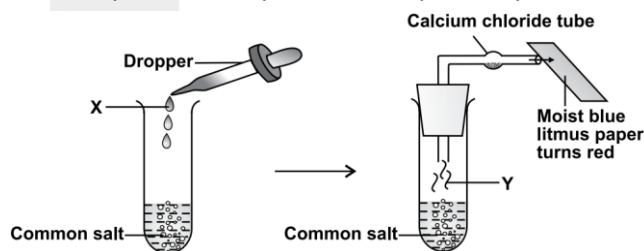Compound X has the molecular formula C_2H_6O.

1. X can be made by fermentation process.
2. X can be oxidised to Y.
3. X can react with Y to form Z and water.
To which homologous series do X, Y and Z belong?

	X	Y	Z
A	Alcohols	Carboxylic Acids	Esters
B	Alcohols	Esters	Carboxylic Acids
C	Carboxylic Acids	Alcohols	Esters
D	Carboxylic Acids	Esters	Alcohols

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20. **Chemical Clues: What's X and Y in the Reaction Mix?**

Study the given diagram carefully and identify X and Y respectively.

(A) Conc. HCl, CO_2 (B) Conc. H_2SO_4, HCl (C) Conc. HNO_3, H_2 (D) Conc. $NaOH, Cl_2$

MATHEMATICS

21. **Radius vs. Chord: Finding the Perfect Gap**

In a circle of radius 13 cm, a chord of length 24 cm is drawn. The distance of the chord from the centre is:

(A) 5 cm   (B) 7 cm   (C) 9 cm   (D) 11 cm

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22. **Double the Luck: Same-Color Ball Challenge**

A bag contains 3 red, 4 green, and 5 blue balls. Two balls are drawn at random. The probability that they are of the same colour is:

(A) 19 / 66   (B) 10 / 66   (C) 15 / 66   (D) 21 / 66

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23. **From Roots to Cubes: Quadratic Magic**

If roots of $2x^2 - 3x + 4 = 0$ are α, β then $\alpha^3 + \beta^3 = ?$

(A) $47/4$ (B) $-45/8$ (C) $53/4$ (D) $55/4$

24. *Three Points, One Circle: Find Its Equation*

The equation of a circle passing through (0, 0), (4, 0) and (0, 3) is:

(A) $x^2 + y^2 - 4x - 3y = 0$

(B) $x^2 + y^2 - 4x + 3y = 0$

(C) $x^2 + y^2 + 4x - 3y = 0$

(D) $x^2 + y^2 - 2x - 2y = 0$

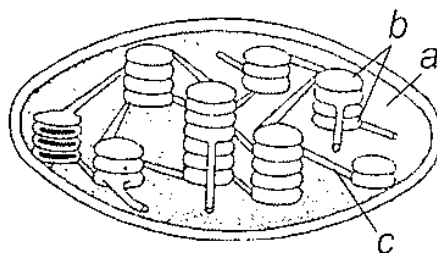**25.** *Ace Your Odds: Probability in Action*

If two different cards are drawn from a pack, the probability that one is a spade and one is a heart is:

(A) 13 / 102   (B) 26 / 221   (C) 13 / 221   (D) 1 / 34

BIOLOGY

26. *Inside the Chloroplast: Spot the Photosynthetic Powerhouses*

Examine the diagram of a chloroplast. Identify which statement about its parts is correct:

(A) The part labelled ' b ' is called intergranal thylakoid.

(B) The part labelled ' c ' is called granum.

(C) The part labelled ' a ' is the site of dark reaction.

(D) The parts labelled ' a ', ' b ' and ' c ', all possess photosynthetic pigments such as chlorophyll.

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27. *Soft vs. Hard: Spot the Wrong Differences in Plant Tissues*

Identify the incorrect differences between collenchyma and sclerenchyma from the table below:

	Collenchyma	Sclerenchyma
(i)	It is made up of dead cells	its cells are living
(ii)	Lumen or cell cavity is wide.	Lumen orcell cavity is usually narrow.
(iii)	It provides hardness to the region where it occurs.	It keeps the organ soft.
(iv)	Wall thickening is not uniform.	Wall thickening is uniform.
(v)	Pits are simple and straight.	Pits are simple, oblique and may be branched.

(A) (i) and (iii) only

(B) (i), (iii) and (iv) only

(C) (ii), (iv) and (v) only

(D) (i) and (iv) only

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28. *From Spongilla to Penguin: Classifying Creatures*

Which of the following statements about Spongilla, leech, dolphin and penguin is correct?

(A) Penguin is homoiothermic while the remaining three are poikilothermic.

(B) Leech is found in freshwater while all others are marine.

(C) Spongilla has special collar cells called choanocytes, not found in the remaining three.
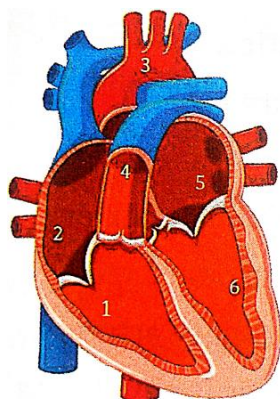
(D) All are bilaterally symmetrical.

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29. *Nutrients vs. Deficiency: Spot the Right Match.*

Which of the following correctly matches a nutrient with the disease caused by its deficiency?

(A) Vitamin E – Scurvy

(B) Iodine - Marasmus

(C) Protein – Cheilosis

(D) Vitamin D – Osteomalacia

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30. *Follow the Oxygen: Trace the Heart's Blood Highways*

In the diagram of the adult human heart, which of the following chambers or vessels carry oxygenated blood?

(A) 1 and 2 only   (B) 3 only   (C) 1, 2 and 4   (D) 3, 5 and 6

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31. *Command Center of Your Moves: Brain in Action*

Which part of the human brain is responsible for controlling voluntary activities of the body?

(A) Hypothalamus   (B) Cerebrum   (C) Medulla oblongata   (D) Cerebellum

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32. *Genetics at Work: Who Gets Which Blood Group?*

If a mother has a homozygous B blood group and the father has blood group A, what are the possible blood groups of their children?

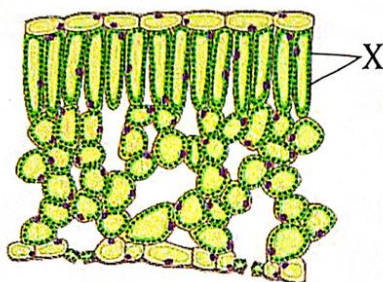(A) AB and B   (B) AB and A   (C) A and B   (D) 0

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33. *Toxic Climb: How Pollutants Amplify in Food Chains.*

The phenomenon of increase in concentration of non-biodegradable organic compounds with each trophic level in a food chain is called

(A) Biological evolution   (B) Bioenlargement

(C) Biological fixation   (D) Biomagnification

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34. *Leaf Powerhouse: What Happens if the Palisade is Gone?*

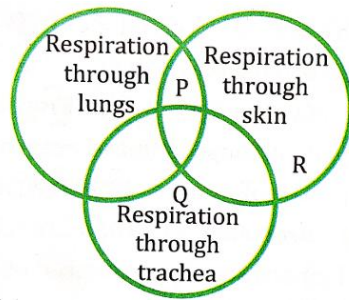The given figure illustrates a section through a leaf.

Which of the following results if the part labelled ' X ' is removed?

I. Capture of light energy will not take place.   II. Production of carbohydrate will get affected.

III. Production of protein will get affected.

(A) I and III only   (B) II and III only   (C) I and II only   (D) I, II and III

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35. *Breathing Styles in the Animal Kingdom: Can You Match Them?*

Refer to the given Venn diagram showing different modes of respiration in animals. Which animal corresponds to the part labelled:

(A) P-Man   (B) Q-Earthworm   (C) R-Cockroach   (D) P-Frog

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36. *Who Excretes What? Decoding Animal Waste Patterns*

Match the items given in column-I with column-II and select the correct option given below.

	Column-I		Column-II
1.	Ammonotelic	p.	Birds
2.	Ureotelic	q.	Tadpole
3.	Uricotelic	r.	Mammals

(A) 1 - q, 2 - r, 3 – p   (B) 1 - p, 2 - r, 3 - q   (C) 1 - r,2 - q,3 – p   (D) 1 - q, 2 - p, 3 -r

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37. *Evolution's Clues: Can You Identify Homologous Structures?*

Which of the following are homologous structures?

(A) Ginger and sweet potato   (B) Trunk of elephant and hand of chimpanzee

(C) Nail of man and claw of cat   (D) Wing of bird and butterfly

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38. *Mendel's Magic: How Traits Split in Gametes*

According to Mendel, each gamete carries only one factor or allele either dominant or recessive. This is called –

(A) The law of purity of gamete   (B) The law of segregation

(C) The principle of dominance   (D) Both (A) and (B)

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39. *Top Bud Rules: Understanding Apical Dominance*

Which of the following best describes apical dominance in plants?

(A) Suppression of growth of apical bud by axillary buds

(B) Suppression of growth of axillary buds by the presence of apical bud

(C) Inhibition of growth of axillary buds by removal apical bud

(D) None of the above

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40. *Hormones and Hydration: The ADH Effect*

How does a decrease in blood ADH levels affect micturition?

(A) Remains unchanged   (B) Decreases

(C) Increases   (D) None of these

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

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Hyderabad

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Think Results. Think Resonance.

2025 Result Highlights

- 175 IIT Seat Selections
- 550 Merit Seats in Top 10 EAPCET Colleges
- 600 Merit Seats in Top National and State Deemed universities
- 955 Students in State Top 10 Marks of Telangana Intermediate

- 323 NIT,IIIT,BITS Selections
- 910 Merit Seats in Top 30 EAPCET Colleges
- 90+ Merit Seats in Top Medical Colleges