INFORMATION BULLETIN ResoFAST 2025
Currently Studying in Class VI

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 VI

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	07	Q1 to Q7	28 M
Part-B	Chemistry	07	Q8 to Q14	28 M
Part-C	Biology	07	Q15 to Q21	28 M
Part-D	Mathematics	14	Q22 to Q35	56 M
Part-E	Mental Ability	05	Q36 to Q40	20 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**.

ResoFAST 2025 Syllabus
Currently Studying in Class VI

SUBJECT: PHYSICS	
Chapter Name	**Topics**
Water	Introduction to Water, Sources of Water, Water Cycle, Importance of Water, Conservation of Water
Earth	Introduction to Earth, Layers of the Earth, The Surface of the Earth, Earth and The Solar System, Earth's Movement
Temperature	What Is Temperature?, Effects of Heat and Cold, Measuring Temperature, Air and Temperature, Daily Life Examples of Temperature
Force & Work	What is Force, Effects of Force, Types of Force, What is Work, Force-Work Relationship, Energy and Work, Simple Machines & Work
Motion & Measurement	Introduction, Standard Units of Measurement, Types of Motion, Measuring Length, Correct Measurement Practices, Motion, Distance, Tools for Measurement
Light & Shadows	Introduction to Light, Formation of Shadows, Types of Objects, Characteristics of Shadows, Pinhole Camera, Reflection of Light, Day and Night Shadows, Uses of Light & Shadow
Pressure	Introduction to Pressure, Formula of Pressure, Factors Affecting Pressure, Pressure Exerted by Liquids, Atmospheric Pressure

SUBJECT: CHEMISTRY	
Chapter Name	**Topics**
States of Matter	Physical States of Matter; Properties of the Three States; Change of State / State Transitions; With Examples; Importance / Uses
Air around us	Air; Composition of Air; Properties of Air; Air and Environment
Rocks & Minerals	What Are Rocks? And Minerals?; Types of Rocks; How Rocks Are Formed; Minerals and Ores; Uses of Rocks and Minerals
Matter & Its Segregation	Properties of Matter and Methods of Separation
Materials of Daily use clothes	Different Types of Materials Used in Daily Life, Clothes/Textiles, Uses of Materials, Care of Materials/Fabrics
Classification & Diversity in matter	Definition of Matter, Observing Variety Around Us, Criteria / Properties for Classification, Classification of Materials, Purpose-Based Selection of Materials, Concept of Changes in Materials / Mixtures, Homogeneous vs heterogeneous mixtures

SUBJECT: BIOLOGY	
Chapter Name	**Topics**
Safety and First Aid	Safety at Home, Safety at School, Safety on Roads, First Aid Basics, Common Injuries, Emergency Situations, Role of Helpers
Nervous System	Introduction, Parts of Nervous System, Sense Organs, Response to Stimuli, Healthy Nervous System
Our Body	Organ Systems, Levels of Organization, Functions of Major Systems, Importance of Hygiene & Nutrition
Nutritious Food	Nutrients, Balanced Diet, Sources of Food, Deficiency Diseases, Food Preservation, Healthy Habits
Forest – Tribals	Tribal Communities, Dependence on Forests, Traditional Knowledge, Rights of Tribals, Challenges, Conservation
Agriculture – Crops	Types of Crops, Stages of Agriculture, Farming Tools, Irrigation, Role of Farmers, Cash & Food Crops, Modern Techniques
The Living Organisms – Characteristics and habitats	Characteristics, Habitats & Adaptations, Biotic & Abiotic Factors, Plant Adaptations, Animal Adaptations, Diversity, Environment Dependence
Getting to know plants	Types of Plants, Plant Parts, Roots, Stems, Leaves, Flowers, Classification
Garbage in – Garbage out	Types of Waste, Waste Disposal, 3Rs, Recycling, Environmental Impact, Waste Segregation, Community Role

SUBJECT: MATHEMATICS

Chapter Name	Topics
Multiple and Divide	Real-life Multiplication, Traditional Multiplication, Division as Equal Sharing & Repeated Subtraction, Patterns in Multiplication
Angles in our Surroundings	Angles Formed by Turning Objects, Right Angle, Angles Less Than / Greater Than Right Angle, Understanding Degrees
Playing with Shapes	Cube Nets & 3D Visualization, Dot-Grid Geometry, Shadows & 2D Projections, Circle Construction & Radius, Tangram Geometry & Composing Shapes, Floor-Tile Patterns & Repetition
Bigger Numbers	Place Value & Expanded Form of Large Numbers, Forming Largest/Smallest Numbers with Given Digits, Estimation of Sums and Differences, Operations with Bigger Numbers, Order of Magnitude Thinking
Knowing Our Numbers	Estimating And Comparing Numbers, Estimation and Rounding Off Numbers, Introduction of Large Numbers, Place Value of Larger Numbers, Use of Commas, International System of Numeration
Whole Numbers	Whole Numbers, Representation of Whole Numbers on Number Line, Properties of Whole Numbers, Patterns in Whole Numbers
Playing with Numbers	Divisibility Rules of Numbers, Factors and Multiples, Prime, Composite, Co-Prime & Twin Prime Numbers, Prime Factorization and Methods of Prime Factorization, Common Factors and Multiples, Highest Common Factor (HCF) And Least Common Multiple (LCM), Relationship Between LCM and HCF
Integers	Negative Numbers, Representation of Integers on A Number Line, Ordering of Integers, Addition and Subtraction of Integers

SUBJECT: MENTAL ABILITY

Chapter Name	Topics
Playing Alphabet	Position of Alphabet, Alphabetical Order, Word Formation by Various Methods, Alphabetical Quibble
Trains	Number Series, Alphabet Series, Letter Repeating Series

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RESONANCE
SCHOOLS
THE EQUATION FOR EXCELLENCE

MEGA
ResoFAST
Resonance Future Achievers Scholarship Test

Class: Currently Studying in Class VI

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 **FIVE PARTS**. **Part-A** is *Physics*, **Part-B** is *Chemistry,* **Part-C** is *Biology,* **Part-D** is *Mathematics,* and **Part-E** is *Mental Ability.*

3. The question paper consists of **7 questions** each from **Physics, Chemistry,** and **Biology, 14 questions** from **Mathematics,** and **5 questions** from **Mental Ability,** 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.
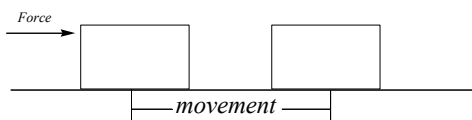
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All the Best

PHYSICS

1. *Push It to Work: When Force Makes Things Move*

If a force is acting on a body and the body moves along the direction of force is called

(A) Force   (B) Work   (C) Pressure   (D) Energy

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2. *Hot or Not? Converting Celsius to Fahrenheit*

Ten Celsius equals_____ Fahrenheit

(A) 20   (B) 30   (C) 40   (D) 50

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3. *Peeling the Earth: What's on the Outside?*

What is the Earth's outermost layer called?

(A) Mantle   (B) Core   (C) Crust   (D) Lithosphere

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4. *From Wheels to Seconds: KM/H to M/S Made Easy*

90 kmph = _____ m/s

(A) 90   (B) 45   (C) 25   (D) 100\

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5. *Footprints in Force: Measuring Pressure*

The weight of a person is 600 N and the area of the foot in contact with the ground is 0.2 m². What is the pressure exerted by the person on the ground?

(A) 3000 Pa   (B) 2000 Pa   (C) 1500 Pa   (D) 5000 Pa

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6. *Shadow Secrets: The Dark Core*

In the formation of shadows, the part of the shadow where light is completely blocked is called:

(A) Penumbra   (B) Umbra   (C) Shadow core   (D) Light zone

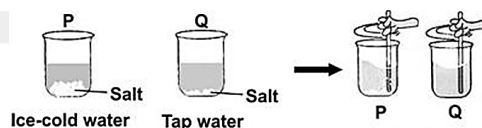**7.** *Speed Demystified: How Fast Are You Going?*

What is the distance traveled by an object per unit time called?

(A) Speed   (B) Acceleration   (C) Velocity   (D) Momentum

CHEMISTRY

8. *Hot or Not: The Role of Heat in Dissolving Substances*

What conclusion can you draw from the following experiment?

(A) Stirring decreases solubility, increase in temperature increases solubility.

(B) Stirring increases solubility, increase in temperature decreases solubility.

(C) Stirring increases solubility, decrease in temperature decreases solubility.

(D) Stirring decreases solubility, decreases in temperature increases solubility.

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9. *Sweet Solutions: Stirring, Heating, and Dissolving*

Reshma took three beakers X, Y and Z containing cold, warm and hot water respectively as shown in the figure. She added two table spoons of sugar to each beaker and stirred the solutions. After two minutes she observed the following. Choose the correct statement(s) that explains her observations.

(i) The solubility of sugar decreases with increase in temperature.

(ii) The solubility of sugar increases with increase in temperature.

(iii) We can add some more sugar if we heat the water.

(A) (i), (ii) and (iii   (B) (ii) and (iii)   (C) (i) and (iii)   (D) (iii) Only

10. *From Solid to Gas: The Magic of Sublimation*

Which of the following is an example of sublimation in everyday life?

(A) Ice melting into water

(B) Salt dissolving in water

(C) Dry ice turning into carbon dioxide gas

(D) Water boiling into steam

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11. *Blink and It's Gone: Understanding Rapid Changes*

Which of the following is an example of a fast change?

(A) Growth of a plant

(B) Melting of ice

(C) Ripening of fruit

(D) Formation of mountains

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12. *Chemical Clues: Spotting Real Reactions*

Which of the following is NOT a characteristic of a chemical change?

(A) Formation of a new substance

(B) Change in color

(C) Change in state

(D) Release of gas

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13. *Hot and Cold: The Science Behind Thermometers*

Which property of materials is most important for making accurate thermometers?

(A) Density

(B) Expansion and contraction with temperature

(C) Color

(D) Flexibility

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14. *States in Motion: Matching Everyday Changes*

Match the column-I with column-II and select the correct option from the given codes:

Column-I	Column-II
P. Water in an ice tray turning into ice cubes.	i. Evaporation
Q. Perfume gradually losing its smell.	ii. Boiling
R. Water droplets forming on the window panes of an air conditioned bus.	iii. Freezing
S. Bubbles appearing in a liquid when it is heated.	Iv. Condensation

(A) P-ii, Q-i, R-iv, S-iii   (B) P-iii, Q-I, R-iv, S-ii   (C) P-iii, Q-ii, R-i, S-iv   (D) P-iv, Q-iii, R-i, S-ii
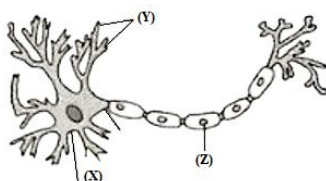
BIOLOGY

15. *Missing Ingredient: Why the Biuret Test Failed*

Ravi forgot to add **caustic soda (NaOH)** while testing for protein in a powdered protein supplement dissolved in water. He only added **copper sulfate**. No colour change was observed. What is the most likely reason for no colour change in Ravi's test?

(A) Protein is not present

(B) Copper sulfate neutralized the protein

(C) Absence of alkaline medium

(D) Biuret reagent was too strong

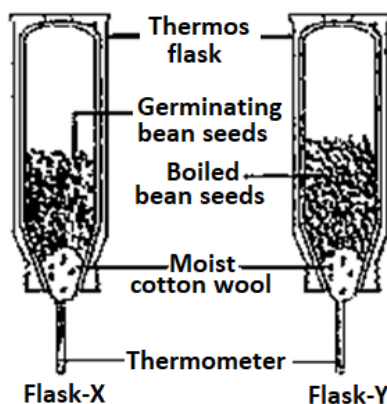**16.** *Neuron Know-How: Spotting the Right Structures*

Identify structures X, Y and Z and select the incorrect statement regarding them.

(A) X is a cell body having nucleus and cytoplasm.

(B) Y are dendrites which are branched extensions of cell body.

(C) Z is an axon which is a cylindrical process arising from X.

(D) Y transmit nerve impulse form one neuron to another whereas Z receive impulses.

17. *Hot Seeds: How Respiration Warms Germinating Beans*

Farheen soaked some bean seeds in water overnight. Next morning she drained the water and kept the seeds moist till they started germinating. She boiled half of the seeds and then kept the germinating seeds in one thermos flask (X) and the boiled seeds in another thermos flask (Y). She covered the mouths of both flasks with moist cotton wool. Then she inserted thermometers in both flasks and kept the flasks as shown in the figure.

What would be her observation?

(A) Temperature of flask X increases because it has photosynthesising seeds.

(B) Temperature of flask X increases because it has respiring seeds.

(C) Temperature of flask Y increases because it has boiled seeds.

(D) Both (B) and (C)

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18. *Forest Fallout: The Hidden Costs of Deforestation*

Which of the following is NOT a consequence of deforestation?

(A) Increased levels of ground water.

(B) Removal of the top layer of soil by wind.

(C) Increased levels of carbon dioxide in the atmosphere.

(D) Destruction of the natural habitats of plants and animals.

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19. *Not Every Illness: Spotting the Odd Disease Out*

Select the disease that is not caused by improper disposal of sewage.

(A) Cholera   (B) Typhoid   (C) Heart attack   (D) Jaundice

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20. *Manure vs. Fertilizer: Soil Science Showdown*

Following are the differences between manure and fertilizers.

	Manures	Fertilizers
(i)	They are not easily soluble in water, so they are not easily absorbed by the roots of the plants.	They are soluble in water and are absorbed easily by the plants.
(ii)	These are inorganic substances.	These are organic substances.
(iii)	Excessive use does not harm the soil texture, they provide humus to the soil.	Excessive use can change the chemical composition of the soil. And also pollutes water.
(iv)	They restore the soil texture and help in water retention.	They may damage the soil texture.
(v)	These are nutrient specific.	These are not nutrient specific

Which of the given differences are incorrect

(A) (ii) and (v) only   (B) (iii) and (iv) only   (C) (i), (ii) and (v) only   (D) (i), (iii) and (v) only

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21. *Choking Danger: When Every Second Counts*

A student suddenly starts coughing forcefully and appears to be choking while eating lunch. She cannot speak properly and points to her throat. A nearby teacher instructs a classmate to perform abdominal thrusts (Heimlich maneuver). What is the most likely cause of this emergency?

(A) Sudden airway irritation due to food allergy   (B) Food lodged in the windpipe

(C) food lodged in the food pipe(esophagus)   (D) Excessive coughing due to throat infection

MATHEMATICS

22. *The Power of 7 Digits: What Happens When We Add 1?*

If 1 is added to the greatest 7-digit number, it will be equal to

(A) 100 thousand   (B) 1 lakh   (C) 10 lakh   (D) 1 crore

23. *Digit Dance: Crafting the Smallest Number*

Keeping the place of 6 in the number 6350947 same, the smallest number obtained by rearranging other digits is

(A) 6975430   (B) 6043579   (C) 6034579   (D) 6034759

24. *The Special Number that Changes Nothing*

Additive identity of 22 is

(A) -22   (B) 1   (C) 0   (D) 22

25. *Division Dilemma: Making Numbers Fit*

What least number must be subtracted from 13,601 to get a number exactly divisible by 87?

(A) 25   (B) 29   (C) 27   (D) 23

26. *Shopping Math: Counting Costs Made Easy*

On Monday Raima bought 7 ice-creams costing Rs. 15 each. On Tuesday she bought 4 flower pots costing Rs. 85 each. The total cost spent is

(A) 285   (B) 399   (C) 476   (D) 445

27. *Factor Fun: Unlocking 140's Secrets*

Prime factors of 140 are

(A) $2 \times 2 \times 7$ (B) $2 \times 2 \times 5$ (C) $2 \times 2 \times 5 \times 7$ (D) $2 \times 2 \times 5 \times 7 \times 3$

28. *Finding the Greatest Common Ground*

HCF of 36 and 144 is

(A) 36   (B) 144   (C) 4   (D) 2

29. *Multiples in Motion: LCM Made Simple*

LCM of 36 and 72 is

(A) 36   (B) 72   (C) 108   (D) 2

30. *From Positive to Negative: Exploring Sums*

The sum of $(+9) + (-6) + (-3) + (+5) + (-6)$ is

(A) 1   (B) –1   (C) –29   (D) 29

31. *From Numbers to Answers: Expression Exploration*

The value of $18 + [3 + \{7 - 8 + (6 - 5) + 3\} - 9]$ is

(A) –15   (B) 13   (C) 14   (D) 15

32. *Breaking It Down: Expanded Form Fun*

What is the expanded form of the number 1618

(A) 1600 + 10 + 8   (B) 1000 + 60 + 8   (C) 1000 + 600 + 100 + 8   (D) 1000 + 600 + 10 + 8

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33. *Baking Math: Boxes and Cookies*

How many boxes will a baker need if she bakes 876 cookies & packs them into 45 boxes?

(A) 20 boxes   (B) 19 boxes   (C) 22 boxes   (D) 21 boxes

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34. *Millions in Mind: Understanding 7-Digit Numbers*

With which place does a 7-digit number start in the Indian system?

(A) Lakhs   (B) Ten thousand   (C) Ten lakhs   (D) Crores

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35. *Zero Power: Unlocking Place Values*

Find the place value of 0 in 36,04,85,298

(A) Ten lakhs   (B) Lakhs   (C) Zero   (D) 6 crores

MENTAL ABILITY

36. *Letter Lab: Crafting Words from HYPOTHESIS*

If it is possible to make a meaningful word with the first, fourth, fifth and eighth letters of the word HYPOTHESIS which of the following will be the third letter of that word? If more than one such word can be formed, give ' X ' as the answer. If no such word can be formed, give ' M ' as the answer.

(A) M   (B) X   (C) S   (D) T

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37. *From Start to Finish: Making Words Flow*

Arrange the given words in a meaningful sequence and select the correct option.

1. Probation   2. Interview   3. Advertisement   4. Selection

5. Application

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

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38. *Alphabet Adventure: Spotting Letter Pairs*

How many such pairs of letters are there in the word INADEQUATE each of which has the same number of letters between them in the word as in the English alphabets?

(A) None   (B) One   (C) Two   (D) More than two

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39. *Letter Patterns: Finding the Missing Link*

Find the missing term in the following sequence. ACH, FAI, JYK, MWN, ?

(A) PVS   (B) OUR   (C) PTQ   (D) OTS

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40. *Number Mystery: Solve the Series*

Find the missing term in place of question mark (?) in the number series given below.

102, 96, 89, 81, 72, ?, 51

(A) 63   (B) 61   (C) 60   (D) 62

SPACE FOR ROUGH WORK