

INFORMATION BULLETIN MEGA ResoFAST – 2026-27

Moving to Class IX

About MEGA ResoFAST:

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

For Foundation aspiring students MEGA 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 MEGA ResoFAST?

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

How will MEGA 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.
- MEGA 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 MEGA ResoFAST?

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

Registration Fee:

- Rs. 99/- 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 MEGA ResoFAST Co-ordination Call for Registration Assistance on **9121219858 (9 AM to 7 PM)**

MEGA ResoFAST: Exam Process

MEGA ResoFAST exam is conducted in Online/Offline mode across Rayalaseema as per the specific dates mentioned in website.

Disclaimer:

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

MEGA ResoFAST 2026 Exam Pattern

Moving to Class IX

- The question paper contains a total of **40 Multiple Choice Questions**, numbered from **Q1 to Q40**.
- Pattern s 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	Q21 to Q35	56 M
Part-E	Mental Ability	05	Q36 to Q40	20 M
Total		40	Q1 to Q40	160 M

- Attempt all questions, each having only one correct answer.
- Each question carries **4 marks**.
- 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.
- The use of **white correction fluid** is **strictly prohibited** on the OMR Sheet.
- 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.
- There are empty pages left at the end of this question paper for **rough work**.

MEGA ResoFAST SYLLABUS

Moving to Class IX

SUBJECT: PHYSICS	
Chapter Name	Topics
Force	What Is Force?, Types of Force, Effects of Force, Balanced and Unbalanced Forces, Friction.
Pressure	Introduction To Pressure, Air Pressure and Winds, Storms and Cyclones, Role of Air Pressure in Storms, Safety Measures During Storms
Friction	Introduction To Friction, Types of Friction, Factors Affecting Friction, Effects of Friction, Reducing and Increasing Friction
Electricity	Charging And Atomic Orbital Model, Lightening and Lightening Conductors, Do Liquids Conduct Electricity?, Chemical Effects of Electric Current, Electroplating
Stars & Solar System	Introduction to Earth, Layers of the Earth, The Surface of the Earth, Earth and The Solar System, Earth's Movement

SUBJECT: CHEMISTRY	
Chapter Name	Topics
Synthetic fibres and plastics	Natural fibres, synthetic fibres - preparation and uses, How can we identify the polymer based on codes, Plastics-Thermoplastics and Thermosetting plastics, How plastics effect environment, Biodegradable and Non-biodegradable plastics, 5R principle
Coal and petroleum	Exhaustible and Inexhaustible Resources Fossil fuels: i. Coal- Formation, Types of coal, Destructive distillation of coal, uses of coal ii. Petroleum – Formation, Fractional distillation of petroleum and uses of different fractions of petroleum iii. Natural gas- Formation, Cracking and uses Misuse of energy sources, Conservation of fossil fuels, Harmful effects caused by the use of fossil fuels
Combustion, fuels and flame	Combustion-Conditions need for combustion, Ignition temperature, Types of combustion, fire extinguishers - types, Zones of candle flame, Fuels - solid, liquid and gaseous fuels
Metals and non-metals	Metals and non-metals physical properties, Chemical properties of metals with Oxygen, Water, acids, bases and other metals (displacement reaction), metal activity series, uses of metals and non-metals

SUBJECT: BIOLOGY

Chapter Name	Topics
Cell: The Basic Unit of Life	Discovery of the Cell, Cell Theory, Variation in Cell size, shape, and number, Cell membrane, Cell wall, Cytoplasm, Nucleus, Mitochondria, Plastids, Endoplasmic Reticulum, Golgi complex, Ribosomes, Lysosomes, Vacuole.
Microorganisms: Friends & Foe	Bacteria, Protozoa, Fungi, Algae, Virus, Microbes in household products, Agriculture, Industrial products, Health sector, Biocontrol agents, Bioweapons, Spoilage of Food,
Biodiversity and its Conversation	Biodiversity- Importance, levels, Biodiversity in India, Biodiversity of Telangana, Loss of Biodiversity, Causes of biodiversity loss, Deforestation, Forest, Poaching, Red data book, Endemic Species, Insitu and Exsitu Conversation, Conventions of Biodiversity, Recycling of paper, Reforestation, Migration.

SUBJECT: MATHEMATICS

Chapter Name	Topics
Rational numbers	Properties, representation on number line, Density, Operations
Linear equations in one variable	Equations with Variables on both sides, Word Problems
Understanding quadrilaterals	Types, Angle sum, Parallelograms, Rhombus, Rectangle, Square
Data handling	Frequency Distribution, Histograms, Pie Charts, Chance & Probability
Squares and square roots	Perfect Squares, Finding Square Roots
Cubes and cube roots	Perfect Cubes, Cube Roots by Prime Factorisation
Comparing quantities	Percentage Increase/Decrease, Profit/Loss, Simple & Compound Interest
Algebraic expressions & identities	Multiplication of Polynomials, Standard Identities
Mensuration	Area of Trapezium, Quadrilateral; Surface Area & Volume
Exponents & powers	Negative Exponents, Laws, Standard Form of Numbers
Direct and inverse proportions	Direct variation, Inverse variation, Word problems
Factorisation	Common factors, Grouping, Using identities, Dividing polynomials
Graphs / introduction to graphs	Coordinate Axes, Plotting Points, Graphs
Practical geometry	Constructing Quadrilaterals
Visualising solid shapes	Polyhedra, Euler's formula, Nets

SUBJECT: MENTAL ABILITY

Chapter Name	Topics
Series	Series
Direction Sense	Direction Sense



Class: Currently Studying in Class VIII

Maximum Marks: 160 M

Duration: 60 Min.

Resonance Future Achievers Scholarship Test

Important Instructions to the Students

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

- 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.
- The use of **white correction fluid** is **strictly prohibited** on the OMR Sheet.
- 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.
- There are empty pages left at the end of this question paper for **rough work**.

All the Best

PHYSICS

1. **Steady Moves: What do you call motion with equal distances and time?**

When a body covers equal distances in equal intervals of time, its motion is said to be

- (A) Non-uniform (B) Uniform (C) Accelerated (D) Back and forth

2. **Universal truth: Is 'G' the same everywhere?"**

The value of universal gravitational constant:

- (A) changes with change of place (B) does not change from place to place
(C) becomes more at night (D) becomes more during the day

3. **Electric Basics: Can you name the right unit for Current?"**

What is the unit of electric current?

- (A) Coulomb (B) ampere (C) Volt (D) Watt

4. **Reflection Check: Can you pick the right Image type?"**

In a plane mirror, the image formed is:

- (A) Real and inverted (B) Virtual and upright (C) Real and upright (D) Virtual and inverted

5. **Feel the heat: What's the true link between Heat and Temperature?"**

What is the relationship between heat and temperature?

- (A) Heat and temperature are inversely proportional
(B) Heat and temperature are directly proportional
(C) Heat is independent of temperature
(D) Heat is equal to temperature

6. **Pop Quiz: What causes the pressure to rise in a Sealed Space?"**

In a sealed container, the pressure of a gas increases when:

- (A) The temperature increases (B) The volume decreases
(C) Both (A) and (B) (D) The gas is allowed to escape

7. **Friction Facts: What doesn't affect the force that slows you down?"**

The force of friction does not depend on which of the following?

- (A) The speed of the object (B) The weight of the object
(C) The nature of the surfaces in contact (D) The normal force

CHEMISTRY

8. **Litmus test challenge: Which Element turns the tide?**

Kanika takes a burning substance and collects the evolved vapours in a test tube, making sure that they do not escape. A small amount of water is added to the test tube. To the solution obtained, a few drops of blue litmus solution are added. The litmus solution turns red. Which of the following could be the burning substance?

- (A) Mg (B) S (C) Na (D) Fe

9. **Full form of PCRA**

PCRA stands for

- (A) Petroleum conservation Research association (B) Pollution control research association
(C) Petroleum control research association (D) Petrol, coal reserve association

10. **Acronym Alert: What does PCRA really stand for?**

Bakelite and Melamine are examples of

- (A) Thermosetting plastics (B) Silk
(C) Nylon (D) Rayon

11. Reaction time: Which pair sparks a Displacement?"

Which of the following pairs will give displacement reactions?

- (A) FeSO₄ solution and Copper metal (B) AgNO₃ solution and Copper metal
(C) CuSO₄ solution and Silver metal (D) NaCl solution and Copper metal

12. Fuel Facts: Can you name the main ingredients of Coal Gas.

Main constituents of coal gas are -

- (A) H₂O, C₂H₆, O₂ (B) CH₄, CO₂, O₂ (C) CH₄, H₂, CO (D) C₂H₆, N₂, O₂

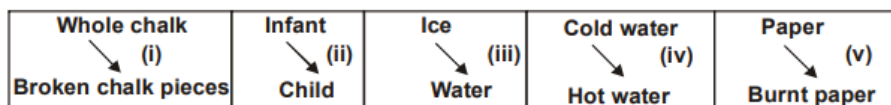
13. Digging Deep: Can you Identify the Superior coal?"

Which is the superior quality of coal?

- (A) Anthracite (B) Peat (C) Lignite (D) Bituminous

14. Change Game: Can you spot the incorrect match in the flow?"

In the given flow chart,



Pick the incorrect match.

- | | | | | | |
|-----|--------------|----------|----------|--------------|--------------|
| | (i) | (ii) | (iii) | (iv) | (v) |
| (A) | Chemical | Physical | Chemical | Irreversible | Reversible |
| (B) | Physical | Physical | Chemical | Chemical | Chemical |
| (C) | Irreversible | Chemical | Physical | Reversible | Chemical |
| (D) | Irreversible | Chemical | Chemical | Irreversible | Irreversible |

BIOLOGY

15. Genetic Puzzle: What's the Chromosome mix in a female Zygote?

In humans beings, the chromosome composition of female destined zygote is

- (A) 22 + X (B) 44 + XY (C) 22 + Y (D) 44 + XX

16. Match it right: Can you pair these creatures with their reproduction types.

Match Column-I with Column-II and select the correct answer with using the codes given below the columns.

	Column I		Column II		Column III
P	Salamander	A	Asexual reproduction	1	Budding
Q	Yeast	B	Sexual reproduction	2	Fission
R	Paramecium			3	Ovipary
S	Platypus			4	Vivipary
T	Flying fox				

	P	Q	R	S	T
(A)	A, 3	B, 2	B, 2	B, 4	B, 3
(B)	B, 3	A, 1	A, 2	B, 3	B, 4
(C)	B, 4	A, 2	A, 1	A, 3	A, 4
(D)	A, 2	B, 1	B, 3	A, 2	B, 4

17. Cell Secrets: Which Organelle handles Protein Packaging like a Pro?"

What part of the cell serves to process, package and export proteins?

- (A) Mitochondria (B) Endoplasmic reticulum
(C) Nucleolus (D) Golgi apparatus

18. **Exclusive Species: Nature's Local treasures at risk**

Read the given statements and select the correct option.

Statement A: A plant or animal species which is exclusively found in a particular area and is not found naturally anywhere else, is known as endemic species.

Statement B: The existence of endemic species is often threatened due to the introduction of exotic species from some other geographical area.

- (A) Both statements A and B are true and statement B is the correct explanation of statement A.
- (B) Both statements A and B are true but statement B is not the correct explanation of statement A.
- (C) Statement A is true and statement B is false.
- (D) Both statements A and B are false.

19. **Deadly Bite: What tiny culprit causes Malaria?**

Malaria is caused due to-

- (A) Fungi
- (B) Plasmodium
- (C) Virus
- (D) Trypanosoma.

20. **Plant Power: Is Photosynthesis the Ultimate Food Factory?**

Statement 1: Photosynthesis is a process by which plants prepare their own food.

Statement 2: Carbohydrates are simple chemical substances.

- (A) Statement (1) is correct while statement (2) is incorrect.
- (B) Statement (2) is correct while statement (1) is incorrect.
- (C) Both statements are correct.
- (D) Both statements are incorrect.

21. **Rainforest Rookies: Who Rules the Trees?**

Carefully observe pictures given below and answer the following questions

Jungle Tales: Who's the Expert Climber—Toucan or Lion-Tailed Macaque?



(i) Toucan



(ii) Lion-tailed macaque

- (A) The animal shown in fig (i) lives in polar regions
- (B) The animals shown in fig (ii) lives in rainforests of Amazon rainforest
- (C) Both the animals are good climbers
- (D) The most striking feature of animal (ii) is its long tail.

MATHEMATICS

22. **Number Quest: Can you find the Perfect Value?**

What is the value of $1 + 2 + 3 - 4 + 5 + 6 + 7 - 8 + \dots + 27 - 28 + 29 + 30 + 31 - 32$?

- (A) 240
- (B) 225
- (C) 210
- (D) 196

23. **Two trains, one track, and a race against time—can you find the speed?**

The distance between two stations A and B is 340 miles. Two trains started from these stations towards each other. The speed of train started from A is 5 miles/h more than the speed of the train started from B. If the distance between the trains after 2 hours is 30 miles then the speed of the train which started from A is?

- (A) 90 miles/h
- (B) 340 miles/h
- (C) 30 miles/h
- (D) 80 miles/h

24. Crack the code and match the pairs—can you solve the mystery of the missing values?

Match Column (A) and Column (B) and then choose the correct option

	Column (A)		Column (B)
1	If $0.8 \times x = 0.0128$ then the value of x is	A	0.21
2	If $6.4 \times 2.5 + 4 + 2.1 \div y = 30$ then the value of y is	B	0.35
3	If $\frac{0.8 \times 0.8 - 0.04 \times 0.04}{(0.8 + 0.04)} = p$, then the value of p is	C	0.016
4	If 25% of 0.8 times $m = 0.07$, then the value of m is	D	0.76

(A) $1 \rightarrow d, 2 \rightarrow a, 3 \rightarrow c, 4 \rightarrow b$

(B) $1 \rightarrow c, 2 \rightarrow d, 3 \rightarrow a, 4 \rightarrow b$

(C) $1 \rightarrow c, 2 \rightarrow a, 3 \rightarrow b, 4 \rightarrow d$

(D) $1 \rightarrow c, 2 \rightarrow a, 3 \rightarrow d, 4 \rightarrow b$

25. Dive into the integer games—can you spot which one breaks the whole number rule?

If $(a + 3)$ and $(b - 3)$ are integers then which of the following may not be an integer?

(A) $2a + 3b$

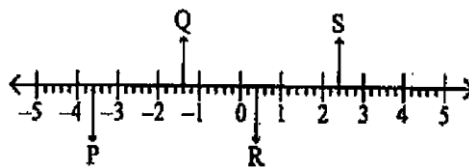
(B) $a - 2b$

(C) $(a + 3) \times (b - 3)$

(D) $\frac{a+3}{b-3}$ {where, $b \neq 3$ }

26. In the world of numbers, every step counts. What's the true value of x in this mayhem?

Observe the given number line and find the value of $P + Q + R + S$.



(A) 0

(B) 2.2

(C) -2.2

(D) 5.0

27. On a Root quest, Pythagoras leads the way — can you find P, Q, and R without delay?

Fill in the blanks and select the correct option.

(i) The greatest member of the Pythagorean triplet, if the other two members are 20 and 99, is P.

(ii) The value of $\sqrt{156.25}$ is Q.

(iii) If $\sqrt{13 - a\sqrt{10}} = \sqrt{8} + \sqrt{5}$, then the value of a is R

	P	Q	R
(A)	101	1.25	5
(B)	99	1.25	4
(C)	88	125	-3
(D)	101	12.5	-4

28. Dive into decimal daydreams — simplify the mystery.

Simplify: $\frac{\sqrt[3]{(0.027)^2} + (\sqrt[3]{0.000512})^2 - \sqrt{(0.3)^4}}{(0.2)^4}$

(A) 1

(B) 2

(C) 3

(D) 4

29. Saddle up with the Line ranger — find 'x' and solve this equation.

Find the value of z in the given equation: $\frac{1}{3} \left(5z - \frac{11}{4} \right) + \frac{7}{8} = \frac{7}{4} \left(z - \frac{1}{2} \right)$

(A) 10

(B) -10

(C) 12

(D) -12

30. **Join the discount detectives — crack the case of gain or loss with every price slice!"**

The shopkeeper marks the price of a shirt 50% more than the cost price and allows a discount of 40% on the mark price of the shirt. Find the gain or the loss percent the shopkeeper has made on whole transaction.

- (A) 10% loss (B) 10% gain (C) 20% loss (D) 20% gain

31. **It's time for the solve-it showdown — crack the code and claim the crown.**

If $a^2bc^3 = 5^3$ and $ab^2 = 5^6$, find abc .

- (A) 5 (B) 5^2 (C) 5^3 (D) $5^{4.5}$

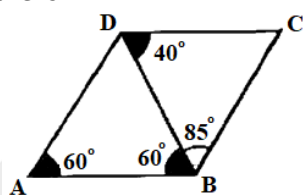
32. **When X and Y hit the field, who scores the winning value?**

What is the value of 'x' if $\frac{a^x}{a^y} = a^{10}$ and $(a^y)^3 = a^x$ for $a > 1$?

- (A) 25 (B) 5 (C) 20 (D) 15

33. **On a mission to find the longest stretch—can you spot the tri-possible winner?"**

The longest segment shown in the figure is:



- (A) \overline{AB} (B) \overline{BD} (C) \overline{DC} (D) \overline{BC}

34. **Triangle Mania kicks in—how many shapes can you form with sides 2, 7, and x?**

If x is an integer and $2 < x < 7$, how many different triangles are there with sides of lengths 2, 7 and x ?

- (A) One (B) Two (C) Three (D) Four

35. **Side by Side: Are these the Perfect Triangle?**

Which of the following can be the sides of a triangle?

- (A) 4, 8, 2 (B) 4, 4, 8 (C) 3, 6, 3 (D) 7, 8, 9

MENTAL ABILITY

36. **Even numbers line up — can you spot the one standing fifth from the right**

If all the even numbers in between numbers from 32 to 51 are arranged in a row then number at fifth position from right, will be-

- (A) 36 (B) 40 (C) 42 (D) 48

37. **Spot the A's dancing with C, but dodging B's—how many fit the bill**

How many A are in the given letter series which does not has B just before it but has C just after it?

DACBACDACBCACBACBADC

- (A) 3 (B) 4 (C) 5 (D) 6

38. **Crack the code where letters turn to numbers — can you decode PLATE?**

In a coded language T A K E=1790, PLOT =5321 then code for PLATE will be -

- (A) 53701 (B) 53071 (C) 35710 (D) 53710

39. **From FRUIT to code — can you unlock the secret behind FLOWER**

In a coded language FRUIT = HTWKV then FLOWER will be written as -

- (A) HNQYGT (B) HGPTYN (C) HYNGPT (D) HTPNGY

40. **Crack the code from SHIFT to UFKDV — now, can you decode COVET's secret**

In a coded language SHIFT is written as UFKDV, Then COVET may be written in coded language as-

- (A) EMXCV (B) FNYDU (C) EXCUV (D) EQUVS

SPACE FOR ROUGH WORK



3 OUT OF EVERY 4

Resonance Hyderabad Students
Secured Merit Seats in 2025

6100+ students have secured seats in IITs, NITs, IIITs, AIIMS & other top institutes in just 7 years

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
- 323 NIT,IIIT,BITS Selections
- 910 Merit Seats in Top 30 EAPCET Colleges
- 90+ Merit Seats in Top Medical Colleges
- 955 Students in State Top 10 Marks of Telangana Intermediate

HYDERABAD'S

BIGGEST
IIT-JEE & NEET
SUCCESS STORY

IS HERE

