



SCIENCEBEAM

TALENT SEARCH EXAM



Date of Exam : 27 - Oct - 2024 (Sunday)

General Instructions :

1. Be present at the exam center at least 30 mins before the exam time.
2. Use of the calculator or any other electronic device in the examination hall is strictly prohibited.
3. Use a HB pencil or Blue/ Black Ball pen only to mark your choice of answer in the OMR sheet by darkening a circle as shown below



4. Rough work should be done only on the sheet space provided in the booklet.
5. The exam pattern is of MULTIPLE CHOICE QUESTIONS and all of them are objective type.
6. The candidate can take the question booklet home after the exam.

GRADE XI, XII & XII Passed

Grade	Duration	Exam Pattern			
		Subject	No. of Questions * Marks	Marks Allotted	
Grade XI, Grade XII, Grade XII Passed (Medical)	2 Hrs (10:00 am to 12:00 Noon)	Physics	20 Single Choice : 15 * 2 Multiple Choice : 5 * 4	50	
		Chemistry	20 Single Choice : 15 * 2 Multiple Choice : 5 * 4	50	
		Biology	20 Single Choice : 15 * 2 Multiple Choice : 5 * 4	50	
		Total Questions	60	Total Marks	150
Grade XI, Grade XII, Grade XII Passed (Engineering)	2 Hrs (10:00 am to 12:00 Noon)	Physics	15 Single Choice : 10 * 2 Multiple Choice : 5 * 4	40	
		Chemistry	15 Single Choice : 10 * 2 Multiple Choice : 5 * 4	40	
		Mathematics	20 Single Choice : 15 * 2 Multiple Choice : 5 * 4	50	
		Total Questions	50	Total Marks	130

Single Choice : This section contains 15 MCQs. Each question has 4 choices (A), (B), (C) and (D) out of which **ONLY ONE is correct**. Each question carries "2" Marks. Each **incorrect answer gets "-1" negative marking**.

Multiple Choice : This section contains 5 Questions. Each question has 4 choices (A), (B), (C) and (D) and **MORE THAN ONE options (Either two options or three options or all options) are correct**. Each question carries "4" Marks that are divided equally among the options.

Correct Answer	Answer marked by student	Marks allotted
A & C	A & C	4
	A or C	2
	B or D	-1
	B & D	-2
	A & B / A & D / C & B / C & D	-1

Grade XI (Medical)		
Physics	Chemistry	Biology
<ul style="list-style-type: none"> ▪ Units & Measurements ▪ Motion in a straight line ▪ Motion in a plane ▪ Laws of Motion ▪ Work, Energy and Power ▪ System of Particles and Rotational Motion 	<ul style="list-style-type: none"> ▪ Some basic concepts of Chemistry ▪ Structure of Atom ▪ Classification of Elements and periodicity in properties ▪ Chemical bonding and molecular structure ▪ Thermodynamics 	<ul style="list-style-type: none"> ▪ Cell : The unit of life ▪ Cell cycle and cell division ▪ The living world ▪ Biological classification ▪ Morphology of flowering plants ▪ Structural organization in animals ▪ Biomolecules ▪ Breathing and exchange of gases ▪ Body fluids and circulation ▪ Excretory products and their elimination ▪ Locomotion and movement

Grade XI (Engineering)		
Physics	Chemistry	Mathematics
<ul style="list-style-type: none"> ▪ Physical World ▪ Units and Measurements ▪ Motion in a straight line ▪ Motion in a plane ▪ Laws of Motion ▪ Work, energy and power ▪ System of Particles and Rotational Motion 	<ul style="list-style-type: none"> ▪ Some basic concepts of Chemistry ▪ Structure of Atom ▪ Classification of Elements and periodicity in properties ▪ Chemical bonding and molecular structure ▪ Thermodynamics 	<ul style="list-style-type: none"> ▪ Sets ▪ Trigonometric Functions ▪ Complex numbers and quadratic equations ▪ Linear inequalities ▪ Permutations and Combinations ▪ Sequences and Series

Grade XII & Grade XII Passed (Medical)		
Physics	Chemistry	Biology
<ul style="list-style-type: none"> ▪ Electrostatics ▪ Current Electricity ▪ Magnetic Effects of Current and Magnetism ▪ Electromagnetic Induction and Alternating Currents ▪ Electromagnetic Waves ▪ Optics ▪ Dual Nature of Matter and Radiation ▪ Atoms and Nuclei ▪ Electronic Devices 	<p>Physical Chemistry</p> <ul style="list-style-type: none"> ▪ Solutions ▪ Electrochemistry ▪ Chemical Kinetics <p>Inorganic Chemistry</p> <ul style="list-style-type: none"> ▪ d-Block and f- Block Elements ▪ Coordination Compounds <p>Organic Chemistry</p> <ul style="list-style-type: none"> ▪ Biomolecules ▪ Haloalkanes and Haloarenes ▪ Alcohols, Phenols and Ethers ▪ Aldehydes, Ketones and Carboxylic Acids ▪ Amines 	<ul style="list-style-type: none"> ▪ Reproduction ▪ Genetics and Evolution ▪ Biology and Human Welfare ▪ Biotechnology and its Applications ▪ Ecology and Environment

Grade XII & Grade XII Passed (Engineering)		
Physics	Chemistry	Mathematics
<ul style="list-style-type: none"> ▪ Electrostatics ▪ Current Electricity ▪ Magnetic Effects of Current and Magnetism ▪ Electromagnetic Induction and Alternating Currents ▪ Electromagnetic Waves ▪ Optics ▪ Dual Nature of Matter and Radiation ▪ Atoms and Nuclei ▪ Electronic Devices 	<p>Physical Chemistry</p> <ul style="list-style-type: none"> ▪ Solutions ▪ Electrochemistry ▪ Chemical Kinetics <p>Inorganic Chemistry</p> <ul style="list-style-type: none"> ▪ d-Block and f- Block Elements ▪ Coordination Compounds <p>Organic Chemistry</p> <ul style="list-style-type: none"> ▪ Biomolecules ▪ Haloalkanes and Haloarenes ▪ Alcohols, Phenols and Ethers ▪ Aldehydes, Ketones and Carboxylic Acids ▪ Amines 	<ul style="list-style-type: none"> ▪ Relations, and Functions ▪ Algebra ▪ Calculus ▪ Vectors and Three dimensional Geometry ▪ Linear Programming ▪ Probability