

SYLLABUS FOR HAVALDAR EDUCATION (SCIENCE)

1. Pattern.

Ser No	Subject	Questions	Marks	Pass Marks	Remarks
(a)	Paper-1: General Knowledge & English	50	50	20 in each Paper	Candidate has to pass each part separately
(b)	Paper-2 Maths Physics Biology Chemistry Computer Science	50	50		

2. Syllabus.

(a) **General Knowledge** : The test will include questions relating to India and its neighboring countries especially pertaining to History, Culture, Geography and who's who. In addition Abbreviations, Sports, Awards and Prizes, Terminology, Indian Armed Forces, Continents and Sub Continents, Inventions and Discoveries, The Constitution of India, International Organizations, Books and Authors, Knowledge of Important events that have happened in India and at world level in the recent years, Current important world events, Prominent personalities etc.

(b) **English.**

- (i) Comprehension.
- (ii) **Parts of Speech.**
 - (aa) Article.
 - (ab) Noun and Pronoun.
 - (ac) Adjective.
 - (ad) Preposition.
 - (ae) Conjunction and models.
- (iii) Verbs
- (iv) **Tenses.**
 - (aa) Present/past forms.
 - (ab) Simple/continuous form.
 - (ac) Prefect forms.
 - (ad) future time reference.
- (v) Sentence Structure
- (vi) **Type of Sentences.**
 - (aa) Affirmative/interrogative sentences.
 - (ab) Use of Phrases.
 - (ac) Direct and Indirect speech.
 - (ad) Active and Passive Voice.
- (vii) **Other Areas.**
 - (aa) Idioms and Phrases.
 - (ab) Synonyms and antonyms.
 - (ac) One word substitution.

(c) **Mathematics.**

- (i) Algebra.
- (ii) Matrices & Determinants.
- (iii) Analytical Geometry.
- (iv) Trigonometry.
- (v) Integral Calculus.
- (vi) Differential Calculus.
- (vii) Probability and Statistics.
- (viii) Number Systems
- (ix) Fundamental arithmetical operations
- (x) Mensuration
- (xi) Area, Volume and Surface Area
- (xii) Vector Algebra
- (xiii) Binomial theorem
- (xiv) 3D Geometry
- (xv) Sequence and series
- (xvi) Permutation and Combination
- (xvii) Complex numbers

(d) **Physics** : Physical Properties and States of Matter, Mass, Weight, Volume, Density and Specific Gravity, Principle of Archimedes, Pressure Barometer, Motion of objects, Velocity and Acceleration, Newtons Laws of Motion, Force and Momentum, Parallelogram of Forces, Stability and Equilibrium of bodies, Gravitation, elementary ideas of work, Power and Energy, Heat and its Effects, Sound waves and their properties, Reflection and refraction. Spherical mirrors and Lenses, Type and properties of magnet, Static and Current Electricity, conductors and Non-conductors, Ohms Law, Simple Electrical Circuits, Heating.

(e) **Chemistry** : Physical and Chemical changes. Elements, Mixtures and Compounds, Symbols, Formulae and simple Chemical Equations, Law of Chemical Combination, Properties of Air and Water, Preparation and Properties of Hydrogen, Oxygen, Nitrogen and Carbondioxide, Oxidation and Reduction, Acids, bases and salts, Carbon and its forms, Natural and Artificial Fertilizers, Elementary ideas about the Structure of Atom, Atomic, Equivalent and Molecular Weights, Valency.

(f) **Biology** : Basic Biology, Life Process, Study of Birds, Human Beings, Uniqueness of human body, Food and Health, Necessity of balanced diet, Wasteful Food Practices, Food Yield, Essentials for good health, Cycles of materials, Ecological balance, Living resources, Habitat and Organisms, Adaptation.

(g) **Computer** : Computer System, Concept of Memory, Input / Output Devices, Basic concept of an Operating System and its functions, Introduction to Windows, MS Word, MS Power Point, MS Excel.

Note:- The above syllabus is not a comprehensive list of topics pertaining to the subject. Questions are designed to test the candidate's general awareness of the environment around him and its application to society. Questions are also designed to test knowledge of current events and such matters of everyday observation and experience as may be expected of an educated person. At times questions may be asked other than the above topics also.

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SYLLABUS FOR HAVALDAR EDUCATION (ARTS)

1. Pattern.

Ser No	Subject	Questions	Marks	Pass Marks	Remarks
(a)	Paper-1: General Knowledge & English	50	50	20 in each Paper	
(b)	Paper-2 Maths History Geography Political Science Economics	50	50		

2. Syllabus.

(a) **General Knowledge** : The test will include questions relating to India and its neighboring countries especially pertaining to History, Culture, Geography and who's who. In addition Abbreviations, Sports, Awards and Prizes, Terminology, Indian Armed Forces, Continents and Sub Continents, Inventions and Discoveries, The Constitution of India, International Organizations, Books and Authors, Knowledge of Important events that have happened in India and at world level in the recent years, Current important world events, Prominent personalities etc.

(b) **English.**

- (i) Comprehension.
- (ii) **Parts of Speech.**
 - (aa) Article.
 - (ab) Noun and Pronoun.
 - (ac) Adjective.
 - (ad) Preposition.
 - (ae) Conjunction and models.
- (iii) Verbs
- (iv) **Tenses.**
 - (aa) Present/past forms.
 - (ab) Simple/continuous form.
 - (ac) Prefect forms.
 - (ad) future time reference.
- (v) Sentence Structure
- (vi) **Type of Sentences.**
 - (aa) Affirmative/interrogative sentences.
 - (ab) Use of Phrases.
 - (ac) Direct and Indirect speech.
 - (ad) Active and Passive Voice.
- (vii) **Other Areas.**
 - (aa) Idioms and Phrases.
 - (ab) Synonyms and antonyms.
 - (ac) One word substitution.

(c) **Mathematics.**

- (i) Algebra.
- (ii) Analytical Geometry.
- (iii) Trigonometry.
- (iv) Number Systems
- (v) Fundamental arithmetical operations
- (vi) Mensuration
- (vii) Area, Volume and Surface Area

(d) **History:** All aspects of Indian History from Ancient to Modern, Indian Freedom Struggle, Post Independence issues of consolidation and reorganization of the nation, World History including World War–I, Industrial Revolution, Colonization, decolonization and neo colonization, World War–II, Economic depression, emergence of new political philosophies – communism, capitalism and socialism.

(e) **Geography:** Geomorphology, Climatology, Oceanography, Biogeography, Environmental Geography, Economic Geography, Population and Settlement Geography, Regional Planning Models, Theories and Laws in Human Geography, Geography of India: Physical Setting, Resources, Agriculture, Industry Transport, Communication and Trade, Cultural Setting, Contemporary Issues.

(f) **Political Science:** Political Theory and Thought, Indian Government and Politics, Public Administration, International Relation, Political Development and modernization, Power and Authority, Theory of International Relation, International Law and UN, Indian Foreign Policy, Ideology Power and Interest.

(g) **Economics:** Basic concepts of economics, macro and micro economic policy, micro macro balance, impact of economic policies, development versus growth, determinant of growth and development, India's ranking in the various indices, poverty and its eradication programmes,, All Demographics issues and aspects, All aspects of Fiscal policy .

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