

Sanskar International School

Syllabus for Entrance Test

Class 9th

ENGLISH

Candidates will be expected to write a composition from a choice of subjects which will test their ability to organize describe, narrate, report, explain, persuade or argue, present ideas coherently, compare and contrast ideas and arrive at conclusions.

Candidates will have to write a letter from a choice of two subjects requiring either a formal or an informal mode of Treatment. Candidate will be expected to be familiar with the use of appropriate salutation, format and style for Letters.

An unseen passage of prose of about 250 words will be given. One question will be set to test vocabulary. A number of questions requiring short answers will also be asked on the passage.

Questions based on fill in the blanks, uses of and, but or so, rewriting a sentence according the instructions given, usage of verbs etc.

HINDI

- 1) किसी एक विशय पर निबन्ध
- 2) पत्र लेखन
- 3) अपठित पद्यांश
- 4) शब्दार्थ

- 5) पर्यायवाची
- 6) विलोम शब्द
- 7) वाक्यों को शुद्ध रूप मे लिखना

MATHEMATICS

Simplification

Squar roots

Percentage

Profit and Loss

Simple interest

Fraction

Simultaneous equations

HCF and LCM

Set theory

Construction of various geometrical figures

Finding perimeter, diagonals etc.

Note:- Science subject will only be tested for those who opt for Science at ICSE level.

PHYSICS

1. Our Universe- Galaxy; constellations; Measuring distances in the universe; Solar system; Tides;

Apparent motion of the stars; our universe is expanding Big Bang Theory.

2. Refraction of Light- Laws of refraction; Formation of rainbow; Lenses; Defects of vision; optical instruments.

3. Heat- Heat is a form of energy; Heat as a quantity; specific heat; Conductors and insulators; Basic- formula for transfer of heat; Heat capacity; Latent heat; Evaporation

4. More about Solids, Liquids and Gases Kinetic theory of matter; Surface tension; Conduction and convection Gases and liquids exert pressure; Archimedes' principle; Sinking and flotation; Atmospheric pressure; Effect of Volume on pressure of gas.

5. More about Energy- Sources of energy; Renewable sources of energy; Non-renewable sources of energy; Conservation of energy

6. Static Electricity- Electrical charge; Modern electronic theory of electrification Conductors and insulators; Gold- leaf electroscope; Flow of charge; electric current; Atmospheric electricity.

7. Magnetism and Electricity- Properties of magnet; Magnetic fields; The Magnetic field of the Earth; Electromagnetism; Electromagnetic field; electromagnet; Electromagnetic induction

CHEMISTRY

1. Hydrogen- Preparation of hydrogen Physical and chemical properties of hydrogen; Uses of hydrogen

2. Carbon and its Compounds- Allotropes of carbon; diamond and graphite; Amorphous carbon; General properties of carbon; Compounds of carbon; Catenation

3. Fuels- Calorific value of a fuel; Characteristics of a good fuel; Types of fuel; Natural Fuels; Coal and petroleum; Processed fuels; Combustion; Candle flame; Extinguishing a fire

4. Structure of the Atom- Atoms; Dalton's atomic theory; Discovery of electrons protons and neutrons; Rutherford's experiment; Bohr's atomic model; Composition of nucleus; Isotopes; Electronic configuration; molecular formulae; formulae; Chemical bonding; Radioactivity Fission, fusion, uses of nuclear energy

5. Transformation of Substances- Representing a chemical change; Characteristics of a chemical reaction; Classification of chemical reaction: homogeneous, heterogeneous, irreversible, reversible exothermic and endothermic reactions; Nature of the reaction

Neutralization reaction; Electrolysis; Distillation as a method of separating liquids in a mixture

6. Metals and Non metals- Metals and non metals physical properties; Electronic configuration and electropositive character; Reactivity series; Metal and non metals- chemical properties, Extraction of metals: concentration, smelting and refining; Extraction of iron, copper, aluminum; Alloys; Conservation and recycling of metals

7. Practical Chemistry- Some laboratory techniques Some common experiments: making a saturated solution, preparing crystals, heating substances, preparation of carbon dioxide; Common household chemicals

BIOLOGY

1. Life Processes- Transport of Food and minerals in Animals and Plants Circulatory system in human beings; Blood; Blood vessels; Heart; The lymphatic system; Transport of materials in plants

2. Life processes- Growth Development and Reproduction Asexual reproduction in plants and animals; sexual reproduction in plants; sexual reproduction in animals; Sexual reproduction in humans

3. Life Processes- Control and Co-ordination

Nervous control; Human nervous system; Reflex action; Sense organs; Taking care of

Sense organs; chemical regulation

4. Health and Hygiene- Communicable diseases; Transmission of communicable diseases; Non-communicable diseases; Nutritional deficiency diseases; Diseases due to malfunctioning of body organs; Other bad habits leading to ill health; prevention of diseases; Natural defenses of the body; Immunity; Vaccination; First aid for cuts bruises and skin burns

5. Pollution and Conservation- Our natural resources soil; Water; Air Forests; Wildlife; Pollution; Water pollution; Air pollution; Noise pollution; Energy resources; Alternate sources of energy

6. Food Production and Management- Classification of plants; Agricultural tasks and practices; Crop protection; Crop improvement (Hybridization); Useful microorganisms; Useful animals