**PUBLIC CENTRAL SCHOOL**

**SCIENCE SYLLABUS (BIOLOGY)**

**Session 2018-2019**

**Chapter 1**

**Life Processes:**

‘Living Being’. Basic concept of nutrition, respiration, transport and excretion in plants and animals.

**Chapter 2**

**Control Coordination:**

Tropic movements in plants; Introduction of plant hormones; Control and co-ordination in animals: Nervous system; Voluntary, involuntary and reflex action; Chemical co-ordination: animal hormones.

**Chapter 3**

**How Do Organisms Reproduce (Reproduction)?**

Reproduction in animals and plants (asexual and sexual) reproductive health-need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women’s health.

**Chapter 4**

**Heredity and Evolution:**

Heredity; Mendel’s contribution- Laws for inheritance of traits: Sex determination: brief introduction; Basic concepts of evolution.

**Chapter 5**

**Our Environment:**

Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.

**Chapter 6**

**Management of Natural Resources:**

Conservation and judicious use of natural resources. Forest and wild life; Coal and Petroleum conservation. Examples of people’s participation for conservation of natural resources. Big dams: advantages and limitations; alternatives, if any. Water harvesting. Sustainability of natural resources.

**Assessment Division of Chapters:**

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|  | **Chapter 1** | **Chapter 2** | **Chapter 3** | **Chapter 4** | **Chapter 5** | **Chapter 6** |
| Periodic Test I  **(July 2018)** |  |  |  |  |  |  |
| Periodic Test II **(September 2018)** |  |  |  |  |  |  |
| Periodic Test III **(January 2019)** |  |  |  |  |  |  |
| Pre-Board Examination **(February 2019)** |  |  |  |  |  |  |
| Board Examination **(March 2019)** |  |  |  |  |  |  |

**Major Practical/Experiments:**

1. Preparations of temporary mount of a leaf peel to show stomata.
2. Experiment to show that CO2 is given out during respiration.
3. Studying of Binary Fission, Budding with the help of permanent slides.
4. Experiment to show that light is necessary for photosynthesis.
5. Identification of different parts of embryo of a dicot seeds.