

# Board Practice Test Std.XII

## Syllabus (2015 – 16)

### PHYSICS

#### BPT-1

Current Electricity, Magnetic Effect of electric current, Electrons & photons, Semiconductors, Communication, Wave theory of light, Interference and diffraction, Magnetism.

#### BPT-2

Electrostatics, Electromagnetic Induction, Atoms, Molecules and nuclei.

#### BPT-3

Circular Motion, Gravitation, Rotational Motion, Oscillations, Elasticity, Surface Tension, Wave Motion, Stationary Waves, Kinetic theory of gases and Radiation.

### Mathematics

#### BPT-1

Maths I-Mathematical Logic, Matrices, Trigonometric function, Linear Programming.

Maths II- Continuity, Differentiation, Applications of Derivatives

#### BPT-2

Maths I – Pair of straight lines.

Maths II – Integration, Definite Integral, Applications of Definite Integral, Differential Equations

#### BPT-3

Maths I – Vectors, Three Dimensional Geometry, Line, Plane

Maths II – Probability Distribution, Binomial Distribution.

# **EM/CS**

## **BPT-1**

**E.M.** – Electrical Symbols, Circuit diagram and panel diagram, Fuses, Conductors, Gauge of a conductor, Insulators, Semiconductors and high resistance heating elements, Types of wires and wiring accessories, Wiring system, House wiring, Indian electricity rules and over head lines.

**C.S. I** – C++

**C.S. II**- Networking Technology

## **BPT-2**

**E.M.** – Underground cables, Illumination, Electrical Appliances, Electric heating, Parallel operation of 3-phase alternators, Theory of rotating magnetic field and 3- Induction motor, H.V. Substation, Maintenance

**C.S. I** - Operating System

**C.S. II** - Instruction Set and Programming of 8085

## **BPT-3**

**E.M.** – Transformers, Single phase motors, Theory of rotating magnetic field and 3- Induction motor, Synchronous motor, Measuring Instruments.

**C.S. I** - Data Structures, HTML

**C.S. II** - Introduction to 8085 Microprocessor (Theory), Introduction to 8051 microcontroller and X-86 family.

# Chemistry

## BPT-1

Chemical Thermodynamics, Solid State Chemistry, P-block element, Co-ordination compounds, Polymers.

## BPT-2

Halogen derivative of alkanes and haloarenes, alcohols, phenols, ethers, aldehydes, ketones, carboxylic acid, compound containing nitrogen, Biomolecules, general principle and isolation of elements and metallurgy.

## BPT-3

Solutions & Colligative properties, Chemical Kinetics, Electrochemistry, d & f block elements, Chemistry in everyday life.

# English

## BPT-1

Q.1(A) Unit – 1- 4, Q.1(B) Unseen grammar, Q.2(A) Unit – 5 - 8, Q.2 (B) Summary, Q.3(A) Unseen Passage, (41 marks)

## BPT-2

Q.4(B) Note Making, Q.4(A) Poems – 1-4, Q.4(B) Poems – 5-8, Q.5(A)

Rapid Reading(Rewrite from the point of view of character), Q.5(B)

Composition(Extend / Add a paragraph or convert in to Dialogue or

Cautious write up), Q.6(A) Letters (Formal or semi formal), Q.6(B)

Tourist leaflet / Appeal or Report writing / Dev. News Item or

Dialogue writing, Q.6(C) Information Transfer or View / counterview

(24 marks)

## BPT-3

Q.6 (B)(C) : (20-25 mins. must be kept in hand for revising, completing

any incomplete question, grammar and underlining etc., Q.7(A)

Framing Interview Questions, Q.7(B) : Speech (15 marks)

# **PSYCHOLOGY**

## **BPT-1**

Chapter 1:- Intelligence.

2:-Personality.

3:- Stress Management.

4:- Psychological Disorders & Therapies.

## **BPT-2**

Chapter 5:- Attitude

6:- Social Influence

7:-Psychology & life

8:-Developing Psychological skills.

# **BIOLOGY**

## **BPT-1 (BOTANY)**

1. Genetic Basis of Inheritance.

2. Gene-Its nature ,expression and regulation.

3. Biotechnology :-process and application.

4. Enhancement in food production.

5. Microbes in Human welfare.

## **BPT-2 (BOTANY)**

1. Photosynthesis

2. Respiration

3. Reproduction in plants

4. Organisms and Environment I

## **BPT -3 (ZOOLOGY)**

1. Origin and Evolution of life.

2. Chromosomal basis of Inheritance.

3. Genetic Engineering and Genomics.

4. Human health and diseases.

5. Animal Husbandary

## **BPT-4(ZOOLOGY)**

1. Circulation

2. Excretion and osmoregulation

3. Control and co-ordination

4. Human Reproduction

5. Organisms and Environment II