e-Yantra Test Syllabus

Here is the subject-wise syllabus for the e-Yantra Online Selection Test

C-Programming:

The C Language and its Advantages, C Syntax and Constructs, Data Types and Variables, Operands, Operators, Arithmetic Expressions, Control Instructions – Looping and decision making, C preprocessor, Functions, Arrays, Pointers, Strings, Structures, Storage Classes, Input/output Management, C Compiler.

Reference Books:
- Let us C by Yashwant Kanetkar
- Test your C Skill by Yashwant Kanetkar

Electronics/Electrical:

Basic Electrical: Devices- Resistors, Capacitors and Inductors. Ohms Law, Kirchhoff's law, Network Theorems

Analog Devices and Circuits: Semiconductor Physics, Diodes and diode circuits, BJT and BJT circuits, FET and FET circuits, Opamp

Digital Electronics/Microcontroller: Number System, Logic Gates, Boolean expression and K-Map, Synthesis of Combinational Circuits and Sequential circuits, Memory device, 8-bit Microcontrollers, IO Interfacing, Interrupt, DMA, ADC/DAC

Reference Books:
- Basic Electrical by B.L.Theraja
- Electronic Devices and Circuit Theory by Robert L. Boylestad
- Digital Electronics by Morris Mano

- 8051 Microcontroller-Architecture, Programming and Applications by Kenneth J. Ayala

Logical Reasoning and Aptitude:

Time, Distance and work, Percentage, Profit-Loss, Ratio-Proportion, Simple and Compound Interest, Unitary Method, Permutation-Combination, Probability, Mensuration, Clock and Calendar, Numbers system, Progression, H.C.F. & L.C.M., Average, Percentage,

Alligation/Mixture, Relationship, Time, Speed, Distance and Work, Percentage, Profit-Loss, Ratio-Proportion, Simple and Compound Interest, Stocks, Shares, Dividend, Discount, Partnership, Unitary Method, Algebra, Permutation-Combination, Probability, Mensuration, Geometry, Trigonometry, Coordinate Geometry, Clock and Calendar, Set theory, Linear and non-linear equations.

Reference Books:
- Quantitative Aptitude by R.S. Aggarwal

Note: Books mentioned above are standard subject books. Participants are free to use any other books of their choice.