Western Naval Chargeman Exam Pattern

Paper	Subject	Marks
1	General English	10
2	Numerical Ability/ Logical Reasoning	10
3	Science & Technology	70
4	General Knowledge	10
Total Marks		100 Marks

Western Naval Command Chargeman Syllabus - Topic Wise

General English

- Questions based on the passage,
- Substituting phrasal verbs for expression,
- One word substitution,
- Change to passive/ active voice,
- Punctuation
- Use of adjectives, use of verbs, use of pronouns, prepositions
- Tenses.
- Correction of sentences.

Numerical Ability/Logical Reasoning

- Basic Maths, quadratic equations, use of logarithm & Mathematical tables, average, percentage, ratio and proportion
- Matrix algebra, calculation of inverse, Eigenvalues, and Eigenvectors
- Elementary logical problems
- Determination of area of an ellipse, parabola, hyperbola, and other irregular, surfaces
- Surface area and volume of a pyramid, cone, sphere, cylinder, etc.
- Scalars and vectors, vector algebra, dot, cross, and triple product
- Elementary statistics-calculation of mean, median, mode, data analysis.

Science & Technology

- Newton's laws of motion, Archimedes principle, mass, weight, density, gravity
- Numerical on work, force, power, friction, inclined plane, lever
- Basics of optics and laws of reflection/refraction, wave propagation
- Propagation of sound waves, Doppler effect, ultrasonic, waves
- Knowledge of mechanical engineering drawing
- Properties of ferrous & non-ferrous material, various heat treatment, corrosion treatments & case hardening
- Knowledge of limit,
- Working Principles of various types of engines (I.C.E & E.C.E)
- Knowledge of various machinery Usage of various hand tools and its maintenance

- Working knowledge of computer & internet.
- Laws of electricity & magnetism with numerical on current, voltage resistors, etc. Gauss's law, AC circuits, oscillators
- Elasticity, surface tension, viscosity, and escape velocity problems
- Safety precaution & fire prevention, use of various fire extinguishers
- Knowledge of different precision measuring instruments and their counts

General Knowledge

- Current affairs
- Capitals & currencies
- Sports & Entertainment
- Defense (Army/Navy/Air Force) related Acronyms
- Eminent personalities (Indians/foreigners)
- Navy related (Ship, Ports)
- Important national facts
- Regional geography.