SYLLABUS FOR COMPUTER BASED RECRUITMENT TEST (CBRT) FOR THE POST OF ASSISTANT DIRECTOR IN **DEPARTMENT OF SCIENCE AND TECHNOLOGY AND WASTE MANAGEMENT** (ADVT. NO. 04 YEAR 2024)

- II. General Knowledge, Current Affairs and Events of National and -10 marks International Importance - 25 marks **III.** Logical Reasoning and Analytical Ability **IV. Core:** - 30 marks **1. Engineering Fundamentals** • Civil Engineering: **Basics of Structural Engineering** 0 Environmental Engineering concepts 0 **Mechanical Engineering:** • Thermodynamics and Fluid Mechanics • Material Science and Engineering 2. Science and Technology **Current Trends in Science and Technology:**
 - Innovations in engineering practices
 - Emerging technologies (e.g., AI, IoT, renewable energy)
 - **Research and Development:**

I. General English including Grammar

- Importance of R&D in technology advancement
- Case studies of successful innovations
- Fundamentals of project planning and execution
- Recent advancements in Goa state and Maharashtra state
- **Planning and Organization:**
 - Steps for organizing fairs, exhibitions, and symposiums
 - Budgeting and resource allocation
- **Proposal Evaluation:**
 - Criteria for assessing proposals
 - Best practices in proposal scrutiny

3. Waste Management

- **Principles of Waste Management:**
 - Waste generation, segregation, and treatment
 - Techniques for waste recycling and waste reduction
- **Regulatory Framework:**
 - National and state-level waste management policies
 - Environmental regulations and compliance
- **Environmental Issues:**
 - Climate change, and its impact on waste management.
 - o sustainable development and effects on waste management

4.Communication and writing Skills :

- Report writing and documentation
- Presentation skills for technical topics

Note:

Duration for C.B.R.T : 90 Minutes Maximum Marks for C.B.R.T : 75 Marks - 10 marks