## **NISE Syllabus**

A. For SCIENTIFIC/TECHNICAL Positions (bilingual - Hindi and English) objective -

(With major emphasis on Solar Energy) - 200 Marks

Part – I: General: 50 marks (0.25 negative marking for wrong answers)

- (i) General Knowledge
- (ii) Reasoning
- (iii) Quantitative Aptitude
- (iv) English language proficiency

Part – II Technical 150 marks (0.25 negative marking for wrong answers)

- i. National and Global Scenario of Energy
- ii. Development of Renewable Energy in India and abroad
- iii. Fundamentals of Solar Energy.
  - Solar resource and potential
  - Solar Energy (Solar Thermal & Photovoltaic),
  - Solar Cell Technologies, including material science
  - Off Grid Solar PV applications for lighting, water pumping etc
  - Solar thermal applications for heating, cooling and process heat
  - Solar PV and Concentrating Solar Power plants
  - Integration of solar power plants with grid including Power Electronics, Power Systems, Transformer, Distribution, grid connectivity, etc.
- iv. Fundamentals of Energy Technologies (including relevant principles of heat transfer, combustion, fluid mechanics, power systems, materials, etc.),
- v. Energy Storage Technologies, including hydrogen and fuel cells
- B. For administrative posts i.e. Office Secretary and Office Secretary-I

CBT/Test (Bilingual – Hindi and English except for English language)

Total Marks: 200 Duration not exceeding 180 minutes

- 1. English & Hindi Language proficiency & Comprehension
- 2. General Intelligence & Reasoning
- 3. General Awareness
- 4. Quantitative Aptitude

Conduct of Shorthand test (at mutually agreed centre(s) for which Centres and linked facilities i.e. computer and other amenities/ necessities shall be provided by the agency) after declaration of result and finalization of merit on the basis of CBT/Test for 3(three) posts of Office Secretary-I for first 60 candidates (merit based)

Dictation: 10 Minutes Speed 120 WPM (Hindi / English)

Transcription on computer English: 50 minutes Hindi: 65 minutes

C. The type of questions in both the sections shall be Objective Type, having four options to choose from.