

**(A) Syllabus & pattern of exam :**

- (i) Computer based “written competitive exam” for the posts of **Junior Engineer-I** and **Junior Chemist** shall be conducted through Online mode. The Question Paper shall be in two parts of total two(2) hours’ duration, consisting of Objective Type Questions (Multiple Choice Questions - MCQ) only, as detailed hereunder :-

**(a) Junior Engineer-I****Part – A : 60% weightage**

The standard and syllabus of the examination will be of the level of Degree in Engineering in the respective discipline.

**Part – B : 40% weightage**

- (i) Reasoning & Mental Ability
- (ii) Mathematics
- (iii) General Knowledge & Everyday Science
- (iv) Hindi General
- (v) English General

A brief out-line of scope of each sub-part is given hereunder for general guidelines of candidates, but is not intended to be exhaustive :-

- (i) **Reasoning & Mental Ability** :- Analytical Reasoning, Number series, Letter series, Odd man out, Coding-Decoding, Shapes and Mirror Images, Clocks, etc.
- (ii) **Mathematics**:- Mathematics. (Class-XII level)
- (iii) **General Knowledge & Everyday Science** :- Current events including issues of State (Rajasthan), National & International importance, Persons & Places in recent news, Games & Sports, Science, Indian History, Civics, Geography, Indian Polity, etc., with special reference to Rajasthan.
- (iv) **Hindi General** :- Hindi Grammar and language (Class-X level).
- (v) **English General** :- English Grammar and language (Class-X level).

The Question Papers, except “Hindi General” of Part-B, shall be in English only.

**(b) Junior Chemist****Part – A : 60% weightage**

The standard and syllabus of the examination will be of the level of Post Graduation in Chemistry/ Graduation Degree in Chemical Engineering.

**Part – B : 40% weightage**

- (i) Reasoning & Mental Ability
- (ii) Mathematics
- (iii) General Knowledge & Everyday Science
- (iv) Hindi General
- (v) English General

A brief out-line of scope of each sub-part is given hereunder for general guidelines of candidates, but is not intended to be exhaustive :-

- (i) **Reasoning & Mental Ability** :- Analytical Reasoning, Number series, Letter series, Odd man out, Coding-Decoding, Shapes and Mirror Images, Clocks, etc.
- (ii) **Mathematics**:- Mathematics. (Class-X level)
- (iii) **General Knowledge & Everyday Science** :- Current events including issues of State (Rajasthan), National & International importance, Persons & Places in recent news, Games & Sports, Science, Indian History, Civics, Geography, Indian Polity, etc., with special reference to Rajasthan.
- (iv) **Hindi General** :- Hindi Grammar and language (Class-X level).
- (v) **English General** :- English Grammar and language (Class-X level).

The Question Papers, except “Hindi General” of Part-B, shall be in English only.

- (ii) The competitive exam for the post of **Informatics Assistant** shall be conducted in **two Phases** as follows :

**Phase - I**

In the Phase-I, computer based “written competitive exam” shall be conducted through Online mode and Question Paper shall be in two parts of total two(2) hours’ duration, consisting of Objective Type Questions (Multiple Choice Questions - MCQ) only, as detailed hereunder :-

**Part – A : 60% weightage**

- (i) Data Interpretation, Data Sufficiency, Major development in the field of Information Technology.
- (ii) Overview of the Computer System including input-output devices, pointing devices, and scanner.
- (iii) Introduction to Operating System, Word Processing (MS-Word), Spread Sheet Software (MS-Excel), Presentation Software (MS Power Point), DBMS Software (MA-Access).

- (iv) Representation of Data (Digital versus Analog, Number System – Decimal, Binary & Hexadecimal), Introduction to Data Processing, Concepts of files and its types.
- (v) Introduction of Internet Technology and Protocol. LAN, MAN, WAN, Search Service/ Engines. Introduction to online & offline messaging. World Wide Web Browsers, Web publishing, Creation & maintenance of Websites, HTML, Interactivity Tools, Multimedia and Graphics, Voice Mail and Video Conferencing, Introduction to e-Commerce.
- (vi) Security, Protecting Computer Systems from viruses & malicious attacks, Introduction to Firewalls and its utility, Backup & Restoring data.
- (vii) Algorithms for Problem Solving, Introduction to C Language, Principles and Programming Techniques, Introduction of Object Oriented Programming (OOPs) concept, Introduction to “Integrated Development Environment” and its advantages.

**Part – B : 40% weightage**

- (i) Reasoning & Mental Ability
- (ii) Mathematics
- (iii) General Knowledge & Everyday Science
- (iv) Hindi General
- (v) English General

A brief out-line of scope of each sub-part is given hereunder for general guidelines of candidates, but is not intended to be exhaustive :-

- (i) **Reasoning & Mental Ability** :- Analytical Reasoning, Number series, Letter series, Odd man out, Coding-Decoding, Shapes and Mirror Images, Clocks, etc.
- (ii) **Mathematics**:- Mathematics. (Class-XII level)
- (iii) **General Knowledge & Everyday Science** :- Current events including issues of State (Rajasthan), National & International importance, Persons & Places in recent news, Games & Sports, Science, Indian History, Civics, Geography, Indian Polity, etc., with special reference to Rajasthan.
- (iv) **Hindi General** :- Hindi Grammar and language (Class-X level).
- (v) **English General** :- English Grammar and language (Class-X level).

**Phase - II**

Qualifying Typing Speed Test on Computer :

(a) Hindi Typing	15 Minutes
(b) English Typing	15 Minutes

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