

Rajasthan Computer Teacher

Syllabus

CONTENTS

Syllabus.....	2
---------------	---

Syllabus

Rajasthan Computer Teacher Exam Syllabus

Knowing the Rajasthan Computer Teacher Syllabus is important before starting your exam preparation. Knowing the syllabus will help you in a guided preparation for the Rajasthan Computer Teacher examination.

Rajasthan Computer Teacher Syllabus for Paper I

Art & Culture

- [Indian art and culture](#)
- [Major facts about Indian states culture](#)
- [Early later Vedic period](#)
- [Art and culture of Rajasthan](#)
- [Geography and Culture of India](#)

History

- [Important wars battles in Indian history](#)
- [Mughal Empire](#)
- [Famous sites in India](#)
- [Folk dances of India](#)

Geography

- [Indian geography](#)
- [Types of soil in India](#)
- [Crops in India](#)
- [Motions of the Earth](#)
- [Interior structure of the Earth](#)
- [Earthquakes](#)

General Science

- [Soil Pollution](#)
- [Environment Protection Act](#)
- [Non-renewable energy](#)
- [Development and Environment](#)
- [Pollution and Its Types](#)
- [Constitution](#)
- [Sports](#)
- [General Science](#)

Current Affairs

- [Current Affairs](#)
- [Computers](#)
- [General Knowledge](#)
- [Environment](#)
- [Government Schemes](#)
- [Disaster Management](#)

General Ability

- Logical Reasoning
- [Analytical Ability](#)
- [Decision Making](#) and Problem Solving

- Data interpretation- Charts, Graphs
- Numbers and their relations
- Problems on Data Sufficiency
- Orders of magnitude

Rajasthan Computer Teacher Syllabus for Paper II

Subject	Topics
Mental Ability	<ul style="list-style-type: none"> • Data Interpretation • Analytical Ability • Logical Reasoning • Data Sufficiency • Major developments in Information Technology
Fundamentals of Computer	<ul style="list-style-type: none"> • Number system • Arithmetic operations • Introduction to various categories of computer language • Functional details of Input and Output devices
Programming Fundamentals	<ul style="list-style-type: none"> • C, C++, • Java • DotNet • Artificial Intelligence (AI) • Machine learning • Python and Block Chain programming • Data types (Built in and user defined) • Scope of variables • Precedence of operators • Control flow • Functions • Arrays pointers • Structures and unions, • Enumerated data-types and file handling • Command line arguments.
Object-Oriented Programming using C++ and JAVA	<ul style="list-style-type: none"> • Objects and classes • Inheritance, polymorphism • Event and exceptions handling • Files and streams.
Data structures and Algorithms:	<ul style="list-style-type: none"> • Abstract data types • Arrays as data structures • Linked list v/s array for storage • Stack and stack operations • Queues • Binary trees, binary search trees • Graphs and their representations • Sorting and searching, symbol table.

Algorithms	<ul style="list-style-type: none"> • Tree traversals, • Branch and bound and greedy methods • Complexity of algorithms.
Digital Logic Systems	<ul style="list-style-type: none"> • Boolean expressions • K-maps • TTL and CMOS logic families • Combinational logic design using half/full adders, sub tractors, and multiplexer • Synchronous sequential system design
Computer Organization and Architecture	<ul style="list-style-type: none"> • Von-Neumann architecture of computers • Registers and micro-operations • Control logic • Processor addressing and bus organization • Processor Input/output and DMA. • Memory organization and cache coherence
Operating Systems	<ul style="list-style-type: none"> • CPU scheduling • Deadlocks • Memory management • File. systems • Disk scheduling • Concept of Client-server architecture in distributed environment and RPC • Process, threads, and their synchronization. • Real-Time OS: clock synchronization and task scheduling. • System initialization, .booting, and handling user accounts. Backup and restore, Bopme shell programming for Linux.
Database Management System	<ul style="list-style-type: none"> • E-R models • Relational Algebra • Calculus and databases • Integrity constraints, triggers, normalization, and indexing • Transaction processing, concurrency control • Relational Database Management System (RDBMS).
Software Engineering	<ul style="list-style-type: none"> • Phases of System Development Life Cycle. • System modeling. • SoAware requirement specifications and DFDs. • Introduction to software testing, software project

<p>Data and computer networks</p>	<ul style="list-style-type: none"> • Evolution of Networking • Data Communication terminologies • Transmission media • Network devices • TCP/IP & OSI/ISO reference models • Functions of different layers, characteristics of physical media, multiplexing in physical layer, medium access protocols • Introduction to 802.3, 802.4, 802.5, 802.It • LAN technologies • IP protocol including routing and congestion control, TCP and UDP, DNS.
<p>Network Security</p>	<ul style="list-style-type: none"> • Groups, rings and fields in finite space, • Euler and Ferznat's theorem • Primality testing • Security services and mechanisms • Symmetric and asymmetric encryption including DES, AES, IDEA, RSA algorithms • Key management in symmetric and asymmetric encryption, message authentication and hashing, email security • Viruses, and trusted systems • Networking (LAN, WAN) • Ethical Hacking
<p>Basics of communication</p>	<ul style="list-style-type: none"> • Channel capacity, attenuation, communication impairments • Propagation of RM waves through free space (excluding free space models) • PCM and delta modulation • WDM • Brief introduction to GSM and CDMA based communication systems
<p>Web Development</p>	<ul style="list-style-type: none"> • HTML/DHTML • Web Page Authoring Using HTML • Document Object Model Concept and Importance of Document Object Model • Dynamic HTML document and Document Object Model • Introduction to Cascading Style Sheet (CSS) • Extensible Markup Language (XML) • Basic of PHP and Java Script.

Know what all points to Keep in mind while downloading the [Rajasthan Computer Teacher admit card](#) Here!

Rajasthan Computer Teacher Exam Pattern 2022

Candidates should know the Rajasthan Computer Teacher Exam Pattern to get an idea of the exam structure, maximum marks, duration, and marking scheme. We have shared below the exam pattern and marking scheme for the Rajasthan Computer Teacher post for the reference of the candidates.

- The exam shall consist of two separate papers.
- A total of 100 questions shall be asked for 100 marks in each paper.
- For every wrong answer, there will be a negative marking of 1/3rd of the mark prescribed.

Paper	Subject	Questions	Marks	Duration
Paper-I	Art & Culture, History, Geography, General Science, & Current Affairs of Rajasthan	100	100	2 hours
	General Ability: <ul style="list-style-type: none"> • Logical Reasoning & Analytical Ability • Decision Making & Problem Solving • General Mental Ability • Basic Numeracy (Class X Level) • Data Interpretation (Class X Level) 			
Paper-II	Pedagogy, Mental Ability, & Profesional subject	100	100	2 hours
Total		200	200	4 hours