## SCHEME & SYLLABUS OF EXAMINATION OF PART-I FOR POST NO. 7 ASSISTANT PROGRAMMER

Part	Section	Subject/Syllabus	No. of questions	Maximum Marks	Qualifying Marks
			60	180	72
Part-I	Section 'A'	Reasoning/Quantitative Aptitude	20	60	
	Section 'B'	<ul> <li>General Knowledge &amp; General Knowledge of Rajasthan:         <ol> <li>Events of State, National and International importance</li> <li>Geography and Natural Resources of India and Rajasthan</li> <li>Agricultural, Social and economic development of India Rajasthan</li> <li>Indian Medieval History, Indian struggle for Independence,, and History of Rajasthan</li> <li>Culture and heritage of India and Rajasthan</li> </ol> </li> </ul>	30	90	
		<ul> <li>General Science:</li> <li>1. Elements, Mixtures and Compounds</li> <li>2. Physical and Chemical Changes; Oxidation and Reduction: Catalysis</li> <li>3. Metals and Non Metals</li> <li>4. Acids, bases and Salts</li> <li>5. Reflection of light and its laws, lenses,</li> </ul>			

human eye, defects of vision and its correction			
6. Electric current, Electric potential, Ohms law, electric cell and Electric motor			
7. Human Brain, hormones, human diseases and cure			
8. Economic importance of animals and plants			
9. Biomass, sources of energy, ecosystem, Mendel's Law of inheritance, chromosomes			
10. Human blood groups, blood transfusion, Deficiency diseases and cure			
Basic Computer Skills:			
1. Introduction to Computers			
2. Computer Systems			
3. Uses of Computers			
4. Introduction to the Internet & Search Engines, Internet Applications			
5. Operating system,			
6. MS Word Advance			
7. Database Management System			
8. MS Excel Advance			
9. MS Power Point Basics			
10. Microsoft Outlook-Basics			
Section 'C' Language Comprehension			
Hindi	10	30	
1. शब्द रचनाः संधि एवं संधि विच्छेद, समास, उपसर्ग, प्रत्यय			

2. शब्द प्रकार: तत्सम, तत्भव, अर्धतत्सम, देशज, विदेशी, संज्ञा. सर्वनाम. विशेषण. क्रिया. अव्यय 3. शब्द ज्ञान: पर्यायवाची, विलोम, शब्द युग्मो का अर्थभेद, वाक्यांश के लिए सार्थक शब्द, संश्रुततिभन्नार्थक शब्द, समानार्थी शब्द, उपयुक्त शब्द चयन, संबंधवाची शब्दावली 4. शब्द शुद्धि 5. व्याकरणिक कोटियाँ: परसर्ग, लिंग, वचन, पुरुष, काल, वृत्ति, पक्ष, वाच्य 6. वाक्य रचना 7. वाक्य शुद्धि 8. विराम चिन्हो का प्रयोग 9. मुहावरे/ लोकक्तिया 10. पारिभाषिक शब्दावली: प्रशासनिक/ विविध **English** 1. Use of articles and determiners 2. Tenses/ sequence of tenses 3. Active and passive voice 4. Direct and Indirect Narration 5. Use of Prepositions 6. Synonyms and antonyms 7. Comprehension of passage 8. Idioms and Phrases 9. Letter writing: Official, Demi-official. Circulars

and Notices

## POST NO. 7 ASSISTANT PROGRAMMER

## SCHEME AND SYLLABUS OF EXAMINATION OF PART-II

Part	Section	Subject No. of Question			Maximum Marks	
Part-II	Section 'A'	Computer Basics:	90	50	270	150
	Components of A Computer System -CPU, Motherboards, Primary Storage Devices, Secondary Storage Devices, On-Line form Entry, direct data entry, Data base, Types of Computer input/Output, PDA's, computer hardware Basics.					
		Operating System:				
		System Software, Operating System, Operating Systems for Larger Systems, their System Software, General Purpose Software/Utilities, Application Software, All types of Mobile OS.				
		Internet's Basic Operation:				
		Basics of Internet (Web browser, HTTP, HTML etc), Windows, MS office, Apple IOS, License (Ubuntu), LAN, WAN, VPN, URL, Network system, Switches, Hubs, Data Center, UPS, video conferencing.				
	Section 'B'	Computer Networks & Communication:		40	_	120
		PCB, Design of PCB, PCB Design Software, Testing, Fabrication Techniques, Repair, Servicing and Maintenance Concepts, Cryptography and network security, advanced computer networks,				

Part	Section	Subject	No. of Questions	Maximum Marks
Part	Section	Types of servers, types of various internet connections, computer networks, network software & network standardization, data communication, Physical layer, transmission medium, datalink layer, medium access control sub layer, network layer, networking devices, Emails, Search Engines, Social Networking, Cloud application, Audio-Video Conferencing, Voice over Internet Protocol (VOIP), MAC protocols, CSMA/CD, Ethernet, Addressing, Bridges, Spanning Tree, Flooding/Multicasting, Switching vs routing Switching architectures, ARP, IP, IP header structure, IP delivery review, option and encapsulation, ICMP, path MTU discovery and traceroute operation, IP Multicast multi cast model, multicast forwarding, link layer support, IFMP, Internet Multicast forwarding and routing, Address allocation/use, Internet traffic management & quality of service, Installation and configuration of client server network, DNS, DHCP, FTP &HTTP, network switches, networks (both wire & wireless).  Computer Hardware & Components:		
		Electronic components, electronic circuits, PC architecture, Internal components, External components, Network components, transmission media & topologies, TCP/IP &subnetting, OS basics & installation, Device installation, Diagnostics tools & PC maintenance, Basic network and installation, practical working skill in assembling a computer, biometric security device installation and configuration,		

Part	Section	Subject	No. of Questions	Maximum Marks	
		installation & troubleshooting and repair of computer, printer & other hardware devices, OS. antivirus. Cyber security, video Display of PC, Keyboard of PC, Disk Drives, Peripheral Devices, Power Supply, BIOS & DOS Services, Advanced Microprocessors, Service & Maintenance of Computer Hardware, Networking Equipment's, Display Devices, Bluetooth, Wi-Fi, internet, Extranet.			

**Note:** Only those candidates, who have qualified the written examination, will be called for Proficiency test.

The number of candidates called for Proficiency Test would be three/five times the number of vacancies advertised for the post but in the said range although candidates who secure the same percentage of marks shall be included.

Proficiency Test	Subject	Duration	Maximum Marks	Qualifying Marks
	As per syllabus of written examination	3 Hours	100	40