

**Unit - I**

**Chapter 1 : Basics of Information System 1-1 to 1-15**

**Syllabus : Importance of information technology in the modern era :** Information Concepts, Information versus knowledge, Components of Information System. **Hardware Components of computer system :** Memory (Primary and secondary), Motherboard, Peripherals. **Google Search Engine :** Introduction, Google Search Query. **Applications of Internet Digital Platforms (BHIM, Digi-Locker, m-parivahan, NSDL, Digital Gujarat, passport seva, e-rupi....).**

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**Chapter 2 : Digital Logic 2-1 to 2-50**

**Syllabus : Introduction to digital computers and number system :** Binary numbers, Base conversions (Binary, Decimal, Hexadecimal, Octal). **Working of Logic gates :** AND, OR, INVERTER, XOR, XNOR, **Working of Universal Gates :** NAND gate, NOR gate. Simplification of basic logic gates using Universal gates (Both NAND and NOR).

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**Unit - V**

**Chapter 5 : Networking 5-1 to 5-66**

**Syllabus : OSI Model :** Working and Functioning of each layer, Name of protocols supported at each layer, Name of Hardware supported at each layer. **Network Topologies :** Bus, Mesh, Star, Ring, Hybrid. Types of **Computer Networks :** LAN, MAN, WAN. **Network Addressing (IPv4) :** Internet protocol (need, types), Classful addressing scheme, Address space, Notations, Netid, Hostid, Need of IPv6. Introduction to various IEEE 802 standards. **DNS :** Introduction, Need, Domain Names and its types. **Internet and Intranet :** URL, Internet, Intranet, Comparison between Intranet and Internet. **Networking Devices (Types and use) :** Hub, Switch, Router, Bridge, Gateway, Modem, Repeater, Wireless access point, NIC.

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<b>Chapter 6 : Information Security 6-1 to 6-17</b>	
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