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3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	Sign. of Candidate
5	5	(5)	(5)	(5)	5	5	(5)	5	(5)	(5)	
6	6	6	6	6	6	6	6	6	6	6	
7	7	7	7	7	7	7	7	7	7	7	Sign. of Invigilator
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(7)	A Display to the following topologies can a Node be easily added:									
	A.	Ring topology	В.	Bus topology						
	C.	Star topology	D.	Tree topology						
(8)	Which one of the following operating systems is used in an airline traffic controlsystem?									
	A.	Batch processing system								
	В.	Time sharing system								
	C.	.								
	D.	Real time system								
(9)	Cards	s used to connect additional of	devices to	o motherboard are attached via:						
	A.	Expansion slot	B.	Connector						
	C.	Bays	D.	Links						
(10)	'Multimodal Authentication' means:									
	A.	Use of username and passy	word							
	B.	Use of two or more authen	tication	methods						
	C.	Use of access cards								
	D.	Use of biometrics								
(11)	In a r	ing topology, how many neig	ghbors de	pes each device have?						
	A.	One	B.	Two						
	C.	Three	D.	Four						
(12)	'D6'	with reference to a spreadshe	eet mean	s:						
, ,	A.	Column D, Row 6	В.	Column D6						
	C.	Row D6	D.	Row D, Column 6						
(13)	A tex	at modifying feature in Word	to create	e decorative effects is called:						
(-)	Α.	Bookmark	B.	Layout						
	C.	WordArt	D.	Hyperlink						
	٠.	52 67 110	ν.	J P						



Federal Board SSC-I Examination Computer Science Model Question Paper(Curriculum 2009)

Time allowed: 2.45 hours Total Marks: 42

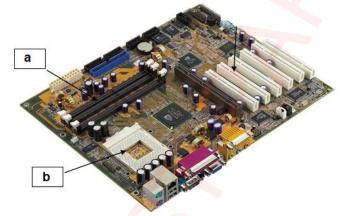
Note: Answer all parts from Section 'B' and all questions from Section 'C' on the **E-sheet**. Write your answers on the allotted/given spaces.

SECTION – B (Marks 22)

Q.2 Attempt all parts from the following. All parts carry equal marks.

(11x2=22)

- i. Write down any two characteristics of 3rd generation computers.
- ii. Name the two parts (a) and (b) of the motherboard.



- iii. What does the terms CAD and CAM stand for?
- iv. You want to pursue a career in Information Technology. Which specific career would you be most interested in, and why?
- v. With increasing Memory sizes, do you still think Memory Management is an important function of an Operating System? Justify your answer with two reasons.

OR

Name any two common operations that an operating system uses to handle file management.

- vi. Identify the most suitable software to prepare Result Sheet of students. Give a suitable reason to support your answer.
- vii. What is the importance of Protocol in data communication?

OR

Give two applications of Bluetooth technology.

viii. How does synchronous transmission differ from asynchronous transmission in terms of speed and accuracy?

ix. Why is accurate data transmission important in a communication system?

ΛR

Provide an example of a situation during data transmission where timeliness is needed.

x. Write down any two difficulties a company may face in running a business without having a computer network.

OR

Why Mesh topology is considered the most reliable? Give two reasons.

xi. State two ways to protect a computer from virus attacks.

OR

Write down two disadvantages of software piracy.

SECTION – C (Marks 20)

Note: Attempt all questions. Marks of each question are given within brackets. $(4\times05=20)$

Q.3 Explain any two categories of application software with examples. (1.5+1.5+1+1)

OR

Explain the four basic operations of a computer system. Also draw the diagram. (1+1+1+1+1)

Q.4 Explain Command line and Graphical user interfaces with one example each.

(1.5+1.5+1+1)

Q.5 Describe Batch Processing and Time Sharing Operating Systems. Also give one application of each. (1.5+1.5+1+1)

OR

Describe any two types of unguided transmission media along with their applications in daily life. (1.5+1.5+1+1)

Q.6 Explain DSL and ISDN data communication lines. Also give one merit and one demerit of each. (1.5+1.5+1+1)

OR

What are computer ethics? Write any four moral guidelines for ethical use of computer technology. (1+1+1+1+1)

COMPUTER SCIENCE SSC-I

(Curriculum 2009)

Student Learning Outcomes

Sr No	Section: Q. No. (Part no.)	Contents and Scope	Student Learning Outcomes *	Cognit ive Level **	Allocated Marks in Model Paper
1	A: Q1(1)	5.2 Types of Networks	i) Explain the following types of networks on the basis of spatial distance • Wide Area Network (WAN)	U	1
2	A: Q1(2)	1.3 Computer Hardware	i) Describe the following hardware:• Storage devices	K	1
3	A: Q1(3)	3.1 Word Processing	xv) Use of Hyperlink	A	1
4	A: Q1(4)	5.1 Networks	iii) Define Data transmissionmodes	U	1
5	A: Q1(5)	4.4 Communication Terminologies	 i) Elaborate the following terms with corresponding formulas and standard units Data rate • Baud rate • Bandwidth • Signal to Noise Ratio 	K	1
6	A: Q1(6)	4.3 Communication Devices	Describe the uses of followingcommunication devices • Dialup modem • Network Interface card • Router • Switch / Access Point	К	1
7	A: Q1(7)	5.2 Types of Networks	iii) Explain with detailed diagrams the following network topologies • Bus topology • Ring topology • Star topology • Mesh topology	U	1
8	A: Q1(8)	2.2 Operating System	 ii) Describe the following types of O.S. Batch processing Time sharing processing Real time processing 	U	1
9	A: Q1(9)	1.3 Computer hardware	i) Describe the following hardware: • System unit Motherboard	U	1
10	A: Q1(10)	6.3 Authentication Mechanisms	iv) Explain the term multimodel authentication	K	1
11	A: Q1(11)	5.2 Types of Networks	 iii) Explain with detailed diagrams thefollowing network topologies Bus topology Star topology Mesh topology 	U	1
12	A: Q1(12)	3.2 Spreadsheet	i) Know the Basics of SpreadsheetAddressing cells	U	1
13	A: Q1(13)	3.1 Office Automation	Inserting Word Art	K	1

14	B: 2(i)		i Describe brief history and	K	2
	- a(::)	Computer	generations of computer		
15	B: 2(ii)	1.2 Computer Hardware	Motherboard	U	2
16	B: 2(iii)	1.2 Role of	USE OF COMPUTERS IN	K	2
		Computer	VARIOUS FIELDS		
			Manufacturing		
17	B: 2(iv)	1.2 Role of	Careers in Information	U	2
		Computer	Technology (IT)		
10	D 26-3	2.1 Introduction To OC	Eventions of Operating Systems	11	2
18	B: 2(v)	2.1 Introduction To OS OR	Functions of Operating System • Memory Management	U	2
		OK	Wellioty Wallagement		
		2.1 Introduction To OS	File Management	A	2
19	B: 2(vi)	3.2 Spreadsheet	Introduction to Spreadsheet	K + U	2
17	D. 2(VI)	3.2 Spreadsheet	introduction to spreadsheet	K + U	L
			Characteristics of a Good		
			Communication System	<u> </u>	
20	B: 2(vii)	4.1 Data	Components Of A Communication		
		Communication	System	U	2
		op.	OR		
		OR			
		5.2 Types of Networks	Unguided <mark>Media</mark>	K	2
21	B: 2(viii)	3.2 Types of Networks	Asynchronous and Synchronous	IX	L
	D. 2(VIII)		Transmission Modes	U	2
					_
22	B: 2(ix)	4.1 Data	Characteristics Of A Good	U	2
44	D. 4(IX)	Communication	Communication System	U	۷
23	B: 2(x)	5.1 Computer Networks	Uses of Networks	U	2
		OD	OR		
		OR 5.1 Computer Networks			
		3.1 Computer NetWOFKS	Network Topologies	U	2
24	B: 2(xi)	6.2 Computer Viruses	Common Symptoms of Malware		
- :	~. ~ ()	5.2 computer viruses	Attack		
		OR	an.		
			OR		
		6.4 Computer Ethics	Areas of Computer Ethics		
25	C:Q3	1.5 Computer Software	Application Software	K	5
		OR	OR		
		1.4 Basic operations of a	Racic operations of a computer		_
		computer	Basic operations of a computer	K+A	5
26	C:Q4	2.1 Introduction to OS	Common Types Of Operating	17	_
			Systems	K	5
			Command Line Interface		
			 Graphical User Interface 		
			(GUI).		
27	C: Q5	2.1 EUNDAMENTALCOP	Common Tymas of Onavatina		
4/	c. Qo	2.1 FUNDAMENTALS OF OPERATING SYSTEM	Common Types of Operating Systems	K + A	5
		Or	Or	IX 'A	3
		4.2Transmission Media	Unguided Media		
28	C: Q6	5.3	i) Explain the following types		
	- 3	Communication over	of lines which use the	K + U	5
		the Networks	telephone networks for data		
		1	1 -		

Or 6.4 Computer Ethics	communications • Digital Subscriber Line (DSL) • Integrated Services Digital Network (ISDN) lines • CD MA Or Areas of Computer Ethics		
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*Student Learning Outcomes
National Curriculum for Computer Sciences Grades IX-XII, 2009
(Page no. 26-36)

**Cognitive Level K: Knowledge

U:

Understanding A: Application

COMPUTER SCIENCE SSC-I

Table of Specifications

Assessment Objectives		Unit 1: Fundamentals of Computer (15%)	Unit 2: Fundamentals of Operating Systems (15%)	Unit 3*: Office Automation (25%)	Unit 4: Data Communication (20%)	Unit 5: Computer Networks (15%)	Unit 6: Computer Security and Ethics (10%)	To Mark (55 T +	s: 75	Percentage: 100%
Knowledge based	Section A	Q1 (2) (01)		Q1 (13) (01)	Q1 (5) (01) Q1 (6) (01)		Q1 (10) (01)	5		
	Section B	Q2 (i) (02) Q2 (iii) (02)	Q2 (v) (02)			•	Q2 (xi) (02) Or Q2 (xi) (02)	10	43	50%
	Section C	Q3(05)	Q4 (05) Q5 (03)		Q6 (05)	Q5 (05)	Q6(05)	28		
Understanding based	Section A	Q1 (9) (01)	Q1 (8) (01)	Q1 (12) (01)	Q2 (vii) (02) Q2 (vii) (02)	Q1 (1) (01) Q1 (4) (01) Q1 (7) (01) Q1 (11) (01) Q2 (x) (02) Or Q2 (x) (02)		15	35	40%
	Section B	Q2 (ii) (02) Q2 (iv) (02)	Q2 (iii) (03) OR Q2 (v) (02) Q5 (02)	Q2 (vi) (02)	Q2 (ix) (02)			15		
	Section C	OR Q3(05)						5		
Application based	Section A			Q1 (3) (01)				1		
	Section B		Q2 (iii) (01)		Q2 (vii) (02) Q2 (ix) (02)			5	6	10%
	Section C									
Total marks		20	19	05	17	13	10	8	4	100%

^{*}Unit-3: is all practical so it's 20% covered in practical paper and 5% in theory paper

KEY: Q1(1)(01) Q2(03)

Question No (Part No.) (Allocated Marks) Question No (Allocated Marks)