Version No.			

ROLL NUMBER						

Answer Sheet No._____

Sign. of Candidate _____

Sign. of Invigilator_____

COMPUTER SCIENCE SSC–I

SECTION – A (Marks 13)

Time allowed: 15 Minutes

Section – A is compulsory. All parts of this section are to be answered on separate bubble sheet and handedover to the Centre Superintendent. Deleting/overwriting is not allowed. **Do not use lead pencil.**

Q.1 Fill the relevant bubble for each part on bubble sheet. Each part carries one mark.

(1) What is commonly used for long-distance WAN connections?

A. Bluetooth B. Fiber Optics
C. Wi-Fi D. Coaxial cable

(2) Which storage device has the fastest read/write access?

A. Compact Disk B. Floppy Disk
C. Digital Video Disk D. Hard Disk

(3) Which feature would an author use while writing a document to add an externallink to a website in MS-Word?

A. Onlinelink B. Hyperlink
C. Weblink D. Anchorlink

(4) Television broadcasting is an example of following transmission mode:

A. Simplex B. Half-Duplex
C. Full-Duplex D. Simple Duplex

(5) Rate of change of electrical signals per second is called:

A. Data rate B. Baud rate
C. Bandwidth D. Signal-to-Noise ratio

(6) Which one of the following communication devices is used to connect two different types of networks?

A. Router B. Bridge
C. Switch D. Gateway

(7) In which one of the following topologies can a Node be easily added?

A. Ring topology
B. 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
B. Time sharing system
C. Multitasking system
D. Real time system

(9) Cards used to connect additional devices to motherboard are attached via:

A. Expansion slot
B. Connector
C. Bays
D. Links

(10) 'Multimodal Authentication' means:

A. Use of username and password
B. Use of two or more authentication methods
C. Use of access cards
D. Use of biometrics

(11) In a ring topology, how many neighbors does each device have?

A. One
B. Two
C. Three
D. Four

(12) 'D6' with reference to a spreadsheet means:

A. Column D, Row 6
B. Column D6
C. Row D6
D. Row D, Column 6

(13) A text modifying feature in Word to create decorative effects is called:

A. Bookmark
B. Layout
C. WordArt
D. Hyperlink

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)

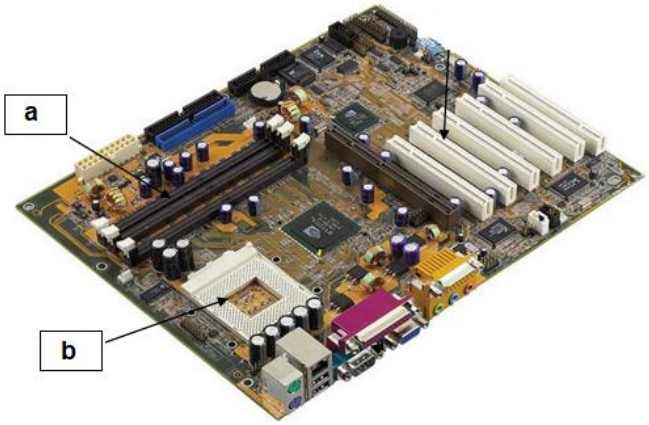
Q.2 Attempt all parts from the following. All parts carry equal marks. (11x2=22)

i. Write down any two characteristics of 3rd generation computers.

OR

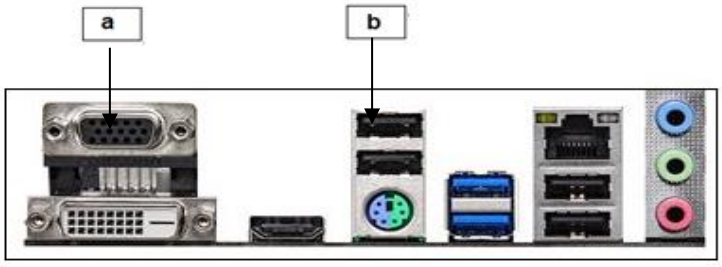
Write down any two characteristics of 4th generation computers.

ii. Name the two parts (a) and (b) of the motherboard.



OR

Name the two ports (a) and (b) of the motherboard.



iii. What does the terms CAD and CAM stand for?

OR

Give two applications of computers in education field.

iv. You want to pursue a career in Information Technology. Which specific career would you be most interested in, and why?

OR

Give two advantages of using bank ATM.

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.

OR

Give two characteristics of InPage software.

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?

OR

Which communication medium is the fastest? Give two reasons.

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

OR

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. (4×05=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)

OR

Write notes on Macintosh and Linux operating systems. (2.5 + 2.5)

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 andScope	Student Learning Outcomes *	Cognitive 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	K	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 ofO.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 • Ring topology • Star topology • Mesh topology	U	1
12	A: Q1(12)	**3.2 Spreadsheet**	i) Know the Basics of Spreadsheet • Addressing cells	U	1
13	A: Q1(13)	**3.1 Office Automation**	Inserting Word Art	K	1

14	B: 2(i)	**1.1 Introduction to Computer**	Describe brief history and generations of computer 3rd generation OR 4th generation	K	2
15	B: 2(ii)	**1.2 Computer Hardware**	Motherboard parts OR Motherboard Ports	U	2
16	B: 2(iii)	**1.2 Role of Computer**	USE OF COMPUTERS IN VARIOUS FIELDS • Manufacturing OR • Education	K	2
17	B: 2(iv)	**1.2 Role of Computer**	Careers in Information Technology (IT) OR Use of Computers in Banks (ATM)	U	2
18	B: 2(v)	**2.1 Introduction To OS** **OR** **2.1 Introduction To OS**	Functions of Operating System • Memory Management OR • File Management	U A	2 2
19	B: 2(vi)	**3.2 Spreadsheet** **OR** **3.3 InPage Urdu Editor**	Introduction to Spreadsheet OR Introduction to InPage	K + U	2
20	B: 2(vii)	**4.1 Data Communication** **OR** **5.2 Types of Networks**	Components Of A Communication System OR Unguided Media	U K	2 2
21	B: 2(viii)	**4.1 Data Communication**	Asynchronous and Synchronous Transmission Modes OR Communication Media	U	2
22	B: 2(ix)	**4.1 Data Communication**	Characteristics Of A Good Communication System – accuracy OR Timeliness	U	2
23	B: 2(x)	**5.1 Computer Networks** **OR** **5.1 Computer Networks**	Uses of Networks OR Network Topologies	U U	2 2
24	B: 2(xi)	**6.2 Computer Viruses** **OR** **6.4 Computer Ethics**	Common Symptoms of Malware Attack OR Areas of Computer Ethics		
25	C:Q3	**1.5 Computer Software** **OR** **1.4 Basic operations of a computer**	Application Software OR Basic operations of a computer	K K+A	5 5
26	C:Q4	**2.1 Introduction to OS**	Common Types Of Operating Systems • Command Line Interface • Graphical User Interface	K	5

			(GUI). OR Macintosh and Linux operating systems		
27	C: Q5	**2.1 FUNDAMENTALS OF OPERATING SYSTEM** **Or** **4.2Transmission Media**	Common Types of Operating Systems Or Unguided Media	K + A	5
28	C: Q6	**5.3 Communication over the Networks** **Or** **6.4 Computer Ethics**	i) Explain the following types of lines which use the telephone networks for data communications • Digital Subscriber Line (DSL) • Integrated Services Digital Network (ISDN) lines • CD MA Or Areas of Computer Ethics	K + U	5

*** Student Learning Outcomes**

National Curriculum for Computer Sciences Grades IX-XII, 2009
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****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%)	Total Marks: 75 (55 T + 20 P)		Percentage: 100%
Knowledge based	Section A	Q1 (2) (01)		Q1 (13) (01)	Q1 (5) (01) Q1 (6) (01)		Q1 (10) (01)	**5**	**57**	**50%**
	Section B	Q2 (i) (02) OR Q2 (i) (02) Q2 (iii) (02) OR Q2 (iii) (02)	Q2 (v) (02) OR Q2 (v) (02)				Q2 (xi) (02) OR Q2 (xi) (02)	**16**		
	Section C	Q3(05)	Q4 (05) OR Q4 (05) Q5 (03)		Q6 (05) Q5 (03)	Q5 (05)	Q6(05)	**36**		
Understanding based	Section A	Q1 (9) (01)	Q1 (8) (01)	Q1 (12) (01)	Q2 (vii) (02) Q2 (viii) (02) OR Q2 (viii) (02)	Q1 (1) (01) Q1 (4) (01) Q1 (7) (01) Q1 (11) (01) Q2 (x) (02) OR Q2 (x) (02)		**17**	**41**	**40%**
	Section B	Q2 (ii) (02) Q2 (iv) (02)	Q2 (iii) (03) OR Q2 (v) (02)	Q2 (vi) (02) OR Q2 (vi) (02)	Q2 (ix) (02)			**15**		
	Section C	Q3(05)	Q5 (02)		Q5 (02)			**9**		
Application based	Section A			Q1 (3) (01)				**1**	**8**	**10%**
	Section B		Q2 (iii) (01)		Q2 (vii) (02) Q2 (ix) (02) OR Q2 (ix) (02)			**7**		
	Section C									
Total marks		**24**	**26**	**07**	**26**	**13**	**10**	**106**		**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)**