

Version No.			

ROLL NUMBER							



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1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
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9	9	9	9

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1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

Answer Sheet No. _____

Sign. of Candidate _____

Sign. of Invigilator _____

COMPUTER SCIENCE SSC–I
SECTION – A (Marks 12)
Time allowed: 15 Minutes

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

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

- (1) How many pairs of computers can communicate simultaneously on LAN?
A. 1 ☐ B. 3 ☐
C. 2 ☐ D. Multiple ☐
- (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 external link 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 control system?
- | | | |
|----|-------------------------|-----------------------|
| 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) Which one of the following topologies use more cable?
- | | | | | | |
|----|---------------|-----------------------|----|---------------|-----------------------|
| A. | Bus topology | ☐ | B. | Star topology | ☐ |
| C. | Ring topology | ☐ | D. | Mesh topology | ☐ |
- (12) 'D6' with reference to a spreadsheet means:
- | | | | | | |
|----|-----------------|-----------------------|----|-----------------|-----------------------|
| A. | Column D, Row 6 | ☐ | B. | Column D6 | ☐ |
| C. | Row D6 | ☐ | D. | Row D, Column 6 | ☐ |

Result.pk



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

Time allowed: 2.45 hours

Total Marks: 43

Note: Answer any nine parts from Section 'B' and attempt any two questions from Section 'C' on the separately provided answer book. Write your answers neatly and legibly.

SECTION – B (Marks 27)

Q.2 Attempt any **NINE** parts from the following. All parts carry equal marks. $(9 \times 3 = 27)$

- i. Write down two benefits and one drawback of laser printer.
- ii. Write down the characteristics of Third generation computers.
- iii. With increasing Memory sizes, do you still think Memory Management is an important function of an Operating System? Justify your answer.
- iv. Write down the purpose of Shareware and Freeware Software? Give an example of each.
- v. Define any three transmission impairments in communication mediums.
- vi. Write down any three difficulties a company may face in running a business without having a computer network.
- vii. Identify the most suitable software to prepare Result Sheet of students. Give two reasons.
- viii. List down any three authentication methods along with their applications in daily life.
- ix. Differentiate between synchronous and asynchronous transmission by giving an example of each.
- x. How is the job of System Analyst different from a Programmer?
- xi. Write down three advantages of Software Piracy.
- xii. Between Linux and Macintosh, which operating system would you prefer? Give two reasons to support your answer.
- xiii. List three types of computer attacks and how can they be prevented.

SECTION – C (Marks 16)

Note: Attempt any **TWO** questions. $(8 \times 2 = 16)$

Q.3 Describe four types of Unguided transmission media along with its applications in daily life. **(08)**

Q.4 Explain the following data communication lines in terms of transfer rate, cost, merits, and demerits: **(02 × 04 = 08)**

- (i) Dialup (ii) DSL (iii) ADSL (iv) CDMA

Q.5 Describe the following types of Operating Systems: **(04 × 02 = 08)**

- a) Batch Processing Operating System
- b) Time Sharing Operating System

COMPUTER SCIENCE SSC-I

(Curriculum 2009)

Student Learning Outcomes

Sr No	Section: Q. No. (Part no.)	Contents and Scope	Student Learning Outcomes *	Cognitive Level **	Allocated Marks in Model Paper
1	A: 1(i)	5.2 Types of Networks	i) Explain the following types of networks on the basis of spatial distance • Local Area Network (LAN)	U	1
2	A:1(ii)	1.3 Computer Hardware	i) Describe the following hardware: • Storage devices	K	1
3	A: 1(iii)	3.1 Word Processing	xv) Use of Hyperlink	A	1
4	A: 1(iv)	5.1 Networks	iii) Define Data transmission modes	U	1
5	A: 1(v)	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: 1(vi)	4.3 Communication Devices	Describe the uses of following communication devices • Dialup modem • Network Interface card • Router • Switch / Access Point	K	1
7	A: 1(vii)	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: 1(viii)	2.2 Operating System	ii) Describe the following types of O.S. • Batch processing • Time sharing processing • Real time processing	U	1
9	A: 1(ix)	1.3 Computer hardware	i) Describe the following hardware: • System unit – Motherboard	U	1
10	A: 1(x)	6.3 Authentication Mechanisms	iv) Explain the term multimodel authentication	K	1
11	A: 1(xi)	5.2 Types of Networks	iii) Explain with detailed diagrams the following network topologies • Bus topology • Ring topology • Star topology • Mesh topology	U	1

12	A: 1(xii)	3.2 Spreadsheet	i) Know the Basics of Spreadsheet • Addressing cells	U	1
13	B: 2(i)	1.3 Computer hardware	i) Describe the following hardware: • Output devices	U	3
14	B: 2(ii)	1.1 Introduction to Computer	ii) Describe brief history and generations of computer	K	3
15	B: 2(iii)	2.1 Introduction	ii) Get Familiar with the functions of OS • Memory Management	U	3
16	B: 2(iv)	1.5 Computer software	iii) Elaborate the following terms • Open source software • Shareware • Freeware	U	3
17	B: 2(v)	4.2 Transmission Medium	iv) Explain the following transmission impairments in communication mediums • Attenuation • Amplification	K	3
18	B: 2(vi)	5.1 Networks	ii) Describe the uses of networks	A	3
19	B: 2(vii)	3.2 Spreadsheet	i) Know the Basics of Spreadsheet • Naming cell and sheets • Filling column and rows • Addressing cells (Relative and absolute addresses) • Paste special ii) Work with functions and formulas	A	3
20	B: 2(viii)	6.3 Authentication Mechanisms	iii) Explain in detail the following authentication methodologies • Username and password • Personal Identification Number (PIN) • Access cards • Biometrics	K+A	3
21	B: 2(ix)	4.1 Basics of Communication	iv) Describe the following modes of data communication • Synchronous transmission • Asynchronous transmission 4	U	3
22	B: 2(x)	1.2 Role of compute	ii) Know the scope of the following careers in IT: • Software Engineer - Programmer - System Analyst	U	3
23	B: 2(xi)	6.4 Computer Ethics	ii) Discuss the following areas of computer ethics • Information accuracy • Information ownership/ Intellectual property rights • Software piracy • Information privacy	U	3
24	B: 2(xii)	2.1 Introduction	iii) Differentiate between common types of O.S. • Command Line Interface (CLI) - DOS - Unix • Menu Driven Interface (Novel , DOS)	U	3

			• Graphical User Interface (GUI) - Macintosh - Linux - Windows 2		
25	B: 2(xiii)	6.1 Computer Security 6.2 Computer Viruses	iii) Explain the Following attacks: • Virus • Worm • Adware • Spyware • Malware iii) Know that the following software can help safeguard against viruses, worms, adware and spyware: • Antivirus • Anti Spyware	K	3
26	C: 3	4.2 Transmission Medium	iii) Discuss the following unguided media • Radio waves • Microwave • Infra-red • Satellite	U+A	8
27	C: 4	5.3 Communication over the Networks	i) Explain the following types of lines which use the telephone networks for data communications • Dial-up lines • Digital Subscriber Line (DSL) • Integrated Services Digital Network (ISDN) lines • CDMA	U	2 2 2 2
28	C: 5	2.2 Operating System	ii) Describe the following types of O.S. • Batch processing • Time sharing processing	K	4 4

*** 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 (5) (01) Q1 (6) (01)		Q1 (10) (01)	4	22.5	30%
	Section B	Q2 (ii) (03)			Q2 (v) (03)		Q2 (viii) (1.5) Q2 (xiii) (03)	10.5		
	Section C		Q5 (08)					8		
Understanding based	Section A	Q1 (9) (01)	Q1 (8) (01)	Q1 (12) (01)		Q1 (1) (01) Q1 (4) (01) Q1 (7) (01) Q1 (11) (01)		7	39	52%
	Section B	Q2 (i) (03) Q2 (iv) (02) Q2 (X) (03)	Q2 (iii) (03) Q2 (xii) (03)		Q2 (ix) (03)		Q2 (xi) (03)	20		
	Section C				Q3 (04)	Q4 (08)		12		
Application based	Section A			Q1 (3) (01)				1	13.5	18%
	Section B	Q2 (iv) (01)		Q2 (vii) (03)		Q2 (vi) (03)	Q2 (viii) (1.5)	8.5		
	Section C				Q3 (04)			4		
Total marks		14	15	05	16	15	10	75		100%

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

KEY:

1(1)(01)

Question No (Part No.) (Allocated Marks)