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University of Rajshahi
Department of Computer Science and Engineering
B.Sc. (Engg.) Part-1 Odd Semester Examination-2016
Course: CSE-1111 (Computer Fundamentals)
Full Marks-52.5 Time-3:00 Hour

[N.B. Answer any SIX questions taking THREE from each part]

Part-A

1. (a) What is computer? Defines analog and digital computer. 3
(b) Discuss mainframe and supercomputer with applications. 3
(c) What is computer generation? Mention different generation names with their used technologies. 2.75
2. (a) Draw the block diagram of a digital computer and discuss how a program is executed by it. 4
(b) What is CPU? Draw the block diagram of the internal structure of CPU and write its functions. 4.75
3. (a) What is computer memory? How is it measured? 2
(b) What are the differences between magnetic tape and magnetic disk? 2.75
(c) Define the following terms in context of a disk storage: i) Access time 2
ii) Latency iii) Seek time iv) Transfer rate
(d) What is cache memory? What function does it perform? 2
4. (a) Discuss the functional mechanism of a hard disk drive during data read and write operation. 3.75
(b) Discuss how data is read from a compact disk. 3
(c) What is RAM? Shortly discuss about each type of RAM. 2

Part-B

5. (a) Discuss LCD monitor with their types and problems. 3
(b) Discuss different evaluation criteria of a printer. 2.75
(c) Discuss the functional mechanism of a laser printer. 3
6. (a) What is software? Define operating system with its types and functions. 3.75
(b) What is utility program? Discuss some utility programs with their tasks. 3
(c) Define user-written program and package program. 2
7. (a) Compare DOS and Windows as two operating systems. 2
(b) What is database and database management system (DBMS)? What are the advantages of DBMS? 3
(c) Define computer virus. Mention some symptoms and prevention of computer virus. 3.75
8. (a) What is computer network? Discuss different types of computer networks. 3
(b) Define network topology. Discuss bus topology of computer network. 3.75
(c) Define browser and search engine with examples. 2

University of Rajshahi
Department of Computer Science and Engineering

B.Sc. (Engg.) Part-I Odd Semester Examination-2015

Course: CSE1111 (Computer Fundamentals)

Marks: 52.5

Time: 3 Hours

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Dept. of Computer Science &
Engineering
University of Rajshahi.

[Answer any six (06) questions taking three (03) from each part]

Part-A

1. a) What is a computer? Discuss different types of digital computers with their applications. 4
b) What is meant by computer generation? Mention the technologies used in different generation of computers. 1.75
c) Draw the block diagram of a digital computer and discuss how a program is executed by it. 3
2. a) What is CPU? Draw the internal block diagram of a CPU. 2.25
b) Draw and discuss the data read-write mechanism of a 64x4 RAM. 3.5
c) Define computer memory. Suppose your computer has 2 MB cache, 4 GB RAM and 500 GB hard drive. Explain your idea behind having 3 different types of memory instead of having just one. 3
3. a) Discuss how data is read from a compact disk. 4
b) Explain, whether the touch screen of a tablet PC is an input or output device. 2.75
c) What happens when you press a key on your computer's keyboard? 2
4. a) Compare CRT, LCD, and LED monitors. 2.75
b) Discuss the printing mechanism of a laser printer. 3
c) Define scanner, bar-code reader, and modem. 3

Part-B

5. a) What is software? Define system software and application software with examples. 3
b) Discuss operating system with its types and functions. 3.75
c) What are package program and user-written program? 2
6. a) What is language translator? Discuss different types of language translators. 4
b) Define utility program. Mention some name of utility programs with their tasks. 3.75
c) What do you mean by driver software? 1
7. a) What is meant by computer networks? List four benefits that computer networks provide to their users. 3
b) What is network topology? Suppose in a lab of CSE department, all the computers and printers are connected to a network switch. Name and explain the topology that is used here. 3.75
c) Why is the Internet sometimes described as a "network of networks"? 2
8. a) What do you mean by database and database management system? Are they same or different? How? 3
b) What is computer virus? Mention some symptoms of virus for attacking a computer. 3.75
c) Define anti-virus and computer hacker. 2

University of Rajshahi
Department of Computer Science and Engineering
B.Sc. (Engg.) Part-I Semester-I Examination-2014
Course: CSE-1111 (Computer Fundamentals)
Full Marks-52.5 Time: 3 hours

[N.B. Answer SIX questions taking any THREE from each part]

PART-A

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|---|------|
| 1. (a) Define computer. Discuss analog, digital, and hybrid computers with applications | 4.75 |
| (b) Draw the block diagram of the internal structure of a CPU and write its functions. | 4 |
| 2. (a) Define computer memory. Why is RAM called primary memory and volatile memory? | 3 |
| (b) Draw the architecture of a 64x4 RAM and discuss data read-write operation in it. | 4 |
| (c) What are BIOS and flash memory? | 1.75 |
| 3. (a) What is cache memory? Mention its importance and functions. | 4 |
| (b) Discuss the functional mechanism of a hard disk drive during data read-write operation. | 4.75 |
| 4. (a) Briefly discuss LCD monitor with their types and problems. | 4 |
| (b) Write the differences between impact and non-impact printers. | 1.75 |
| (c) Define and discuss computer buses. | 3 |

PART-B

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|---|------|
| 5. (a) What is software? Define operating system with its functions and types | 4 |
| (b) Write the differences between DOS and Windows operating system. | 2.75 |
| (c) Define language translator and driver software. | 2 |
| 6. (a) What do you mean by data and information? Write the difference between them. | 3 |
| (b) Define database and DBMS with example. | 2.75 |
| (c) What is utility software? Mention its functions. | 3 |
| 7. (a) Define computer network. Discuss the function of a bus network. | 4 |
| (b) Discuss the operation of optical fiber as a communication media. | 3 |
| (c) Define Internet, intranet, and extranet. | 1.75 |
| 8. (a) What is a computer virus? What tasks can they perform? | 2.75 |
| (b) How can you prevent viruses in a computer? Name some common antivirus software. | 3 |
| (c) Discuss the following terms: (i) HTTP (ii) SMTP (iii) FTP | 3 |

University of Rajshahi
Department of Computer Science and Engineering
B.Sc. (Engg.) Examination-2013, Year-I, Semester-I
Course: CSE-1111 (Computer Fundamentals)
Full Marks-52.5 Time: 4 hours

[N.B. Answer any six questions taking THREE from each of the groups]

PART-A

1. (a) What is a computer? Discuss different types of digital computers with their applications. 5
(b) Draw the block diagram of a digital computer and discuss how a program is executed by it. 3.75
2. (a) Describe two main parts of the CPU and explain how they work together. 4
(b) Explain the difference between RAM and ROM. 2
(c) Describe three hardware factors that affect processing speed. 2.75
3. (a) Discuss the functional mechanism of a hard disk drive during data read and write operation. 4
(b) What is a cache memory? Discuss why and how a cache memory is used in a computer. 4.75
4. (a) List the five steps a computer follows when accepting input from a keyboard. 2
(b) Describe four characteristics one should consider when comparing monitors. 4
(c) Explain the factors one should consider when evaluating printers. 2.75

PART-B

5. (a) What is software? Define system software and application software with example. 3
(b) What is an operating system? Mention its different types and functions. 3.75
(c) Write the differences between DOS and Windows operating system. 2
6. (a) Define the term database and DBMS. 2
(b) Differentiate between flat file databases and relational databases. 3
(c) Explain different field types of a database table with example. 3.75
7. (a) What is computer network? Discuss different types of computer networks. 4
(b) Define topology. Shortly discuss the function of a star topology. 3.75
(c) What do you mean by protocol? 1
8. (a) What is Internet? Mention different applications of Internet. 2.75
(b) Define browser and search engine with example. 2
(c) What is computer virus? Mention some harms and symptoms of virus program. 3
(d) What does an anti-virus do? 1

Page No. of Semester Exam
Date of Completion
Signature of Candidate
Date of Submission

University of Rajshahi
Department of Computer Science and Engineering
B.Sc. Engg.(CSE) 1st Year Odd Semester 2012
Course: CSE 1111 (Computer Fundamentals)
Time: 4 Hrs. Full Marks: 52.5

[N.B. Answer SIX questions taking at least THREE from each Section.]

Section A

- 1.a) What are the basic components of a computer system? Briefly discuss each component. 3.75
b) Briefly discuss about different generations of computer. 3
c) Write down your idea about the specification of a high configuration personal computer. 2
- 2.a) Define computer memory. Why RAM is called a primary memory as well as volatile memory? 3
b) What is a cache memory? Discuss why is it essential in a computer system? 3.75
c) Define resolution and refresh rate of a monitor with example. 2
- 3.a) Discuss the data read-write mechanism of a hard disk drive. 4.75
b) Discuss the printing mechanism of a laser printer. 4
- 4.a) What are the specifications that should be considered while buying monitors? Explain. 3
b) How does a color CRT monitor produce images on screen? 2.75
c) Write the advantages disadvantages of CRT monitor and LCD monitor. 3

Section B

- 5.a) What is software? Define system software and application software with example. 3
b) Define operating system with its types and functions. 3.75
c) Write the differences between DOS and Windows operating system. 2
- 6.a) What is language translator? Differentiate between compiler and interpreter. 3
b) What is utility program? Write the names and functions of some utility programs. 3
c) Define user-written program and package program with example. 2.75
- 7.a) What are the differences between data and information? 1
b) Define the terms: (i) DBMS (ii) Database (iii) Entity (iv) Record (v) Field (vi) File. 4
c) Define DDL and DML. 2
d) How computer process data? 1.75
- 8.a) What is network topology? Discuss different types of networks topologies. 5
b) What do you mean by internet access providing and internet presence providing by an ISP? 2.75
c) What is a MODEM? 1