

**Bangladesh Open University**  
**School of Science and Technology**  
**B. Sc in Computer Science and Engineering Program**  
**161 Term (1<sup>st</sup> Year 1<sup>st</sup> Semester)**  
**Final Examination**  
**Course Code & Title: CSE11P8 Computer Fundamentals Lab**

Time: 3 hours

Total Marks: 60

- A.** Choose and perform one experiment by lottery from out of the following experiments. 1×40=40
- Exp 1. You are supposed to create a word processing file using MS Word, according to the instructions given below.

(a) Open a new MS Word file and type the following text given in the box below.

Academy award The Academy Awards, informally known as The Oscars®, are a set of awards given annually for excellence of cinematic achievements. The Oscar statuette is officially named the Academy Award of Merit and is one of nine types of Academy Awards. The Academy Awards ceremony is also the oldest award ceremony in the media; its equivalents, the Grammy Awards (for music), Emmy Awards (for television), and Tony Awards (for theatre) are modeled after the Academy.

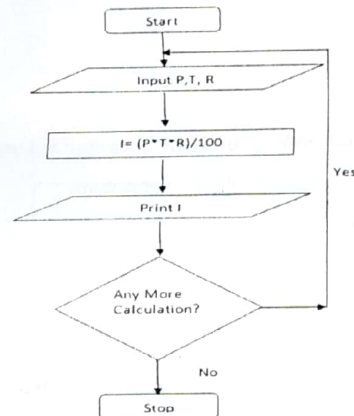
Current special categories

Academy Honorary Award: since 1929

Academy Scientific and Technical Award: since 1931

Gordon E. Sawyer Award: since 1981

- (b) Correct any spelling errors displayed in the given text.  
(c) Save the document as **BOU\_<Roll no>**.  
(d) Keep 2/2 inches left and right indent.  
(e) Insert "Award Ceremony" as header and page number in footer.  
(f) Draw the following Flowchart in your document.



- Exp 2. Suppose that you are going to give a speech on "Importance of Computer in Our Daily Life". Prepare a presentation in MS Power Point on that topic (Prepare at least 5 slides).

- Exp 3. You are supposed to perform the following using MS Access:

Field	Data Type	Size
EmpID	Auto number	
EmpName	Text	30
Address	Text	50
Phone Number	Number	
EmailAddress	Text	40

- (a) Create a form to enter record to the given table.  
(b) Insert any 5 record to the given table.  
(c) Create a query to sort EmpName in ascending order.  
(d) Create suitable report for the records you entered.
- Exp 4. Perform the following operations in Microsoft Power point:
- a) Create Master slide  
b) Create duplicate slide.  
c) Insert slide number and date into the footer section except the master slide.  
d) Insert animation and background picture.  
e) Create **pi and bar chart** in entering the following data in the table provided:

	2000	2001	2002
Net Revenues	22,956	25,296	28,365
Net Income	9,42	7,346	7,829



# Bangladesh Open University

## School of Science and Technology

B. Sc in Computer Science and Engineering Program

181 Term (1st Year 1st Semester) Final Examination

Course Code & Title: CSE1127 Computer Fundamentals

Time: 3 Hours

Total Marks: 70

[N.B.: Answer any 5 (five) questions. The figures in the right margin indicate the full marks. All portions of each question must be answered sequentially.]

1. (a) Define computer. "Charls Babbage is known as the father in the history of computer system." Justify the statement. 1+2  
(b) Write the technical evolution of the generations of computer. 6  
(c) Describe the main features and characteristics of microcomputers and super computer. 3  
(d) Draw a block diagram of showing basic organization of a computer system. 2
2. (a) Define I/O devices. Write the importance of I/O devices. 2+2  
(b) Describe different registers of a CPU. 4  
(c) Write short note on the following: 6  
(i) OMR; (ii) MICR; (iii) plotters.
3. (a) Why do we need to study binary number system in spite of having decimal number system? 3  
(b) Convert the following numbers as directed: 5  
(i)  $(205.125)_{10} = (?)_2$ ; (ii)  $(1001.101)_2 = (?)_{10}$ ; (iii)  $(4762)_8 = (?)_{10}$ ;  
(iv)  $(691)_{10} = (?)_{BCD}$ ; (v)  $(2354)_8 = (?)_{16}$   
(c) Perform as directed 6  
(i)  $(10111)_2 + (11010)_2$ ; (ii)  $(77216)_8 + (23571)_8$ ; (iii)  $(2D7A2)_{16} + (A4C51)_{16}$ ;  
(iv)  $(11101)_2 - (1011)_2$ ; (v)  $(53214)_8 + (12331)_8 + (12471)_8$ ;  
(vi) Find the 1's and 2's complement form of  $(11001001)_2$ .
4. (a) Write short note on (i) computer language; (ii) plug and play. 2+2  
(b) Differentiate between machine language and high level language with example. 3  
(c) Define software. Why is it necessary for a computer system? 1+2  
(d) Define operating system. Mention the importance of operating system. 2+2
5. (a) Define computer memory. Describe different primary storage of computer systems. 2+4  
(b) Distinguish between volatile and non-volatile memory. 2  
(c) Explain cache memory. How is it differ from primary memory? 2+1  
(d) How do you measure the performance of computer system? 3
6. (a) Briefly explain different types of printers. 6  
(b) What is scanner and mention the functions of it? What are the three most common types of optical scanners? Briefly explain. 2+4  
(c) Define tracks and sectors of hard disk. 2
7. (a) Define computer networks. Describe different types of network based on their scale. 2+3  
(b) Write short notes on the following (any three) 6  
(i) HTTP; (ii) web browser; (ii) upload and download; (iii) topology.  
(c) Briefly explain different types of transmission media. 3



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**181 Term (1st Year 1st Semester) Final Examination**  
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**Time: 3 Hours**

**Total Marks: 60**

**A. Choose and perform one experiment by lottery from out of the following experiments.**

**1×40=40**

**Exp 1.**

Create a document using MS Word and save the file as exam paper. However, it is necessary to comply with the following specifications:

- The name of the university should appear in capital letters in font Times New Roman, size 14, centered at the top of the page.
- The subject name, total marks as well as the duration of the exam should appear just below the heading at the top of the page.
- A minimum of five questions must appear in the exam paper and the value of each question must be indicated.
- Use equation to write the formula.
- Use subscript and superscript.
- Change the layout of the page as Page size: A4 (8.27" x 11.69")
- Set page number using footer.
- Set a password to protect the file.

**Exp 2.**

Perform the following operations in Microsoft Power point:

- Create Master slide
- Create duplicate slide.
- Insert slide number and date into the footer section except the master slide.
- Insert animation and background picture.
- Create **pi and bar chart** in entering the following data in the table provided:

	2000	2001	2002
Net Revenues	22,956	25,296	28,365
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**Exp 3.**

Type the following into a blank worksheet in Microsoft Excel and save it.

SI No.	Student Name	Exam1	Exam2	Exam3	Final			Result	
					Avg	Best	Min	CGPA	Grade
1	Davis	88	73	85					
2	Johnson	52	71	65					
3	Smith	91	85	96					
4	Jones	78	82	67					
5	Connor	88	91	83					
6	O'Nelly	43	33	27					

- Sort the data in ascending order based on Student Name.
- Include header and page number.
- Calculate Final value (Average, Best and Minimum) using standard Microsoft Excel formula.
- Create bar chart using Avg, Best and Min value per student.
- Calculate the Result (CGPA, Grade) based on Avg value using standard Microsoft Excel formula.  
Note: Grade: 80-10=A, 60-79=B, 50-59=C, 40-49=D, 30-39=E, 0-29=F  
CGPA: A=4.00, B=3.50, C=3.00, D=2.50, E=2.00, F=0.00

**Exp 4.**

Prepare a database using MS. Access for the following data and do the operations.

Employee ID	Name	Basic salary (Tk.)	Medical allowance (Tk.)	House rent	Total amount
0001	Mr.A	60,000	1500	-	-
0002	Mr.B	35,000	1500	-	-
0003	Mr.C	70,000	1500	-	-
0004	Mr.D	55,000	1500	-	-

- Create a table structure for the above data.
- Calculate house rent for each employee according to 50 % of basic salary.
- Calculate the total amount for each employee according to the summation of Basic salary, Medical allowance, and House rent.
- Sort the table in ascending order on basic salary.
- Create a report for viewing the salary details of an employee.



**Exp 5.**

You are supposed to create a word processing file using MS Word, according to the instructions given below.

(a) Open a new MS Word file and type the following text given in the box below.

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Current special categories

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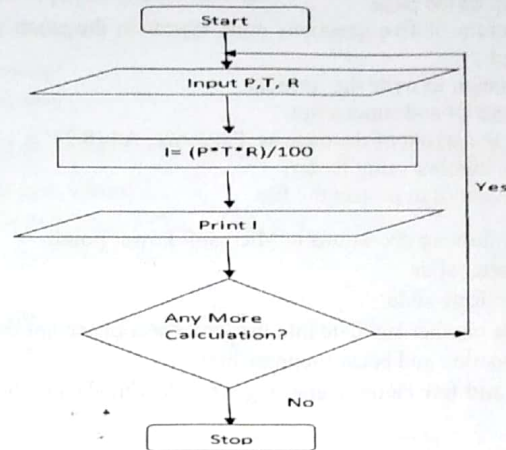
(b) Correct any spelling errors displayed in the given text.

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(d) Keep 2/2 inches left and right indent.

(e) Insert "Award Ceremony" as header and page number in footer.

(f) Draw the following Flowchart in your document.

**Exp 6.**

Suppose that you are going to give a speech on "Importance of Computer in Our Daily Life". Prepare a presentation in MS Power Point on that topic (Prepare at least 5 slides).

**Exp 7.**

Type the following into a blank worksheet in Microsoft Excel and save it.

Emp. No.	Emp. Name	Basic Salary	House Rent	Medical Allowance	Conv. Allowance	Gross Salary	Tax	Net Pay
1.	AAA	22,000.00						
2.	BBB	20,000.00						
3.	CCC	32,000.00						
4.	DDD	23,000.00						
5.	XXX	28,000.00						

a) Sort the data in ascending order based on basic salary.

b) Calculate House Rent (if Basic Salary is less than 25000 then 45% otherwise 40%).

c) Calculate Conv. Allowance (if Basic Salary is greater than 25000 then 30% otherwise 20%).

d) Calculate Medical Allowance (if Basic Salary is greater than 25000 then 60% otherwise 45%).

e) Calculate Gross Salary.

f) Calculate Tax as per Government rules.

g) Calculate Net Pay.

h) Calculate total pay by formula.

**Exp 8.**

Perform the followings in Microsoft access:

a) Create a data base and name it "Student Information".

b) Create a table entering S\_ID, FIRST\_NAME, LAST\_NAME, DOB, ADDRESS, and PHONE as column name.

c) Create two more tables that contains course and marks information.

d) Make S\_ID as primary key.

e) Insert some data into the table.

f) Make relationship between three tables.

g) Create a form and display the data into the form.

h) Add header to the form as Student information.

**B. Notebook on experiments.**

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**C. Viva-voce.**

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