

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSIT 107: Optical Fiber Communication (Eve)

Course Teacher: Ahmed Abdullah (01680076500, ahmed.abdullah@royal.edu.bd)

Assignment

Assignment Topic:

Describe optical fiber network design method with diagram.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSE 231: Computer Algorithm (Day)

Course Teacher: Ahmed Abdullah 01680076500, ahmed.abdullah@royal.edu.bd

Assignment

Assignment Topic:

Implement a Binary search Algorithm without recursion.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: MS 611: Computer Graphics & Animation (M.Sc.)

Course Teacher: Ahmed Abdullah 01680076500, ahmed.abdullah@royal.edu.bd

Assignment

Assignment Topic:

Define Aspect Ratio? What are the advantages and disadvantages of direct view storage tubes?

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: MS 671: Object Oriented Programming (M.Sc.)

Course Teacher: Ahmed Abdullah 01680076500, ahmed.abdullah@royal.edu.bd

Assignment

Assignment Topic:

Design a national flag using turtle graphics using python.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: GED 102: Research Project Proposal

Course Teacher: Ahmed Abdullah 01680076500, ahmed.abdullah@royal.edu.bd

Assignment

Assignment Topic:

What is literature Review? Discuss the importance of the literature review to conducting a research project.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: CSE-111, Course Name: Computer Fundamentals

Course Teacher: Shaikh Afnan Birahim (01711027668, afnan.birahim@royal.edu.bd)

Assignment

Assignment Topic:

List the advantages of IC technology over transistor technology. What is a system? Why do we often refer to a computer as a computer system? Differentiate between positional and non-positional number systems. Explain collating sequence.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: CSIT-325, Course Name: Management Information System
Course Teacher: Shaikh Afnan Birahim (01711027668, afnan.birahim@royal.edu.bd)
Assignment

Assignment Topic:

What is an information system? Describe the components of information system. How can Internet technologies help a business form strategic alliances with its customers, suppliers, and others? Briefly describe the artificial intelligence techniques in business. Describe thermal imaging with necessary figures.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: MAT-105, Course Name: Statistics and Probability
Course Teacher: Shaikh Afnan Birahim (01711027668, afnan.birahim@royal.edu.bd)
Assignment

Assignment Topic:

Write down the differences between statistics and probability. What are the advantages and disadvantages of stem and leaf plot? What is covariance and how it is standardized? Explain.

The following data shows the scores on the first statistics exam -

Class Interval	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Frequency	3	10	14	21	12	6	4

- a. Using this data set draw a frequency polygon and ogive.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: CSE-231, Course Name: Computer Algorithm
Course Teacher: Md Khirul Islam Badal (01748864767, Khirul.badal@royal.edu.bd)
Assignment

Assignment Topic:

Describe the Breath First Search Algorithm with an appropriate example.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT/BBA/HMT

Course Code: CSE-221, Course Name: Microprocessor & Assembly Language
Course Teacher: Md Khirul Islam Badal (01748864767, Khirul.badal@royal.edu.bd)
Assignment

Assignment Topic:

- a) What is number system? Defines the different types of number system with an example.
b) Define base of a number system. Discuss the importance of Hexadecimal number system.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: CSE-135, Course Name: Discrete Mathematics

Course Teacher: Md Khirul Islam Badal (01748864767, Khirul.badal@royal.edu.bd)

Assignment

Assignment Topic:

- a) What is chromatic number? Discuss the properties of a graph
- b) Define the De Morgan's Theorem with a truth table.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: CSIT-333, Course Name: Computer Graphics

Course Teacher: Md Khirul Islam Badal (01748864767, Khirul.badal@royal.edu.bd)

Assignment for Final (EVE)

Assignment Topic:

What is Alpha Compositing. Describe the alpha compositing with an example.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSE 339: Simulation & Modeling (Eve)

Course Teacher: Hasan Abdullah (01681523656, hasan.abdullah@royal.edu.bd)

Assignment

Assignment Topic:

Explain the phases of simulation modeling? What are the limitation and area of simulation modeling? Explain the random walk simulation problem step by step.

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSIT-333: Computer Graphics [Eve]

Course Teacher: Hasan Abdullah (01681523656, hasan.abdullah@royal.edu.bd)

Assignment

Assignment Topic:

Write a short note on i) Layout of Storyboard, ii) object and path, iii) Specification of key frame and iv) In-between frames generation. What are the animation functions? How does RGB color model work?

ROYAL UNIVERSITY OF DHAKA
Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSE-323: E Commerce [Eve]

Course Teacher: Hasan Abdullah (01681523656, hasan.abdullah@royal.edu.bd)

Assignment

Assignment Topic:

Briefly explain the main features of E-commerce? What is B2G, G2B and G2C business model? Write a short note on call center. What are the advantages and disadvantages of E-Commerce Integrated Supply Chain?

ROYAL UNIVERSITY OF DHAKA
 Program: B.Sc. (HON'S) in CSE/CSIT
Course Code & Title: CSE 323: E-Commerce (DAY)
Course Teacher: Nazia Nuzhat (01705829945, nazia.nuzhat@royal.edu.bd)

Assignment

Assignment Topic:

Answer the following questions:

- a) Write short notes on 3 types of e-commerce.
 - i. Business-to-Consumer (B2C)
 - ii. Business-to-Business (B2B)
 - iii. Consumer-to-Consumer (C2C)
- b) What are the key differences between e-commerce and e-business?
- c) What do you mean by Market Strategy? Describe about it.
- d) What are the advantages and disadvantages of e-commerce?

ROYAL UNIVERSITY OF DHAKA
 Program: B.Sc. (HON'S) in CSE/CSIT
Course Code & Title: CSE 121- Structured Programming Language (EVE)
Course Teacher: Nazia Nuzhat (01705829945, nazia.nuzhat@royal.edu.bd)

Assignment

Assignment Topic:

Answer the following questions:

- a) What is structured programming?
- b) What are Variables? How variables work on programming language?
Give some examples.
- c) Write the output for the following program:

```
#include <stdio.h>
int main ( void )
{
  int a , b , c ;
  a = 5 ;
  b = 7 ;
  b += 7 ;
  c = a + b ;
  printf ("a = %d , b = %d , c = %d \n " , a , b , c ) ;
  return 0 ;
}
```

ROYAL UNIVERSITY OF DHAKA
 Program: B.Sc. (HON'S) in CSE/CSIT
Course Code & Title: CSE 213- Object Oriented Programming Language (EVE)
Course Teacher: Nazia Nuzhat (01705829945, nazia.nuzhat@royal.edu.bd)

Assignment

Assignment Topic:

Answer the following questions:

- a) Describe about Assignment Operators in Java programming with some examples.
- b) What are the differences between the constants 7, '7' and "7"?

c) Convert UML to Java code:

Student
-id:String -name:String -mark:double
+ set/get() + constructor() + display():void

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSE 233 - Operating System (Eve)

Course Teacher: Md. Nur-E-Arefin (01675025549, nur.arefin@royal.edu.bd)

Assignment

Assignment Topic:

What is Process? Explain Process Control Block (PCB). What are the differences between Process & Thread? Differentiate between Multitasking & Multiprogramming. Define & explain Assembler, Loader and Compiler. Explain paging. What are the different file operations? Explain different file allocation methods. Differentiate between fragmentation and segmentation. What do you understand by File Management System? Describe the different types of file access methods.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSE 133 - Data Structure & Algorithm (Eve)

Course Teacher: Md. Nur-E-Arefin (01675025549, nur.arefin@royal.edu.bd)

Assignment

Assignment Topic:

Explain different types of data structures. Explain Array, Stack and Queue. Describe their operations and types. What are linear search and binary search? Explain searching in array.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSE 321 - Computer Peripheral & Interfacing (Eve)

Course Teacher: Md. Nur-E-Arefin (01675025549, nur.arefin@royal.edu.bd)

Assignment

Assignment Topic:

Explain Synchronization of CPU and Interface chip. Explain different input and output devices with appropriate figures. What are the types of interfacing? Describe how multiple I/O devices work. What is Decoder? Explain 8279 & 8254 interfacing chips.

ROYAL UNIVERSITY OF DHAKA

Program: MSCSE

Course Code: MS 691 and Course Title: Data Mining & Warehousing

Course Teacher: Rowjatul Zannat Eshita

(Contact No: 01675742407, Mail: rowjatul.eshita@royal.edu.bd)

Assignment

Assignment Topic:

What is OLTP and OLAP? Show the steps to implement a Data Warehouse. Write down the advantages and disadvantages of data mining. Why do we Need Data Warehouse?

ROYAL UNIVERSITY OF DHAKA

Program: MSCSE

Course Code: MS 615 and Course Title: Digital Signal Processing

Course Teacher: Rowjatul Zannat Eshita

(Contact No: 01675742407, Mail: rowjatul.eshita@royal.edu.bd)

Assignment

Assignment Topic:

- a) What is signal? Draw a signal to describe the following Unit Impulse Function: $x[n] = \delta[n] - 2\delta[n-2] + 3\delta[n-3] - 4\delta[n+4]$ and draw a signal using Power Function, $x[n] = (-0.5)^n$.
- b) Write down advantages of Digital over Analogue Signal Processing.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: CSE 321 and Course Title: Computer Peripheral & Interfacing (DAY)

Course Teacher: Rowjatul Zannat Eshita

(Contact No: 01675742407, Mail: rowjatul.eshita@royal.edu.bd)

Assignment

Assignment Topic:

Distinguish between the layout of CD-ROM and Standard Disk. Write down the applications of OMR, OCR and MICR. Determine the transfer rate, in Mbytes/s, for a hard disk drive, given Rotational speed = 8000 rpm, Sectors per track = 30 and Data per sector = 1024 bytes.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code: EEE 109 and Course Title: Microcontroller (DAY & EVENING)

Course Teacher: Rowjatul Zannat Eshita

(Contact No: 01675742407, Mail: rowjatul.eshita@royal.edu.bd)

Assignment

Assignment Topic:

- a) Define microcontroller? Distinguish between Pentium and 8051. Discuss about the different type registers of microcontroller.
- b) Draw a circuit for simple 4-bit counter and a timing diagram for 8-bit registers for the input 11001010. Explain the following instructions:

- i. MOV 52h, 53h
- ii. MOV A, @R0
- iii. MOVX @DPTR, A
- iv. MOV DPTR, # 2000h
- v. MOV A, #80h

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: EEE 103 - Electronics Engineering

Course Teacher: Kanti Bhusan Roy Kawshik (01924008069, kanti.kawshik@royal.edu.bd)

Assignment

Assignment Topic:

Explain Forward Biased PN Junction Diode and its characteristics.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: CSIT 211 - Digital Logic Design

Course Teacher: Kanti Bhusan Roy Kawshik (01924008069, kanti.kawshik@royal.edu.bd)

Assignment

Assignment Topic:

Make a circuit of 2-input Transistor OR Gate.

ROYAL UNIVERSITY OF DHAKA

Program: B.Sc. (HON'S) in CSE/CSIT

Course Code & Title: EEE 101 - Electrical Engineering

Course Teacher: Kanti Bhusan Roy Kawshik (01924008069, kanti.kawshik@royal.edu.bd)

Assignment

Assignment Topic:

Describe relation between current and voltage.