NORTHERN COLLEGE
B A N G L A D E S H

CSE SECOND YEAR THIRD SEMESTER EXAMINATION, 2019

Data Structure

Subject code: 520201

Time------- 1.50 hours   Mid-term Examination-1   Full Marks---30

[N.B. ---- The figures in the right margin indicate full marks. Answer **every** question properly]

1.
   a)   What is Data Structure ? Write some example.   2

   b)   Explain Floor and Ceiling functions with proper mathematical example.   4

   c)   Define Factorial function with example.   3

   d)   Define Array and Rules of Array. How to calculate the Length of an Array ? Give proper example.   6

2.
   a)   How to represent Linear Arrays in Memory location ?   5

   b)   What is String ? How many types of string ?   2

   c)   How many types of String Storing ? Describe Fixed-length structures.   4

   d)   What is Character data type and how many types of it ? How to store string data in Linked Storage ?   4

All the Best   CSE 10th Batch

NORTHERN COLLEGE
B A N G L A D E S H

CSE SECOND YEAR THIRD SEMESTER EXAMINATION, 2019

Object Oriented Programming

Subject code: 520203

Time------- 1.50 hours   Mid-term Examination-1   Full Marks---30

[N.B. ---- The figures in the right margin indicate full marks. Answer **every** question properly]

1.
a) Define OOP. What is the benefits of OOP ?   3
b) Write the difference between OOP and SP.   4
c) What is Class ? What are Objects ? How are they created ? Write a code structure as example.   4
d) How many ways to declare Member functions ? Write with code structure.   4

2.
a) When do we declare a member of a class Static ? What is Static Member functions ? Write code structure.   6
b) How to create Arrays within a class ? What are Arrays of objects ? Write a code for both.   6
c) How to allocate memory for objects ? Draw the diagram   3

All the Best

CSE 10th Batch

NORTHERN COLLEGE
B A N G L A D E S H

CSE SECOND YEAR THIRD SEMESTER EXAMINATION, 2019

Computer Architecture

Subject code: 520205

Time------- 1.50 hours   Mid-term Examination-1   Full Marks---30

[N.B. ---- The figures in the right margin indicate full marks. Answer **every** question properly]

1. a) What is a Stored Program computer ?   1
    b) What are the four main components of any general-purpose computer   2
    c) What is the key distinguishing feature of a microprocessor ?   2
    d) Describe the IAS and IBM 7094 computer with proper diagram.   10

2. a) Describe the Timing of Synchronous and Asynchronous bus operation with diagrams.   5
    b) Write the PCI protocol layers.   2
    c) What is the Bus Structure of microprocessor ?   3
    d) Describe the Basic Instruction Cycle in Computer components with diagrams.   5

All the Best   CSE 10th Batch

NORTHERN COLLEGE

B A N G L A D E S H

Department of Computer Science and Engineering

Midterm Examination-1

Subject: Ordinary Differential Equation

CSE 10th Batch

Time: 1.5 hours   **Full Marks: 30**

[N.B. — The figures in the right margin indicate full marks. All questions must answer sequentially.]

1. a) Define ordinary differential equation. — 5

   b) Define order and degree of a differential equation. — 5

2. Solve: $y - x\frac{dy}{dx} = a(y^2 + \frac{dy}{dx})$ — 10

3. Solve: $x^2 + x^2\frac{dy}{dx} = xy\frac{dy}{dx}$ — 10

NORTHERN COLLEGE
B A N G L A D E S H

CSE SECOND YEAR THIRDSEMESTER MID TERM EXAMINATION-1, 2019

(Fundamental of Business Studies)
Subject Code: 520207
Mid term Examination -1

Time------- 1.30 hours   Full Marks---30

[N.B. ---- The figures in the right margin indicate full marks. Answer any **two** questions from Section A and any **two** questions from Section B.]

Section A (Short Question)
(Answer any **two** questions 5 X 2 =10)

1. a) What is Business?   3
   b. What are the characteristics of business   7

2. a) What is entrepreneur.?   2

   b) What are the characteristics of entrepreneur? Briefly discuss it.   3

3. a) What is Management?   2
   b) Write down the importance of management. Briefly discuss it.   3

4. a) Define motivation.   2
   b. Define Small business.   3

Section B (Broad Question)
(Answer any **two** questions, 2 X 10=20)

5. a. What is the formation of sole proprietorship business?   5
   b. Define business law.   5
6. Do you think that motivation is the important tools increasing production? Discuss it   10

7. Define franchising. Write down the characteristics of franchising.   10
8. Define environment of business. Write down the social responsibility of business   10

Good Luck   Batch 10