University of Asia Pacific
Department of Basic Sciences and Humanities
Final Examination, Fall 2016
Programme: B. Sc. Engineering (Computer Science)
(1st Year 1st Trimester)

Course Title: Bangladesh Studies: History **Course Code: HSS 111(b)**

Credit: 2.00

Time: 2 hours **Full Marks: 60**

Answer any four (4x15=60)

1. Who was the first known king of Bengal? Explain his activities.
2. Write down a short note on Somapura Mahavihara.
3. Who proposed Lahore resolution? Describe its background and reaction.
4. Explain the first phase and significance of language movement.
5. Why did Bangabondhu Sheikh Mujibur Rahman present his historic six point programme in 1966? What was the significance of the program?
6. Briefly describe the war strategies in the liberation war of Bangladesh.

University of Asia Pacific
Department of Computer Science & Engineering
Program: B.Sc. Engineering
Trimester Final Examination (Fall 2016)

Year: 1st
Trimester: 1st
Course Code: HSS 101
Course Title: English Language I
Full Marks: 60
Time: 3.00 Hours
*Marks are indicated in the right margin.

Section – A

1. Read the passage carefully and then answer the corresponding questions. **5 x 1 = 5**

The average computer user has between 5 and 15 username/password combinations to log in to email accounts, social networking sites, news and entertainment sites, online stores, online banking accounts, or other websites. For people who use email or other internet applications at work, the number of required username/password combinations may surpass 30. Some of these accounts demand that you use a specific number of symbols and digits, while others require you to change your password every 60 days. When you add to this list the codes needed to access things like ATMs, home alarm systems, padlocks, or voicemail, the number of passwords becomes staggering. The feeling of frustration that results from maintaining a memorized list of login credentials has grown so prevalent that it actually has a name: **password fatigue**.

Having to remember so many different passwords is irritating, but it can also be dangerous. Because it is virtually impossible to remember a unique password for each of these accounts, many people leave handwritten lists of usernames and passwords on or next to their computers. Others solve this problem by using the same password for every account or using extremely simple passwords. While these practices make it easier to remember login information, they also make it exponentially easier for thieves to hack into accounts.

Single sign-on (SSO) authentication and password management software can help **mitigate** this problem, but there are drawbacks to both approaches. SSO software is typically used by large companies, schools, or libraries. Password management software, such as KeePass and Password Safe, is most often used on personal computers. The problem with both SSO authentication and password management software is that the feature that makes them useful is also what makes them vulnerable. If a user loses or forgets the password required to log in to SSO software, the user will then lose access to all of the applications linked to the SSO account.

Some computer scientists have suggested that instead of passwords, computers rely on biometrics. This is a method of recognizing human users based on unique traits, such as fingerprints, voice, or DNA. Biometric identification is currently used by some government agencies and private companies, including the Department of Defense and Disney World. While biometrics would certainly eliminate the need for people to remember passwords, the use of biometrics raises ethical questions concerning privacy and can also be expensive to implement.

A. What is a password?
1) A secret phrase used to get benefit from internet.
2) A string of characters that allows access to a system.
3) An action that signals a task completed.
4) None of the above.

B. Which is the best synonym for "mitigate"?
1) Predict
2) Investigate
3) Complicate
4) Lessen

C. The passage discusses all of the following solutions to password fatigue **except**
1) Voice recognition software
2) Keepass
3) Using very simple passwords
4) Intelligent encryption

D) SSO software is not used in –
1) Large companies
2) Libraries
3) Schools
4) Personal computers

E) One of the drawbacks of using biometric identification is –
1) No need to remember passwords
2) Reliance on fingerprints
3) Expensive to implement
4) Use friendly

Section – B

2. Fill in the blanks with appropriate parts of speech. 7 x 1 = 7

a. _____ responsibility doesn't always get best result from employees. (Impose)
b. Red and green _____ the nature and sacrifice of the Bangladeshi fighters in 1971. (Symbol)
c. Shakib Al Hasan has played a _____ knock against New Zealand recently. (marvel)
d. Excessive _____ of beef is detrimental for health. (consume)
e. The govt. should take quick _____ to involve the beggars in the working force. (initiate)
f. The celebrity spends his money _____ (lavish)
g. She can cook very _____ Italian pasta. (taste)

3. Add either prefix or suffix with <u>any eight (8)</u> of the following words. 8 x0.5 = 4

-ship, micro-, hyper-, in -, -en, de-, inter-, trans-

visible, continental, action, white, centralize, danger, tension, biology, leader, person

4. Make separate sentences from any <u>Four (04)</u> homophone pairs that are given below. 4 x 2 = 8

a. cue, queue
b. waste, waist
c. sight, site
d. choir, quire
e. flour, flower
f. night, knight

5. The following excerpt has some misspelled words, tense and misused capitalization. Trace them out and write the passage correctly. 8

many of the serius health concerns in modern america can be linced to poor diat. people who regularly consume foods high in sodium, suger, and saturated fats not only increase their chances of obsity, but also increase their risks of develop heart disease, diabetes, and several types of cancar. Although some people who regularly consume inhealthy foods do so knowingly, there is also a significant portion of the population that remains undereducated about propar nutrition. What is more, individuals who live in food deserts areas in low-income neighborhoods that lack easy access to healthy, afford food—may not even have the opporchunity to obtain nutritous food. Although there have been some recent govement efforts to reduce the number of food deserts, more community-based afforts should be encouraged and supported

Section – C

6. Suppose, you have noticed a job advertisement of Square group in The Daily Star on 22.01.2017 for the position of "Officer" at their corporate office in Motijheel, Dhaka. Details weren't given in it. Now write an inquiry letter to the Head of Human Resource Management (HRM) requesting information about the post. 10

7. Write a movie review on any English or Bangla movie you have watched recently. 8

8. **Write a paragraph on any <u>one (1)</u> from below (minimum 200 words)** 10

a) Tourism trends in Bangladesh
b) If you were Invisible for a Day

University of Asia Pacific

Department of Basic Sciences and Humanities

Final Examination, Fall 2016

Programme: B. Sc. Engineering (Computer Science)

(1st Year 1st Trimester)

Course Title: Bangladesh Studies: Society and Culture **Course Code: HSS 111(a)**

Credit: 2.00

Time: 2 Hours **Full Marks: 60**

There are **SIX** questions. Answer **ANY FOUR** (4x15)

1. a) What is sociological imagination? 5
   b) Explain sociological imagination with suitable examples. 10

2. Discuss G. Lenski's different types of society with examples. 15

3. a) What is culture? 5
   b) Discuss different elements of culture. Give examples from your own society. 10

4. a) Define social stratification. 5
   b) Enumerate different types of social stratification with examples. 10

5. a) What is socialization? 5
   b) Explain different agencies of socialization. Cite examples. 10

6. What do you mean by authority? Discuss the different types of authority, as enumerated by Max Weber, with examples. 15

University of Asia Pacific

Department of Computer Science & Engineering

Final Examination Trimester, Fall-2016

Course Title: Computer Fundamentals Course Code: CSE 101 Credit: 3.00

Time: 3 hours Full Marks: 150

There are **Eight** Questions. Answer any **Six**. Figures in the right margin indicate marks. While answering the questions, you can assume anything needed if not mentioned in the questions.

1. **(a)** Write a code that will take input **n** from the user and will determine ${}^{n}P_{n}$? 10

Hints: ${}^{n}P_{n} = n!$

Sample Input	Sample Output
5	120
0	1

(b) Write down a function which will return 1 if the given three numbers are three sides of an equilateral triangle, else return 0. 10

Sample Input	Sample Output
60 60 50	0
3 3 3	1

(c) Convert the following while loop code to the equivalent for loop code. 5

```
int a=1;
while(a<10)
{
        if(a>5)
        {
                break;
        }
        a++;
}
```

2. **(a)** Write down the code to find out whether a given character is a letter or not? 10

Sample Input	Sample Output
I	Yes
+	No

(b) Will a for loop generate error if it has no "Condition" part ? What will happen? Explain. 7

(c) What will be the output if you compile and execute the following C code with input: **2** ? 8

```
#include<stdio.h>
int main( ){
int a;
scanf("%d",&a);
switch(a){
        case 1:
        case 2:
```

```
            case 3:
                    printf("Input Invalid!!!\n");
            case 4:
            case 5:
                    printf("Warning!! Bujhe shune...!!\n");
            default:
                    printf("This will not be printed!!!\n");
    }
    return 0;
    }
```

3. (a) Write a C code that will find the sum of the following series: 10

$1*2*3 + 2*3*4 + 3*4*5 + \ldots\ldots\ldots\ldots + n*(n+1)*(n+2)$

(b) Write a code that will take an input **n** from user and will draw the following shape in console. 10

Sample Input	Sample Output
4	4 45 456 4567

(c) Find all syntax errors existing in the following code and correct them: 5

```
#include <stdio.c>
Int main ()
    int x, y, z, m:
    scanf("%d %d",  x, y,z);
    z = x+y;
    while(1)
    {
        printf ("%d", m);
    }
    print ("%d", x*y);
    return 0;
```

4. (a) Write down a flow chart to find the mid number of three.[Suppose, the inputs are distinct] 8

(b) What is returned by a function when its' return type is void?Is it possible? 7

(c) Write a C program to show the outer area of a Solid Sphere when cut into half; Take the radius as input of the Sphere and then print the area. 10

Hints: area = $4\pi r^2+\pi r^2+ \pi r^2$

Sample Input	Sample Output
4	301.5936
2	75.3984

5. (a) Will it be a problem if a function definition contains no parameter? Explain with an example. 8

(b) Draw a flow chart to swap two variables. 7

(c) Write down a C code which will find the sum of all digits in a given number. 10

Sample Input	Sample Output
420	6
786	21

6. (a) What will be the output of the following C code? 10

```
#include<stdio.h>
void main(){
        int i,j;
        for(i=0;i<5;i++){
            for(j=0;j<1;j++){
                        printf("%d %d\n",i,i);
            }
        }
}
```

(b) What is the structure of do-while loop? Explain with an example. 8

(c) An array can contain multiple types of data. Do you agree or disagree? Explain. 7

7. (a) Write down the output of the following code. 5

```
int reverse(int x){
        int reverse;
        reverse =x;
        x= reverse;
        return reverse;
}
void main(){
        int a=23,b;
        b=reverse(a);
        printf("%d",b);
}
```

(b) Write down a C code that will find the average in an integer array of size 10.[You will have to take the inputs in the array.] 10

(c) Write a C code to find the values divisible by 3 in a 2D integer array with 4 rows and 3columns. 10

2+2+4+2=10

8. (a) Convert the following numbers as follows:
(i) $(1011)_{10}$ to Octal.
(ii) $(1011)_2$ to Hexadecimal.
(iii) $(ABCD)_{16}$ to Octal.
(iv) $(78)_8$ to Decimal

(b) Suppose, in your dream, you are the "Hero". The villain whose weight is 50 kg has kidnapped the "Heroine" and you are rescuing her. You have punched straight to the villain's nose with a force. That's why the villain has achieved some acceleration. Now write a C code to calculate the acceleration of the villain in meter per second square. [The input should be the force applied to the villain's nose in Newton(N).] 10

Sample Input	Sample Output
60	1.2
130	2.6

(c) Write about float, double and long int type variables in Code Blocks. 5