



## Assignment No: 2

Programme: \_\_\_\_\_

Semester: \_\_\_\_\_

**Submitted by:-**

<b>Student Name :</b>	
<b>Enrollment No :</b>	
<b>Roll No. :</b>	
<b>Course Name:</b>	
<b>Date of Submission:</b>	

**Submitted to:-**

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**Programme: B.Tech (CS) VI<sup>th</sup> Sem**  
**Course Name: Digital Image processing**  
**Course Code: BTCS-321**  
**Assignment No: 2**  
**Due date of submission: 20.04.2018**

### **Instructions**

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

### **Q.1**

- a) Explain how Fourier transform is useful in DIP.
- b) Describe RGB color model with their color range values.

### **Q.2**

- a) What are the components of pattern recognition system?
- b) Compare Image Enhancement and Image Restoration.



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**Programme: B.Tech (CS) VI<sup>th</sup> Sem**

**Course Name: Software Engineering**

**Course Code: BTCS-322**

**Assignment No: 2**

**Due date of submission: 20.04.2018**

### **Instructions**

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### **Q.1**

- a) As we have discussed about SDLC process in the class. Now, you will learn more, if you explain Waterfall, Prototype, and Spiral models with their merits and demerits. Go ahead.
- b) As you are aware of the concept of Software. So, you can explain the characteristics of a good software. Do it.

### **Q.2**

- a) As you are aware of Software Requirements Specification. Explain IEEE standards for SRS.
- b) Write short note on:
  - i) Software Crisis
  - ii) Software Re-engineering



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**Programme: B.Tech (CS) VI<sup>th</sup> Sem**

**Course Name: Compiler Design**

**Course Code: BTCS-323**

**Assignment No: 2**

**Due date of submission: 20.04.2018**

### **Instructions**

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### **Q.1**

(a) As you are aware of syntax directed translation. So, you can explain its scheme briefly. Do it.

(b) As you know about symbol table. So, you can explain the different data structures for symbol table. Do it.

### **Q.2**

(a) As you are aware of errors. You will learn more about errors, if you attempt to explain the Lexical, Syntactic and Semantic phase errors. Go ahead.

(b) As you are aware of basic blocks. So, you can explain the optimization of basic blocks in detail. Do it.



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**Programme: B.Tech (CS) VI<sup>th</sup> Sem**

**Course Name: Java Programming**

**Course Code: BTCS-324**

**Assignment No: 2**

**Due date of submission: 20.04.2018**

### **Instructions**

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### **Q.1**

- (a) Explain all OOP concepts with examples.
- (b) Explain exception handling in java with example.

### **Q.2**

- (a) Explain JAVA swing and AWT.
- (b) Explain with example JDBC.



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**Programme: B.Tech (CS) VI<sup>th</sup> Sem**  
**Course Name: Cryptography & Network Security**  
**Course Code: BTCS-325**  
**Assignment No: 2**  
**Due date of submission: 20.04.2018**

### **Instructions**

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

### **Q.1**

(a) As you know in network security there are many protocols for secure communication. So explain Secure Socket Layer in brief.

(b) As you aware of the concept of symmetric key cryptography encryption. So, explain the DES algorithm in brief.

### **Q.2**

(a) As we have already discussed the algorithm of RSA in the class. So, solve the given question using RSA.

$P=17$ ,  $q=9$ ,  $e=7$  and  $d=21$ .

Calculate the public key and private key. And show encryption and decryption for plain text=5.

(b) As you know the concept of hashing? So, explain the concept of SHA.



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**Programme: B.Tech (CS) VI<sup>th</sup> Sem**  
**Course Name: Industrial Management**  
**Assignment No: 2**  
**Due date of submission: 20.04.2018**

### **Instructions**

1. Write the responses to the assignment in your own handwriting.
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3. Write your Name, Programme and Enrollment No. clearly at the top of page.

### **Q.1**

- a) You know that Quality Control & Total Quality Management are two different things. You will learn more if you define both of them & differentiate between them.
- b) Describe the various methods of controlling industrial pollution.

### **Q.2**

- a) “Many productive activities and technologies that we use have a disastrous impact on mankind” Comment.
- b) What do you understand by Acceptance Sampling? Explain the methods of double sampling & sequential acceptance sampling.