

## School of Engineering and Applied Science

## B.Tech CS Semester VI Major Assignment

## **Important Instructions to Student:**

- 1. Last date for Assignment Submission 30-May-2020
- 2. This assignment carries major **weightage of 50 Marks**. Kindly prepare it very carefully and in a very detailed manner. For any help in this regard, kindly contact your faculties.
- 3. Front Page of Assignment should clearly include details like:
  - **a.** Your Name
  - **b.** UID Number
  - c. Subject
  - d. Class
  - e. Semester

In the event of no such information, we may not be able to assign marks for your assignment, for which responsibility lies with students.

- 4. You can write and submit assignment through any of the following options:
  - a. Handwritten Assignment Prepare softcopy of your assignment through suitable apps and send the assignment as one PDF to your respective faculty as mentioned above.
  - b. Typed Assignment Prepare Assignment with following font setting and submit the assignment to your respective faculty as mentioned above.
    - i. Font Type Times New Roman or Arial
    - ii. Headings Font Size 14
    - iii. Text (Except Heading) 12
    - iv. Normal Margin and Line Spacing maximum 1.15
- 5. After this lockdown ends, you all have to submit the physical assignment copies to your respective Faculties. So, keep the assignment carefully for submission.
- While submitting assignment through email, kindly use subject line as Name of the Programe\_Name of Course/Branch\_Semester\_Name o the the Subject. For Example B.Tech.\_Mechanical\_VI\_Theory of Machines

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	puter Graphics	Mode of Submission	
Dr. Sailesh Iyer		Google form: <u>https://forms.gle/Bx6f5cxrjqEgp8XC8</u>	
		Subject Line: B.Tech CSE/VI CG	
1.	Explain at least 5 applicati	ons of Computer Graphics in detail.	
2.	List and Explain Bresenham's Algorithm with derivation for slope between 0 and 1.		
3	Plot line using DDA Line Drawing Algorithm for the endpoints (5,5) and (9,15).		
4	Explain the terms: Graphic	es Driver, Graphics Mode, Resolution, Pixel and Aspect Ratio.	
5.	Explain Pivot point rotation and Fixed Point Scaling.		
Cryp	togranhy Network &	Mode of Submission	
Secu	rity	Google form: https://forms.gle/6Bd8EcEg7TC8mmIP9	
Prof.	Poonam Chakravarty	Subject Line: B Tech CSE/VI CNS	
1.	Explain Digital signature i	model process, importance and limitations of it in details.	
2	Explain Digital signature model process, importance and initiations of it in details.		
2.	details.		
3.	What is Virus? Explain all types of virus and effects of virus in details.		
4.	What are the main security threats and issues can occurs in online shopping? Which steps we		
5	Explain how does AES we	rexplain in details with example.	
5.	it	Six to secure your the transmission? write initiations and weakless of	
Data	Warehousing and	Mode of Submission:	
Mini	ng	Google Form: https://forms.gle/JuUf6n5Sosf1iBoi9	
D. C			
Dr. S	ailesh lyer	Subject Line: B.Tech CSE/VI DWDM	
<b>Dr. S</b> 1.	Explain Data Warehousing	Subject Line: B.Tech CSE/VI DWDM	
1.	Explain Data Warehousing Explain OLAP Cube and i	Subject Line: B.Tech CSE/VI DWDM g. ts operations.	
Dr. S       1.       2       3.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process.	Subject Line: B.Tech CSE/VI DWDM g. ts operations.	
Dr. 8       1.       2       3.       4.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT	Subject Line: B.Tech CSE/VI DWDM g. ts operations. P.	
Dr. 8       1.       2       3.       4.       5.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar	Subject Line: B.Tech CSE/VI DWDM     g.     ts operations.     P.     nalysis? Explain the terms in it with an example.	
Dr. 8       1.       2       3.       4.       5.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar	Subject Line: B.Tech CSE/VI DWDM     g.     ts operations.     P.     values of the terms in it with an example.	
Dr. 8   1.   2   3.   4.   5.   Theo	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar	Subject Line: B.Tech CSE/VI DWDM g. ts operations. P. nalysis? Explain the terms in it with an example. Mode of Submission:	
Dr. S       1.       2       3.       4.       5.       Theo       Prof.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar ory of Computation Hardik Patel	Subject Line: B.Tech CSE/VI DWDM     g.     ts operations.     P.     malysis? Explain the terms in it with an example.     Mode of Submission:     Google Form: <a href="https://forms.gle/nE1es5Yi92Bw46g66">https://forms.gle/nE1es5Yi92Bw46g66</a>	
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Dr. S     1.     2     3.     4.     5.     Theo     Prof.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar ory of Computation Hardik Patel	Subject Line: B.Tech CSE/VI DWDM     g.     ts operations.     P.     halysis? Explain the terms in it with an example.     Mode of Submission:     Google Form: <a href="https://forms.gle/nE1es5Yi92Bw46g66">https://forms.gle/nE1es5Yi92Bw46g66</a> Subject Line: B.Tech CSE/VI TOC	
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Dr. 8     1.     2     3.     4.     5.     Theo     Prof.     1.     2.     3.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar What is Market Basket Ar Construct turing machine for number of 1's over the input What is parser? List out and Design PDA for the language	Subject Line: B.Tech CSE/VI DWDM     g.     ts operations.     P.     halysis? Explain the terms in it with an example.     Mode of Submission:     Google Form: <a href="https://forms.gle/nE1es5Yi92Bw46g66">https://forms.gle/nE1es5Yi92Bw46g66</a> Subject Line: B.Tech CSE/VI TOC     or language consisting of strings having any number of 0's and only even set $\Sigma = \{0, 1]$ explain parsing technique in sort.     e {L = a <sup>m</sup> b <sup>m</sup> c <sup>n</sup>   m, n ≥ 1}.	
Dr. S     1.     2     3.     4.     5.     Theo     Prof.     1.     2.     3.     4.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar Ory of Computation Hardik Patel Construct turing machine for number of 1's over the input What is parser? List out and Design PDA for the language Obtain CFG for the PDA give	Subject Line: B.Tech CSE/VI DWDMg.ts operations.P.malysis? Explain the terms in it with an example.Mode of Submission: Google Form: <a href="https://forms.gle/nE1es5Yi92Bw46g66">https://forms.gle/nE1es5Yi92Bw46g66</a> Subject Line: B.Tech CSE/VI TOCor language consisting of strings having any number of 0's and only even set $\Sigma = \{0, 1]$ explain parsing technique in sort.e {L = a <sup>m</sup> b <sup>m</sup> c <sup>n</sup>   m, n ≥ 1}.n below.	
Dr. 8     1.     2     3.     4.     5.     Theo     Prof.     1.     2.     3.     4.	Explain Data Warehousing Explain OLAP Cube and i Explain KDD process. Compare OLAP and OLT What is Market Basket Ar What is Market Basket Ar Ory of Computation Hardik Patel Construct turing machine for number of 1's over the input What is parser? List out and Design PDA for the language Obtain CFG for the PDA give A = ({q <sub>0</sub> , q <sub>1</sub> }, {0,1}, {A	Subject Line: B.Tech CSE/VI DWDM g. ts operations. P. halysis? Explain the terms in it with an example. Mode of Submission: Google Form: https://forms.gle/nE1es5Yi92Bw46g66 Subject Line: B.Tech CSE/VI TOC or language consisting of strings having any number of 0's and only even set $\sum = \{0, 1$ explain parsing technique in sort. $e_{\{L = a^m b^m c^n   m, n \ge 1\}}$ . n below. $h_{Z}$ , $A, Z, \{q_1\}$ where $\Delta$ is given below	
Dr. 8     1.     2     3.     4.     5.     Theo     Prof.     1.     2.     3.     4.     5.     Theo     Prof.     1.     2.     3.     4.	Sallesh TyerExplain Data WarehousingExplain OLAP Cube and iExplain KDD process.Compare OLAP and OLTWhat is Market Basket ArOry of ComputationHardik PatelConstruct turing machine for number of 1's over the inputWhat is parser? List out and Design PDA for the languageObtain CFG for the PDA give $A = ({q_0, q_1}, {0,1}, {A\Delta(q_0, 0, Z) = \Delta(q_0, AZ)$	Subject Line: B.Tech CSE/VI DWDM g. ts operations. P. malysis? Explain the terms in it with an example. Mode of Submission: Google Form: <u>https://forms.gle/nE1es5Yi92Bw46g66</u> Subject Line: B.Tech CSE/VI TOC or language consisting of strings having any number of 0's and only even set $\Sigma = \{0, 1$ explain parsing technique in sort. $\{L = a^m b^m c^n   m, n \ge 1\}$ . n below. $h_{z}, \lambda, Z, \{q_1\}\}$ where $\Delta$ is given below )	
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	grammar with example in detail.		
6.	Remove the $\epsilon$ production from following CFG by preserving meaning of it for CGF.		
	$S \rightarrow XYZ$		
	$X \rightarrow 0X \mid \epsilon$		
	$Y \rightarrow 1Y \mid \epsilon$		
7.	Solve the following problems.		
	Show that $(0^*1^*) = (0+1)^*$		
	Show that $(ab)^* \neq (a^*b^*)$		
	Show that $(r + s) = r + s$		
		Mode of Submission:	
ASP.	NET WITH C#	Google Form: <u>https://forms.gle/CKGLDi2FKMmtWUsp7</u>	
Prof	Vagnesh Rathod	Subject Line: B Tech CS VI AWC	
1101.	rughtsh Kuthou	Subject Line. D. reen els (Trive	
1.	Write a short note on "ST.	ATE MANAGEMENT".	
2	Will of the NET for more dealer and the second seco		
	what is .NET framework? Explain various components of .NET framework		
3.	(i) Write ASP.NET code to display selected elements from the CheckBoxList on a Label		
	control. Elements on the label must be separated by a whitespace.		
	(ii) Write ASP.NET code to send data entered in two textboxes from one web page to another		
	web page. Display the data on two separate labels.		
4.	Explain all validation controls with example		
	Explain an valuation controls with example.		
5.	(i) Declare one TextBox control, one Button control, one Label control, and one		
	RegularExpressionValidator control in an .aspx file. The submit() function checks if the page is		
	valid. If it is valid, it returns "The page is valid!" in the Label control. If it is not valid, it returns		
	"The page is not valid!" in the Label control. If validation fails, the text "The zip code must be 5		
	numeric digits!" will be displayed in the RegularExpressionValidator control.		
	(ii) Create a form which contains LUD. Name, Branch and Someston Legert the values into a		
	(ii) Create a form which contains OID, Name, Branch and Semester. Insert the values into a database table		
	uatabase table.		



Object Oriented Analysis		Mode of Submission
and Design with UML		Google form: https://forms.gle/EYRpqc66R8EPQNvw8
Prof.	Jigar Pandya	Subject Line: B.Tech CSE/VI_OOAADWU
1.	Exlain the concept of UM	L with the comparision between programming language and UML
	language. Explain Basic b	uilding block and Arrchitecture of UML diagram.
2	Explain the Class and Object diagram concept with all notetions. Draw the Class & Object	
	diagrams for the project of	f Online Shopping System and explain both the diagrams in detail
3.	Explain the Package and Sequance diagram concept with all notations. Draw the Package and	
	Sequance diagram for the	project of Online Shopping System and explain both the diagrams in
	detail.	
4.	Explain the Activity and U	Jse case diagram concept with all notetions. Draw the Activity and
	Use case diagram for the	project of Hospital Management System and explain both the diagrams
	in detail.	
5.	Discuss component and se	equance diagram in detail with example.

NOTE: After completing your assignments, contact your respective faculty member and submit the assignment for assessment.