B. C. A (2 nd Semester)
030010208 - CC4-Object Oriented Programming
Assessment Policy

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 40 marks
A1	Quiz	1 hr.	1	20	04X01=04
A2	Unit Test	1.5 hrs.	1	30	06X02=12
A3	Open Book	1 hr.	2	20	04X01=04
A4	Internal Examination	3 hrs.	1	60	15X01=15
A5	Assignment	-	2	15	05X01=05

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 50 marks
A6	Unit Test (Practical)	2 hrs.	2	20	04X02=08
A7	Section Test (Practical)	3 hrs.	1	30	12X01=12
A8	Semester End exam (Practical)	3 hrs.	1	30	20X01=20
А9	Journal/Viva	-	18	15	10X01=10

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Assessment Type Classification:					
Accessment Code	A 1	Weightage of	Unit	(%)	
Assessment code :	AI	Content :	1	100	
Assessment Type :	Quiz	Tentative Date :	01-01-201	8	
Kind of Question Format:	 Find out error if any otherwise write the output of following codes give below. (10 out of 10) [Each of 1 marks] [10 marks] Do as Directed. (05 out of 05) [Each of 2 marks] [10 marks] Total [20 marks]				g codes narks] marks] narks]
To measure :	Knowledge, Comprehension and Analysis				
Course Outcome :	CO1: Perceive the basic Object Oriented Programming and data structures concepts. CO7: Design, implement and test programs using object oriented concepts.				
Programme Outcome:	 PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO5: Recognition of the need for life-long learning. 				

				Unit	(%)		
Assassment Code .	12	Weightage of	f	1	20		
Assessment coue :	AZ	Content :		2	40		
				3	40		
Assessment Type :	Unit Test 1	Tentative Date :		15-01-2018	8		
	Q.1 [A] Short answe	er questions. (4 out of 4)			[01x04=	04]	
	Q.2 Long answer qu	er questions. (3 out of 4) lestions:)		[02x03=	:06]	
	[A] Practical bas	ed question.			[01x05=	05]	
Kind of Question	OF	R Contraction of the second seco			OR		
Format:	[A] Practical bas	ed question.			[01x05=	05]	
	[B] Practical based question. [0]					05]	
	OR OR						
	[B] Practical based question. [01x05=05]					05]	
	Q.3 Answer the following in detail. (2 out of 3) [02x05=10]						
				Tot	al [30 mar	'ks]	
To measure :	Knowledge, Application, Comprehension and Analysis						
	CO1: Perceive the	e basic Object Oriente	ed	Programm	ning and o	data	
	structures concepts.						
	CO2: Utilize the object initialization and destroyation concept using						
	constructors and destructors.						
Course Outcome :	CO3: Apply the concept of polymorphism and implement static (compile						
	time) polymorphism in programs by overloading methods and						
	operators.						
	CO7: Design, implement and test programs using object oriented						
	concepts.						

Programme Outcome:	PO1: Ability to understand the concepts of key areas in computer science.PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society.PO5: Recognition of the need for life-long learning.
Bonus Criteria:	# Improvement Criteria

				Unit	(%)		
Assessment Code ·	Δ2	Weightage	of	1&2	10		
Assessment coue.		Content :		3 & 4	30		
				5	60		
Assessment Type :	Unit Test 2	Tentative Date :		27-02-201	3		
	Q.1 [A] Short answe	er questions. (4 out of	4)		[01x04=	04]	
	[B] Short answe	er questions. (3 out of	4)		[02x03=	:06]	
	Q.2 Long answer qu	estions:					
	[A] Practical bas	ed question.			[01x05=	:05]	
Kind of Question	OI	R			OR		
Format [.]	[A] Practical bas	ed question.			[01x05=	:05]	
i oi mat.	[B] Practical bas	ed question.			[01x05=	:05]	
	OI	ł			OR		
	[B] Practical bas	ed question.			[01x05=	:05]	
	Q.3 Answer the follo	owing in detail. (2 out	of 3	3)	[02x05=	:10]	
				Tot	al [30 mar	'ks]	
To measure :	Knowledge, Applica	tion, Comprehension	and	Analysis			
	CO1: Perceive the	e basic Object Orier	nted	l Programn	ning and	data	
	structures concepts.						
	CO2: Utilize the object initialization and destroyation concept using						
	constructors and destructors.						
	CO3: Apply the concept of polymorphism and implement static (compile						
Course Outcome ·	time) polymorphism in programs by overloading methods and						
	operators.						
	CO4: Apply the concept of inheritance to reduce the length of code.						
	CO5: Apply concept of dynamic polymorphism using virtual functions,						
	overriding functions and abstract class in programs.						
	CO7: Design, implement and test programs using object oriented						
	concepts.						
	PO1: Ability to un	derstand the concep	ots	of key area	s in comp	uter	
	science.						
Programme Outcome	PO2: Ability to design and develop system, component or process as well						
riogramme outcome.	as test and maintain it so as to provide promising solutions to industry						
	and society.						
	PO5: Recognition of	the need for life-long	g lea	rning.			
Bonus Criteria:	# Improvement Cri	# Improvement Criteria					

Improvement Criteria – Student will get 20% marks on total obtain marks of Unit Tests as bonus if he/she is improving their performance in continues **Unit Test as per any one of the following condition**:

Suppose Unit Test-1 marks is X and Unit Test-2 marks is Y then 1) Y>X (If X<12 and Y>=12)

2) Y-X >= 5

Note: Absent in any one Unit Test is not eligible for bonus. If total marks of unit test including bonus marks, marks will more than 12 then it will only consider 12 marks.

			Unit	(%)	
	4.2	Weightage of	1&2	10	
Assessment Lode :	A3	Content :	3	20	
			4	70	
Assessment Type :	Open Book	Tentative Date :	06-02-201	8	
Kind of Question Format:	1) Analysis based question for completing the given C++ code.(2 out of 2) [each of 5 marks][10 marks]2) Understanding based question for finding Error and Output.(5 out of 5 [each of 2 marks][10 marks]Total [20 marks]				
To measure :	Knowledge, Applic	cation, Comprehensio	on and Analy	ysis	
Course Outcome :	 CO1: Perceive the basic Object Oriented Programming and data structures concepts. CO2: Utilize the object initialization and destroyation concept using constructors and destructors. CO3: Apply the concept of polymorphism and implement static. (Compile time) polymorphism in programs by overloading methods and operators. CO4: Apply the concept of inheritance to reduce the length of code. CO7: Design, implement and test programs using object oriented 				
Programme Outcome:	 PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO5: Recognition of the need for life-long learning. 				

Assessment Code :	A4	Weightage of Content :	Unit 1 to 6
Assessment Type :	Internal Examination	Tentative Date :	27-03-2018
Kind of Question Format:	Section-1 (from uni Q.1 [A] Short answe [B] Short answe Q.2 Long answer qu [A] Practical base OF [A] Practical base OF [B] Practical base OF [B] Practical base Q.3 Answer the follo Section-2 (from uni	t 1 to 3) er questions. (4 out of 4) er questions. (3 out of 4) estions: ed question. ed question. ed question. k ed question. bwing in detail. (2 out of 3) t 4 to 6)	[01x04=04] [02x03=06] [01x05=05] OR [01x05=05] [01x05=05] OR [01x05=05] [02x05=10]
	Q.4 [A] Short answe	er questions. (4 out of 4)	[01x04=04]

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	[B] Short answer questions. (3 out of 4)	[02x03=06]
	Q.5 Long answer questions:	
	[A] Practical based question.	[01x05=05]
	OR	OR
	[A] Practical based question.	[01x05=05]
	[B] Practical based question.	[01x05=05]
	OR	OR
	[B] Practical based question.	[01x05=05]
	Q.6 Answer the following in detail. (2 out of 3)	[02x05=10]
	1	'otal [60 marks]
To measure :	Knowledge, Application, Comprehension, Evaluation a	nd Analysis
	CO1: Perceive the basic Object Oriented Program	nming and data
	CO2: Utilize the object initialization and destroyation	on concept using
	constructors and destructors.	
	CO3: Apply the concept of polymorphism and implement	nt static. (Compile
Outcome :	operators.	g methods and
	CO4: Apply the concept of inheritance to reduce the len	ngth of code.
	CO5: Apply concept of dynamic polymorphism using	virtual functions,
	overriding functions and abstract class in programs.	
	CO6: Apply I/O operations and file streams concept in	programs.
	CO7: Design, implement and test programs using	object oriented
_	DO1: Ability to understand the concents of low or	and in computer
	science	eas in computer
	PO2: Ability to design and develop system component	or process as well
Programme Outcome:	as test and maintain it so as to provide promising solu	itions to industry
	and society	itions to muustry
	PO5: Recognition of the need for life-long learning	
	ros. Recognition of the need for me-tong leaf filling.	

Assessment Code :	A5	Coverage of Content :	Unit 1-6	
Assessment Type :	Assignment	Tentative Date :	-	
Kind of Question Format:	Long Questions.			
To measure :	Knowledge, Application, Comprehension, Evaluation and Analysis			
Rules :	 A teacher shall provide at least 2 questions for assignment from each unit at the completion of the unit. Assignment shall be assessed after completion of Unit 3 and 6 respectively. 			

	CO1: Perceive the basic Object Oriented Programming and data
	structures concepts.
	CO2: Utilize the object initialization and destroyation concept using
	constructors and destructors.
	CO3: Apply the concept of polymorphism and implement static.
	(Compile time) polymorphism in programs by overloading methods
Course Outcome :	and operators.
	CO4: Apply the concept of inheritance to reduce the length of code.
	CO5: Apply concept of dynamic polymorphism using virtual
	functions, overriding functions and abstract class in programs.
	CO6: Apply I/O operations and file streams concept in programs.
	CO7: Design, implement and test programs using object oriented
	concepts.
	PO1: Ability to understand the concepts of key areas in computer
	science.
Programmo Outcomo:	PO2: Ability to design and develop system, component or process as
riogramme outcome.	well as test and maintain it so as to provide promising solutions to
	industry and society.
	PO5: Recognition of the need for life-long learning.

Assessment Code :	A6	Weightage of Content :	Unit	(%)	
			1	50	
			2	50	
Assessment Type :	Unit Test 1 (Practical)	Minimum number of practical to be certified as eligibility to appear: 6	Tentative Date	e: 15-01	-2018
Kind of Question Format:	 Draw a class diagram for given practical problem in Q-2. [6 marks] Analysis based practical problem. (2 out of 2)[each of 7 marks] [14 marks] Total [20 marks] 				
To measure :	Knowledge, Application, Comprehension and Analysis				
Course Outcome :	 CO1: Perceive the basic Object Oriented Programming and data structures concepts. CO2: Utilize the object initialization and destroyation concept using constructors and destructors. CO7: Design, implement and test programs using object oriented concepts. 				
Programme Outcome:	 PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO5: Recognition of the need for life-long learning. 				

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Assessment Code :	A6	Weightage of Content :	Unit 1 & 2 3	(%) 10 50
Assessment Type :	Unit Test 2 (Practical)	Minimum number of practical to be certified as eligibility to appear: 10	Tentative Date	e: 27-02-2018
Kind of Question Format:	1) Draw a class diagram for given practical problem in Q-2. [6- marks] 2) Analysis based practical problem.(2 out of 2)[each of 7 marks] [14 marks] Total [20 marks]			
To measure :	Knowledge, Application, Comprehension and Analysis			
Course Outcome :	 CO1: Perceive the basic Object Oriented Programming and data structures concepts. CO2: Utilize the object initialization and destroyation concept using constructors and destructors. CO3: Apply the concept of polymorphism and implement static (compile time) polymorphism in programs by overloading methods and operators. CO4: Apply the concept of inheritance to reduce the length of code. CO7: Design, implement and test programs using object oriented concepts. 			
Programme Outcome:	 PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO5: Recognition of the need for life-long learning. 			

Assessment Code :	A7	Weightage of Content :	Unit 1 to 5
Assessment Type :	Section Test	Minimum number of practical to be certified as eligibility to appear: 14	Tentative Date : 14-03-2018
Kind of Question Format:	 Draw Analy Analy Viva. 	a class diagram for given practica sis based Practical problem. sis based Practical problem.	l problem in Q-2 [5 marks] [10 marks] [10 marks] [5 marks] Total [30
To measure :	Knowled	lge, Application, Comprehension a	and Analysis
Course Outcome :	 CO1: Perceive the basic Object Oriented Programming and data structures concepts. CO2: Utilize the object initialization and destroyation concept using constructors and destructors. CO3: Apply the concept of polymorphism and implement static (compile time) polymorphism in programs by overloading methods and operators. CO4: Apply the concept of inheritance to reduce the length of code. CO5: Apply concept of dynamic polymorphism using virtual functions, overriding functions and abstract class in programs. CO6: Apply I/O operations and file streams concept in programs. 		

	CO7: Design, implement and test programs using object oriented concepts.
Programme Outcome:	PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO5: Recognition of the need for life-long learning.

Assessment Code :	A8	Weightage of Content :	Unit 1 to 6		
Assessment Type :	Semester End Exam	Minimum number of practical to be certified as eligibility to appear: 16	Tentative Date : 02-04-2018		
Kind of Question Format:	1) Draw a cla 2) Analysis b 3) Analysis b 4) Viva.	ass diagram for given practica based Practical problem. based Practical problem.	l problem in Q-2 [5 marks] [10 marks] [10 marks] [5 marks] Total [30 marks]		
To measure :	Knowledge, Application, Comprehension and Analysis				
Outcome :	 CO1: Perceive the basic Object Oriented Programming and data structures concepts. CO2: Utilize the object initialization and destroyation concept using constructors and destructors. CO3: Apply the concept of polymorphism and implement static (compile time) polymorphism in programs by overloading methods and operators. CO4: Apply the concept of inheritance to reduce the length of code. CO5: Apply concept of dynamic polymorphism using virtual functions, overriding functions and abstract class in programs. CO6: Apply I/O operations and file streams concept in programs. CO7: Design implement and test programs using object oriented concepts. 				
Programme Outcome:	PO1: Ability to understand the concepts of key areas in computer science. PO2: Ability to design and develop system, component or process as well as test and maintain it so as to provide promising solutions to industry and society. PO5: Recognition of the need for life-long learning.				

UFM Policy:

- If two or more submitted papers are too similar for coincidence, a penalty shall be imposed that shall usually be the same for the student who did the original as for the one copying from it.
- Any ascertained fact of breaking institute policy shall be associated with one or all of the following: (i) zero marks for the work; (ii) report to the programme coordinator; (iii) report to the Director.