

VELAGAPUDI RAMAKRISHNA
SIDDHARTHA ENGINEERING COLLEGE::VIJAYAWADA
(AUTONOMOUS)
DEPARTMENT OF CE/CSE/ECE/EEE/EIE/IT/ME
MICRO LEVEL SYLLABUS

Class	B Tech	Regulation	VR 20
Subject Code	20IT5404B	Year & Semester	III - Fifth Semester
Title of the Subject	DOT NET TECHNOLOGIES		

Unit No	Content/Topics Covered (mention Sub Topics as found in books)	Text Book	Chapter/ Section No.	Pageno
Unit I	Introducing C# and .NET	[T2]	1	1
	Object Orientation		1.1	1
	Type Safety		1.2	2
	Memory Management		1.3	3
	Platform Support		1.4	3
	CLR, BCLs and Runtimes		1.5	3
	Creating Types in C#		3	95
	Classes		3.1	95
	Fields		3.1.2	96
	Constants		3.1.3	97
	Methods, Instance		3.1.4	98
	Constructors		3.1.5	99
	de-constructors		3.1.6	100
	Object Initializers		3.1.7	101
	this Reference		3.1.8	102
	Properties		3.1.9	105
	Indexers		3.1.10	109
	Static Constructors		3.1.11	111
	Static Classes		3.1.12	113
	Finalizers		3.1.13	114
	Inheritance		3.2.1	115
	Polymorphism		3.2.2	118
	Casting and Reference Conversions		3.2.3	120
	Virtual Function Members		3.2.4	122
	Abstract Classes and Abstract Members		3.2.5	124
Unit II	Advanced C#	[T2]	4.1	159
	Delegates		4.1.1	159
	Writing Plug-In Methods with Delegates		4.1.2	160
	Instance and Static Method Targets		4.1.3	161
	Multicast Delegates		4.1.4	162
	Generic Delegate Types		4.1.5	163
	The Function and Action Delegates		4.1.6	164
	Delegates Versus Interfaces		4.1.7	165
	Delegate Compatibility		4.1.8	166
	Events		4.2	167
	Standard Event Pattern		4.2.1	169
	Event Accessors		4.2.2	171
	Event Modifiers		4.2.3	173
	Lambda Expressions		4.3	174
	Explicitly Specifying Lambda Parameter and Return Types		4.3.1	174
	Anonymous methods		4.4	180

	Exceptions		4.5	181
	try Statements and Exceptions		4.5.1	182
	The catch Clause		4.5.2	184
	The finally Block		4.5.3	186
	Throwing Exceptions		4.5.4	188
Unit III	Working with Data using Entity Framework core	[T1]	10	407
	Understanding modern databases		10.1	408
	Understanding legacy Entity Framework		10.1.1	408
	Understanding Entity Framework Core		10.1.2	408
	Creating a console app for working with EF Core		10.1.3	409
	Using a sample relational database		10.1.4	409
	Using Microsoft SQL Server for Windows		10.1.5	410
	Creating the Northwind sample database for SQL Server		10.1.6	412
	Setting up EF Core		10.2.	417
	Choosing an EF Core database provider		10.2.1	417
	Connecting to a database		10.2.2	417
	Defining the Northwind database context class		10.2.3	418
	Defining EF Core models		10.3	420
	Using EF Core conventions to define the model		10.3.1	421
	Using the EF Core Fluent API to define the model		10.3.2	423
	Building an EF Core model		10.3.3	423
	Adding tables		10.3.4	426
	Querying EF Core models		10.4	433
	Filtering included entities		10.4.1	435
	Filtering and sorting products		10.4.2	438
	Getting the generated SQL		10.4.3	438
	Logging EF Core using a custom logging provider		10.4.4	439
	Pattern matching with Like		10.4.5	444
	Loading patterns with EF Core		10.5	446
	Eager loading entities, ,		10.5.1	446
	Enabling lazy loading		10.5.2	447
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	Manipulating data with EF Core:		10.6	450
	Inserting entities		10.6.1	450
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	Using Google Chrome to make HTTP requests		14.1.2	569
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	Creating an empty ASP.NET Core project,		14.2.2	574
	Testing and securing the website		14.2.3	576
	Controlling the hosting environment		14.2.3	580
	Separating configuration for services and pipeline,		14.2.4	582
	Enabling a website to serve static content		14.2.5	584
	Exploring ASP.NET Core Razor Pages		14.3	586
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	Adding code to a Razor Page		14.3.2	587
	Using shared layouts with Razor Pages		14.3.3	588
	Using code-behind files with Razor Pages		14.3.4	591
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Designation	Name in Capitals	Signature with Date
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Dt.12-06-2019

GUIDELINES FOR DRAFTING MICRO LEVEL SYLLABUS

1. The micro level syllabus is framed in order to give a clear insight into the detailed content of the syllabus prescribed for the subject.
2. The micro level syllabus is not just simply reproducing the prescribed syllabus from horizontal orientation to vertical orientation
3. The micro level syllabus must include every minute heading from the source - Text Book/Reference Book - specifying the source no., chapter no. and page no. in the source
4. The micro level syllabus offer guidance to three sections of users, namely, the Teacher that teaches the course, the student who learns the subject and the paper setter who sets the question paper for the semester end examination.
5. The micro level syllabus should clearly indicate the full scope of any particular topic such as definition, theoretical explanation, diagram, analysis, derivation, problems etc.
6. The micro level syllabus is an important document which must be carefully drafted spending enough time in order to avoid confusion among any of the three sections of users.
7. The micro level syllabus must include books/references at the end of the document
8. The micro level syllabus must be subjected to a thorough discussion among the Course Coordinator, Module Coordinator, Program Coordinator and the Head of the Department.
9. The signed documents may be displayed in the department web site for information to all the stake holders.

CONTROLLER OF EXAMINATIONS