

SOFTWARE TESTING

Total Teaching Hours: 30

Course Outcomes:

This course will enable students to

- Differentiate the various testing techniques
- Derive Test Cases for any given problem.
- Classify the problem into suitable testing models.
- Apply a wide-variety of testing techniques in an effective and efficient manner.
- Explain the need for planning and monitoring a process

**UNIT-I**

[10 Hours]

Introduction: Basic definitions, A testing life cycle, Test Cases, Fundamental approaches to apply Test Cases, Levels of Testing, Examples: The NextDate function, Triangle problem and The Commission Problem and The SATM (Simple Automatic Teller Machine) problem, Boundary Value Testing: Generalizing Boundary Value Analysis, Limitations of Boundary Value Analysis, Robustness Testing, Worst-Case Testing, Special Value Testing, Test cases for the Triangle problem, Test cases for the NextDate function, Test cases for the Commission Problem, Random Testing and Guidelines for Boundary Value Testing.

**UNIT-II**

[10 Hours]

Equivalence Class Testing: Equivalence Classes, Weak Normal Vs Strong Normal Equivalence Class Testing, Weak Robust Vs Strong Robust Equivalence Class Testing, Equivalence Class Test Cases for the Triangle Problem, Equivalence Class Test Cases for the Next Date Function and Equivalence Class Test Cases for the Commission Problem, Guidelines for Equivalence Class Testing, Decision Table Based Testing: Decision tables, Test cases for the triangle problem, Test cases for the Next Date function, Test cases for the commission problem, Guidelines and observations, Data flow Testing: Definition Use Testing, Example- the Commission Problem, Slice-Based Testing, Guidelines and Observations.

**UNIT-III**

[10 Hours]

Levels of Testing: The SATM System, Structural and Behavioural Insights, Integration Testing: A Closer Look at the SATM System, Decomposition-Based Integration, Top Down Vs Bottom-Up Integration, Sandwich Integration, Call Graph-Based Integration, Pair wise Integration, Neighbourhood Integration, Path-Based Integration, System Testing: Threads, Basic concepts for requirements specification, Finding threads, Structural strategies and functional strategies for thread testing, Interaction Testing: A Taxonomy of Interactions, Static Interaction in a Single Processor, Static Interaction in Multiple Processors, Dynamic Interaction in a Single Processor, Dynamic Interaction in Multiple Processors, Client-Server Testing.

**Text Book**

1. Paul C. Jorgensen: Software Testing, A Craftsman's Approach, 3rd Edition, 2013.

**DAYANANDA SAGAR COLLEGE OF ARTS SCIENCE AND COMMERCE**

Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore-560082

**Department of Computer Application-MCA**

Date: 28/02/2022

Admission Notice For Add on Course Software Testing

This is to notify that department of Computer Application is offering add on course on Software Testing for first year MCA students and the course is going to begin from 07/03/2022. Interested students should give their names in the office before 04/03/2022.



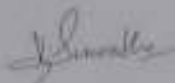
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Vice Principal, DSCASC

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SHAVIGE MALLESHWARA HILLS, KUMARASWAMY LAYOUT, BANGALORE-560078  
Department of Computer Applications - MCA  
**ADD ON COURSE**  
**CERTIFICATE OF COMPLETION**

This is presented to

VARSHA H S - P03CJ21S0038

for successfully completing 30 hours of Software Testing  
course during April 2022



Prof. Suneetha V, HOD  
MCA, DSCASC



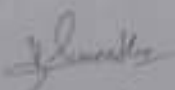
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Department of Computer Applications - MCA  
**ADD ON COURSE**  
**CERTIFICATE OF COMPLETION**

This is presented to

MANJUNATH R M - P03CJ21S0045

for successfully completing 30 hours of Software Testing  
course during April 2022

  
Prof. Suneetha V, HOD  
MCA, DSCASC

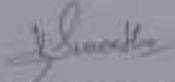
  
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Department of Computer Applications - MCA  
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**CERTIFICATE OF COMPLETION**

This is presented to

K S CHARITHA - P03CJ21S0004

for successfully completing 30 hours of Software Testing  
course during April 2022



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MCA, DSCASC




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This is presented to

K JAGADEESH - P03CJ21S0018

for successfully completing 30 hours of Software Testing  
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Vice Principal, DSCASC

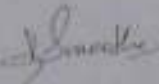



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This is presented to

NAVEEN N - P03CJ21S0047

for successfully completing 30 hours of Software Testing  
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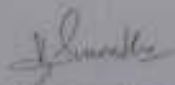
  
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This is presented to

MARZAN G - P03CJ21S0054

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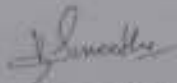


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NEHA C - P03CJ21S0036

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This is presented to

PRUTHVIRAJ P K - P03CJ21S0003

for successfully completing 30 hours of Software Testing  
course during April 2022



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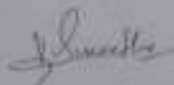
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This is presented to

R KAMAL - P03CJ21S0021

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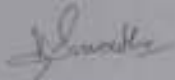
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This is presented to

POOJA NUKALA - P03CJ21S0007

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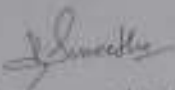
  
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Department of Computer Applications - MCA  
**ADD ON COURSE**  
**CERTIFICATE OF COMPLETION**

This is presented to

RACHANA B - P03CJ21S0053

for successfully completing 30 hours of Software Testing  
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Department of Computer Applications - MCA  
**ADD ON COURSE**  
**CERTIFICATE OF COMPLETION**

This is presented to

VIDYUT GUPTA - P03CJ21S0035

for successfully completing 30 hours of Software Testing  
course during April 2022



Prof. Suneetha V, HOD  
MCA, DSCASC



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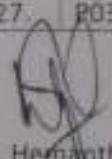
## Department of Computer Applications- MCA

### Add On Course –Software Testing

Date: 07/03/2022

List of I semester MCA students enrolled for the course:

Sl No	Registration Number	Name
1.	P03CJ21S0003	PRUTHVIRAJ P K
2.	P03CJ21S0004	K S CHARITHA
3.	P03CJ21S0005	NAGARAJ G HEGDE
4.	P03CJ21S0007	POOJA NUKALA
5.	P03CJ21S0008	YOGESHWARAN G
6.	P03CJ21S0011	SUSHMITA S WARIK
7.	P03CJ21S0012	BASAVARAJ ISHWARAPPA GUNJAL
8.	P03CJ21S0013	DARASHAN BELLATTI
9.	P03CJ21S0015	SHRAVANI N G
10.	P03CJ21S0018	K JAGADEESH
11.	P03CJ21S0021	R KAMAL
12.	P03CJ21S0024	VINAY U HIREMATH
13.	P03CJ21S0026	HARSHITHA C
14.	P03CJ21S0029	PREETHAM B K
15.	P03CJ21S0030	GAYATHRI J DEEKSHITH
16.	P03CJ21S0034	HARSHITHA M
17.	P03CJ21S0035	VIDYUT GUPTA
18.	P03CJ21S0036	NEHA C
19.	P03CJ21S0038	VARSHA HS
20.	P03CJ21S0039	AKHIL RAJENDRA PATTAR
21.	P03CJ21S0040	SHIVAPRASAD R
22.	P03CJ21S0045	MANJUNATH R M
23.	P03CJ21S0047	NAVEEN N
24.	P03CJ21S0049	RAGHAVENDRA
25.	P03CJ21S0053	RACHANA B
26.	P03CJ21S0054	MARZAN G
27.	P03CJ21S0058	PRADEEP G R

  
Prof. Hemant Uppala  
Vice Principal, DSCASC

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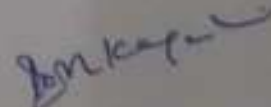
**Software Testing Add on Course**

Date: 04/03/2022

**Time Table**

The department of Master of Computer application is conducting add on course on software testing for I semester MCA and the course is going to start from 07/03/2022. The course will be engaged from **Monday to Friday at 4 pm to 5pm.**

  
Prof. Hemant Uppala  
Vice Principal, DSCASC

  
Faculty in-charge

DAYANANDA SAGAR COLLEGE OF ARTS SCIENCE AND COMMERCE

Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore-560092

Department of Computer Application

Software Testing - Add on Course

I Semester MCA

Attendance

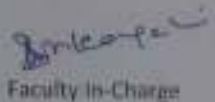
Sl NO	Register No	Name	8/3	9/3	10/3	11/3	14/3	15/3	16/3	17/3	18/3	21/3	22/3	23/3	24/3	25/3	28/3	29/3	30/3	31/3	01/4	04/4	05/4
1.	PO3CJ2150003	PRUTHVIRAJ P K	1	2	A	3	A	4	5	6	7	8	9	10	A	11	12	13	14	15	16	17	A
2.	PO3CJ2150004	K S CHARITHA	A	1	2	3	A	A	4	5	6	7	8	A	9	10	A	11	12	13	14	15	16
3.	PO3CJ2150005	NAGARAJ E HEGDE	1	A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
4.	PO3CJ2150007	POOJA NUKALA	1	2	3	4	5	6	A	A	A	7	8	9	10	11	12	13	14	15	16	17	18
5.	PO3CJ2150008	YOGESHWARAN G	1	2	3	4	A	5	A	6	A	7	A	8	9	10	11	12	A	13	14	15	16
6.	PO3CJ2150011	SHRIMITA S WARIK	1	2	3	4	5	6	7	8	9	10	A	A	11	12	13	14	15	16	17	18	19
7.	PO3CJ2150012	BASAVARAJ ISHWARAPPA GUNJAL	1	2	3	A	A	4	5	6	7	8	9	10	A	11	12	13	14	15	A	16	17
8.	PO3CJ2150013	DAHASHAN	1	2	3	4	A	5	A	6	7	A	8	9	10	A	11	A	12	A	13	14	15

9.	PO3CJ2150015	SHRAVANI N G	1	A	2	A	3	A	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
10.	PO3CJ2150018	K JAGADEESH	1	2	3	4	A	A	A	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
11.	PO3CJ2150021	R KAMAL	1	2	3	4	5	6	7	8	A	A	A	9	10	11	12	13	14	15	16	A	A	
12.	PO3CJ2150024	VINAY U HIREMATH	A	A	1	2	3	4	5	6	7	8	9	10	11	12	13	A	A		14	15	16	
13.	PO3CJ2150026	HARSHITHA C	1	2	3	4	5	6	7	8	A	A	9	10	A	A	11	12	13	14	15	16	17	
14.	PO3CJ2150029	PREETHAM B K	1	2	3	A	4	A	5	A	6	A	7	8	9	10	11	12	13	14	15	16		
15.	PO3CJ2150030	GAYATHRI J DEESHITH	1	A	2	3	4	5	6	7	8	9	10	A	11	12	13	14	15	A	16	17	18	
16.	PO3CJ2150034	HARSHITHA M	1	2	3	4	5	6	7	8	9	A	10	11	12	13	14	15	16	17	18	19	20	21
17.	PO3CJ2150035	VIDYUT GUPTA	1	2	3	A	4	5	6	7	8	9	10	A	11	12	13	14	15	16	17	18		
18.	PO3CJ2150036	NEHA C	1	2	3	4	A	5	A	6	7	8	9	10	11	12	13	14	A	15	16	17	18	
19.	PO3CJ2150038	VARSHA HS	1	2	3	4	5	6	7	8	9	A	10	A	11	A	12	A	13	14	15	16	17	
20.	PO3CJ2150039	AAHIL RAJENDRA PATTAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
21.	PO3CJ2150040	SHIVAPRASAD H	1	2	A	3	A	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
22.	PO3CJ2150045	MANJUNATH R M	A	1	2	3	4	5	A	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

23.	P03CJ2150047	NAVEEN N	1	2	3	4	5	6	7	8	A	9	10	A	11	12	B	12	A	15	11	17	18
24.	P03CJ2150049	RAGHAVENDRA		2	2	3	4	5	6	7	8	9	10	11	12	A	13	14	15	16	A	17	18
25.	P03CJ2150053	RACHANA B	1	2	3	4	5	6	7	8	9	10	A	11	12	13	14	15	16	17	A	18	19
26.	P03CJ2150054	MARZAN G	1	2	3	4	5	6	7	8	9	10	11	12	A	13	A	14	A	15	16	A	17
27.	P03CJ2150058	PRADEEP G R	1	2	3	4	5	6	7	8	9	10	11	12	13	A	14	A	15	A	16	17	18



Prof. Hemant Uppala  
Vice Principal, OSCASC



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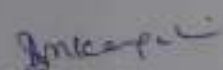






23.	P03C/2150047	NAVEEN N	19	20	21	22	23	24	25	26										
24.	P03C/2150049	RAGHAVENDRA	19	20	21	22	23	24	25	26										
25.	P03C/2150053	RACHANA B	20	21	22	23	24	25	26	27										
26.	P03C/2150054	MARZAN G	18	19	20	21	22	23	24	25										
27.	P03C/2150058	PRADEEP G R	19	20	21	22	23	24	25	26										

  
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