

MODEL QUESTION PAPER
DIPLOMA IN COMPUTER ENGINEERING/COMPUTER HARDWARE ENGINEERING
SOFTWARE TESTING
Time: 3 HourMax.Marks: 75
PART A

I - Answer *all* the following questions

(9 x 1 = 9 Marks)

1	Reduced maintenance is a ----- goal of software testing.	MO 1.01	R
2	Define Failure.	MO 1.02	R
3	State the difference between verification and validation	MO 1.04	U
4	State the number of test cases designed for a module of n variables in robustness testing method.	MO 2.01	U
5	Define path segment.	MO 2.04	U
6	Name two types of dummy modules used in unit validation testing.	MO 3.02	R
7	----- is the acceptance testing conducted at the development site by the end users.	MO 3.05	R
8	List two open-source testing tools used for performance and load testing.	MO 4.02	R
9	Name two main interfaces used on the server side in case of interface testing of web-based applications.	MO 4.05	R

PART B

II - Answer any *eight* questions . Each question carries 3 marks.

(8 x 3 = 24 Marks)

1	Explain the long term goals of software testing.	MO 1.01	R
2	Interpret bug classification based on criticality.	MO 1.02	U
3	Explain the significance in test execution phase in STLC.	MO 1.03	U
4	State the guidelines for designing test cases using basis path testing.	MO 2.04	R
5	Explain structured walk through.	MO 3.01	U
6	State the entry and exit criteria of alpha testing.	MO 3.05	U
7	Describe the method of selective retest technique.	MO 3.06	U
8	Briefly discuss the need for automation testing	MO 4.01	U
9	Outline the commercial testing tools : Silk Test, LoadRunner and Jmeter.	MO 4.03	R
10	Explain the issues in testing the inheritance features.	MO 4.04	U

PART C

Answer ALL questions. Each carries 7 marks

(6 x 7 = 42 Marks)

III	List any seven testing principles which acts as guidelines for testers OR	MO 1.03	R
IV	Explain Software testing methodology with a neat figure.	MO 1.04	U
V	A program reads three numbers A, B and C within a range [1,100] and prints the largest number. Design test cases for the program using equivalence class testing technique. OR Explain how decision table based testing can be used to test the	MO2.05	A

VI	complex combinatins of input conditions.	MO2.03	U
VII	Describe state transition diagram with an example. OR	MO2.03	U
VIII	Define the term, Path . List the applications of path testing.	MO2.04	U
IX	Summarize the role of stubs and skeletons in unit validation testing. OR	MO3.02	U
X	Compare the two types of Acceptance testing.	MO3.05	U
XI	Define function testing. Outline the processes involved in function testing.	MO3.04	R
XII	OR State the objectives of regression testing. Explain when regression testing is carried out.	MO3.06	U
XIII	State any seven benefits of test automation.	MO4.01	R
XIV	OR Explain content testing of web based software.	MO4.05	U

Mark Distribution

Module	hr / Module	Marks/Module ($h_i / \sum H_i$) * 123 ($\pm 5\%$)	Type of Questions							
			Part A		Part B		Part C		Total	
			No of Questions	Marks	No of Questions	Marks	No of Questions	Marks	No of Questions	Marks
1	13	28	3	3	3	9	2	14	7	26
2	15	32	2	2	1	3	4	28	8	33
3	17	36	2	2	3	9	4	28	9	39
4	13	28	2	2	3	9	2	14	7	25
Total	58	123	9	9	10	30	12	84	31	123

Cognitive Level Mark Distribution

Cognitive Level	Marks	% of Marks
Remembering	36	29
Understanding	80	65
Applying	7	6
Analysing		
Evaluating		
Creating		
Total	123	100