National University of Computer and Emerging Sciences, Lahore Campus

THE WILLIAM THE STATE OF THE ST	Course Name:	Network-Security	Course Code:	CS525
	Program: MS	BS (Computer Science)	Semester:	Spring 2020
	Duration:	90 Minutes	Total Marks:	41
	Paper Date:	11-03-2019	Weight	20
	Section:	•	Page(s):	6
	Exam Type:	Midterm		

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Instruction/Notes:

- 1. Points for each question are roughly related to the time that needs to be spent on that question. Avoid spending excessive time on questions with less points and less time on questions with more points.
- 2. Any kind of dishonesty will result in a minimum penalty of F in the exam.

MCQ1. One of the empirical studies found out that if an error in the requirement phase is not corrected, it could result in as much as _____ rework cost (if corrected at later stages of development). (1)

- (A) 10 times
- B) 50 times
- C) 100 times
- D) 200 times
- E) 300 times

MCO2. Which of the following statements are true (1)

- Vi. Many requirements error are made
- vii. Many of these errors are not detected early v
 - iii. Many of these error are detected early
- iv. Some of these error are detected early
- w. Many of these errors can be detected early
- vi. Many of these cannot be detected early
- vii. Requirements error are usually not very common
- A) i, iii, v
- B) i, ii, iv, vi
- C) ii, iv, v, vii
- D) i, ii, iv, v
 - E) ii, iv, vi, vii

MCO3. Gold-plating refers to the practice of (1)

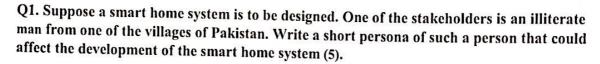
- A) Assigning correctly the highest priority to a requirement
- B), Assigning incorrectly the highest priority to a requirement
- Defining a useless requirement not desired by the customer in the hopes of impressing them
- D) Taking a requirement and assigning it the highest importance

MCQ4. Following are the features that most customers do not want. Identify the one which a small percentage would want. (1)

- Undesirable performance characteristics
- WBT Esthetic features
- C) Gold plating
- D) Hazards

MCQ5. Which is not one of the objectives of an interview. (1)

- A. Record
- B. Reassure
- C. Discover
- D. Refine



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Q2. What is the relationship between a goal and a requirement? Explain with at least 2 examples (1+1+1=3)Goals are the objectives that one derived from the Mills on Statement and Goals help to donine Regularments. 1) For egical of a pos option is to accurately and effectively Compute fotals, ofter including toxes, rebates etc. and print receipt to the edusar keg. can be: 1) System must generate a sales 1D for multiple items. purchased by the user. 2) another goal: Goal of the airconditions/heating bystem process of air cooling/heating through a user inter bace st. is to automate the Q3. Describe 10 different security requirements for a smart home monitoring system. (10 points) 1. The system must be password protected and should allow access control levels to support the different wers of the home, Eq: 14ds, elders, workers etc. 2. Access to the voice and video recordings persons moving inside the home must not be soved publicly availab and securely on the cloud. 3. The Brometric / RFID devices morate at every entry point of the home user a curs to the home. The Databax of the Safe home System becare so disalous any hacker to intrude cause shept or must have access levely each inhabitant of the home and these must be configurable by an administrator 6. The windows opening / closing syclem to detect any ononymous 7. There must be security comeras histalled soon of the house configured in the SH interface Har System, must each darm to a secursity Department of Computer Science Page 3 of 6

It Req! User Interface must allow eister heating or cooling of

one sime.

	9
	10.
	10
a process	
	Q4. Imagine a system such as FELX. Write one desired behavior, one specified behavior, one missing behavior and one unwanted behavior. (1+1+1+1=4)
Desirel:	1. Flex must display the students information occurrately at all times.
Specified	
every.	2. Flex will operate through wide one a notwork for
•	at spellus / teacher's lother Hakelolder to access at
Missing.	way is me of the hour (24,7)
West of the second of the seco	3. Flex does not provide a Reporting feature.
	Sworld
Invanted:	4. Flore man 12 and 11 Property
,	4. Flex muß nor display the personic (student's) psyclogical details such as weight, general health, height etc
	The state of the gur, general health, height etc
	Q5. Imagine a system such as FELX. Write two forbidden behaviors. (2)
	1 (1. (4.)
	1. Flex Shall not display any personal or academic
	details of a student other than the one logged in.
	2. Flex shall not have a downtime of more than
	minutes.
	O6 Should a ward and a state of the state of
	Q6. Should a requirements engineer make assumptions? Explain your answer with an example. (2)
	No, he/she must not make any assumptions while
	documenting orequirements. For instituce, it might be
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assumed that the system is regularly to be used on ultiple hardware devices (such as smartphones and tablets) to laptop1 and desktops. This at the development and is not proposty Q7. In CMMI Level 2, how does having cost and schedule planning processes affect the overall development process? (2) Schedule planning helps in determining the resource and cost requirements and this will be on input for process. A good Schedule will have better effort and cost and will help the detalopment to be completed and budget. Q8. Describe briefly the four major requirements engineering activities. (1+1+1+1=4)1. Requirements Elicitation, which involves the discovery of Requirements through different elicitation techniques 2. Requirements Analysis & Neopobiation: in which the logs.

are analysized after dicitation phase and negotiated with the client on Countricting requirements, incomplete and incomeis tent

3. Paquinements Documentation: involves Planmenting the 4. Require monts Validation: uncludes verlidating whether the requirements will correctly work in the intended Q9. Why do we need to analyze a current system that is going to be replaced with a new one which we are being tasked to build? (4)



2. upgrading	needl
3. To improved	with be possible within the corner just stiction
of the archi	secture.
be used to	to be implemented in it.
sequine wents	to be implemented in it.

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