University of Palestine
Faculty of Applied Engineering and Urban Planning

Course Name	Software Engineering fundamentals			Course No.	SWEN 2002
Academic Year	2018/2019	Semester	2nd	Exam Type	Final-exam
Exam Date	21/05/2019			Exam Time	9:00

اسم الطالب(بالعربي):		الرقم الجامعي:	
اسم المدرس: د. عبد الحميد زغبر	رقم الشعبة:101 102	وقت المحاضرة:11:00-12:30 8:00-9:30	الرقم المتسلسل:

Important Instructions

- ***This is a closed-book exam; all related material must be placed away from your desk.***
- ***Cell phone use is prohibited for any purpose: Your cell phone must be turned off and placed off of the desk. Cell phones may not be accessed during the exam. Failure to comply may be treated as a violation of the Honor Code.***
- ***Headphones of any kind are not permitted.***
- ***This exam is 60 minutes long.***
- ***Make sure that you have 4 pages including this page.***
- ***This exam has 3 essay questions. Read each question carefully before answering.***
- ***Calculators can be used but cannot be shared.***
- ***When you finish, you must:***
  - ***Check that you have written your information in the spaces provided.***
  - ***Give the exam package (all papers) to the proctor before you leave.***

For Teacher's Use Only **For Proctor's Remarks**

QN	KPI/ILO	SO	DL	Mark	Weight
1	B1	g	4		17
2	B2	j	4		15
3	B4	c	3		18
Total					50

KPI: Key Performance Indicator, ILO: Intended Learning Outcomes, SO: ABET Student Objectives,

First Questions:-

True or False: (17) marks

1- Zero defect code is a goal of Agile testing. ( )

2- CASE is available for all routine activities of software process. ( )

3- Integration perspective, tools are classified according to process activities that are supported. ( )

4- The scrum team estimates the work associated with each story. ( )

5- Iterative process models describe the software process as a cycle of activities. ( )

6- Requirements engineering is the process of developing a software specification.( )

7- Evolution involves checking that the system meets to its specification and user needs ( )

8- The main advantage of iteration process model is to avoid the commitment to specification and design. ( )

9- The activities of design and implementation are closely related and may be inter-leaved.( )

10- Transformations are ‘correctness-preserving ‘so the program conforms to its specification ()

11- With the self-organizing team concept, there is no longer any need for managers. ()

12- The primary purpose of the Sprint Retrospective is to identify process improvements ()

13- In the case of a Marketing company, the critical site selection factor would probably be community receptiveness. ()

14- Agile methods seem to work best when team members have a relatively high skill level. ()

15- The availability of a system reflects the user’s trust in that system ( )

16- The problem analysis phase is best described by the statement, "Don't try to fix it unless you understand it." ()

17-Security is a system attribute that reflects the system’s ability to protect itself from external attack. ( )

Second Questions

Choose the right answer for each of the following: 15 Marks

1. Use Incremental model for :			
a.large systems	**b. Fast systems and small ones**	**c. Critical system**	**d. All**
2. A recent evolution of the increment approach called :			
a.Process iteration	**b. Reuse-oriented**	**c. Extreme programming**	**d. None**
3. When is a Sprint Retrospective ceremony performed?			
a.Whenever the Scrum Master suggests		**b. At the end of each Sprint**	
c. Whenever needed		**d. Whenever the Product Owner suggests**	
4. When can a Sprint be canceled?			
a. The Sprint items are no longer needed		**b. Sprint can never be canceled**	
c. When Development is unable to complete the work		**d. Whenever the Product Owner says**	
5. Agile is:			
a. A software developmentprocess	**b. An adjective**	**c. philosophy**	**d. A set of best practices**
6. Which of the following is NOT one of the 4 Agile values?			
a.Individuals & Interactions	**b. Planning & Meeting**	**c. Customer Collaboration**	**d. Working Software**
7. Agile Software Development is based on:			
a.Incremental Development		**b. Iterative Development**	
c. Linear Development		**d. Both Incremental and Iterative Development**	
8. Which on of the following is not an agile method?			
a. XP	**b. 4GT**	**c. Scum**	**d. Crystal**
9. Which one of the following is not a phase of Prototyping Model?			
a. Quick Design	**b. Coding**	**c. Prototype Refinement**	**d. Engineer Product**
10. The _____ of a system is the probability that system services will be delivered as specified			
a. Reliability	**b. Security**	**c. Availability**	**d. Dependability**
11. Software is defined as :			
a. Instructions	**b. Data Structures**	**c. Documents**	**d. All**
12. What is the major advantage of using Incremental Model?			
a. Customer can respond to each increment		**b. Easier to test and debug**	
c. It is used when there is a need to get a product to the market early		**d. Easier to test and debug & It is used when there is a need to get a product to the market early**	
13. _____The ability of a system to continue to deliver its services to users in the face of accidental attack.			
a. Maintainability		**b. Reparability**	
c. Error tolerance		**d. Survivability**	
14. If requirements are easily understandable and defined then which model is best suited?			

a. Spiral model.	**b. Waterfall model.**	**c. Prototyping model**	**d. None of the above.**
15. A characteristic of a software system that can lead to a system error is known as?			
a. Human error or mistake	**b. System fault**	**c. System error**	**d. System failure**

Third Question: -18Marks

1. What is the difference between testing and evaluation?(2.5Marks)

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2. Describe what is Kanban?(2.5Marks)

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3. What is the difference between agile and spiral development model?
   In terms of the (definition, advantages & disadvantages, and use of each) (3Marks)

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4. Draw Waterfall model and Evolutionary Models-Prototyping. (5Marks)

5. What is RAD Model?
   When RAD works and when it doesn't? (5Marks)

Good Luck