2018年第一学期

《软件工程概论》 平时作业参考答案(8-11章)

**开课学期： 2018年第一学期（春季）**

**课 时： 32**

**学 分： 2**

**课程属性： 必修**

**考核方式：考试 闭卷笔试 70%**

**课程作业 30%**

**教学班级： 1613011 1613013**

Chapter 8 Testing the Programs

Part 1 Fill Blanks

1. A fault occurs when a human makes , called an error, in performing some software behavior. Thus a fault is an view of system, as seen by the eyes of the .
2. A failure is a for the system’s required behavior. Thus a failure is an

view: a problem that the sees.

3. Fault identification is the process of what the fault or faults

Caused the failure, and fault correction or removal is the process of

to the system so that the faults are removed.

4. An algorithm fault occurs when a component’s or does not

produce the proper output for a given input.

5. Computation and precision faults occur when a formula’s

Wrong or dose not compute the result to the required number of

places.

6. When the documentation does not match what the program actually

Dose, we say that the program has .

7. Stress or overload fault occur when the data structures are filled past their

Specified .

8. A test evaluates the system to determine if the functions described by the requirements specification are actually performed by

he integrated system.

9. A test compares the system with the remainder of these software

and hardware requirements.

10. A test checks against the customer’s requirement description, and

This test complete jointly with the customer.

11. A test is run to make sure that the system still functions as it should.

12. We view the test object form the outside as a closed or black box whose

contents are unknown, our test inputs to the closed box and notes

what is produced.

13. We view the test object as an open box and or white box, we can see

the of the test object to test in different way.

14. A test point or test case is a particular choice of to be used in

Test a program.

15. In bottom-up integration test, we should develop a to passes a

test case to the component to be tested

16. In Top-down integration test, we write a to simulate the activity

of the missing component.

Part 2 Brief Description and Exercises

1. Simply describe the code walkthroughs and code inspection .
2. If we wanted to test a positive input value, given the properly test case.
3. Do the 7 of this chapter( only use bottom-up and top-down

Approaches， Fourth Edition P451).

1. Figure 1. is a program’s logic flow, give out:
2. the test case for STAEMENT TESTING, BRANCH TESTING,
3. the test path for PATH TESTING.

X=X/A

（A>1）OR (B=0 )

(A=2) AND ( X>1)

F

a

End

Start

T

F

X=X+1

T

b

c

d

e

Figure 1. Program Logic Flow

Chapter 9 Testing the System

Part 1 Fill Blanks

1. A system configuration is a collection of system delivered

To a particular customer.

1. The software reliability is a possibility of the system will operate without

The failure under a given and a given interval.

1. The software availability is the probability that a system is operating successfully according to specification at a given of time.
2. The software maintainability is the probability that , for a given condition

Of use, a maintenance activity can be carried out within stated interval and using stated and .

1. The test in develop environment is called test, and in customer’s

environment is called test.

Part 2 Brief Description and Exercise

1.Briefly describe the content of :

1. Test Plan
2. Test Specification
3. Test Description
4. Test Report

Chapter 10 Delivering the System

Part 1 Fill Blanks

1. The exercises the main system functions, and the performs

The system functions to support the major work.

Part 2 Brief Description and Exercise

1. Briefly describe the functions of the user and the operator.
2. Briefly describe the training content for user training, operator training and the special training.

Chapter 11 Maintaining the System

Part 1 Fill Blanks

1. Any work done to the system after it is in operation is considered to be maintenance.
2. The S-systems are defined by and derivable from a specification.
3. The P-system are very abstract, and is almost impractical and

Impossible.

1. To control the day-to-day system functions, we on the maintenance team respond to problems from faults. This kind of maintenance is called

Maintenance .

1. Suppose the existing database management system is upgrade to

A new version, this maintenance is called maintenance.

1. If the customer wanted to add a new function, this kind of maintenance

Is called maintenance.

Part 2 Brief Description and Exercise

1. List the factors affecting the maintenance cost.

**End of the Exercise of Chapter 8-11.**