11)Define Faults (Defects). (Nov/Dec 2013),(Nov/Dec2014).(Remembering)

A fault is introduced into the software as the result of an error. It is an anomaly in the software that may cause it to behave incorrectly, and not according to its specification.

12) Define failures. **(Remembering)**

A failure is the inability of a software or component to perform its required functions within specified performance requirements.

15. Write the formula for cyclomatic complexity?(April 2011),(Nov/Dec2014), (Nov/Dec 2016) (April/May 2018)   (Understanding)

The complexity value is usually calculated from control flow graph(G) by the formula. $V(G) = E-N+2$

Where The value E is the number of edges in the control
flow graph The value N is the number of nodes.

13. Write the Goals of Integration test. (Application)

- To detects defects that occur on the interface of the units.
- To assemble the individual units into working subsystems and finally a completed system that ready for system test.

9) **Write short notes on Cost driver. (Application)**

A Cost driver can be described as a process or product factor that has an impact on overall project costs. Cost drivers for project the include

- Product attributes such as the required level of reliability
- Hardware attributes such as memory constraints.
- Personnel attributes such as experience level.
- Project attributes such as tools and methods.

1. **Define Project monitoring or tracking. (April/May2010)(Knowledge)**

   Project monitoring refers to the activities and tasks managers engage into periodically check the status of each project .Reports are prepared that compare the actual work done to the work that was planned.

23. What is the scope of automation? (Nov/Dec 2013)),(Nov/Dec2014),(May/June 2016, May/June 2017).(NOV/DEC 2018)(Remember)

The scope of automated software testing is the best way to increase the effectiveness, efficiency and coverage of your software testing.

2. Define Unit Test and characterized the unit test. (Remembering)(NOV/DEC 2017)

At a unit test a single component is tested. A unit is the smallest possible testable software component.

It can be characterized in several ways

- A unit in a typical procedure oriented software systems.
- It performs a single cohensive function.
- It can be compiled separately.
- It contains code that can fit on a single page or a screen.

There are two main types of unit tests: manual and automation. Both types are used to verify specific components of the system being tested. Unit testing improves program efficiency by ensuring that the individual components all work as intended.

Why according to principle 5 is it important to develop test cases for both valid and invalid input conditions?

Test cases should be developed for both valid and invalid input conditions. Use of test cases that are based on invalid inputs is very useful for revealing defects since they may exercise the code in unexpected ways and identify unexpected software behavior. 27-May-2011

Differentiate between verification and validation?(Nov/Dec 2009) (Analyzing)

Verification	Validation
➤ Verification is the process of evaluating software system or component to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase. ➤ Verification is usually associated withactivities such as inspections and reviewsof the s/w deliverables	➤ Validation is the process of evaluating software system or component during or at the end of the , the development phase satisfy the conditions imposed at the start of that phase. ➤ Validation is usually associated withTraditional execution _based testing, i.eExercising the code with test cases.

23)Write the business impact of globalization.(Nov/Dec 2013).(Application)

- Markets for software products are becoming global therefore product satisfaction is increased exponentially.
- Rich supply of talented people needs to be utilized effectively.

- Some countries also offer cost advantages that makes them a compelling business preposition.