

MIDTERM EXAMINATION
CS504- Software Engineering - I Question No: 1 (
Marks: 1) - Please choose one

Most software continues to be custom built because

- ▶ **Software is easier to build without using someone else's components.**
- ▶ Off the shelf software components are not commonly available
- ▶ Component reuse is common in the software world
- ▶ Reusable components are too expensive to use

Question No: 2 (Marks: 1) - Please choose one

Which of the items listed below is not one of the software engineering layers?

- ▶ Tools
- ▶ Process
- ▶ **Manufacturing**
- ▶ Methods

Question No: 3 (Marks: 1) - Please choose one

Which of these people would not be likely to part of the FAST team?

- ▶ hardware and software engineers
- ▶ manufacturing representative
- ▶ marketing representatives
- ▶ **senior financial officers**

Question No: 4 (Marks: 1) - Please choose one

An state transition can only occur when triggered by a(n)_____

- ▶ actor
- ▶ collaboration attempt
- ▶ **event**
- ▶ none of the given

Question No: 5 (Marks: 1) - Please choose one

A change becomes ----- because of close presence of data and functions ▶

Localized

- ▶ Private
- ▶ Global
- ▶ Accessible

Question No: 6 (Marks: 1) - Please choose one

A process which does not take input is called

- ▶ **miracle process**
- ▶ core process
- ▶ secondary process
- ▶ all of the above

Question No: 7 (Marks: 1) - Please choose one

Data Store notation in DFDs presents.

- ▶ Data input
- ▶ Data output
- ▶ **Data input and Data output**
- ▶ non of the given

Question No: 8 (Marks: 1) - Please choose one

Coupling is a measure of -----of a module or component.

- ▶ **Independent**
- ▶ Dependent
- ▶ Closeness
- ▶ All of the given

Question No: 9 (Marks: 1) - Please choose one

If a problem is identified and fixed at a -----stage in the software development process, it will cost much more than if it was fixed at and -----stage.

- ▶ eralier & lator
- ▶ after & before
- ▶ none of the above
- ▶ **lator and earlier**

Question No: 10 (Marks: 1) - Please choose one

Once these requirements have been finalized, the ----- process starts.

- ▶ **Construction**
- ▶ Development
- ▶ Mentainance phase
- ▶ Construction and Development

Question No: 11 (Marks: 1) - Please choose one

Identifying Whole-Part structures (Aggregations) means what are my -----

- ▶ **Components**
- ▶ Structures
- ▶ Objec
- ▶ Classes

Question No: 12 (Marks: 1) - Please choose one

Data design actually begins during the creation of the analysis model, not the architectural model.

- ▶ **True**
- ▶ False

Question No: 13 (Marks: 1) - Please choose one

System Architecture is important to consider because it helps in making -----

- ▶ **Mutual communication.**
- ▶ **Early design decisions.**
- ▶ **Reusable abstraction of a system.**

- ▶ All of the above

Question No: 14 (Marks: 1) - Please choose one

Software architecture is "the ----- of the components of a program/system, their interrelationships, and principles and guidelines governing their design and evolution over time."

- ▶ combination
- ▶ collection
- ▶ **structure**
- ▶ unification

Question No: 15 (Marks: 1) - Please choose one

Cohesion is about making sure each component does _____ thing and does it well.

- ▶ three
- ▶ two
- ▶ infinite
- ▶ **one**

Question No: 16 (Marks: 1) - Please choose one

Following are some statements associated with data flow diagrams. Identify the correct statement from among them.

- ▶ DFDs are used to model complex interfaces.
- ▶ **DFDs are used to represent only functional processing, data stores and data movements between functions.**
- ▶ DFDs depict only processes which can be decomposed.
- ▶ DFDs do not show external data sources and external data sinks.

Question No: 17 (Marks: 2)

To manage the complexity of the system we need to apply the principles of separation of concern. Discuss briefly.

Question No: 18 (Marks: 2)

What is elaborated Usecase? Explain it

Question No: 19 (Marks: 2)

What is Software Architecture?

Question No: 20 (Marks: 3)

What notation is used for Sequence Diagrams? Draw it graphically.

Question No: 21 (Marks: 3)

How can we decrease Coupling explain it.

Question No: 22 (Marks: 5)

Narrate some of the architectural design guidelines that can help in addressing nonfunctional requirements challenges.

Question No: 23 (Marks: 5)

What is the importance of Classification in identifying Classes and objects ?