

**University of Mumbai**  
**Examinations summer 2022**

Time: 2 hours 30 minutes

Max. Marks: 80

Q	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Loose coupling refers to _____
Option A:	two modules that have relatively few interdependencies,
Option B:	two modules that have relatively more interdependencies,
Option C:	two modules that have highest interdependencies,
Option D:	two modules that have no interdependencies,
2.	Elements that encapsulate processing and data in a systems architecture are referred to as _____
Option A:	Software component
Option B:	Software connector
Option C:	Software configuration
Option D:	Software common
3.	Software Architecture is building block of _____
Option A:	Processing elements,Connecting elements
Option B:	Data elements,Connecting elements
Option C:	Connecting elements,Data elements
Option D:	Processing elements, Connecting elements, Data elements
4.	Which architectural style goal is to achieve Integrability?
Option A:	Data Flow Architectures
Option B:	Call and Return Architectures
Option C:	Data Centered Architectures
Option D:	Event driven Architectures
5.	What is a Reference Model?
Option A:	It is a division of functionality together with data flow between the pieces
Option B:	It is a description of component types

Option C:	It is standard decomposition of a known problem into parts that cooperatively solve a problem
Option D:	It is a division of functionality together with data flow between the pieces, It is standard decomposition of a known problem into parts that cooperatively solve a problem
Q6.	Which one among the following is not applicable to 4+1 view model
Option A:	Logical view
Option B:	Process view
Option C:	Abstraction
Option D:	Physical view
7.	What is pipes and filter style?
Option A:	They emphasize on incremental transformation of data by successive components
Option B:	It is used in UNIX family of the system
Option C:	They return no state information
Option D:	All of the mentioned
8.	What are the Goals of the Analysis?
Option A:	Completeness, Consistency, Compatibility; Correctness
Option B:	Completeness, Consistency, Complexity; Correctness
Option C:	Comprehensive, Consistency, Compatibility; Correctness
Option D:	Completeness, Consistency; Compatibility
9.	Who are software architects?
Option A:	Software Designer, Domain Experts
Option B:	Software Technologist, Standards Compliance Expert
Option C:	Software Engineering Economist
Option D:	Software Designer, Domain Experts, Software Technologist, Standards Compliance Expert
10.	Which statement written below best represents an architectural description
Option A:	is an indication that there is a mechanism that relates one component to another usually through relationships such as data flow or control flow.
Option B:	defines the hardware and software building blocks that make up the overall information system of an organization
Option C:	Is a low level language
Option D:	strategy, governance, organization and key business process

<b>Q2</b>	<b>Solve any Two Questions out of Three 10 marks each</b>
A	Explain in brief Scalability and Heterogeneity.
B	Explain architecture style and pattern.
C	What are the various design principles required for a good software design? Explain any three.

<b>Q3.</b>	<b>Solve any Two Questions out of Three 10 marks each</b>
A	Explain blackboard architecture with an example.
B	Explain Software Architecture and Mobility in detail?
C	Explain a few of the Domain- Specific Architecture

<b>Q4.</b>	<b>Solve any Two Questions out of Three 10 marks each</b>
A	Briefly explain the technical importance of Software Architecture. Further elaborate on the fact that architecture is the vehicle for stakeholder communication
B	Briefly write down about Level of Automation.
C	What is an architectural model? What is its relationship to architecture? To design decisions?