Program: BE Computer Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VII

Course Code: CPE7024 and Course Name: Software Architecture

Time: 1hour   Max. Marks: 50

==

Note to the students: - All the Questions are compulsory and carry equal marks.

Q1.	Architecture Description Language represents architectural structures that include which of the following?
Option A:	Static structure of component
Option B:	Large grained components
Option C:	Fine grained components
Option D:	Component based design
Q2.	Which of the following is the essential feature of ADL?
Option A:	The ability to provide structures
Option B:	The ability to declare a component and name its type
Option C:	The ability to support analytical capability
Option D:	The ability to support commercial tool
Q3.	Which of the following is not a limitation of software architecture?
Option A:	Lack of tools and standardized ways to represent architecture.
Option B:	Lack of awareness of the importance of architectural design to software development
Option C:	Lack of styles guide the organization
Option D:	Lack of understanding of the role of software architect and poor communication among stakeholders
Q4.	Generic Software Architecture design follows which of the activities?
Option A:	Analysis
Option B:	Architectural Design
Option C:	Finalize Design
Option D:	Analysis & Architectural Design
Q5.	Which of the following is true?
Option A:	Component is not interact with other component
Option B:	Connectors transfers data unidirectional
Option C:	A dynamic structure requires a simulator to perform analysis
Option D:	A dynamic structure does not requires a simulator to perform any analysis

Q6.	The concepts of push/pull type of pipelines are used in …
Option A:	Broker Architectural Style
Option B:	Pipe-and-Filter Architectural Style
Option C:	Layered Architectural Style
Option D:	MVC Architectural Style
Q7.	Which of the following is not an advantage of reliability analysis?
Option A:	Identify reliability bottlenecks
Option B:	Explore architectural alternatives to optimize various application attributes
Option C:	Assess the reliability of an operational application to identify components that provide the highest potential for reliability improvement.
Option D:	Are not validated experimentally
Q8.	Which of the following is true?
Option A:	One tier architecture consist of presentation, business and data access layers
Option B:	One tier architecture consist of presentation and data access layers
Option C:	One tier architecture consist of business and data access layers
Option D:	One tier architecture consist of presentation and business layers
Q9.	Architectural styles are composed of which of the following?
Option A:	A set of component types that perform some function at run-time
Option B:	A topological layout of these components indicating their run-time inter relationships
Option C:	A set of semantic constraints
Option D:	A set of pattern
Q10.	Which of the following are not considered for connectors?
Option A:	Connectors transfers data bidirectional.
Option B:	Connectors connect two component of type procedure
Option C:	Connectors provide invocation
Option D:	Each connector does not provide interaction duct
Q11.	Which of the following type has the main goal to achieve performance?
Option A:	Main program and subroutine Architecture
Option B:	Remote Procedure Call system
Option C:	Object Oriented or abstract data type system
Option D:	Architectural style
Q12.	Which of the following type has the main goal to achieve Modifiability?
Option A:	Main program and subroutine Architecture
Option B:	Remote Procedure Call system
Option C:	Object Oriented or abstract data type system
Option D:	Main program and subroutine Architecture, Object Oriented or abstract data type system

Q13.	What is not correct about Data centered architecture?
Option A:	It is modifiable with respect to changing the functionality of any particular client as other clients will not be affected
Option B:	It is non-modifiable with respect to changing the functionality of any particular client as other clients will be affected
Option C:	Coupling among the client will lessen the effect of data center architecture
Option D:	Data is not accessed frequently by other components, which modify data
Q14.	What are the advantage of pipe & filters?
Option A:	They interact with the environment in limited ways
Option B:	They simplify systems maintenance and enhance its reuse
Option C:	Interactive applications are encouraged by the style
Option D:	No filter cooperation
Q15.	Which of the following is NOT considered to be a stakeholder?
Option A:	Sales People
Option B:	End user
Option C:	Project Team
Option D:	Customers
Q16.	Which of the following is incorrect regarding Event Driven Style?
Option A:	It is easily adaptable to complex environments
Option B:	It organizes a system around the consumption of events
Option C:	It is an object oriented approach
Option D:	It is often used for user interfaces
Q17.	Which of the following is true with respect to layered architecture?
Option A:	Separation of concerns among components
Option B:	Isolation means change in one layer don't impact components on other layer
Option C:	Each layer is allowed to depend on the layer above it being present and correct
Option D:	A layer may call other layers above and below it, as long as it uses them
Q18.	In which of the following style new clients can be added easily?
Option A:	Data Flow Architecture
Option B:	Call and Return Architecture
Option C:	Data Centered Architectures
Option D:	Layered Architectures
Q19.	What type of class relationship can be read as "Object A contains Object B and Object B is part of object A"?
Option A:	Generalization
Option B:	Specialization
Option C:	Composition
Option D:	Aggregation
Q20.	Which of the following entity does not communicates with the target system

	through the interface
Option A:	Super ordinate system
Option B:	Group system
Option C:	Subordinate system
Option D:	Peer level system
Q21.	…………… have the advantage that unlike some other modeling notations, they are simple and intuitive.
Option A:	Entity-relation diagram
Option B:	Data flow diagram
Option C:	Objects class diagram
Option D:	State transaction diagram
Q22.	Which diagram shows the configuration of run-time processing elements of the system?
Option A:	Deployment Diagram
Option B:	Class Diagram
Option C:	Component Diagram
Option D:	ER Diagram
Q23.	What is batch sequential style?
Option A:	In batch sequential components are not independent programs
Option B:	Assumptions is that each step runs to completion before the next step starts
Option C:	Reduced latency due to the incremental processing of input
Option D:	The interpretation of a program constitutes its execution
Q24.	Which architectural style goal is to achieve Portability?
Option A:	Call and Return Architecture
Option B:	Virtual Machine Architecture
Option C:	Layered Architecture
Option D:	Data Flow Architecture
Q25.	Which of the following can be considered regarding client and server?
Option A:	Client and server is a type of broken architecture style
Option B:	Client and server is an architectural style
Option C:	Client and server may be considered as an architectural style
Option D:	Client and server is not an architectural style

Program: BE Computer Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VII

Course Code: CPE7024 and Course Name: Software Architecture

Time: 1hour   Max. Marks: 50

==

Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	A
Q2.	B
Q3.	C
Q4	D
Q5	C
Q6	B
Q7	D
Q8.	A
Q9.	C
Q10.	D
Q11.	B
Q12.	D
Q13.	D
Q14.	A
Q15.	A
Q16.	C

Q17.	A
Q18.	C
Q19.	D
Q20.	B
Q21.	B
Q22.	C
Q23.	B
Q24.	B
Q25.	B