KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

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Coimbatore – 641 029

DEPARTMENT OF COMPUTER SCIENCE (PG)

QUESTION BANKS

SUBJECTS

S.No	Name of the Subject
1.	Artificial Intelligence And Expert Systems
2.	Data Structures Using C++
3.	Data Communications And Networks
4.	Enterprise Web Services
5.	Information Security
6.	Advanced Java
7.	Open Source Systems
8.	Relational Database Management Systems
9.	Software Project Management
10.	Unix And Linux Programming

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COIMBATORE - 29

QUESTION BANK

Subject Code : **17PCS3E2**

Subject Name : **ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS**

DEPARTMENT OF COMPUTER SCIENCE [PG]

NOVEMBER 2018

SECTION – A (1 Marks)

UNIT I

1. The study of how to make computers do things which at the moment people do better.
   a) Artificial Intelligence b) Pattern making c) OR graphs d) none

2. Solving problem that we do every day when we decide how to get to work in morning is _____ reasoning.
   a) Commonsense b) workout c) daily d) problem.

3. Which is applied to several commonsense tasks as well as problem of performing symbolic manipulation of logical experts?
   a) GPS b) GRS c) GSS d) GTS

4. Simplifying the problem by restricting it to written language is _____
   a) Natural language understanding b) Quick Language understanding
   c) Data understanding d) Information understanding.

5. A _____ system has necessary & sufficient means for intelligent action.
   a) Physical symbol b) Intellectual c) General language d) none

6. An attempt to solve all practical, significant problems that previously scared human expertise.
   a) Expert systems b) artificial intelligence c) Pattern making d) none

7. A physical symbol consists of set of entities called _____
   a) Patterns b) Symbols c) Graphs d) Routes.

8. Attempting to maximize the likelihood of winning, while assuming that the opponent will try to minimize that likelihood is _____ procedure.
   a) Maximize b) minimize c) innovative d) exclusive

9. A set of _____match common question forms & produce patterns to be used to match against inputs.
   a) Templates b) Patterns c) Symbols d) States.

10. Patterns are also called as _____.
    a) Text patterns b) data patterns c) information patterns d) innovative patterns.

11. There are _____ important families of such knowledge representation systems.
    a) One b) Two c) Three d) Four

12. Which is a kind of stored knowledge about stereotypical event?
    a) Script b) Tags c) Branches d)

13. Which provides a way of solving problems for which no more direct approach is available as well as framework into any direct techniques?
    a) Search b) Abstraction c) Use of Knowledge d) None

14. Which provides a way of solving complex problems by exploiting the structures of objects?
a) Search b) Abstraction c) Use of Knowledge d) None

15. Which provides a way of separating important features and variations from many unimportant ones that would otherwise overwhelm any process?
a) Search b) Abstraction c) Use of Knowledge d) None

16. A classical example of class of program is _____.
a) EPAM b) ECAM c) EDAM d) EKAM.

17. A method for determining whether a machine can think.
a) Turing Test b) Turning tests c) Terming Test d) Tuning Test

18. A program that analyzes organic compounds to determine their structure.
a) DENDRAL b) VENTRAL c) ENTRAL d) SENDRAL

19. The most commonly used language for AI programming.
a) LISP b) BASIC c) PROLOG d) none

20. There are _____ production rules for water jug problem.
a) 11 b) 12 c) 15 d) 18

UNIT II

21. The simplest of all the approaches in heuristic search techniques.
a) Generate & test b) hill climbing c) simulation annealing d) Patterns

22. Problems which are unable to overcome combinatorial explosion to which search processes are vulnerable is _____ method.
a) Weak b) strong c) new d) information.

23. A method in which planning process uses constraint satisfaction techniques
a) plan generate test b) generate test c) new test d) vertical test.

24. Which is used when good heuristic function is available for evaluating states but when no other knowledge is available?
a) Hill Climbing b) Simulation c) Steepest d) Narrow

25. Steepest Accent hill climbing is also called _____.
a) Gradient search b) view search c) main search d) data search

26. A _____ is a state that is better than all neighbors but not better than some states far away.
a) Local maximum b) plateau c) ridge d) backtrack

27. A local maximum is also called as _____.
a) Foothills b) Main data c) Slope hills d) View hills.

28. A _____ is a flat area of search space where whole set of neighboring.
a) Local maximum b) plateau c) ridge d) backtrack

29. A _____ is a special kind of local maximum.
a) Local maximum b) plateau c) ridge d) backtrack

30. The rate at which the system is cooled is called _____ schedule.
a) Annealing b) Virtual c) Lenient d) Absorbent

31. A process in which physical substances such as metals are melted and gradually cooled to solid state.
a) Annealing b) Virtual c) Lenient d) Absorbent

32. The Search allows a solution to be found without all competing branches having to be expanded.
a) Depth first b) Breadth first c) New First d) Last

33. A priority queue in which the elements within highest priority are those with most promising value of heuristic function.
a) Open b) Closed c) New d) Stack

34. The nodes that are already examined.
a) Open b) Closed c) New d) Stack

35. Best first search algorithm is simplification of _____ algorithm.
a) A* b) B* c) D* d) E*

36. The node on OPEN with lowest f' value is _____.
a) Best node b) worst node c) new node d) last node.

37. Control structure is useful if some tasks provide negative evidence about merits of other tasks.
a) Agenda driven b) Agenda Event c) Agenda Met d) Agenda new

38. A structure useful for representing solution to problems that can be solved by decomposing problems.
a) AND OR b) NOT OR c) FILL OR d) NAND

39. Exploiting a value to describe an algorithm for AND OR graph is _____
a) Futility b) Initial c)Final d) high

40. If any node has successor arc whose descendants are solved the node is _____
a) Solvable b) Solved c) new d) Main

UNIT III

41. Which reveals some truths in relevant world.
a) Facts b) Data c) Query d) Information

42. In _____ level the facts are described.
a) Symbol b) Knowledge c) Pattern d) New

43. In _____ level , the representation of objects at knowledge level are define din terms of symbols.
a) Symbol b) Knowledge c) Pattern d) New

44. The fact in logic for " Spot is a dog" is:
a) dog (Spot) b) Spot(dog) c) dog spot d) Spotdog

45. The ability to represent all to kinds of knowledge needed in domain.
a) Representational adequacy b) Inferential Adequacy
c) Inferential Efficiency d) Acquisitional Efficiency

46. The ability to manipulate representational structures in a way as to derive new structures inferred from old
a) Representational adequacy b) Inferential Adequacy
c) Inferential Efficiency d) Acquisitional Efficiency

47. The ability to incorporate into knowledge structure additional information used to focus attention of inference mechanism.

a) Representational adequacy b) Inferential Adequacy
c) Inferential Efficiency d) Acquisitional Efficiency

48. Which is used to acquire new information easily?
a) Representational adequacy b) Inferential Adequacy
c) Inferential Efficiency d) Acquisitional Efficiency

49. Knowledge is the way to represent declarative facts as set of relations of same sort used in database systems.
a) Simple relational b) Inheritable c) Inferential d) Procedural

50. One of useful forms of inference is _____.
a) Simple relational b) Inheritable c) Inferential d) Procedural

51. Collection of frames is also called as _____
a) Semantic network b) semantic process c) semantic view d) patterns.

52. Slot and filler structure is also called as _____
a) Semantic network b) semantic process c) semantic view d) patterns

53. Which implies more structure on attributes and inference mechanism?
a) Frame system b) New Path c) Path Mark d) Frame network

54. Which is a powerful form of inference.
a) Property inheritance b) Property data c) Property view d) Property

55. One of the most commonly used procedures in property inheritance is _____
a) Resolution b) refraction c) Pattern making d) data transfer

56. Procedural knowledge can be represented in _____
a) LISP b) PROLOG c) BASIC d) JAVA

57. Two attributes of every general significance is instance and _____.
a) isa b) is the c) iswe d) is

158. The idea of spotting is broken into seeing and _____
a) time span b) view span c) new span d) data span

59. A usual way to solve a problem is to change the _____.
a) Primitives b) data c) Information d) Progress

60. Representation of fact that all dogs have tail is
a) dog(x) ⟶ hastail(x) b) dog(y) ⟶ hastail(y)
b) dog(x) ⟶ hastail d) dog(y) ⟶ hastail

UNIT - IV

61. Which is not Familiar Connectives in First Order Logic?
a) and
b) iff
c) or
d) not

62. Inference algorithm is complete only if,
a) It can derive any sentence
b) It can derive any sentence that is an entailed version
c) It is truth preserving
d) It can derive any sentence that is an entailed version & It is truth preserving

63. Uncertainty arises in the wumpus world because the agent's sensors give only
a) Full & Global information
b) Partial & Global Information
c) Partial & local Information
d) Full & local information

64. A Hybrid Bayesian network contains
a) Both discrete and continuous variables
b) Only Discrete variables
c) Only Discontinuous variable
d) Both Discrete and Discontinuous variable

65. How is Fuzzy Logic different from conventional control methods?
a) IF and THEN Approach
b) FOR Approach

c) WHILE Approach
d) DO Approach

66. If a hypothesis says it should be positive, but in fact it is negative, we call it
a) A consistent hypothesis
b) A false negative hypothesis
c) A false positive hypothesis
d) A specialized hypothesis

67. A constructive approach in which no commitment is made unless it is necessary to do so, is
a) Least commitment approach
b) Most commitment approach
c) Nonlinear planning
d) Opportunistic planning

68. When a top-level function is entered, the LISP processor does?
a) It reads the function entered
b) It prints the result returned by the function
c) Large memory and high-speed processor
d) All of the mentioned

69. Which kind of planning consists of successive representations of different levels of plan?
a) Hierarchical planning
b) Non-hierarchical planning
c) Project planning
d) All of the mentioned

70. The component of an ICAI (Intelligent Computer Assisted Instruction) presenting information to the student is the?
a) Student model
b) Problem solving expertise
c) Tutoring module
d) All of the mentioned

71. In which of the following situations might a blind search be acceptable
a) Real life situation
b) Complex game

c) Small search space
d) All of the mentioned

72. The explanation facility of an expert system may be used to:
a) construct a diagnostic model
b) expedite the debugging process
c) explain the system's reasoning process
d) explain the system's reasoning process & expedite the debugging process

73. Visual clues that are helpful in computer vision include:
a) color and motion
b) depth and texture
c) height and weight
d) color and motion, depth and texture

74. In which of the following areas may ICAI programs prove to be useful?
a) educational institutions
b) corporations
c) department of Defense
d) all of the mentioned

75. A network with named nodes and labeled arcs that can be used to represent certain natural language grammars to facilitate parsing.
a) Tree Network
b) Star Network
c) Transition Network
d) Complete Network

76. The company that grew out of research at the MIT AI lab is:
a) AI corp
b) LMI
c) Symbolics
d) both LMI & Symbolics

77. Which technique is being investigated as an approach to automatic programming?
a) generative CAI
b) specification by example

c) non-hierarchical planning
d) all of the mentioned

78. The primary method that people use to sense their environment is:
a) reading
b) writing
c) speaking
d) seeing

79. The Newell and Simon program that proved theorems of Principal Mathematical was:
a) Elementary Perceiver
b) General Problem Solver
c) Logic Theorist
d) Boolean Algebra

80. A KES knowledge base contains information in the form of:
a) associations
b) actions
c) free text
d) all of the mentioned

UNIT - V

81. The process by which you become aware of messages through your sense is called
a) Organization
b) Sensation
c) Interpretation-Evaluation
d) Perception

82. Susan is so beautiful; I bet she is smart too. This is an example of
a) The halo effect
b) The primary effect
c) A self-fulfilling prophecy
d) The recency effect

83. _____ prevents you from seeing an individual as an individual rather than as a member of a group.
a) Cultural mores
b) Stereotypes
c) Schematas
d) Attributions

84. When you get fired from your job and you determine it is because your boss dislikes you, you are most likely exhibiting
a) Self-promotion
b) Fundamental attribution error
c) Over-attribution
d) Self-serving bias

85. Mindless processing is
a) careful, critical thinking
b) inaccurate and faulty processing
c) information processing that relies heavily on familiar schemata
d) processing that focuses on unusual or novel events

86. What will take place as the agent observes its interactions with the world?
a) Learning
b) Hearing
c) Perceiving
d) Speech

87. Which modifies the performance element so that it makes better decision?
a) Performance element
b) Changing element
c) Learning element
d) None of the mentioned

88. How many things are concerned in design of a learning element?
a) 1
b) 2
c) 3
d) 4

89. What is used in determining the nature of the learning problem?
a) Environment
b) Feedback
c) Problem
d) All of the mentioned

90. How many types are available in machine learning?
a) 1
b) 2
c) 3
d) 4

91. Which is used for utility functions in game playing algorithm?
a) Linear polynomial
b) Weighted polynomial
c) Polynomial
d) Linear weighted polynomial

92. Which is used to choose among multiple consistent hypotheses?
a) Razor
b) Ockham razor
c) Learning element
d) None of the mentioned

93. What will happen if the hypothesis space contains the true function?
a) Realizable
b) Unrealizable
c) Both Realizable & Unrealizable
d) None of the mentioned

94. What takes input as an object described by a set of attributes?
a) Tree
b) Graph
c) Decision graph
d) Decision tree

95. How the decision tree reaches its decision?
a) Single test
b) Two test
c) Sequence of test
d) No test

96. When talking to a speech recognition program, the program divides each second of your speech into 100 separate:
a) Codes
b) Phonemes
c) Samples
d) Words

97. Which term is used for describing the judgmental or commonsense part of problem solving?
a) Heuristic
b) Critical
c) Value based
d) Analytical

98. Which stage of the manufacturing process has been described as “the mapping of function onto form”?
a) Design
b) Distribution
c) Project management
d) Field service

99. Which kind of planning consists of successive representations of different levels of a plan?
a) hierarchical planning
b) non-hierarchical planning
c) all of the mentioned
d) project planning

100. What was originally called the “imitation game” by its creator?
a) The Turing Test
b) LISP
c) The Logic Theorist
d) Cybernetics

ANSWER KEYS

UNIT - I

1. a) artificial intelligence
2. a) commonsense
3. a) GPS (General Problem Solver)
4. a) Natural language understanding
5. a) Physical symbol
6. a) Expert systems
7. b) Symbols
8. a) Maximize
9. a) Templates
10. a) Text patterns
11. c) Three
12. a) Script
13. a) Search
14. c) Use of Knowledge
15. b) Abstraction
16. a) EPAM
17. a) Turing Test
18. a) DENDRAL
19. a) LISP
20. b) 12

UNIT - II

21. a) Generate & test
22. a) Weak

23. a) plan generate test
24. a) Hill Climbing
25. a) gradient search
26. a) Local maximum
27. a) Foothills
28. b) plateau
29. c) ridge
30. a) Annealing
31. a) Annealing
32. a) Depth first
33. a) Open
34. b) Closed
35. a) A*
36. Best node
37. a) Agenda driven
38. a) AND OR
39. a) Futility
40. b) Solved

UNIT - III

41. a) Facts
42. b) Knowledge
43. a) Symbol
44. a) dog (Spot)
45. a) Representational adequacy
46. b) Inferential Adequacy
47. c) Inferential Efficiency
48. d) Acquisitional Efficiency
49. a) Simple relational
50. b) Inheritable
51. a) semantic network
52. a) Semantic network
53. a) Frame system
54. a) Property inheritance

55. a) Resolution

56. a) LISP

57. a) isa

58. a) time span

59. a) Primitives

60. a) dog(x) ⟶ hastail(x)

UNIT - IV

61. d) not

62. d) It can derive any sentence that is an entailed version & It is truth preserving

63. c) Partial & local Information

64. a) Both discrete and continuous variables

65. a) IF and THEN Approach

66. c) A false positive hypothesis

67. a) Least commitment approach

68. b) It prints the result returned by the function

69. a) Hierarchical planning

70. c) Tutoring module

71. c) Small search space

72. d) explain the system's reasoning process & expedite the debugging process

73. d) color and motion, depth and texture

74. d) all of the mentioned

75. c) Transition Network

76. d) both LMI & Symbolics

77. b) specification by example

78. d) seeing

79. c) Logic Theorist

80. d) all of the mentioned

UNIT -V

81. d) Perception

82. a) The halo effect

83. c) Schematas

84. d) Self-serving bias

85. c) information processing that relies heavily on familiar schemata

86. a) Learning

87. c) Learning element

88. c) 3

89. b) Feedback

90. c) 3

91. d) Linear weighted polynomial

92. b) Ockham razor

93. b) Unrealizable

94. d) Decision tree

95. c) Sequence of test

96. c) Samples

97. a) Heuristic

98. a) Design

99. a) hierarchical planning

100. a) The Turing Test

SECTION – B (5 Marks)

UNIT - I

1. What is artificial intelligence?
2. What are the problems in artificial intelligence?
3. Discuss the AI techniques.
4. Write down the criteria for success in AI.
5. Write in brief about water jug problem.
6. What are the production systems in problem space and search?
7. Discuss heuristic search.
8. Write any 5 problem characteristics in problem spaces and search.
9. What are the issues in the design of search?
10. Discuss Breadth First Search and Depth First Search.

UNIT - II

11. What is generate and test in AI?
12. Write a short note on hill climbing.
13. Write a short note on best first search.
14. Discuss about A* algorithm.
15. Discuss about AO* algorithm.
16. What is constraint satisfaction?
17. Discuss Means-End Analysis.
18. Write about representations and mappings.
19. What are the approaches to knowledge representation?
20. What are the issues in knowledge representation?
21. Discuss about frame problems in AI.

UNIT - III

22. Write a note on Declarative and Procedural knowledge.
23. What is logic programming?
24. Write a note on Forward and Backward reasoning.
25. Write briefly about the methods in Matching.
26. Write a note on predicate logic representation.
27. What are the limitations in propositional logic?
28. Write a note on representation of facts in predicate logic.
29. Discuss about Instance and Isa representation.
30. What are computable functions and predicates?
31. What is resolution?
32. Write a brief note on conversion to clause form.
33. What is control knowledge?

UNIT - IV

34. Write about Probability and Bayes theorem.
35. Write a short note on Bayesian networks.
36. Write a short note on Dempster-Shafer theory.
37. What is fuzzy logic?
38. Write about syntactic and semantic spectrum of representation.
39. Write a note on logic and slot and filler structures.
40. Write a note on representational techniques in knowledge representation.
41. What is Planning?
42. What are the components of a planning system?
43. Write a note on goal stack planning.
44. Write a note on linear planning using constraint posting.
45. What is hierarchical planning?
46. Write about reactive systems in planning.
47. Write about planning techniques in AI.
48. What is Understanding?

UNIT - V

49. What is learning?
50. What is rote learning?
51. What is learning by taking advice?
52. Write a note on learning by problem solving.
53. Write a note on Analogy.
54. What is neural net learning and genetic algorithm?
55. What is common sense?
56. Write a note on expert systems.
57. What are expert system shells?
58. What is knowledge acquisition?
59. Write a note on perception.
60. Write a note on real time search in perception and action.
61. What is action?

SECTION – C (8 Marks)

UNIT – I

1. Discuss in detail about the problems in AI.
2. Explain about AI technique.
3. Explain AI and it's criteria for success.
4. Define the problem as a state space search.
5. Write in detail about the production system in problem spaces and search.
6. What are the problem characteristics in problem search?
7. Explain the issues in the design of search programs.
8. Write about the control strategies and search techniques.
9. Explain problems, problem spaces, and searches in AI.
10. What are control strategies in production systems?

UNIT – II

11. Discuss any three Heuristic Search techniques.
12. Explain in detail about Hill climbing.
13. Explain Best First search in detail.
14. Explain about A* and AO* algorithm.
15. Explain constraint satisfaction in detail.
16. Explain in detail about Means-End analysis.
17. Explain about Problem reduction.
18. Write in detail about Knowledge representation issues in AI.
19. What are the approaches to Knowledge representation?
20. What are the issues in Knowledge representation?
21. Explain in detail about the frame problem.

UNIT – III

22. Discuss the Representation of Knowledge using rules.
23. Discuss about Logic Programming in detail.
24. Differentiate Forward Reasoning and Backward Reasoning.
25. Explain in detail about Matching.
26. Write about predicate logic representation in detail.
27. Explain about Instance and Isa representation.
28. Explain in detail about computable functions and predicates.
29. Explain about resolution.
30. Explain about Conversion to clause form.
31. Explain about Control knowledge.

UNIT – IV

32. Explain statistical reasoning in detail.
33. Explain Bayes theorem and Dempster-Shafer theory in detail.
34. Write about certainty factors and rule based systems in detail.
35. Explain Bayesian networks and Fuzzy logic in detail.
36. Explain about Knowledge representation.
37. Explain the representation techniques in knowledge representation.
38. Explain about planning.
39. Explain goal stack planning and hierarchical planning.
40. Explain the components of a planning system in detail.
41. Discuss the concept of understanding in detail.

UNIT - V

42. What is learning? Explain.
43. Explain about learning in problem solving.
44. Explain about learning from examples – induction.
45. What is analogy? Explain its methods.
46. Explain about Common sense.
47. Discuss Expert Systems in detail.
48. Discuss Knowledge Acquisition in detail.
49. Explain about Perception.
50. Discuss real time search in perception and action.
51. Explain about Action.

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COIMBATORE-641029

QUESTION BANK

SUBJECT CODE: 18PCS101

TITLE OF THE PAPER: Data Structures using C++

DEPARTMENT OF COMPUTER SCIENCE (PG)

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CONTENTS

Section A (1 Marks)

Unit I

1. What does your class can hold?
   a) data b) functions c) *both data & functions* d) none of the mentioned

2. Which class is used to design the base class?
   a) *abstract class* b) derived class c) base class d) none of the mentioned

3. Which is also called as abstract class?
   a) virtual function b) *pure virtual function* c) derived class d) none of the mentioned

4. Where the object does is created?
   a) *class* b) constructor c) destructor d) attributes

5. How to access the object in the class?
   a) scope resolution operator b) ternary operator
   c) *direct member access operator* d) none of the mentioned

6. Which of these following members are not accessed by using direct member access operator?
   a) public b) private c) protected d) *both private & protected*

7. To where do the program control transfers when the exception is arisen?
   a) catch b) *handlers* c) throw d) none of the mentioned

8. Which keyword is used to check exception in the block of code?
   a) catch b) throw c) *try* d) none of the mentioned

9. What will happen when the exception is not caught in the program?

   a) *error* b) program will execute c) block of that code will not execute

   d) none of the mentioned

10. The fields in the class in c++ program are by default

    a) protected b) *private* c) public d) none of the mentioned

11. Constructors are used to

    a) *initialize the objects* b) construct the data members

    c) both initialize the objects & construct the data members d) none of the mentioned

12. Pick out the other definition of objects.

    a) member of the class b) associate of the class c) attribute of the class

    d) *instance of the class*

13. How many objects can present in a single class?

    a) 1 b) 2 c) 3 d) *as many as possible*

14. Which operator works only with integer variables?

    a) increment b) decrement c) *both increment & decrement* d) none of the mentioned

15. How many types are there in increment/decrement operator?

    a) 1 b*) 2* c) 3 d) 4

16. Pick out the correct statement

    a) *Pre Increment is faster than post-increment* b) post-increment is faster than Pre Increment

    c) pre increment is slower than post-increment d) none of the mentioned

17. What is the use of the 'finally' keyword?

    a) It used to execute at the starting of the program

    b) *It will be executed at the end of the program even if the exception arise*

    c) It will be executed at the starting of the program even if the exception arise

    d) none of the mentioned

18. How do define the user-defined exceptions?

    a) *inheriting and overriding exception class functionality*

    b) overriding class functionality c) inheriting class functionality d) none

19. Which of the following permits function overloading on c++?

    a) type b) number of arguments c) *type & number of arguments*

    d) none of the mentioned

20. In which of the following we cannot overload the function?

    a) *return function* b) caller c) called function d) none of the mentioned

Unit - II

21. Which of the following data structure store the homogeneous data elements?

    A Lists B Pointers C Records D *Arrays*

22. What is the time complexity of inserting a node in a doubly linked list?

    A. O(nlogn) B. *O(logn)* C. O(n) D. O(1)

23. Which of the following is false about a doubly linked list?

    A. We can navigate in both the directions B. It requires more space than a singly linked list

    C. The insertion and deletion of a node take a bit longer D. *None of the mentioned*

24. Which of these is an application of linked lists?

    A. To implement file systems B. For separate chaining in hash-tables

    C. To implement non-binary trees *D. All of the mentioned*

25. Which of the following data structure can't store the nonhomogeneous data elements?

    A. *Arrays* B. Stacks C. Records D. None of the abov

26. Which of the following is non-linear data structure?

    A *Trees* B. Stacks C. Strings D. All of the abo

27. Which of the following data structures are indexed structures?

    A. Stack B. Linked lists C. *Linear arrays* D. All

28. Which of the following data structure is non linear type?

A. *Graph* B. Stacks C .Lists D. None of the above

29. Before inserting into stack one must check the condition.....

A. *Overflow* B. Underflow C. Maximum elements D. Existing elements

30. The value of REAR is increased by 1 when.....

A. An element is merged in a queue B. *An element is added in a queue*

C. An element is traversed in a queue D. An element is deleted in a queue

31. In a circular linked list

A. *there is no beginning and no end.* B. components are arranged hierarchically.

C. forward and backward traversal within the list is permitted.

D. components are all linked together in some sequential manner.

32. Which of the following is not a disadvantage to the usage of array?

A. Fixed size B. You know the size of the array prior to allocation

C. Insertion based on position D. *Accessing elements at specified positions*

33. What is the time complexity of inserting at the end in dynamic arrays?

A. O(1) B. O(n) C. O(logn) D. *Either O(1) or O(n)*

34. What is the space complexity for deleting a linked list?

A. *O(1)* B. O(n) C. Either O(1) or O(n) D. O(logn)

35. A linear collection of data elements where the linear node is given by means of pointer is called?

A. *Linked list* B. Node list C. Primitive list D. None

36. In a circular linked list

A. Components are all linked together in some sequential manner.

B. *There is no beginning and no end.*

C. Components are arranged hierarchically.

D. Forward and backward traversal within the list is permitted.

37. Which of the following operations is performed more efficiently by doubly linked list than by singly linked list?

A. *Deleting a node whose location in given* B. Searching of an unsorted list for a given item

c) Inverting a node after the node with given location D. Traversing a list to process each node

38. In linked list each node contain minimum of two fields. One field is data field to store the data second field is?

A. Pointer to character B. Pointer to integer C. *Pointer to node* D. Node

38. Data object is a set of _____

A. data B. numbers C. *instances* D. characters

39. A set of instances or values are called as

A. data B. class C. *data object* D. characters

40. Which one of the following returns the elements from left to right?

A. printf() B. *output()* C. list() D. putdata()

Unit – III

41. The operation for adding an entry to a stack is traditionally called:

A. add B. append C. insert *D. push*

42. The operation for removing an entry from a stack is traditionally called:

A. delete B. peek C. *pop* D. remove

43. Which of the following stack operations could result in stack underflow?

A. *is_empty* B. pop C. push D. Two or more of the above answers

44. Which of the following applications may use a stack?

A. A parentheses balancing program. B. Switch box routing.

C. Tower of Hanoi. D. *All of the above.*

45. One difference between a queue and a stack is:

A. Queues require linked lists, but stacks do not.

B. Stacks require linked lists, but queues do not.

C. *Queues use two ends of the structure; stacks use only one.*

D. Stacks use two ends of the structure, queues use only one.

46. If the characters 'D', 'C', 'B', 'A' are placed in a queue (in that order), and then removed one at a time, in what order will they be removed?

A. ABCD B. ABDC C. DCAB D. *DCBA*

47. If the characters 'D', 'C', 'B', 'A' are placed in a queue (in that order), and then removed one at a time, in what order will they be removed?

A. *ABCD* B. ABDC C. DCAB D. DCBA

48. A linear list of elements in which deletion can be done from one and insertion can take place only at the other end is known as a ?

A. *Queue* B. Stack C. Tree D. Linked list

49. A queue is a ?

A. *FIFO list* B. LIFO list C. Ordered array D. Linear tree

50. A normal queue, if implemented using an array of size MAX_SIZE, gets full when

A. *Rear = MAX_SIZE – 1* B. Front = (rear + 1)mod MAX_SIZE

C. Front = rear + 1 D. Rear = front

51. Stack is also called as

A. *Last in first out* B. First in last out C. Last in last out D. First in first out

52. ..... is not the operation that can be performed on queue.

A. *Traversal* B. Insertion C. Deletion D. Retrieval

53. The data structure required to evaluate a postfix expression is

A. queue B. *stack* C. linked-list D. All of the above

54. Queues serve major role in

A. Simulation of recursion B. Simulation of arbitrary linked list

C. *Simulation of limited resource allocation* D. All of the mentioned

55. Which of the following is not the type of queue?

A. Ordinary queue B. *Single ended queue* C. Circular queue D. Priority queue

56. A data structure where elements can be added or removed at either end but not in the middle is called .....

A. Stacks B. queues C. *dequeue* D. linked lists

57. What does 'stack overflow' refer to?

A. accessing item from an undefined stack B. *adding items to a full stack*

C. removing items from an empty stack D. index out of bounds exception

58. Which of the following data structures can be used for parentheses matching?

A. n-ary tree B. queue C. priority queue D. *stack*

59. Stack is used for

A. Rail road car arrangement B. Parentheses matching C. *Both A & B* D. None

60. Queue is used for

A. *Rail road car arrangement* B. Parentheses matching C. Tower of Hanoi *D.* None

Unit – IV

61. ..... is the method used by card sorter?

A. Quick B. Heap C. Insertion D. *Radix sort*

62. The operation that combines the element is of A and B in a single sorted list C with n=r+s element is called.....

A. Sharing B .*Merging* C. Inserting D. None of the above

63. Which of the following sorting algorithms does not have a worst case running time of $O(n^2)$?

A. Insertion sort B. Quick sort C. Bubble sort D. *Merge sort*

64. The quick sort algorithm exploit _____ design technique

A. Overflow B. Backtracking C. Dynamic programming D. *Divide and Conquer*

65. Which of the following sorting algorithm is of divide and conquer type?

A. Bubble sort B. Insertion sort C. *Merge sort* D. Selection sort

66. …….. sorting algorithm is frequently used when n is small where n is total number of elements.

A. Heap B. *Insertion* C. Bubble D. Quick

67. Partition and exchange sort is ……..

A. *quick sort* B. tree sort C. heap sort D. bubble sort

68. In which sort the data are divided into h sub arrays?

A. Insertion sort B. Selection C. Bubble sort D. *Shell sort*

69. To ____ a set of data, the data have to compared and moved as necessary.

A. Heap B. *Sort* C. Merge D. None

70. Comparison, interchanges and assignments are used to calculate _____ of sorting algorithms.

A. Efficiency B. *Complexity* C. Time D. None

71. What is a hash table?

A. A structure that maps values to keys B. *A structure that maps keys to values*

C. *A structure used for storage* D. A structure used to implement stack and queue

72. If several elements are competing for the same bucket in the hash table, what is it called?

A. Diffusion B. Replication C. *Collision* D. None of the mentioned

73. What is a hash function?

A. A function has allocated memory to keys

B. *A function that computes the location of the key in the array*

C. A function that creates an array

D. None of the mentioned

74. What can be the techniques to avoid collision?

A. Make the hash function appear random B. Use the chaining method

C. Use uniform hashing D. *All of the mentioned*

75. The goal of hashing is to produce a search that takes

a) *O(1) time* b) O(n2)time c) O(log n) time d) O(n log n) time

76. Key value pairs is usually seen in

a) *Hash tables* b) Heaps c) Both Hash tables and Heaps d) Skip list

77. ____ is the popular approach for storing and searching values from memory.

A. *Hashing* B. Push C. Load D. Search

78. In ___ portion of the key are often recombined or folded together.

A. *Folding* B. Hashing C. Loading D. Searching

79. In which method, only a part of the key is used to find the result?

A. *Extraction* B. Folding C. Probing D. Perfect HF

80. In which hashing data are stored with in a hash table

A. Chaining B. Hashing C. *Open Addressing* D. Open hashing

Unit - V

81. How many leaves does the tree have?

A. 2 B. *4* C. 6 D. 8

82. How many of the nodes have at least one sibling?

A. *5* B. 6 C. 7 D. 8

83. What is the value stored in the parent node of the node containing 30?

A. 10 B. *11* C. 14 D. 40

84. How many descendants does the root have?

A. 0 B. 2 C. 4 D. *8*

85. What is the depth of the tree?

A. 2 B. *3* C. 4 D. 8

86. Disadvantage of using array representation for binary trees is?

A. difficulty in knowing children nodes of a node

B. difficult in finding the parent of a node

C. *have to know the maximum number of nodes possible before creation of trees*

D. difficult to implement

87. Advantages of linked list representation of binary trees over arrays?

A. dynamic size B. ease of insertion/deletion

C. ease in randomly accessing a node D. *both dynamic size and ease in insertion/deletion*

88. How to travel a tree in linkedlist representation?

A. using post order traversing B**.** using pre order

C. using post order traversing D. *all of the mentioned*

89. Which of the following is false about a binary search tree?

A. The left child is always lesser than its parent

B. The right child is always greater than its parent

C. The left and right sub-trees should also be binary search trees

D. *None of the mentioned.*

90. In ____ search start at the beginning of the list and check every element in the list.

A. Binary search B. *Linear search* C. Hash search D. None.

91. To represent hierarchical relationship between elements, Which data structure is suitable?

A. Graph B . *Tree* C. Dequeue D. Priority

92. Which of the following data structure is linear type?

A. *Stack* B. Graph C. Trees D. Binary tree

93. The complexity of linear search algorithm is

A. *O(n)* B. O(log n) C. O(n2) D. O(n log n)

94. The complexity of Binary search algorithm is

A. O(n) B. *O(log n)* C. O(n2) D. O(n log n)

95. In Binary trees nodes with no successor are called.....

A End nodes B Final nodes C Last nodes D. *Leaf nodes*

96. The post order traversal of a binary tree is DEBFCA. Find out the pre order traversal

A. ABFCDE B. ADBFEC C. *ABDECF* D. ABDCEF

97. The postfix form of A*B+C/D is

A. ABCD+/* B. *AB*CD/+* C. *AB/CD+ D. A*BC+/D

98. What is the postfix representation of this expression of (12 – a) * (b + 9) / (d * 4)?

A. *12 a – b 9 + * d 4 * /* B. 4 b * d 9 + a 12 - * /

C. /12 a – b 9 + d 4 * D.12 – a * b + 9 / d * 4

99. Binary search algorithm cannot be applied to...

A. *pointer array* B. sorted linear array C. sorted binary trees D. sorted linked list

100. ..... is a directed tree in which outdegree of each node is less than or equal to two.

A. *Binary tree* B.Tree C. Unary tree D. None of the above

1. C
2. .A
3. B
4. A
5. C
6. D
7. B
8. C
9. A
10. B
11. A
12. D
13. A
14. C
15. B
16. A
17. B
18. A
19. C
20. A
21. D
22. B
23. D
24. D
25. A
26. A
27. C
28. A
29. A
30. B
31. A
32. D
33. D
34. A
35. A

36. B
37. A
38. C
39. C
40. B
41. D
42. C
43. A
44. D
45. C
46. D
47. A
48. A
49. A
50. A
51. A
52. A
53. B
54. C
55. B
56. C
57. B
58. D
59. C
60. A
61. D
62. B
63. D
64. D
65. C
66. B
67. A
68. D
69. B
70. C
71. B
72. C
73. B
74. D
75. A
76. A
77. A

78. A
79. A
80. C
81. B
82. A
83. B
84. D
85. B
86. C
87. D
88. D
89. D
90. B
91. B
92. A
93. A
94. B
95. C
96. C
97. B
98. A
99. A
100. A

Section B (5 Marks)

Unit - I

1. Define data type. Give examples.
2. Write a short note on data abstraction , give an example
3. Brief note on data encapsulation with example.
4. What is abstract data type? Give example.
5. Give an example of an abstract data type.
6. List five benefits of using ADTs, giving a short explanation of each.
7. List two benefits of using data encapsulation, giving a short explanation of each.
8. Write a c++ program to implement recursion.

9. Write a brief note on exception handling.
10. Discuss briefly about overloading.

Unit – II

11. Define data object, list some of them with examples.
12. What is data structure? List out its types.
13. How do you change the length of a one dimensional array?
14. What are all the possibility to increase the length of an existing array?
15. Write a method to push a given data to the linear list.
16. Discuss briefly on circular list and header node.
17. Short note on singly linked list.
18. How do you inset and delete an item to and from the linear list?
19. Discuss briefly on DLL.
20. List out merits and demerits of linked list.

Unit – III

21. Short note on stack
22. Write an algorithm for pushing an item to a stack.
23. write an algorithm for remove an item from a stack
24. Write an algorithm for pushing an item to a queue.
25. write an algorithm for remove an item from a queue.
26. Write a note on queue.
27. List out the ADTs of stack.
28. List out the ADTs of queue.
29. How do you represent a stack using linked list.
30. How do you represent a queue using array.

Unit – IV

31. Define Hashing. Write it uses.
32. What is probing? List out the types of probing.
33. Short note on Division method of hashing.
34. Write brief note on Linear Probing.
35. Brief note on quadratic probing
36. What is collision? How does collision solve?
37. Brief note on insertion sort with example.
38. Discuss briefly on sorting and its types.
39. Describe bubble sort.
40. Write a short note on selection sort.

Unit – V

41. Define a binary tree. Give an example.
42. Define complete binary tree with an example.
43. What is BST? Give an example.
44. Describe how an array may be used to effectively represent a complete binary tree.
45. Draw the array representation of the binary tree.
46. Give the algorithm for a preorder traversal of a binary tree.
47. Write an algorithm for a inorder traversal of a binary tree.
48. Show the algorithm for a postorder traversal of a binary search tree.
49. Draw the binary tree representation of { 78, 98, 54, 22, 34, 90, 56, 88, 55, 65}
50. What is indexed BT? Show an example.

Section C (8 Marks)

Unit – I

1. Explain the features of C++.
2. What is overloading? Describe its types with examples.
3. Illustrate exceptional handling in c++ with suitable examples.

4. Write a Program to implement the concept of Overloading.
5. Write a C++ program to implement data abstraction.
6. Write a C++ program to implement data encapsulation.
7. Write a C++ program to implement Polymorphism.
8. What is inheritance? Explain its types with suitable example.
9. Write a C++ program to implement multi level inheritance.
10. List out the benefits of OOPS.

Unit – II

11. List out the operations of linear list data structure with example.
12. What are all the possible ADTs of linear list.
13. Write a C++ program to implement the operations of singly linked list.
14. Write a C++ program to implement the operations linear list data structure using an array.
15. Write a C++ program to implement to insert and delete an item using dll.
16. Illustrate linked list and its types.
17. Compare linked list with an array.
18. Discuss the linked and array representation of linear list data structure.
19. Write a C++ program to Search an element in a Linked List (Iterative and Recursive)
20. Write a C++ program to implement linear search using an array.

Unit – III

21. Write a C++ program to implement the operations of stack using an array.
22. Write a C++ program to implement the operations of queue using an array.
23. Write a C++ program to implement the operations of queue using a linked list.
24. Explain Stack.
25. Illustrate Queue.
26. List out the operations of Stack.
27. List out the operations of Queue.
28. Explain any one of stack application.

29. Explain any one of queue application.

30. Write a C++ program to implement tower of Hanoi

Unit – IV

31. Describe how probing methods deal with overflow.

32. Describe how chaining deal with overflow.

33. Explain Collision resolution methods.

34. What are the two broad classes of collision resolution techniques? Explain.

35. Explain FCHD minimal perfect hash function.

36. Describe Chichilli's method of minimal perfect hash function.

37. How Shell sort works explain with an example?

38. Explain Quick sort with example.

39. Illustrate sorting.

40. Describe Heap sort.

Unit – V

41. Illustrate Tree and its types with suitable examples.

42. List out the Advantages of Binary Tree.

43. In what circumstances is the array representation of a binary tree space efficient and space inefficient? Explain with example.

44. Give the algorithm for a preorder, inorder, postorder traversal of a binary tree.

45. List out the Advantages of Binary Search Tree.

46. Describe, using an example, how an arithmetic expression can be represented using a binary tree.

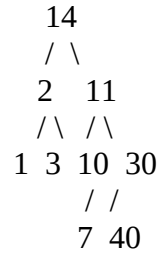
Once represented, how can the expression be output in postfix notation?

47. List out the Properties of Binary Tree.

48. Listout the operations of BST.

49. Listout the operations of Indexed Binary Tree.

50. Write the order of the nodes visited in the following tree with in-order , pre-order & post-order traversal:



KONGUNADU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)
COIMBATORE - 29

QUESTION BANK

Subject Code : 17PCS102

Subject Name : DATA COMMUNICATIONS AND NETWORKS

DEPARTMENT OF COMPUTER SCIENCE [PG]

NOVEMBER 2018

Programme Code: 09	**MSc. Computer Science**
Course Code: 18PCS102	**Core Paper 4 – Data Communication and Networks**

SECTION-A (1 Marks)

UNIT-I

1. An example of a distributed system is the _____ .
(a) World wide web (b) Http (c) FTP (d) Networks

2. Person to person communication is often called as _____ .
(a) Host- Host (b) Host – peer (c) Peer-to-peer (d) Peer- Host

3. Point-to-point transmission with one sender and one receiver is sometimes called as _____.
a. unicasting b. multicasting c. broadcasting d. bicasting

4. The _____ is a type of network.
a. LAN b. broadcast c. unicasting d. multicasting

5.The topologies which are applicable for LANs broadcast are _____ .
a. bus b. ring c. both a and b d. none

6. In WANs broadcast _____ move bits between machines.
a. switching element b. router c. transmission lines d. repeater

7. A collection of interconnected networks are called as an _____ .
a. internet b. intranet c. LAN d. MAN

8. An agreement between the communicating parties on how communication is to proceed is __.
(a) Multiplex (b)Demultiplexing (c)Simple multiplexing (d) Protocol

9. The entities comprising the corresponding layers on different machines are called _____ .
a. peers b. levels c. protocols d. cables

10. The actual communication in the OSI reference model is done through the _____.
a. physical medium b. datalink c. network d. transport

11. The virtual communication is shown by _____ lines.
a. dotted b. solid c. dash d. point

12. The physical communication is shown by _____ lines.
a. dotted b. solid c. dash d. point

13. Between each pair of adjacent layers is _____.
(a) Rules (b) Interface (c) Protocol (d) link

14. A set of layers and protocols is called as_____ .
(a) Network Architecture (b) Structure (c) Design (d) Model

15. One protocol per layer is called as _____
(a) Interface (b) Procedure (c) protocol stack. (d)None

16. Connection-_____ service is modeled after the telephone system
(a) Oriented (b) Less (c) dependent (d) Independent

17. Connection-_____ service is modeled after the postal system
a) Oriented (b) Less (c) dependent (d) Independent

18. The network layer controls the operation of the _____ .
a. subnet b. router c. hub d. bridge

19. The widely used application protocol is _____.
a. Tcp/Ip b. http c. udp d. tcp

20. The protocols used in transport layer are _____.
a. tcp b. udp c. both a and b d. none

UNIT-II

21. Subnet consists of _____&_____.
(a) Host, Routers (b) Host, Transmission lines
(c) Routers, Protocol (d) Routers, Transmission lines

22. An industry standard ultrium tape can hold _____ gigabytes.
a.200 b.100 c.50 d.600

23. For many applications an _____ connection is needed.
(a) Online (b) Offline (c) Baseline (d) Batch

24. One of the oldest and still more common transmission media is _____ .
(a) Twisted pair. (b) Co-axial (c) Fibre –optic (d) Copper

25. Expansion of UTP.
(a) Unshielded twisted pair (b) Unshielded twisted part (c) Unshielded tuned pair
d) Unshaped twisted pair

26. Coax is widely used for _____ .
a. LAN b. MAN c. WAN d. internet works

27. Wide area data communication went from 56 kbps is called _____ .
a. the ARPANET b. LAN c. MAN d. WAN
28. Pieces of fiber can be fused to form a solid connection is _____.
(a) Two (b) Three (c) Four (d) Five

29. Light sources are typically used to do the _____ LEDs.
(a) Forwarding (b) Controlling (c) Signaling (d) Focusing

30. In ring topology _____broadcasting done by using passive star construction.
(a) Hardware (b) Software (c) Middleware (d) Firmware

31. Communication satellites can be thought of as a big microwave repeater in the sky which contains several _____
(a) Transponders (b) Repeaters (c) Switches (d) Bridges

32. Expansion of GEO
(a) Geostate Earth Orbit (b) Geographical Earth Orbit (c) Geostationary Earth Orbit
(d) Geostationary End Orbit

33. The fine tuning activity is called _____
(a) Station keeping (b) Renaissance (c) Tuner (d) Switches

34. Expansion of VSATs.
(a)Very Smart Aperture Terminals (b) Very Small Aperture Terminals
c) Very Small Aperture Tutors (d) Very Small Aperture Tuners.

35. Expand: MEO.
(a) Medium Earth Origin (b) Middle Earth Orbit
c) Medium Earth Orbit (d) Media Earth Orbit

36. Expansion of LEO
(a) Low Edge Orbit (b) Low Earth Orbit (c) Light Earth Orbit (d) Last Earth Orbit

37. Expansion of GPS
(a) Global Post System (b) Global Positioning Socket (c) Global Positioning System
(d) Global Part System

38. An alternative design to Iridium is _____ .
(a) Global star (b) Teledesic (c) Fiber Optic (d) Coaxial

39. PSTN refers to _____
(a) Public Switched Telephone Network (b) Private Switched Telephone Network
c) Public Switched Top Network (d) Public Socket Telephone Network

40. Each end office has a number of outgoing lines to one or more nearby switching centers called _____.
(a) Toll offices (b) Host (c) Station (d) Telephone office

UNIT-III

41. Which layer deals with the algorithm for achieving reliable efficient communication between to adjacent machine.
(a) Data link layer (b) Physical layer (c) Presentation layer (d) Network layer

42. Providing a well defined service interface to the _____ layer
(a) Data link (b) Physical (c) Presentation (d) Network

43. The _____ takes the packet, from the network layer and encapsulate them into frames for transmission
(a) Data link layer (b) Physical layer (c) Presentation layer (d) Network layer

44. LANs are unacknowledged _____service in data link layer.
(a) Connection-less (b) connection-oriented (c) Connectivity (d) Interface

45. The first framing method uses a field in the header to specify the number of _____ in the frame.
(a) characters (b) Words (c) Pictures (d) Pixels

46. Most protocols have used the same byte called a_____
(a) Mega-byte (b) One-byte (c) Pixels (d) flag byte.

47. Byte stuffing technique is otherwise called as _____ .
(a)Word stuffing (b) Frame (c)Character stuffing (d) flag byte.

48. UNICODE uses _____ characters.
(a) 16-bit (b) 15-bit (c) 12-bit (d) 1-bit

49. Two approaches are commonly used in flow control are _____
(a) feedback (b) rate based (c) Both a & b (d) Common

50. The use of error correcting codes is often referred to _____ .
(a) Forward error detecting code (b)Backward error detecting code
c) Correcting methods (d) Error-less method

51. The codes that can only correct single errors are _____.
(a) Hamming (b) error detecting code (c) Error correcting code (d) Double

52. Expansion of CRC

(a) Cyclic ready check (b) Cyclic repetition check (c) Cyclic redundancy check
(d) Cyclic return check

53. Protocols in which stations listen for a carrier and act accordingly are called _____.
(a) Carrier sense protocols (b) Carrier sense multiple access protocol
(c) Carrier multiple protocols (d) Carrier oriented Protocols

54. Expand : CSMA.
(a) Carrier sense multiple access (b) Carrier Model access
(c) Carrier sense multiple active (d) Carrier side multiple protocols

55. The bits in each address position from different stations are _____.
(a) Boolean (b) Logical (c) Arithmetic (d) Byte

56. Expand WDMA.
(a) Wavelength divider multiple access (b) Wavelength division more access.
c) Wavelength division multiple axis (d) Wavelength division multiple access.

57. The basic unit of a Bluetooth system is a piconet which consists of a _____node.
(a) master (b) Slave (c) more (d) Single

58. LANs can be connected by devices called _____.
(a) Bridges (b) Routers (c) Gates (d) Switches

59. Protocols in which stations listen for a carrier and act accordingly are called _____.
(a) Carrier sense protocols (b)Carrier Model access
(c) Carrier sense multiple active (d) Carrier side multiple protocols

60. The first sense protocol is _____.
(a) 1-persistent CSMA (b) A-persistent CSMA (c) 2-persistent CSMA
(d) B-persistent CSMA

UNIT-IV

61. Which do not base their routing decisions on measurement or estimates of the current traffic and topology?
(a) Non adaptive algorithms (b) adaptive algorithms (c) Shortest path algorithm
(d) Routing algorithm

62. Every incoming packet is sent out on every outgoing line except the one it arrives on is called as _____.
(a)Packet (b) Flooding (c) Routing (d)Collision

63. A variation of flooding that is slightly more practical is _____

(a) Selective flooding (b)Packet (c) Flooding (d) Routing

64. The _____ algorithms operate by having each router maintain table.
(a) Distance vector routing (b) adaptive algorithms (c) Shortest path algorithm
(d) Routing algorithm

65. Measure the _____ to each of its neighbours.
(a) Delay (b) adaptive algorithms (c) Shortest path algorithm (d) Routing algorithm

66. Compute the _____ to every other router.
(a) Routing algorithm (b) Shortest path (c) Non adaptive algorithms
(d) adaptive algorithms

67. An alternate design uses _____ .
(a) Binary trees (b) Core trees (c) Core-based trees (d) None

68. The transport layer makes use of the services provided by _____ .
(a) Network layer (b) Presentation layer (c) Physical layer (d) Application layer

69. The hardware within the transport layer that does the work is called _____ .
(a) Signalling (b)Sending (c)Receiving (d) Transport entity

70._____ controls TPDUs are also acknowledged implicitly or explicitly.
(a) Packets (b) Tokens (c)Networks (d) Path

71. Data can now be exchanged using _____ primitives.
(a) Receive (b) Send (c)Accept (d) Clear

72. Which is widely used for internet programming?.
(a)Interpreter (b) Primitives. (c)Coding (d)Transmitter

73. In _____ system calls is not the last word in platform independence.
(a) Unix (b) Linux (c) C-Sharp (d)PHP

74. Which is used to connect the points?.
(a) Ports (b) Plug (c)Connector (d) Socket

75. The illegal combinations of time and sequence number are in _____ region
(a) Boundary (b) Forbidden (c) Critical (d) None

76. Which can also be useful in the transport layer for another reason?
(a) Multiplexing (b) De Multiplexing. (c) Simplex (d) Half duplex

77. Which problem is used to recover from host crashes?

(a) Troublesome (b) Static (c) Dynamic (d) Host

78. Non-adaptive algorithms sometimes called _____.
(a) Static (b) Dynamic (c) Host (d) Flooding

79. Adaptive algorithms sometimes called _____.
(a) Static (b) Dynamic (c) Host (d) Flooding

80. The distance metric is the number of hops, and such tree is called _____.
(a) Sink tree (b) Binary tree (c) Heap tree (d) Trie

UNIT-V

81. Expansion of DNS.
(a) Domain name service (b) Domain name secure (c) Domain name server
(d) Domain name system

82. To map a name onto an IP address,an application program calls a library procedure called the _____ .
(a) Recursive (b) Controller (c)Transmitter (d) Resolver.

83. Every _____ can have a set of resource records.
(a) domain (b) Main (c) Host (d) Server

84. The DNS name space is divided into nonoverlapping _____ .
(a) Zones. (b) domain (c) Main (d) Host

85. The first e-mail systems simply consisted of _____protocols.
(a) FTP (b) HTTP (c) TFTP (d) ARP

86. The _____ which allow people to read and send e-mail.
(a) user agent (b) Processor agent (c) Transfer agent (d) Active agent

87. The process of creating messages and answers is _____.
a.composition b.transfer c.reporting d.displaying

88. To moving messege from originator to recipient is _____.
a.composition b.transfer c.reporting d.displaying

89. Telling the originator what happened to the message is called as _____.
a.composition b.transfer c.reporting d.displaying

90. People can read their e-mail by _____ incoming messages.
a.composition b.transfer c.reporting d.displaying

91. The message inside the envelope consists of two parts:the _____ and _____.
(a) header ,body (b) header,title (c) Body, Text (d) header.text

92. The message to be encrypted known as _____
(a) Decoding (b) plaintext (c) Encoding (d) Cipher text

93. The output of the encrypted process known as_____
(a) Decoding (b) plaintext (c) Encoding (d) Cipher text

94. In a _____ each letter or group of letters is replaced by another letters.
(a) substitution cipher (b) plaintext (c) Encoding (d) Cipher text

95. The most common three-letter combinations are called _____.
(a) Trigrams (b) Digrams (c) Structures (d) Architecture

96. Expansion of DES.
(a) Data encryption state (b) Data encoding standard (c) Data entitled standard.
(d) Data encryption standard

97. Substitutions are performed by _____ boxes.
a.S b.A c.P d.F

98. Substitutions are implemented with simple electrical circuit known as _____ boxes.
a.S b.A c.P d.F

99. The general system of symbol-to-symbol substitution is called _____ substitutions
(a) substitution cipher (b) plaintext (c) Encoding (d) mono alphabets

100. Reorder the letters is called _____
(a) transposition ciphers (b) substitution cipher (c) ciphertext (d) Plain text.

ANSWER KEYS

UNIT-I

1. World Wide Web.

2. Peer-to-peer.

3. A.Unicasting.

4. A.LAN.

5. C.Both a and b.

6. C.Transmission lines.

7. A.Internet.

8. Protocol.

9. A.Peers.

10. A.Physical medium.

11. A.Dotted lines.

12. B.Solid lines.

13. Interface.

14. Network architecture.

15. protocol stack

16 Oriented

17. Less.

18. A.Subnet.

19. B.HTTP.

20. C.Both a and b.

UNIT-II

21. Routers ,Transmission lines

22. a. 200 gb.

23. Online.

24. Twisted pair.

25. Unshielded twisted pair.

26. b. MAN.

27. a. The Arpanet.

28. Two

29. Signaling

30. Hardware

31. Transponders.

32. Geostationary Earth Orbit.

33. Station keeping

34. Very Small Aperature Terminals.

35. Medium Earth Orbit.

36. Low Earth Orbit.

37. Global Positioning System.

38. Global star.

39. Public Switched Telephone Network.

40. Toll offices.

UNIT-III

41. Data link layer.

42.Network.

43. Datalink.

44. Connection-less

45. Characters

46. flag byte

47. Character stuffing.

48. 16-bit.

49. Both a & b

50. Forward error detecting code.

51. Hamming.

52. Cyclic redundancy check.

53. Carrier sense protocols.

54. Carrier sense multiple access.

55. Boolean.

56. Wavelength division multiple access.

57.Master

58. Bridges

59. Carrier sense protocols

60. 1-persistent CSMA

UNIT-IV

61. Non adaptive algorithms.

62. Flooding.

63. Selective flooding.

64. Distance vector routing.

65. Delay.

66. Shortest path.

67. Core-based trees.

68. Network layer.

69. Transport entity.

70. Packets.

71. Send.

72. Primitives.

73. Unix.

74. Ports.

75. Forbidden region.

76. Multiplexing.

77. Troublesome.
78. Static routing.

79. Dynamic routing.

80. Sink tree.

UNIT-V

81. Domain name system.

82. Resolver.

83. Domain

84. Zones.

85. FTP

86. user agent

87. a. Composition.

88. b.Transfer.

89. c.Reporting.

90. d.Displaying.

91. header,body

92. Plain text.

93. ciphertext

94. substitution cipher

95. Trigrams

96. Data Encyrption Standard

97. a). S.

98. b). P.

99. mono alphabets

100. transposition ciphers.

SECTION – B (5 Marks)

UNIT – I

1. What are the components of data communications?
2. Write a note on network criteria.
3. Discuss various protocols and standards in data communications.
4. Write a note on line configuration.
5. Write about the transmission modes.
6. Discuss about the categories of networks.
7. Write a note on analog signals.
8. Write a note on digital signals.
9. Write a note on composite signals.
10. What is distributed processing?

UNIT – II

11. Write a note on parallel transmissions.
12. Write a note on serial transmissions.
13. What is modem?
14. What is cable modem?
15. Write a note on optical fibers.
16. Write a note on twisted pairs.
17. Write a note on coaxial cables.
18. Write about the propagation of radio waves.
19. What is terrestrial microwave?
20. What is satellite communication?

UNIT – III

21. What is circuit switching?
22. What is packet switching?
23. What is message switching?

24. Write a note on stop and wait flow control.
25. Write a short note on Repeaters and Bridges.
26. Write a note on Routers and Gateways.
27. What is a public switched telephone network?
28. Discuss the various stages involved in connection establishment and termination.
29. Write a note on transport protocol data unit.
30. Write a note on connection oriented and connectionless services.

UNIT – IV

31. What are the services provided by ISDN?
32. What is functional grouping in ISDN?
33. What are the 3 types of channels in ISDN?
34. Write about the triple star protocol.
35. Write a note on frame relay.
36. Write a note on application adoption layer (AAL).
37. Write a note on PLP packets.
38. Write a note on BRE and PRE.
39. Write a note about reference points in ISDN.
40. Write a note on visual connection in ATM.

UNIT – V

41. Write a note on ARP and RARP.
42. Write a note on ICMP and IGMP.
43. Write an overview of TCP/IP.
44. Write a note on BOOTP.
45. Write a note on DHCP.
46. Write a note on FTP.
47. Write a note on MTA (Mail Transfer Agent).
48. What is network virtual terminal (NVT)?
49. What is multipurpose internet mail extension (MIME)?
50. What is the post office protocol?

SECTION – C (8 Marks)

UNIT – I

1. Explain various standard criteria committees.
2. Explain topologies in data communications.
3. Elucidate TCP/IP protocol suite.
4. Explain the functions of physical and data-link layer.
5. Explain the functions of network and transport layer.
6. Explain the functions of session, presentation, and application layer.
7. Explain the OSI model.
8. Differentiate OSI and TCP/IP.
9. Explain the pros and cons in various topologies.
10. Differentiate analog, digital, and composite signals.

UNIT – II

11. Explain analog to digital conversion.
12. Explain digital to analog conversion.
13. Discuss DCE and DTE interfaces.
14. Explain digital data transmissions.
15. Discuss guided media.
16. Discuss unguided media.
17. Explain cellular telephony.
18. Explain quadrature amplitude modulation.
19. Differentiate between ASK, TSK, and PSK.
20. Discuss about PCM and PAM.

UNIT – III

21. Explain Switching and its types.
22. Explain flow control in data-link layer.

23. Explain about Error control.
24. Discuss link state routing.
25. Discuss Distance vector routing.
26. Differentiate UDP and TCP.
27. Differentiate crossbar and multi-stage switches.
28. Explain OSI transport protocol.
29. Explain multi-protocol routers and brouters.
30. Discuss Dijkstra's algorithm.

UNIT – IV

31. Discuss about the subscriber access to the ISDN.
32. Explain the ISDN layers.
33. Explain the X-25 layers.
34. Explain frame relay layers.
35. Discuss the frame relay operation.
36. Explain the ATM architecture.
37. Explain the types of switching in ATM layers.
38. Discuss the ATM layers.
39. Differentiate ISDN and X-25 layers.
40. Differentiate ATM and frame relay.

UNIT – V

41. Explain various protocols in the network layer.
42. Explain subnetting in detail.
43. Discuss addressing concepts in detail.
44. Explain the internetwork protocol.
45. Discuss STMP in detail.
46. Discuss TELNET in detail.
47. Discuss HTTP in detail.
48. Explain IPv6 addressing.
49. Explain IPv6 packet formats.
50. Explain ICMPv6 in detail.

KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

COIMBATORE -29.

QUESTION BANK

SUBJECT CODE : 18PCS4E3

TITLE OF THE PAPER : ENTERPRISE WEB SERVICES

DEPARTMENT OF COMPUTER SCIENCE

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CONTENT

UNIT-I

1.Which is an XML-based mechanism for exchanging information between applications within a distributed environment?

a)SOAP b) UDDI c)WSDL d) XML

2.Which mechanism allows one application to invoke and use a procedure of other possible remote applications?

a)RPC b) Telnet c)HTTP d)FTP

3.SOAP can be conjunction with HTTP for a _____environment.

a) Light weight b) Distributed c) Centralized d) Heavy weighted

4.Which is language for describing web services?

a)WSDL b)SOAP c) UDDI d) XML

5.Which among theseis a specification for a registry of information for web services?

a) UDDI b) XML c)WSDL d)SOAP

6.What is a set of rules for designing text formats that support the developer in creating structured data referred as?

a)XML b)WSDL c) SOAP d) UDDI

7.XML documents are structured into a number of____

a)elements b) units c) messages d) blocks

8.Which feature allow developers to name classes unambiguous.?

a) Namespace b) Package c) Substitution d) Inheritance

9.What results in the combination of URL and URN.

a) URI b)URS c)URP d)URT

10.Which object in XMLspecifies that the contents of the complex type must appear as an ordered list.?

a)Sequence b) Substitution c)Complex d)any

11.Which allows a choice of any of the contents of the complex type?

a)Simple b)choice c)Union d) List

12. Name the element that specifies the contents of the complex type appear as a unordered list.

a)Simple b)all c)Union d) List

13.The term RPC refers to_____.

a)Remote Procedure callb)Remote Program call c)Re-programmed card d)Reach possibility centre

14.What is accessed by client applications from Web Services that are remotely hosted?

a) Business units b) Capabilities c) Data d) Functions.

15.Which are used as namespace identifier which resolves ambiguity?

a) URI b) Scope c) URL d) Qualifier.

16. XML Documents captures _____carrying number of elements delimited in tags.

a) Structured Data b) Whole Data c) Processed Data d) Abstract data.

17. Which are used as namespace identifier which resolves ambiguity?

a) URI b) Scope c) URL d) Qualifier.

18. Name the Simple subtype is created in XML Schema.

a) Facets b) Restrictions c) List and Union d) Both a & b

19. Using which element it becomes placeholder for future content?

a) Skip b) Any c) Choice d) All.

UNIT-II

20. Which handler simply dispatches the content to appropriate method call?

a) SOAP Messages b) SOAP- RPC c) SOAP Envelope d) Literals.

21. What among defines a collection of operation within WSDL document?

a) Port type b) Binding c) Definition d) Services.

22.Web services are an instance of the _____architecturepattern.

a)service-oriented b)message oriented c)path oriented d)operation oriented

23.SOAP message is an XML document whose root element is called the_____.

a) header b) envelope c) root d) caption

24.In SOAP terms, an application is comprised of _____that exchange messages.

a) units b) modes c) parts d) nodes.

25.SOAP stands for _____.

a) Simple Object Access Protocol b) Stay on alert protocol

c)Simple operation access protocol d) Static operation abort protocol.

26.Whatis the container structure for the SOAP message?

a) SOAP-message b) SOAP Envelope c)SOAP header d)SOAP -namespace

27. Whichattribute contains a URI that identifies the role being played by the intended recipient of its header block?

a) units b) modes c) parts d) role

28. Which attribute is used to declare how the contents of a header block were created?

a) Document style b) RPC style c)Literal style d)encodingStyle

29. Which SOAP refers to the way in which the application payload is hosted within the SOAP Body element?

a) Document style b)RPC style c)Literal style d)encodingStyle

30. Which attribute appears in both header blocks and the body element of the SOAP message?

a) Document style b)RPC style c)Literal style d)encodingStyle

31.Literal SOAP message use _____to provide the meta-level description of the SOAP payload.

a)arbitrary schemas b) metadata c)token d) literals

32. What is used to describe the web service endpoint to other software agent it will interact?

a) WSCL b)WSSL c)WSDL d)WSIL

33.Which part describes the operations the web service supports and the type of message that the parameterize those operations?

a) concrete b)abstract c) overview d) structure

34.Whichpartdescribes how those operations are tied to physical network end point?

a) concrete b)abstract c) overview d) structure

35.The interaction between the consumer and provider of a service is achieved through _____document.

a) WSDL b)WSCL c) XML d) Literal

36.Which section of the wsdl interface describes how to map the abstractly defined message?

a) Port type b) Binding c) Definition d) Services.

37. The binding element draws together the port type and ____element into a form suitable for exposing to the network.

a) Operation b) Binding c) Definition d) Services.

38.Which finally binds the web service to a specific network-addressable location?

a) Operation b) Binding c) Definition d) Services.

39.Thewsdl begun to form the basis of higher-level protocols that leverages the basic building blocks that it provides, to avoid_____of effort.

a) missing b) duplication c) error d)waste

UNIT-III

40.A registry and a protocol for publishing and discovering web services is____.

a)UBR b)SOAP c)UDDI d) REST

41.What provides the contact information about the service provider in UDDI?

a)White Page b) Yellow Page c) GreenPage d) Blue Page

42.Where the categories under which web services implementing functionalities within those will be found?

a) White Page b)Yellow Page c) GreenPage d) Blue Page

43.This provides the technical information about the web services.

a)Green page b) White Pagec)Yellow Page d) Blue Page

44)Which is the key element of the deployment of web services and provides the centralized registration and search facility.

a)UBR b)SOAP c)UDDI d)REST

45) A small group companies operate and manage a set of_____.

a)Hub b) UBR nodes c)UBR points d) endpoints

46)Which allows searching through the registry for information about business the web services ?

a)The inquiry API b) The publication API c)Tmodel d) Business API

47) Which allows adding, changing, and deleting business and service information within the registry.

a)The inquiry API b) The publication API c)Tmodel d) Business API

48)Which is the most recent incarnation of the UDDI specification.

a)Version 3 b)Version 4 c)Version 5 d)Version 6

49)Information representation within UDDI consists of instance of persistent data structures that are expressed in _____.

a)XML b) SOAP c) WSDL d) REST

50)The business entity type represents information about _____within UDDI.

a)Service initiators b) service providers c)Service holders d)Service distributors

51)Whatfetches technical information about a instance of a web service and includes a network location or endpoint of the services?

a)binding template b) Tmodel c)Connection String d)get_bindingDetail

52)Which are short for technical models , provide more detail information about a web service?

a) binding template b) Tmodel c)Connection Stringd)get_bindingDetail

53.Tmodels provides _____ to the location where such documentation can be found.

a) Link b) address c) pointer d)path

54.The_____type descried the request to keep track of the evolution or change to particular entity.

a) publisherAssertion b)subscription entity c) definition entity d) pointer

55.The_____entity type describes the relationship between one business entity and another business entity.

a) publisherAssertion b)subscription entity c) definition entity d) pointer

56.A new java project, _____is instantiated to act as a proxy and represent the actual UDDI registry.

a)UDDIPROXY b) Proxyed c) UBR Proxy d) Accesspoint

57.The usage of the UDDI is during the design of applications it can be referred to as the

a) Development time b)design time c) runtime d)trial run.

58.Once a webservice has been developed and deployed, it not only has an interface specification but also _____associated with it.

a)network location b) topology c) router d) route table

59.The application begins by retrieving the binding information for the saved binding key by using the

a)binding template b) Tmodel c)Connection String d)get_bindingDetail

60.Which service expects to receive a message from the consumer, while the consumer expects no message back in error?

a)Send b)Receive c)SendReceive d)ReceiveSend

UNIT-IV

61)Which among the following describes the final description of a transaction?

a) Conversation b) Interaction c) Transition d) Commit.

62) Workflow Management System turns business process into which derived reality?

a) Automated b) Computer Co-ordinate c) Assembled d) Organized.

63) Among the following , which is not applicable to WSCL?

a) Abstract Information b) Protocol Binding c) Operation d) Messages.

64) What is verifying the identity of an entity referred as?

a) Authorization b) Authentication c) Validation d) Verification

65) Name the attack that results due to weak passwords.

a) Denial of Services b) Dictionary c) Data Leakage d) Commit.

66) Which aspects of QoS represent latency and throughput?

a) Compliance b) Reliability c) Performance d) Security.

67) Give the powerful media for developing user interface for mobile applications.

a) Illustrator b) Flash c) J2ME d) Eclipse.

68) Which application provides interface for user to browse company products?

a) Web services b) Enterprise Procurement c) ERP d) Catalog.

69) A response page for an EPS application is generated as _____.

a) Cookie b) Output Servlet c) Html page d) Web service.

70) A transition should contain at least one or more _____ for every Interaction.

a) Destination Interaction b) Source Interaction c) SourceInteractionCondition d) Outbound.

71) The process of data integrity assures the data recipient that the data has been received unaltered and intact.

a) Data privacy b) Data Integration c) Data credibility d) Data authenticity

72)What are used the techniques to implement data integrity and data privacy?

a) Decrytion b)Encryption techniques c) Validation d) Verification

73) Which creates a secure tunnel between the organization and destination computers based on public key encryption techniques?

a)SSL protocol b)POP c)POST d)GET

74) The process refers to verifying that the identity of an entity is in fact that which it claims to be.

a) Data Authentication b) Data Integration c) Data credibility d) Data authorisation

75) The Entity trying to have its identity authenticated is known as_____.

a) Principal b) hacker c)User d)Enduser

76) The evidence is used prove the person's identity is known as _____

a) data b) log c)credentials d) information

77) The process permits the sender of the message is _____.

a) Data authorisation b) Data privacy b) Data Integration c) Data credibility

78)The process which verifies that the message data that was received was in fact the same data that was sent by the sender is_____.

a) Data privacy b) Data Integration c) Data credibility d) Data authenticity

79)Which process provides a mean to prove that a sender sent a particular message and does not allow the sender to later disavow having sent it?

a) Discition b)Non-Repudiation c)Repudiation d)Instiction

80)Which are documents that allow organizations to purchase components of services from the vendor.

a)Vendor list b)Purchase orders c)Receipt d)Voucher

UNIT-V

81.The WSRP standard specifies 3 actors involved in a flow, _____consumers & end users.

a)Producers b) Vendors c) User d)Middleman

82.Consumer is a portal toolkit or framework that aggregates and manages _____services.

a)multiple WSRP b)Multiple WSIA c)WSOA d)WSOP

83.Which interface is implemented by the producer and includes a single operation that allows the consumer to retrieve a description of the producer.?

a)Service Description b)Service Descriptor c)Operation halt d)Operation descriptor

84.Which interface includes operations that allow the consumer to register itself with the producer.

a)Authorisation b) Registration c)Intrusion d) Login

85)The consumer invokes the _____operation to retrieve the current presentation markup.

a)add_markup b)set markup c)get Markup d) rem_markup

86)End user interaction with the producer markup must pass through the consumer and hyperlinks URLs and form URLs are referred to as _____

a)Close list b) Program list c) Output list d)Interaction URLs.

87.The consumer to set the values of entity properties in _____.

a) add_markup b)set markup c)set Portlet d) rem_markup

88.The consumer to create a new configured portlet entity in _____.

a) add_markup b)set_Portlet c)Clone_Portlet d) rem_markup

89.The consumer to destroy a created configured portlet entity in _____.

a) add_markup b)set_Portletc) Clone_Portlet d)destroy _Portlet.

90.Hyperlinks allow interactivity between the End-user &_____.

a)WSRPProducers b) Vendors c) User d)Middleman

91.Which technique can be used to modify the link to be returned by WSRP Producer?

a)Path rewriting b)URL rewriting c)Link routing d) Load routing

92.Locating WSRP services within registries such as UDDI is querying the registry for all services that implement the WSRP WSDL _____.

a)tModel b)response message c) Binding message d) Control message

93.The _____gives the Consumer a lot of information about the Producer Portlet.

a) Request message b) Aboutcatalog c)response message d)service msg

94.The response message is an XML message that contains the_____ to be displayed as part of this portlet.

a)HTML fragment b)Javascript c)SOAP message d)xml message

95. Procurement within an_____is extremely complex.

a)Lookup b)enterprise environment c) Search table d) Content

96. An enterprise procurement application acts like a gateway between the _____& the vendors that sell goods and services.

a) procurement administrator b) sales admin c) HRM d) Purchase manager

97.Which interface that allows users to browse a catalog of goods and services from which they can select a particular part number?

a) Text based b)Image based c)Web-based d)File based

98. Which is the main form in which the user enters information about the component to be procured?

a)EPS.html b)Catalog c)User login d)Purchase page

99. The EPS catalog displays the vendor names,_____& brief description of each component.

a) bill no b)component part numbers c)Quantity d)Purchase no.

100. Based on the information entered in to the EPS.html form a response page is generated by the _____.

a)EPS.html b)Catalog c)Userlogin d)Output servlet

ANSWER KEYS

UNIT-1

1)SOAP

2)RPC

3)light weight

4)XML

5)UDDI

6)SOAP

7)message

8)namespace

9)URI

10)sequence

11)choice

12)all

13)remote procedure call

14)

15)URI

16)stuctured data

17)URI

18)both a&b

19)any

UNIT-2

20)SOAP-RPC

21)port type

22)service-oriented

23)envelope

24)nodes

25) Simple Object Access Protocol

26)SOAP-envelope

27)role

28) encodingStyle

29)document style

30)encoding style

31) arbitrary schemas

32)WSDL

33)abstract

34)abstract

35)XML

36)binding

37)operation

38)service

39)duplication

UNIT-3

40)UDDI

41)white page

42)yellow page

43)green page

44)UBR

45)UBR nodes

46)the enquiry API

47)the publication API

48)version 3

49)XML

50)service provider

51)binding template

52)Tmodel

53)pointer

54)subscription entity

55)publisher assertion

56)UDDIPROXY

57)design time

58)network location

59)get_bindingDetail

60)receive

UNIT-4

61)transition

62)automated

63)Abstract Information

64)authentication

65) dictionary

66)performance

67)J2ME

68) enterprice procurement

69)output servlet

70)SourceInteractionCondition

71)data privacy

72)encryption technique

73) SSL protocol

74)data authentication

75)principal

76)credentials

77)data authorisation

78)data integeration

79) Non-Repudiation

80)purchase orders

UNIT-5

81)producers

82)multiple WSRP

83)Service Description

84)registration

85)get markup

86)Interaction URLs.

87)set potlet

88)clone portlet

89)destroy portlet

90)WSRPProducers

91)URL rewriting

92)tmodel

93)response message

94)HTML fragment

95)enterprise environment

96)procurement administrator

97)web based

98)EPS html

99)component part numbers

100)output servlet

SECTION-B (5 marks)

UNIT-I

1. How to achieve Inheritance in schema?
2. Give the need of substitution groups.
3. How to manage WSDL descriptions?
4. Why is webservice essential?
5. What are the components of Webservice that is quite essential?
6. How to create simple type through restrictions?
7. Discuss about "any" element's usage in xml documents.
8. List the method for the complex types creation.
9. Give the steps for implementation of schema.
10. What are the types of namespace available?

UNIT-II

11. Write about SOAP Envelope?

12.Write about SOAP Body?

13. Decribe the usage of SOAP Faults ?

14. Write briefly about SOAP encoding ?

15. What is SOAP RPC ?

16. What is WSDL ?

17.Write about the type element ?

18. Describe about the Services in WSDL ?

19. What is implementation and deployment in WSDL ?

20. Write about binding to and invoking web services ?

UNIT-III

21.Describe the UDDI lifecycle management.

22.Write about UDDI's usage.

23.Write about Business registry and Analogies with Telephone Directories .

24.Differentiate the view of a developer and an analyst towards UDDI

25.What is a UBR used for?

26. Name some famous UBR available in markets with test page.

27.Write about business sectors view towards work flow.

28.What are the issues faced by an outdated UBR?

UNIT-IV

29.Discuss about security as an end to end process?

30.what are web service security issues?

31.what is web service security roadmap?

32.why is QoS important for web services?

33.where are the holes?

34.Isbuiding a quality webservicestough?Discuss it pros.

35.What are the pitfalls faced in http and xml?

UNIT-V

36.What is WSIA?

37.What is WSRP ,Give its usage briefly.

38.What are the tools used for UI in Mobile application?

39. How to invoke a web service through proxy server?

40.Write about Direct mobile web service access.

41.Illustrate the steps in running an EPS application.

42.Write about the Output Servlet.

43.Give the steps for EPs catalog designing.

SECTION –C (8-MARKS)

UNIT-1

44. What are Web services? Why it is Important?

45. Describe the process of inheriting Namespaces

46. How to process a schema, enumerate the steps in it.

47. Elucidate about XML Namespaces.

48. Write in detail about SOAP Messages.

49. Elucidate the definitions of XML Documents.

50. Explain about XML schema.

51. Explain the types of parsers used for XML validation

UNIT- II

52. Write about SOAP Messages?

53. Write about SOAP Header?

54. Illustrate in detail about the SOAP model?

55. Write briefly about Binding?

56. Write about the managing WSDL descriptions?

57. Describe about the Using SOAP &WSDL?

58. Explain about WSDL Structure.

59.Write about Document, RPC, Literal and encoding?

UNIT-III

60. Write about UDDI data structures.

61.Write about UDDI business Registry.

62. Write about workflow management system

63. Write about dynamic access point management.

64. Explain about web portal and programming deployment of UBR.

65. What is the influence of workflow management in business sectors?

UNIT IV

66. What is design patterns and best practices?

67. What are the types of security attacks

68. ReDefine QoS. Why is it important?

69. What are various types of threats?

70. What is the key security features concentrated?

71. How is the WS roadmap overplayed?

72. Write about Non repudiation And Data Integrity

UNIT V

73. Explain mobile web services?

74. Explain direct mobile web service access?

75. Brief description about portals?

76. Explain WSRP and WSIA specification?

77. Explain Enterprise procurement.

78. Illustrate the process of running the EPS application.

79. Explain a) System functionality and Architecture.

80.Discuss the process of EPS System implementation.

81. Explain programmatic and interactive web service interface?

82. Write about building portlets and portels with WSRP?

KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

COIMBATORE -29.

QUESTION BANK

SUBJECT CODE : 18PCS103

TITLE OF THE PAPER : Information Security

DEPARTMENT OF COMPUTER SCIENCE

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CONTENT

SECTION-A [1 Marks]

UNIT I

1. A method, hacker contacts you through phone or email and attempts to acquire your password.

   a) spoofing b) phishing c) spamming d) bugging

2. A category of object or entities that creates danger to an asset is_____.

   a) Threat b) Attack c) Spam d) Black Mail.

3. For which of the following is an information security policy not developed?

   (a) Information systems security (b) System access control
   (c) Hardware and software control (d) Information classification

4. A weakness or fault in a system or protection mechanism that opens to damage is____.
   a) No immune b)Risk c)Vulnerability d) Durabilty

5. The probability that something unwanted will happen_____.

   a) Risk b) Attack c) Threat d) Vulnerability

6. An information has_____ when it is free from errors and gives the expected output.

   a) Authenticity b) Accuracy c)Utility d) Durability

7. The quality or state of information is genuine and no fabrication is _____.

   a) Authenticity b)Accuracy c)Utility d) Durability

8. The information is termed_____ when it is not exposed to unauthorized users.

   a) Authenticity b) Accuracy c) Confidential d) Possession.

9. The quality or state of having a value or purpose of information.

   a) Authenticity b)Accuracy c)Utility d) Durability

10. The state of ownership or control is_____.

   a) Authenticity b)Accuracy c)Utility d) Possesion

11. The main target and most valued asset of an organization is _____.

   a) People b) Data c) Hardware d) Procedure

12. The instruction s for operating a specific task in an organization is referred as_____.

a) People b) Data c) Hardware d) Procedure

13. The investigation phase in SDLC starts with _____.

a) Enterprise information security policy b)plan c)EIS spec d)EIS discussion.

14. The logical design phase creates a _____ for information security.

a) Map b) Specification c) Blueprint d) Policy

15. The physical design evaluates the _____ of Information Security.

a) Hardware b) Technology c) Data d) Network

16. The IP breach with duplication of intellectual property is termed as_____

a) Phishing b) Software Piracy c) Espionage d) Shoulder surfing

17. The malicious code worm that replicates constantly without a program environment is

a) Backdoor trap b) Virus c) Shockwave rider d)SPyder.

18. When an unauthorized gains access to any asset the act is termed as_____

a) Phishing b) Software Piracy c) Espionage d) Shoulder surfing

19. The hackers who exploit the system with automated code are referred as_____

a) Attackers b) Bombers c) Script kiddies d) Script Monkeys.

20. When an insider steals information it is termed as Information_____.

a) Abstraction b) Exortion c) theft d) Disruption

UNIT II

21) The value that organization controls to prevent loss.

a) Benefit b)Profit c) Asset d) Outstanding

22) The process of assigning financial value or worth to each information asset.

a) Benefit Value b)Profit Value c) Asset Value d) Outstanding Value

23) The strategy that reduces the impact caused by exposing vulnerability.

a) Control b) Defend c)Mitigate d) Transfer

24) The common mitigation procedure used to limit has recovery plan.

a) Incident Plan b) Recovery Plan c)Disaster recovery Plan d)Solver

25) Which strategy attempts to prevent the exploitation of vulnerability?

a) Control b) Defend c) Mitigate d) Transfer

26) The risk to asset that remains even after application of controls is

a) Common b) hidden c) Residual d) Public

27) The probability that the vulnerability of object is under attack is _____.

a) Vulnerabilty b)Likelyhood c)Durabilty d)Percentage

28) The process of evaluating the risk for each vulnerability is called _____.

a) Risk Identification b) Risk Assessment c)Mitigation d)Monitoring

29) The output of a risk identification phase is documented as _____.

a) TVA worksheet b) Asset report c) Risk report d) document

30) The process of analyzing each threat is called _____.

a) Risk Identification b) Risk Assessment c)Mitigation d) Threat Assesment

31) The prioritization of each asset is done by_____.

a) Cost Based Analysis b) Weighted Factor Analysis c) Risk Analysis d)TVA

32) What requires that employees secure all the information at containers?

a) Swipe Policy b) Clean Desk c) Clean Room d) Garbage

33) A method hacker contacts you through phone or email and attempts to acquire your password.

a) spoofing b) phishing c) spamming d) bugging

34) Which American contribution for trademark and Privacy Infringement?

a) TRIPS b) DMCA c) CECC d) SFE.

35) Which policy by WTO for intellectual property in multi trade ?

a) TRIPS b) DMCA c) CECC d) SFE.

36) The law adopted by Council of Europe for cybercrime is_____.

a) Convention of cybercrime b) GFOI c)FOIA d) Cybercrime

37) The Act allows any person to request federal agency information.

a) Convention of cybercrime b) GFOI c) FOIA d) Cybercrime

38) Which among these regulates the structure and administration of government agencies and relationship with citizen?

a) Public Law b) Private Law c) Tort d) Civil law

39) Which law governs a nation or state and its relationship with people?

a) Public Law b) Private Law c) Tort d) Civil law

40) Which law encompasses the family law, labour and commercial law?

a) Public Law b) Private Law c) Tort d) Civil law

UNIT III

41) Which among these uses data classification schemes?

a) Mandatory acces controls b) lattice controls c) Mac d) discretionary

42) The users are assigned with level of access in_____ based access control.

a) Mandatory acces controls b) lattice controls c) Mac d) discretionary

43) The lattice structure contains _____ as its column of attributes.

a)ACL b)LCL c)ICL d)Neutral

44) The row of attributes in a lattice structure refers the _____ table.

a)severities b)capabilities c)minorities d)Restrictions

45) The separate host which can be a rich target of external attacks is called _____ .

a) Server b) Bastion c) Remote host d) Telnet.

46) Non discretionary is either_____ or _____ based.

a) role,task b)task,job c)job,place d)place,role

47) Which access is implemented at the option of data?

a) Mandatory acces controls b) lattice controls c) Mac d)discretionary access

48) The mechanism in which supplicant seeks access is called as _____.

a) Identification b)Authorization c) Authentication d)Justification

49) The process of validating the supplicant identity is called as_____

a) Identification b)Authorization c) Authentication d)Justification

50) What is the series of character that is used to identify the user?

a) Password b) Passphrase c) Digital signature d) Cue points

51) The process of comparing the authenticated entity to a list of information asset is_____

a) Identification b) Authorization c) Authentication d) Justification

52) The security program which prevents specific program moving in and out of the organization is called as_____

a) Firewall b) Antivirus c) Analyzer d) Log filters

53) Firewall which examines the header of data packet into a network is _____.

a) Application Gateway b) PFF c)Circuit Gateway d) Host

54) The network connection between internal & external system uses a_____

a) Log file b)Directory c)Route map d)State table

55) The circuit gateway firewall handles the _____layers of OSI model.

a) Application b)Network c) Transport d) Data link

56) Application firewall is also called as_____.

a) Host b)Bastion c)Proxy server d)Router.

57) Dual homed firewall uses ____for network mapping.

a) NAT b)FSAT c)FAT d)lookup

58) Which protocol uses PAC to claim privilege form server?

a) Kerberos b) SESAME c) tacacs d)Ticket senser

59) The VPN mode which uses two perimeter tunnel for traffic handling is called as_____.

a) traffic mode b)link mode c)tunnel mode d)ground mode

60) The Diameter protocol defines the requirements of _____ authorization and Accounting.

a) Identification b)Authorization c) Authentication d)Justification.

UNIT IV

61. Which one of the following is not classified as biometrics?
a) Digital password. b) Voice c) Blood vessels in the retina of your eye d) Fingerprint.

62. ____ are decoy systems designed to lure potential attackers away from critical systems.

a) Honeypots b) Honeycells c) Padded cells d) Padded nets.

63. ____occurs when an attacker attempts to gain entry or disrupt the normal operations of an information system, almost always with the intent to do harm.

a) Intrusion b) forging c) IP spoofing d)ID theft

64. ____ is a network tool that collects copies of packets from the network and analyzes them.

a) Packet scanner b) spike c) honey pot d) packet sniffer

65.System that benchmark and monitor the status of key system files and detect when an intruder creates, modifies, or deletes monitored files..

a) NIDPS b) HIDPS c) AppIDPS d) UPS

66.The most popular ICMP used operating system detector is_____.

a) Nessus b) HPING c) XProbe d) Fuzzers.

67. What occurs when an attacker attempts to disrupt normal operation?

a) Intrusion b) Attack c) threat d) UPS

68) Intrusion _____ consists of procedure and system that identify system intrusion.

a) detection b) correction c) reaction d) restoration

69) Intrusion _____ is the action an organization takes when intrusion is detected.

a) detection b) correction c) reaction d) restoration

70) Intrusion_____ finalizes the restoration to normal state.

a) detection b) correction c) reaction d) restoration

71) The process by which attackers change the format of their activity is called as_____.

a) Evasion b) Intrusion c) Prediction d) Effiction

72) The process of adjusting the IDPS to maximize its efficiency to detect true positive is _____

a) Adjustment b) Tuning c) Fine grain d) Coarse grain

73) The rules to abide during IDPS implementation is termed as _____

a) Blue book b) SitePolicy c) Org.Policy d) Client Policy

74) The system that is programmed to detect intrusion in the network.

a) NIDPS b) HIDPS c) AppIDPS d) UPS

75) The process where NIDPS looks for invalid data packet in TCP/IP protocol.

a)Stack auditor b)protocol controller c)Protocolstack verification d)COP

76) which verifies examine for unexpected packet behavior.

a)Stack auditor b)protocol controller c)Application Protocolverifiers d)COP

77) Which is also known as system verifiers.

a) NIDPS b) HIDPS c) AppIDPS d) UPS

78) Signature –based IDPS is otherwise known as _____ .

a) Misuse detection b) VIDPS c) AppIDPS d) UPS

79) Using _____ the system reviews the log files generated by server.

a) Event log b) Log file monitors c)State table d)Analyzer

80) Which IDPS analyze the network traffic to control its flow?

a) Cross Balance Analysis b) Network Based Analysis c) Routers d) Network Monitor.

UNIT-V

81. During the implementation phase, the organization translates its blueprint for information security into _____

a) Project Plan b) Project deliverable c) Project document d) Project report.

82) The project plan can be created using the simple planning tool .

a) Cost based Analysis b)Work break down structure c) c) Backtracking d) DAVE

83) A _____ is the complete document or program module that either access beginning or finishing point.

a) product b) deliverable c)outcome d) endues.

84) Which among describes the amount of time and efforts hours needed?

a) Project scope b) Product scope c)Lifecycle d)Validity.

85) The process that involves thawing hard and fast habits and establish procedures.

a) freezing b) unfreezing c) thawing d) refreezing

86) A direct change over phases is otherwise called as_____.

a) Phased Implementation b) Direct Changeover c) Pilot Implementation d)Parallel

87) Task or module before the specific task is called as_____.

a) Predecessor b) successor c) In-let d) Outlet

88) The underway stage of a project is managed by_____.

a) Positive feedback b) Negative feedback loop c) Terminate d)Abort.

89) The process by which the change and fund is managed is termed as _____.

a) Obsolescence b) Technology governance c)Technology maintenance d)Defend.

90) An effective Information security governance demands _____.

a) Audit b) constant review c) Recycles d)Inspections.

91) The direct connection between between two information systems for data sharing.

a) Network b) System Interconnection c)link d)Terminal

92. In security planning phase a ____ is developed as a initiative.

a) Development plan b) Project plan c)Contigency Plan d)Constructive plan

93. The maintenance phase follows the guidelines of _____

a)SPI 2000 b)NIST SP 800 c)NIST 2000 d)SP 404

94. In product acquisition the assessment outcome is towards ____ phase.

a) Operation b) Solution c) Implementation d) Evaluation

95. The first clue that security system knows for a fault is _____

a) User feedback b)Fault tolerance c) fault highlighter d)vulnerability

96. A hardware or software item to be modified is_____

a) Configuration item b) change base c) Change item d) end product

97. The recorded state of revision of hardware or software configuration is____.

a)Build b)Version c) List d)Snapshot

98. A significant change of the previous version is _____.

a) Major release b) Minor release c)Patch d) Build

99. A snapshot of a version of software assembled from various modules.

a)Build b)Buildlist c)Version d)Patch

100. The piece of code used to modify the existing error is____

a) Major release b)Minor release c)Patch d) Build

ANSWER KEY

UNIT I

1) Phishing

2) Attack

3) Hardware and software control

4) Vulnerability

5) Risk

6) Accuracy

7) Authenticity

8) Confidential .

9) Utility

10) Possesion

11) Data

12) Procedure

13) Enterprise information security policy

14) Blueprint

15) Technology

16) Software Piracy

17) Shockwave rider

18) Espionage

19) Script kiddies

20) Exortion

UNIT-II

21) Benefit

22) Asset Value

23) Mitigate

24) Disaster Recovery Plan

25) Defend Strategy

26) Residual risk

27) Likelihood

28) Risk assessment

29) TVA sheet

30) Threat assessment

31) Weighted Factor analysis

32) Clean desk policy

33) Classified

34) DMCA

35) TRIPS

36) Convention of cybercrime

37) Freedom of information

38) Public law

39) Civil law

40) Private law

UNIT III

41) Mandatory access control

42) Lattice

43) ACL

44) Capabilities

45) Non-discretionary control

46) Role

47) Discretionary access controls

48) Identification

49) Authentication

50) Pass phase

51) Authorization

52) Firewall

53) PFF

54) State table

55) Transport

56) Proxy server

57) Dual Homed Host

58) SESAME

59) Tunnel mode

60) Authentication

UNIT IV

61) Digital password

62) Honeypots

63) Intrusion

64)Packet scanner

65) NIDPS

66) XProbe

67) Attack

68)Detection

69) Reaction

70) Correction

71) Evasion

72) Tuning

73) Site policy

74) NIDPS

75) Protocol stack verification

76) Application protocol verification

77) HIDPS

78) Misuse detection IDPS

79) Logfile monitor

80) Network Based Analysis

UNIT V

81) Project plan

82) WBS (Work Breakdown Structure)

83) Deliverable

84) Project scope

85) Unfreezing

86) Direct changeover

87) Predecessor

88) Negative feedback loop

89) Technology governance

90) constant review

91) System Interconnection

92) Contigency Plan

93) NIST SP 800

94) Solution

95) User feedback

96) Configuration item

97) Version

98) Major release

99) Build

100) Patch

SECTION-B (5-Marks)

UNIT-I

1) Describe the History of Information Security.

2) List the Components of Information Security.

3) What is Security? List the layers of Information Security

4) Why security is needed in an organization?

5) Give the factors that stimulates in Deviation of QOS.

6) How is shoulder surfing or Espionage achieved?

7) List the forces of nature which generates threats.

8) Give the different Human error that is a source of threat.

9) What is the role of man in middle to perform an attack?

10) Write about social Engineering and its role in an attack.

UNIT-II

11) Write about policy vs. law.

12) What are the different types of laws?

13) Write about the Export and Espionage law

14) How is identity theft controlled?

15) What are the three major undertakings of risk management?

16) Write about the data classification and management

17) What are the inputs to prepare a TVA SHEET?

18) How is likelihood determined?

19) What is the process involved in asset identification?

20) How is risk assessment documented?

UNIT-III

21) Discuss about the Process of authentication.

22) What are the different modes of firewall classifications?

23) Describe the firewall classification by generation.

24) Give the categories of firewall by its structure.

25) Write about content filters.

26) Discuss the usage of RADIUS, TACACS and Diameter.

27) When shall an organization prefer Hybrid firewall?

28) What is the association of each firewall with layers of OSI?

UNIT-IV

29) Write notes on intrusion detection & prevention system

30) Why use an IDPS?

31) Write notes on honeypots,honeynets and padded cell systems

32) Write notes on firewall analysis tools.

33)Write notes on vulnerability scanners.

34)Write notes on packet sniffers.

35) Explain in detail about biometric access tools.

36) Write about web trackers.

UNIT-V

37) Write short notes on implementing Information Security.

38) Discuss about the need for project management.

39) Give short notes on project planning consideration.

40) Illustrate about Bull eye's model.

41) Discuss performance measure of maintenance model.

42) Explain configuration/change management of maintenance model.

43) Discuss data source of monitoring a external environment.

44) Explain security risk assessment.

45) Analyze the effectiveness of technology governance and change control.

46) Write about task dependency in project management.

SECTION-C (8-Marks)

UNIT-I

1) What are the Critical characteristics of Information Security?

2) Explain the different phases of Sec DLC.

3) What are the important functions Information Security performs in an organization?

4) What is a threat? List the different threats encountered in an organization.

5) List the different types of attacks faced in an organization.

6) Give the effects of various software attacks.

7) Describe the member's selection for Information Security project team.

8) Write about data responsibilities and communities of interest.

9) Give the monitoring action of every information security areas.

10) What are the deliberate attacks faced in an organization?

UNIT-II

11) Explain the U.S copyright laws.

12) Write about the general computer crime laws.

13) Write about the international laws and legal bodies.

14) Discuss about the Ethics and Education.

15) Illustrate the role of Risk Identification elaborately.

16) Explain the various list control strategies and How it is applied?

17) What is the result of a risk assessment phase?

18) How to select the optimal risk control strategy?

19) Write about cost based analysis

20) Narrate the steps in developing the project plan.

UNIT-III

21) What are the different types of the access controls?

22) Illustrate the steps in identification .

23) Write about the available firewalls on its processing mode.

24) List the classification of firewall based on its architecture.

25) Analyze the outcome of SOHO firewall debate .

26) How to select the right firewall?

27) Explain the rules to follow for best practices in firewall usage.

28) Write about Kerberos and SESAME protocols

29) What is a VPN? Explain its types.

UNIT-IV

30) Explain types of IDPS.

31)Write notes on IDPS terminology.

32) Explain IDPS detection methods.

33) Describe the steps in deployment of IDPS.

34) Write notes on scanning & analysis tools

35) Write notes on biometric access controls.

36) Give the key factors in maintenance of IDPS.

UNIT-V

37) Explain information security in project management.

38) Explain technical aspects of implementation.

39) Explain non-technical aspects of implementation.

40) Write notes on security management maintenance models.

41) Explain security maintenance model .

42) Write detail about monitoring the external environment.

43) Write detail about monitoring the internal environment.

44) Explain planning & risk assessment.

KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

COIMBATORE -29.

QUESTION BANK

SUBJECT CODE : 18PCS205

TITLE OF THE PAPER : ADVANCED JAVA

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CONTENT

SECTION-A

UNIT I

1.Which mechanism that binds code and data together?

a) Inheritance b) Polymorphism c) Abstraction d) Encapsulation

2.Which among the initializes an object immediately upon creation?

a) Method b) constructor c) class d) this keyword

3.Which tool executes the byte code at run time in system?

a) Compiler b) JVM c) interpreter d) Servlet

4.Give the mechanism used to achieve reusability by simply including it.

a) Abstraction b) Interface c) Packages d) Inheritance.

5.Name the keyword that handles method overriding is resolved.

a) Super b) main c) private d) public

6.Assignment of parent object to refer child class is _____.

a)Typecasting b) Up casting c) Forecasting d) Down casting.

7.What initializes an object immediately upon creation.

a) Method b) constructor c) class d) this keyword

8.In Java, _____ keyword is used to create an used defined interface.

a) interface b) abstract c) extend d) implements

9.Java Packages can be divided in to _____ Types.

a) 2 (b) 4 (c) 3 d. 5

10.Java API Packages can be classified into _____ Types

a) 2 b) 4 c) 3 d) 6

11.In Java default package _____.

a) io b) awt c) lang d) net

12._____ Package is used to create a graphical user interface.

a) io b) awt c) lang d) net

13.In Java Package io stands for _____

a)Input Output b) Input out c)In Out d) In Output

14.An _____ Statement can be used to search a list of packages for a particular class

a)Import b) Include c)Implement d) Included

15.Which of this keyword must be used to inherit a class?

a) super b) this c) extent d) extends

16.Which of the following is a type of polymorphism in Java?
a) Compile time b) Execution time c) Multiple d) Multilevel

17.When method overloading does is determined?
a) At run time b) At compile time c) At coding time d) At execution time

18.Which of these is a mechanism for naming and visibility control of a class and its content?
a) Object b) Packages c) Interfaces d) Superclass

19. Which mechanism by which a call to an overridden method is resolved at runtime?
a) Inheritance b) Polymorphism c) Abstraction d) Dynamic method dispatch**.**

20. When a variable is declared with ____, its value can't be modified, essentially, a constant.

a) Method (b) final keyword (c) class (d) this keyword

21. Multiple inheritance is achieved through _____ and not through class in java.

a) Object b) Packages c) final keyword d) Superclass

UNIT II

22. All exception is subclasses of _____ class.

a) Exception b) Throwable c) Error d) IOException

23. _____ method is overridden to convert user exception.

a) throwable getClause( ) b) String getMessage( ) c) Arithmetic Exception d) to tring( )

24. Which among the following is used to propagate checked exception?

a) Throws b) Throw c) Finally d) Caught.

25. The _____ State means that the thread is ready for execution and is waiting for the availability of the processor.

a) Runnable b)Newborn c) Blocked d)Dead

26. In which state means the processor has given its time to the thread for its executions?

a) Runnable b)Newborn c) Blocked d)Dead

27. A Thread to sleep for a specified time period using method _____.

a) suspend() b) notify() c)sleep() d) resume()

28. Which state of thread is considered “not runnable” but not dead?

a) Runnable b)Newborn c) Blocked d)Dead

29. Which is connectionless protocol?

a) TCP b) IP c) SMTP d) UDP

30. Which method is used to get input in applet?

a) drawstring () b) readLine() c) Indexvalue() d) all

31. Give the method which returns the port to which the socket is connected.

a) get port( ) b) local port( ) c) remote port( ) d) Iport( ).

32. Which class is used for writing character oriented data in a file?

a) FileOutputStream b) FileWriter c) FRead d) Fwrite.

33. Java's _____ class includes methods for drawing many different types of shapes.

a) AWT b)Graphics c) Paint d)Vector

34. Every applet its own area of the screen known as _____

a) Canvas b) Frame c)Layout d) Grid

35. The drawLine method takes _____ pair of coordinates.

a)2 b) 4 c) 5 d) 6

36. The drawRect method takes _____ Arguments

a)2 b) 4 c) 5 d) 6

37. What method is used to fill the arc?

a) fillArc() b)drawArc() c)Both d)None

38. Which method is used to retrieve the currently used font?

a)setColor() b)SetFont() c)getFont() d)SetFont()

39. The Polygon method takes _____ Arguments.

a)2 b) 4 c) 5 d) 6

40. _____ is may be considered a set of lines connected together.

a) Rectangle b)Triangle c)Circle d)Polygon

41. In Applet Program _____ attribute is used to specified the name of the applet

a)ALIGN b)CODEBASE c)CODE d)HSPACE

42. Which method is used to writes a byte to the output stream?

a)read() b)write() c)reset() d) available()

43. Which package contains a large number of stream classes?

a) CODEBASE b) lang c) awt d)applet

UNIT-III

44. How is a standard window in awt termed?

a) Frame b) Panel c) Canvas d) Dialog

45. Which among these is supports lightweight coding?

a) Applet b) Swing c) Beans d) Servlet

46. Name the object used to monitor an image.

a) image repository b) image observer c) image controller d) imgproducer

47. Name the method that is used to fetch label of control.

a) getAction( ) b) getCommand( ) c) getLabel( ) d) getList( )

48. Name the layout which has deck of controls placement is_____.

a) Flow b)Card c) Grid d) Border

49. To include a control in a window _____ method is used.

a)add (Component compObj) b) add( ) c) addcontrol( ) d)additem(Control obj).

50. The button controls uses the _____ listener

a) item b)action c) key d) mouse

51. Which method returns an array containing the names of the currently selected items?

a) getSelectedItems( ) b) getItems( ) c) choice itmes( ) d) getList( )

52. Which method can be used to retrieve the name of the newly selected item?

a) getCommand( ) b)getActionCommand( ) c)getLable( ) d)getItem( )

53. Which event is generated when a button is pressed, item selected or double clicked?

a) Text b) Item c) Action d) Component.

54. Name the method used to include image in java.

a) SetImage ( ) b) drawImage( ) c) LoadImage( ) d) findImage( )

55. Each Container has a _____associated with it.

a) Layout manager b) Frame c) Panel d) Component.

56. Which is the default layout manager?

a) Card b) Grid c)FlowLayout d)Border

57. Which is the style in Border layout to change its default setup?

a) Solid b) Grid c)Inset d)Outset

58. All the controls of AWt extends the properties of _____.

a) Panel b)Frame c)Canvas d)Object

59. Which method is used to include an option in menubar?

a) addmenu( ) b)add(menuobj) c)adoption( ) d)additem( )

60. Java adapter classes provide the default implementation of _____ interfaces.

a) Listener b) Event c)Action d)Component

61. Mouse InputAdapter is included from _____ Listenerclass.

a) DragSource b) MouseInput c) DragTarget d)MouseMove

62. Changing the state of an object is known as an _____.

a) item b)event c) key d) mouse

63.To have a button it demands a component class and _____interface

a) Action b)Accesible c) Serialize d) Nonserialize.

UNIT IV

64. Which method returns the object of ResultSet that can be used to get all the records of a table?
a) executeQuery() b) createStatement() c) getConnection() d) forName()

65. The default username for the oracle database is _____.
a)Scoot b)Scott c) system D)Tiger

63. JDBC is a _____to connect and execute the query with the database.
a)Java API b) Library c)Interface d)Class

67. JDBC API uses _____to connect with the database.
a) Scoot b)Scott c)JDBC drivers d)Tiger

68. Which package contains classes and interfaces for JDBC API?
a) java.sql b)java.net c)java.awt d)java.lang

69. Which is partially a java driver?
a)JDBC-ODBC bridge b)Native-API c)Network Protocol driver d)Thin driver

70. The JDBC-ODBC bridge driver converts JDBC method calls into the_____.
a)ODBC function calls b)Native calls c)middleware d)Directcall

71. The Native API driver uses the _____libraries of the database.
a)server side b) client-side c)browser d)system

72. Which method of class is used to register the driver class?
a) forName() b)getName() c)setName( ) d) className( )

73. Which method of DriverManager class is used to establish connection with the database?
a)getPath( ) b) getConnection() c)setConnection d)makeConnection( )

74. What is the compressed pattern of all bean component is referred as?
a) Manifest b) Index c) Jar d) Refern

75. Give the jar utility option for tabulating the contents.
a) x b) i c) t d) r

76.To recognize feature bean uses a process called _____.
a) Inspection b)Introspection c)Retrospection d)Suspection

77. The bean receives the event fired and register it with its _____.
a)Listener b) Event c)Action d)Component

78. Which bean supports range of values?
a) Simple b) Complex c)Indexed d) Dual

79. The CF in jar files means _____
a) Create folder b)copy folder c)create file d)copy folder

80. Which command in jar file indicates no compression of files?
a) 0 b) 1 c) ~ d)!

81. The jar tool of JDK provides the facility to create the _____ jar file.

a) readable b) executable c)attachable d)removable

82. Introspection is used to allow a bean to discover the properties , methods, and ___
a) Listener b) Event c)Action d)Component

83. Which bean has its single value and its independent?
a) Simple b) Complex c) Indexed d) Dual

UNIT-V

84. Swing components are _____.

a) Heavy weight b)Light Weighted c)Processed d)Sealed

85. Java Swing tutorial is a part of _____.

a) Java Foundation Classes b) Java Abstract class d)Java Bean d)Java Software class

86. The Swings follows the concept of _____.

a)JFC b)MVC c)TFC d)PVC

87. JLabel extends JComponent implements _____, Accessible interface .

a) SwingConstants b) TextComponent c)Adjustable d)Serialisable

88. Only _____ information can be set in Cookie object.

a) Numeric b)Textual c)Image d)Pattern

89. Which class allows you to implement sophisticated editing faculties?

a)Jeditor pane b)JTabbedPane c)Jcomponent d)JControl

90. Which class is used to display the hierarchical data?

a)JTable b)JTree c)JButton d)JScroll

91. JRadiobutton extends _____ class for its properties.

a)Jbutton b)JTogglebutton c)JGroup d)Jaccessible

92. Which method used to get the Context associated with this JCheckBox?

a) getAccessibleContext() b)getcontext( ) c)getValue( ) d)getLabel( )

93. Which software component among these can be reused?

a) applet b) swing c) bean d) servlet

94. Which method a servlet uses to responds to a http request?

a) init ( ) b)service( ) c) Destroy( ) d) run( )

95. Using what method a session can be created ?

a) get attribute( ) b)getsession ( ) c) HTTP session d) Get attname( )

96. Which upcall is generated by each client request?

a) init ( ) b) service( ) c)Destroy( ) d) run( )

97. Servlet is explicitly shut down by the web server by calling the _____method.

a) init ( ) b) service( ) c)Destroy( ) d) run( )

98. The servlet instance is created _____ in the servlet life cycle.

a)once b)Twice c)Thrice d) Multiple times

99. Name the method to maintain state (data) of an user.

a) Session Tracking b)File Tracking c)History d)Cookie management

100. What is a small piece of information that is persisted between the multiple client requests?

a) File b)Data c)Cookie d)Log

101. Which cookie is valid for single session only.

a) Persistent b)Non Persistent c)Single d)Multiple

ANSWER KEY

UNIT-I

1)Encapsulation

2)constructor

3)JVM

4)packages

5)super

6)Down casting

7)constructor

8) Interface

9)2

10)6

11)Lang

12)Lang

13) input output

14) Import

15) Extends

16) Execution time

17) At run time

18) Packages

19) Dynamic method dispatch

20) final keyword

21) Interface

UNIT-II

22) throw able

23) throwable getClause( )

24) finally

25) Runnable

26) Runnable

27) sleep()

28) Runnable

29) UDP

30) read line()

31) local port( )

32) FileWriter

33) graphics

34) canvas

35)2

36)2

37)fillArc()

38)get font()

39)2

40)Polygon

41) CODEBASE

42) write()

43) io

UNIT-III

44) frame

45) swing

46) image repository

47) get label()

48) card

49) add (Component compObj)

50) action

51) getselected iems()

52) getActionCommand( )

53) action

54) draw image()

55) Layout manager

56) FlowLayout

57) inset

58) frame

59) add(menuobj)

60) listener

61) mouseinput

62) event

63) Accesible

UNIT-IV

64) executeQuery()

65) system

66) Java API

67) JDBC drivers

68) java SQL

69) native API

70) ODBC function calls

71) client side()

72) for name()

73) get Connection()

74) jar

75) t

76) Introspection

77) Listener

78) Indexed

79) Create file

80) 0

81) Executable

82) Event

83) Simple

UNIT-V

84) light weighted

85) Java Foundation Classes

86) MVC

87) swing constants

88) Textual

89) J editor pane

90) Jtree

91) toggle button

92) getAccessibleContext()

93) servlet

94) service

95) get session()

96) service( )

97) destroy()

98)twice

99)Session Tracking

100)cookie

101) Non Persistent

Section-B

UNIT-1

1. Define interface. How to create an interface
2. What is difference between class and interface? Give the Example
3. Sketch the various forms of interface implementations

4. Define Package. List out types of package
5. Explain about abstract class and final keyword

6. Write about Dynamic method dispatch.
7. What is the significance of constructors in java?
8. Differentiate method overloading and method overriding.
9.What is the concept of multithreading?
10. Describe the essential of super keyword

UNIT-II

11.Write about isalive( ) and join( ).
12.Explain about Inetaddress class.
13.Explain the Color class constructor.
14.What is the difference between multithreading and multitasking?
15.What is the use of getDocumentBase()?
16.What is the use of getCodeBase()?
17.What is the use of repaint() method?
18.List out Input Stream Classes methods
19.List out Output Stream Classes methods
20How to resolve deadlocks in threads?

UNIT-III

21.What are the adapters available in event handling?
22 Explain the creation of thread using thread class.
23Explain the creation of thread class using Runnable interface.
24.Explain how priorities are assigned to the thread.
25.Explain the methods available in thread class.
26.Explain the life-cycle of the applet.
27.Write a small applet program to display the text message.
28.How parameters are passed to applet program?
29.List the methods defined in Font class.
30. Describe the listeners for events.

UNIT-IV

31.Write about JDBC driver.
32.Explain the registration of database to java.
33.What is the used Execute query( )?
34.What are the types of drivers available?Distiguish.
35.What are the advantages of java beans?

36.Explain how JAR file can be created.

37.What are the simple properties in bean?

38.Explain the Boolean property methods.

39Explain Indexed property methods.

40.Explain Design patterns for events

UNIT-V

41.Explain the life-cycle of a servlet.

42.What are the methods defined by servlet?

43.Explain the difference between get and post method.

44. What is the use of session tracking? Explain with example.

45.Explain the Http get request with example.

46.Explain the Http post request with example.

47.Write about JTextField and its methods

48.Write about Jbuttons.

49. Explain the JCheckbox and JRadioButton with example.

50. Write a brief note on the creation of JComboBox.

SECTION-C

UNIT-I

1. Discuss the features of java with supportive OOPS concept.

2. Explain the methods for acquiring user input in java.

3. Write a brief note on inheritance with example.

4. Explain the classification of packages.

5. Narrate the uses of Interface with example

6. Give the usage of final keyword.

7. Expalin in detail about abstract class.

8. How can method overriding be solved ?

UNIT-II

9.Write about the basics of networking and methods involved

10.Illustrate the methods and working of sockets with example program

11.Explain about multithreading and describe thread functionalities.

12.Discuss the usage of applet programming.

13. Define Exception handling? Explain the keywords used, with example.

14.Write about file input and output stream in detail with examples.

15.Sketch the Applet Life Cycle in detail

16.How to handle customized exception.

17.Explain about nested try and catch.

18.Discuss about drawing and color methods in applet.

UNIT-III

19.what are the types of MouseEvent?

20.Explain the types of Window Event.

21.Explain the Keyevent class with their methods.

22.Explain the ActionListener and ItemListener interface.

23.Write a note on MouseMotionListener and MouseWheelListener interface.

24.Write about AWT fundamentals.

25.Discuss working with graphics in java. Explain its methods.

26.Explain about Layout Manager.

27.Discuss the procedure to create aMDI form with menubar.

28.Illustrate the complete event model.

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UNIT-IV

29 .What is Introspection? List its properties

30. Explain the steps in integrating with JDBC.

31.What is the use of Manifest files?

32.Define introspection.

33.What is the use of beaninfo interface?

34.Explain how contents of JAR file is listed.

35.How updating an existing JAR file take place?

36.Explain how recursing directories is created.

37.What do you mean by Beanbox?

38.What is the use of propertyDescriptor calss inBDK?

39.Explain the steps in creating a simple bean with BDK

UNIT-V

40.How to handle Http get requests in servlet?

41. Discuss about any 5 swing controls in detail

42. Explain the Jmenus.

43.Expalin the process of creating tree withJtree

44.Discuss about Jtabbed pane andJlist

45.Discuss the four layouts available

46.Write a detailednote on the creation of JComboBox.

47.Explain the life-cycle of a servlet.

48.What are the methods defined by servlet?

49.Explain the difference between get and post method.

50. How to handle Http post request in servlets?

KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

COIMBATORE -29.

QUESTION BANK

SUBJECT CODE : 17PCS301

TITLE OF THE PAPER : OPEN SOURCE SYSTEMS

DEPARTMENT OF COMPUTER SCIENCE

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CONTENT

SECTION-A

UNIT-I

1. The main browser window displays the text that you entered between the _____tags.
a. <html> b. <body> c. <head> d. <title>

2. The heading Tag element use container tags ranging from _____.
a.<H1> to <H6> b. <H1> to <H4> c. <H1> to <H8> d. <H1> to <H2>

3. The distance between the content inside a cell and the element's border is defined with _____.

a) Cell Spacing b) Cell Padding c) Margin d) Border

4. The _____keyword is used in list for specifying the appearance of list entry.

a) Start b) type c) Index d) list item

5. The <img > expects_____attribute to include image map in a webpage.

a) map b) use map c) Area d)Shape.

6. The attribute which allows the HTML element to one side of the screen.

a) Align b) Float c) Center d) Justify

7. The _____element is used to create a scrolling effect for the selected text in an HTML page.
a. MARQUEE b. SCROLL c. EFFECT d. IMG

8. The _____ is used to specify the path and file name of the HTML page that you need to access by using a hyperlink.
a. href b. src c. img d. link

9. In _____ ,list can use one type of list within another type of list.
a. nested b. c. d. <dl>

10. _____ has elements to get the input from the user.
a) form b) head c) html d) style sheets.

11. If browser cannot render the image, it displays _____attributes value in image tags.

a) Src b) Mail to: c) URL d) Alt

12. _____ element determines how many columns the *Col* element formats.

a) Colgroup b) Span c) Align d) Merge

13.The _____ attribute combines multiple column into a single row.

a) Colspan b) rowspan c) valign d) align.

14. The horizontal space around the image is altered with _____attribute of <img> tag.

a) space b)span c) hspace d) vspace.

15.the text formatting is applied if it is in _____tag.

a) <P> b) <font> c) <format> d) <pre>

16.The block level element is indicated with_____tag.

a) <blockquote> b) pre c) d)

17.The overline on a text is achieved with _____ tag.

a) underline b) overline c) strike d) strong

18. The formatted text can be obtained using_____ tag.

a) <font> b) <pre> c) <tt> d)<edit>

19. The superscript text pattern can be obtained using_____.

a) sub b) sup c) emboss d) subs

20. The definition list entries can be included with _____ sub tag

a) dl b) dt c) dd d) dm

UNIT-II

21.One or more HTML documents that are displayed in the browser simultaneously by using _____.

a) Frames b) Forms c)Text Area d) Selection

22. The insertion of a document within a document is done in the <body> of the document using_____.

a) Frameset b)nested frames c) iframe d) forms.

23. The frameset can be set static by settting the _____ property to "NO".

a) scrolling b) border c) resize d)target

24. The _____ attribute sets the text displayed on the button.

a) Name b) Caption c) Value d) Reset

25. To include a multiline textbox in a form _____ tag is used.

a) Rich text box b) text box c) text area d) comment box.

26. Nonvisual components in HTML forms are called_____

a) Forms b) Methods c)Hidden Inputs d)Links

27._____element enables the HTML document designers to specify alternative content for browser that don't support frames.

a)no resize b)no frames c) target d)none of the above

28. The _____ property specifies the color of the text.

a) Color b) Text-color c) Background color d) Font-color

29. The distance between the content inside an element and the element's border is obtained by _____.

a) Spacing b) Padding c) Margin d) Border

30. Border styles are of _____ types.

a) 12 b) 11 c) 10 c) 9

31.The inline style can be included using _____attribute.

a) <style> b) <link> c) <rel> d) type

32. The background of a webpage can be fixed using _____ property.

a) Background attachment b) background-repeat c) background-fixed d) background-position

33. The external styles can be used in a page with _____ tag.

a) href b) link c) alink d) vlink

34. _____ enables a web page author to embed an entire CSS document in an HTML documents head section.

a) Inline Style Sheets b)Embedded Style Sheets c)External Style Sheets d)Internal Style Sheets

35. The relative measurement of text is done with _____ units.

a) em b) pxl c) points d)cm

36.The property and the value of the CSS are separated by the _____.

a) Colon b) Curly Brace c)Hyphen d)Semicolon

37. The relative css file in external css is referred with_____attribute.

a) href b) rel c) link d)style

38. The following is not a text-decoration value_____.

a) underline b) overline c)strike through d) capitalize

39.The layering of element overlapping each other is handled by changing the _____ value.

a) Layer b)Z-index c)Y-index d)transparency.

40. The background image can be horizontally tiled using _____ background attribute.

a) repeat b) x-repeat c) y-repeat d) no-repeat.

UNIT-III

41. Which window object is used to include an input box in a DOM structure?

a) alert( ) b) print( ) c) String ( ) d) **prompt( ).**

42. Which method returns the character containing at the specified position?

a) FromcharCodeAt b) charAt c) charCode d) indexOf

43. Which among this is a window object used to redirect the current document?

a) Navigator b) Location c) History d) Status

44. Window. History.____ method may cause to load the current document.

a) now b) go c)back d)front

45. The _____ tag indicates the browser that the text follows is a part of a script.

a) Language b)Script c)Type d)Text

46. The user is allowed to input the values through_____.

a)Prompt b) Alert c) Confirm d) msgbox

47. The _____ sets the day of the month in local time.

a) setDate() b) setTime() c)setMonth( ) d)setHours()

48.The acknowledgment from the user to proceed is received with _____.

a)Prompt b) Alert c) Confirm d) msgbox

49.The symbol _____ matches the end of the line.

a) ^ b) $ c)# d) &

50.The _____function will allow a window to be opened within another

a) Open ( ) b) Pop-up( ) c)init( ) d)fopen()

51.The _____property in pop up denotes the X-coordinates.

a) Top b) left c)front d)Up

52. The _____ returns a string containing the characters from index startup to but not including index end in the source string.

a) substr (start, length) b)Substring (start, end) c)slice(start,end) d) indexOf(substring,index)

53. The function that divides the array into its sub arrays is called as _____

a) slice() b) split() c) divide() d) implode()

54. The flag _____performs ignore case of the pattern and input string

a) r b) i c) w d) p

55. The first element of array is removed and swapped using _____ function.

a) swap( ) b) locate( ) c) Shift( ) d)split( )

56.A string can be passed into Regular expression as a parameter using_____.

a) validate( ) b) Regexp( ) c)Preg( ) d) Search( )

57. The variables are declared with _____ keyword.

a) $ b) global c) var d) #

58. The function used to assign date and time in javascript is_____

a) SetDate( ) b) SetTime( ) c) Alter( ) d)Sysdate( )

59. The given input can be checked whether it's a number with _____ function

a) isNan( ) b)isNum( ) c)Isdigit( ) d) isNotDigit( )

60.The metacharacter which checks whitespace match is ____.

a) \d b) \s c) \D d) \S

UNIT-IV

61.The _____ property of the *all* collection specifies the number of elements in the collection.

a) Length b) tagname c) all d) collection

62. A button on a Web page that allows interactivity between the user and the Web is _____.

a) Rollover b)MOuseon c)Applet d)Swing

63. The _____ properties of the event object give the location of the mouse cursor relative to the top-left corner of the object on which the event was triggered

a) offset -X b) offset-Y c) Both a & b d) location.

64. After loading all the elements, the document calls the _____ event.

a) Start b) Call c) Load d) Unload

65. The simplest way to reference an element is by using the elements _____ attribute.

a) Name b) Id c) Index d) Type

66.The rollover effect is obtained with _____event on.

a) Mouseover b) Mouseon c) Mousedrag d) Mouseoff

67. Which effect makes a hidden image or element to appear when the mouse is moved over it

a) Rollover b)MOuseout c)Applet d)Swing

68. The Rollover is achieved when the _____ event succeeds the mouse over.

a) Mouseout b)Hover on c) HOverout d) MOuseoff

69. The fade-in and out effect heps to achieve a _____.

a) Flying logo b) Fading logo c) hidden logo d) static logo

70. The confirmation from a user is received with a _____ function.

a) prompt( ) b)log ( ) c) confirm ( ) d) input ( )

71. The message can be conveyed in the status bar as per event using _____.

a) self.title( ) b) self.status () c) self.msg( ) d) self.display( )

72. The input box with default value can be assigned with _____.

a) prompt( ) b)log ( ) c) confirm ( ) d) input ( )

UNIT-V

73. A popular web interface that is included with every type of webhosting.

a)PHPAdmin b) MyAdmin c) PHPMyAdmin d) LDAP

74.Which function is used to remove a file?

a) delete( ) b) unlink( ) c) remove( ) d) drop( )

75.The function is used to validate expression in POSIX format.

a) ereg( ) b) preg_match() c) Strpos() d) validate( )

76.Which function is used to retrieve records from a table?

a) fetch_array b) select c)retrieve d) Random

77.On failure of a query_____ is triggered.

a) Error report b) Die() c)Notice d) Exception.

78.A common usage of LDAP is to provide a _____ where one password for a user is shared.

a) single sign-on b) Signature c) encryption d) deviation.

79.A_____ is a set of integers that are generated in order on deman

a) Autoincrement b) Sequence c) Hierarchy d) Candidate

80. Which is a subset of user validation where user embeds cross script

a) XSS b) CSS c) ESC d)Session.

81.Which function is used to sort array values in ascending order with reference to its key?

a) sort( ) b) asort() c) rsort( ) d) ksort( ).

82.The string function _____ is used to divide a string into subarrays.

a) slice( ) b) split( ) c) explode( ) d) substr( ).

83.What elegant qualityin MYSQL database replaces Oracle and Sybase?

a) Heavy Weighted b) Editable c) Light weighted d) Flexible

84.The datatype of given value can be known with _____fuction.

a) var_dump( ) b) var_input() c) var_int() d) var_filter( )

85.Which function can be used to validate the input value with described pattern?

a) ereg( ) b) preg_match() c) Strpos() d) validate( )

86.Which among the given statement is used to carry user input to server page in secured way?

a) $_GET b) $_POST c) $_SEND d) $_RECEIVE.

87.The cross script code injection can be avoided in PHP during redirection by using_____.

a) isset( ) b) htmlspecialchars( ) c) filter_sanitize d) filter_clear.

ANSWER KEY:

UNIT-I

1. <body>

2. <H1> to <H6>

3. Cell Padding

4.type

5.use map

6. Float

7. MARQUEE

8.href

9. nested

10.form

11. Alt

12. Colgroup

13. rowspan

14. hspace

15. <P>

16. <blockquote>

17. strike

18. <pre>

19. sup

20. dd

UNIT-II

21. Frames

22. iframe

23. scrolling
24. Value
25. text area
26. Hidden Inputs
27. no frames
28. Color
29. Padding
30. 10
31. <style>
32. Background attachment
33. link
34. Embedded Style Sheets
35. em
36. Colon
37. href
38. capitalize
39. Z-index
40. x-repeat

UNIT-III

41. prompt( )
42. charAt
43. Location
44. go
45. Type
46. Prompt
47. setTime()
48. Confirm
49.$
50. Pop-up( )
51. left

52. Substring (start, end)

53. slice()

54. i

55. Shift( )

56. Regexp( )

57. var

58. SetTime( )

59. isNan( )

60. \s

UNIT-IV

61. collection

62. Rollover

63. offset -X

64. Call

65. Id

66. Mouseover

67. Rollover

68. Mouseout

69. Flying logo

70. confirm ( )

71. self.status ()

72. prompt( )

UNIT-V

73. PHPMyAdmin

74. unlink( )

75. ereg( )

76. fetch_array

77. Die()

78. single sign-on

79. Sequence

80. XSS

81. asort()

82. slice( )

83. Light weighted

84. var_dump( )

85. preg_match()

86. $_POST

87. htmlspecialchars( )

SECTION-B (5 MARKS)

UNIT-I

1. Write about formatting tags in html.

2. Describe the functionalities of unordered list with examples .

3. Illustrate the usage of marquee, heading ,<a>.

4. How can the elements referred in HTML document?

5.Describe the various usage of <p> tag .

6.Write a note on <hr> tag.

7. Discus about the order list

8.Write a note <Marquee> tag and its attributes

9. Describe the process of inserting images in a webpage.

10.How to link a mail service in a web page?

UNIT-II

11. How can a combo box be included in a webpage?

12. What is the use of positioning?

13. Give the difference between absolute and relative positioning.

14. What is the best use of tag?

15. Where can a tag be used?

16. What are types of border settings available?

17. Write a note on user style sheets

18. What are Inline styles and where is it used.

19. List the attributes of frameset and frames.

20. Write about <iframes>.

UNIT-III

21.Describe about Document object model methods and its elements.

22. Write about i) collection I i) all

23. Describe the attributes of Pop up Windows

24.Illustrate the use of Location( ) and navigator object

25. What is the need of History window objects?

26. Discuss about functions and control statements in JavaScript.

27. Write a program to change the foreground, background color and font @ runtime.

2 8. Give the meta characters used in validation.

29.How to print a statement in status bar?

30. How is error handled in java script?

UNIT-IV

31.Differentiate between the properties that can make a menu system text based.

32.How can we fetch multiple pages in a single download?

33.Narrate a program to print result across frames.

34.How can text be displayed in status bar in dhtml?

35.Give the various message display and confirmation function in dhtml.

36.How to open a new window in dhtml?Illustrate with example.

37.Explain the process of moving images in DHTML.

38.How is object referencing done in dhtml?

39.Give the advantages of Javascript in using text menu.

UNIT-V

40.List the steps and function for registration form validation in PHP.

41.Describe the steps in connecting PHP with Mysql.

42. How to fetch the complete array of records in Mysql?

43. Write a program to retrieve sorted query results.

44.Write a program to sanitize an e-mail forwarded.

45.Discuss about variable ,data type and operators in PHP.

46.Describe the use and difference between include( ) and require( ).

47. Write about the usage of sequence or auto increment in MySQL.

48. Describe about the program control of PHP.

49. Discuss about the types of arrays handled in PHP.

SECTION-C (8 MARKS)

UNIT-I

1. .How to include multimedia files in a html document?

2.Illustrate the usage of imagemap and how to create multiple hotspot?

3. List the types of document to which a hyperlink can be created.

4. Elucidate all the attributes that could be used in a <table>, construct a nested table.

5. Discuss the insertion of definition list in a webpage

6. Create a nested list with various bullet and numberings available.

7. Create a list with customized images as bullet.

8. Describe the attributes of image that avoids overlapping of text.

9. Discuss the heading tag with its attributes.

10. Create a webpage with text based tags.

UNIT-II

11. List the various texts based styles in css.

12. Write a program to create a webpage with external style sheet.

13. Describe all form controls in html.

14. Construct a program to depict the usage of nested frames.

15. Write the various background styles available.

16. Give the types of style sheets available and its significance.

17. Write about Embedded style sheets

18. Write about the various buttons available in html forms with example.

19. How to format block level element with styles?

20. Discuss the various selectors and its differences.

UNIT-III

21. Explain the DOM objects in javascript.

22. List few Math functions in JavaScript.

23.Write about date and time functions in javascript

24. Write about array processing in JavaScript with example program.

25. Explain string manipulation in Javascript with examples.

26.Give the usage of available window objects.

27.List all the browser objects used in javascript.

28. Write a about the message and input boxes.

29.Explain the data validation functions to verify a given pattern.

30.Write about various events in javascript.

UNIT-IV

31.Illustrate the steps and dhtml code for a rollover button.

32.Narrate the steps in creating a flying logo with its code.

33.Write in detail the steps involved in data validation.

34.What is the process and advantage of writing between multiple frames?

35.Explain the attainment of dyanamic page using DHTML.

36.What is the usage of innertext(),innerhtml() and OuterHTML().

37.Why is it important to use div tag rather than later tag to create movable layer of content?

38.Create a code to move multiple images at same time.

39.What are the advantages of Javascript than java in site menu?

UNIT-V

40. Describe about array functions in PHP with examples

41. Elucidate the string manipulation functions in PHP with examples.

42. Explain the various math functions in PHP.

43. How to send a secure e-mail in PHP? Narrate with an example program.

44. Write in detail about file manipulations with examples in PHP.

45. Explain about available filters for validation and distilled input.

46. Illustrate a program to update a student data in database from a webpage with PHP, Mysql.

47. Differentiate between the regular expressions functions in PHP and JavaScript.

48. Describe the various sort available for an array in PHP.

49. Give a detail description about regular expression and functions supporting it .

KONGUNADU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)

COIMBATORE - 29

QUESTION BANK

I M.Sc Computer Science

Prepared by

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Programme Code: 09	**MSc. Computer Science**
Course Code: 18PCS104	**Core Paper 4 - Relational Database Management Systems**

SECTION – A [1 Mark]

Unit – I

1. A Collection of Data typically describing the activities of one or more related organizations is

a) Database b) DBMS c) RDBMS d) ERP

2. A software designed to assist in maintaining and utilizing large collection of Data is known as

a) ERP b) DBMS C) RDBMS d) Database

3. A Collection of higher level Data description constructs that hide many low level storage details is

a) Relational Model b) Integrity Constraints c) Data Model d) Schema

4. A description of Data interms of Data Model is called

a) Relation b) Attribute c) Instance d) Schema

5. A set of rules to be followed by each transactions to ensure that even though actions of several transactions might be interleaved the net effect is identical to execute them in serial order

a) S2PL b) Check Points c) Locking Protocols d) Ahead Log

6. An object in the real world that is distinguishable from other objects is

a) Attribute b) Entity C) Relationship d) Domain

7. An Entity is described using a set of

a) Attributes b) Entity C) Relationship d) Records

8. An association among two or more entities is known as

a) Relationship b) Entity C) Attributes d) Records

9. Attributes used to record information about relationship rather than about any one of the participatory entities

a) NULL b) Descriptive c) Derived d) Complex

10. An Entity without a primary key is known as

a) Strong b) Partial c) Weak d) Total

11. A constraint which determines whether two subclasses are allowed to contain the same entity is

a) Covering b) Integrity c) Assertion d) Overlap

12. A constraint which determines whether the entities in the subclasses collectively include all entities in the super class is

a) Overlap b) Assertion c) Covering d) Integrity

13. A feature that allows us to indicate that a relationship set participate in another relationship set is

a) Class Hierarchy b) Aggregation c) Binary Relationship d) Ternary Relationship

14. The number of fields in a relation is called as

a) Degree b) Cardinality c) Instance d) Schema

15. The number of tuples in a relation is called as

a) Cardinality b) Degree c) Instance d) Schema

16. A condition specified on a Database Schema and restricts the data that can be stored in a Database is

a) Key Constraint b) Integrity Constraint

c) Participation Constraint d) Referential Integrity

17. A statement that a certain minimal subset of the fields of a relation is a unique Identifier for a tuple is

a) Primary Constraint b) Participation Constraint c) Key Constraint d) Integrity Constraint

18. A table whose rows are not explicitly stored in a Database is

a) Record b) Relations c) Schema d) View

19. A command used to delete all rows and to delete table definition is

a) Delete b) Delete all c) Drop Table d) All the above

20. Command used to delete all the records in the table is

a) Alter b) Delete c) Drop Table d) Restrict

21. Command that modifies the structure of an Existing table is

a) Alter table b) Modify table c) Create table d) Change table

Unit – II

22. The abbreviation for DML is

a) Data Manipulation Language b) Data Markup Language

c) Data Model Language d) Data Modify Language

23. DDL Stands for

a) Data Description Language b) Data Definition Language

c) Database Description Language d) Database Definition Language

24. SQL Stands for

a) Standard Query Language b) Server Query Language

c) Structured Query Language b) Secured Query Language

25. The clause which specifies Columns to be retained in the result is

a) From b) Where c) Having d) Select

26. A clause which specifies a cross product of tables is

a) Select b) Where c) From d) Groupby

27. A clause which specifies selection conditions on the mentioned tables is

a) Select b) Where c) From d) Groupby

28. Which of the following is an Optional clause

a) Where b) Select c) From d) All the above

29. A set operation used to check if an element is in a given set is

a) IN b) ANY c) ALL d) NOT

30. A set operation used to compare a value with the element in a given set is

a) IN b) OP ALL c) ANY d) EXIST

31. A set operation used to check if a set is empty is

a) Union b) Except c) Exist d) ANY

32. A Query that has another Query embedded within it is

a) Sub Query b) Multiple Query c) Set Query d) Nested Query

33. The expression NOT unknown is defined to be

a) True b) False c) Unknown d) All the above

34. Any constraint that are not associated with any one table is called

a) Domain constraint b) Assertion c) Integrity constraint d) Triggers

35. A procedure that is automatically invoked by DBMS in response to specified changes to the database is

a) Trigger b) Assertion c) Constraints d) Action

36. A change to the database that activates the trigger is

a) Event b) Condition c) Action d) Assertion

37. A query or test that is in run when the trigger is activated is

a) Event b) Condition c) Action d) Assertion

38. A procedure that is executed when the trigger is activated and the condition is true is

a) Event b) Condition c) Action d) Assertion

39. A database that has a set of associated triggers is called

a) Triggered Database b) Conditional Database

c) Relational Database d) Active Database

40. Features that allow SQL code to be called from a host language such as C or COBOL is

a) Dynamic SQL b) MySQL c) Embedded SQL d) Static SQL

41. Features that allow a query to be constructed at run time is

a) MySQL b) Dynamic SQL c) Embedded SQL d) Static SQL

Unit – III

42. The property that every transaction sees a consistent database instance is

a) Database consistency b) Durability c) Atomicity d) Isolation

43. The DBMS component that ensures atomicity and durability is called

a) Transaction Manager b) Recovery Manager c) Lock Manager d)Buffer Manager

44. A transaction is seen by the DBMS as am series or a list of

a) Schedules b) Methods c) Actions d) Functions

45. A list of actions from a set of transactions and the order in which the actions of a transaction appears is called

a) Serializability b) Action c) Locking d) Schedule

46. A schedule that contains either an abort or a commit for each transaction whose actions are listed is called

a) Serial schedule b) Recoverable schedule c) Complete schedule d) Parallel schedule

47. if the actions of different transactions are not interleaved, that is executed from the start to finish, we call the schedule as

a) Recoverable schedule b) Serial schedule c) Complete schedule d) Parallel schedule

48. The average number of transactions completed in a given time is known as

a) System throughput b) Response time c) Thrashing d) Granularity

49. The average time taken to complete a transaction is called

a) Response time b) System throughput c) Thrashing d) Granularity

50. A small book keeping object associated with each database object is called

a) Save point b) Lock c) Hot spot d) Convoys

51. Database object that is frequently accessed and modified and cause a lot of blocking delays is called

a) Save point b) Lock c) Hot spot d) Latches

52. The feature that allows us to identify a point in a transaction and selectively roll back operations carried out after the point is

a) Convoy b) Lock c) Hot spot d) Save point

53. A transaction characteristics that determines the number of error conditions that can be recorded is

a) Access mode b) Isolation level c) Diagnostic size d) Thrashing

54. A transaction characteristics that controls the extent to which a given is exposed to the actions of other transactions executing concurrently is

a) Access mode b) Isolation level c) Diagnostic size d) Thrashing

55. Apart of the DBMS that keeps track of the locks issued to the transaction is called

a) Lock manager b) Transaction manager c) Buffer manager d) Recovery manager

56. In addition to locks DBMS also supports short duration locks called

a) Latches b) Convoys c) Deadlocks d) Phantoms

57. A transaction retrieves a collection of objects twice and sees different results, even though it does not modify is called

a) Cascading b) Phantom c) Granularity d) Thrashing

58. Serializability graph is also called as

a) Authorized graph b) Locking graph c) View equivalent graph d) Precedence graph

59. To detect deadlock cycles, Lock manager maintains a structure called

a) Downgrading b) Timestamp c) Wait-for-graph d) Lock upgrade

60. In a scheme where lower priority transactions can never wait for higher priority transactions is

a) Wound-die b) Wait-die c) Conservative d) Wound-Wait

61. Ina scheme where higher priority transactions can never wait for lower priority transactions is

a) Wound-Wait b) Wait-die c) Conservative d) Wound-die

Unit – IV

62. The process of splitting a relation in to two or more relations is known as

a) Decomposition b) Access control c) Integrity d) Polyinstantiation

63. The property that enables us to recover any instance of the decomposed relation from corresponding instances of the smaller relations is

a) Outer Join b) Lossless Join c) Inner Join d) Dependency

64. The property that enables us to enforce any constraint on the original relation by simply enforcing some constraints on each of the smaller relations is

a) Outer Join b) Lossless Join c) Dependency preserving d) Inner Join

65. A kind of integrity constraints that generalizes the concept of key is

a) Transitive Dependency b) Join Dependency

c) Multi valued Dependency d) Functional Dependency

66. In a relation if every field contains only atomic values, that is no lists or sets, then it is said to be in

a) Second NF b) BCNF c) First NF d) Third NF

67. A way to control the data accessible by a given user is

a) Privileges b) Access Control c) Clearances d) Availability

68. In Database security, the information should not be disclosed to unauthorized users is referred to

a) Secrecy b) Integrity c) Consistency d) Availability

69. In Database security, only authorized users should be allowed to modify data is referred to as

a) Integrity b) Secrecy c) Consistency d) Availability

70. In Database security, authorized users should not denied access is referred to as

a) Availability b) Secrecy c) Consistency d) Integrity

71. An approach based on the concepts of access rights privileges and mechanisms for giving users such privileges is

a) Authentication b) Authorization

c) Discretionary Access Control d) Mandatory Access Control

72. An approach based on System wide policies that cannot be changed by individual users is

a) Authentication b) Authorization

c) Discretionary Access Control d) Mandatory Access Control

73. The effect of series of GRANT commands can be described in terms of

a) Revocation b) Privilege description c) Authorization Graph d) Access Control

74. In Bell-LaPadulla Model the tables, views, rows or columns are referred to

a) Subjects b) Objects c) Security Classes d) Clearances

75. In Bell-LaPadulla Model the users or Programs are referred to as

a) Subjects b) Objects c) Security Classes d) Clearances

76. A table with a property that users with difference clearances see a different collection of rows when they access the same table is

a) Multilevel table b) Revocation c) Poly Instantiation d) Authorization Graph

77. The presence of data objects that appear to have different values to users with different clearances is called

a) Multilevel table b) Poly Instantiation c) Revocation d) Authorization Graph

78. DES Stands for

a) Data Enabled Service b) Data Encryption Service

c) Data Encryption Standard d) Data Enabled Standard

79. If X-> Y and Y -> Z then X -> Z is

a) Reflexivity b) Augmentation c) Decomposition d) Transitivity

80. If X -> Y then XZ -> YZ for any Z is

a) Reflexivity b) Decomposition c) Augmentation d) Transitivity

81. If X -> YZ then X -> Y and X -> Z is

a) Reflexivity b) Decomposition c) Augmentation d) Transitivity

Unit – V

82. ODMG Stands for

a) Object Database Management Group b) Object Data Management Group

c) Object Database Markup Group d) Object Data Markup Group

83. The abbreviation for BLOB is

a) Binary Linear Object Based b) Binary Large Object

c) Binary Language Object d) Binary List Of Objects

84. Types defined using type constructors are called

a) Reference Types b) Collection Types c) Structured Types d) User-defined Types

85. Collection Types are also called as

a) Type Constructors b) Structured Types c) Reference Types d) Bulk Data Types

86. A type representing a sequence of base type items is called as

a) setof (base) b) bagof (base) c) listof (base) d) multisetof (base)

87. The list operation which returns the first element is

a) Tail b) Head c) Prepend d) Append

88. The list operation which returns the list obtained by removing the first element is

a) Tail b) Head c) Prepend d) Append

89. The combination of atomic data types and its associated methods is called

a) Abstract Datatypes b) Encapsulation c) Structured Types d) constructors

90. Hiding Abstract Data Type internals is called

a) Abstract Datatypes b) Encapsulation c) Structured Types d) constructors

91. The UNDER Clause can be used to generate an arbitrary tree of tables called

a) Encapsulation b) Polymorphism c) Class Hierarchy d) Data Binding

92. Functions that can be applied to objects of the class is called

a) Interface b) Extent c) Relationship d) Method

93. A Study about collection of text documents is

a) Data Mining b) DBMS c) Information Retrieval d) RDMS

94. The value for a term in a document vector or the number of occurrences of a term in the given document is

a) IDF b) Term Frequency c) Vector Space d) Length Normalization

95. The representation of documents as term vectors is called

a) Vector Space Model b) Inverted Vectors c) Lexicons d) Term Frequency

96. The percentage of retrieved documents that are relevant to the query is called

a) Precision b) Recall c) Lexicon d) Signatures

97. The percentage of relevant documents in the database that are retrieved in response to a query

a) Precision b) Recall c) Lexicon d) Signatures

98. The process of reducing related terms to a canonical form is known as

a) Indexing b) Posting c) Stemming d) All the above

99. A Data structure that enables fast retrieval of all documents that contains a query term is known as

a) Signature Files b) Lexicons c) Posting Files d) Inverted Index

100. The collection of Inverted lists is called as

a) Signature Files b) Lexicons c) Posting Files d) Inverted Index

101. An Index Structure for text database system that supports efficient evaluation of Boolean Queries is

a) Web Search Index b) Signature Files c) Inverted Index ` d) Posting Files

102. A Webpage which is very relevant to a certain topic and that is recognized by other pages as authoritative on the subject is called

a) Authority Page b) Hub Page c) Link Page d) Sampling

Answers:

1) a	2) b	3) c	4) d	5) c	6) b	7) a
8) a	9) b	10) c	11) d	12) c	13) b	14) a
15) a	16) b	17) c	18) d	19) c	20) b	21) a
22) a	23) b	24) c	25) d	26) c	27) b	28) a
29) a	30) b	31) c	32) d	33) c	34) b	35) a
36) a	37) b	38) c	39) d	40) c	41) b	42) a
43) b	44) c	45) d	46) c	47) b	48) a	49) a
50) b	51) c	52) d	53) c	54) b	55) a	56) a
57) b	58) d	59) c	60) b	61) a	62) a	63) b
64) c	65) d	66) c	67) b	68) a	69) a	70) b
71) c	72) d	73) c	74) b	75) a	76) a	77) b
78) c	79) d	80) c	81) b	82) a	83) b	84) c
85) d	86) c	87) b	88) a	89) a	90) b	91) c
92) d	93) c	94) b	95) a	96) a	97) b	98) c
99) d	100) c	101) b	102) a			

SECTION – B [5 Marks]

Unit – I

1. What are the advantages of DBMS?
2. Compare File system and DBMS
3. Write a note on levels of Data Abstraction
4. What is Data Independence? Explain
5. Define: Entity, Attribute, Relationship
6. What is a Weak Entity? Explain it with an Example
7. Explain how to destroy and alter tables/views.
8. Write a note on Class Hierarchy
9. What is a Data Model? Explain Relational Data Model.
10. Define the following kinds of Constraints and give an example of each
    a) Key Constraints b) Participation Constraint
11. Compare aggregation with ternary relationship

Unit –II

12. What are the parts of a basic SQL Query?
13. What are nested Queries? Why are they useful?
14. What is grouping? Explain with an Example.
15. Differentiate triggers and Integrity Constraints.
16. With suitable examples explain Set-Comparison Operators
17. What is Correlation in nested queries?
18. What type of SQL Constraints can be specified using the query language?
19. Explain GROUP BY and HAVING clauses with examples.

Unit – III

20. What are the ACID Properties?
21. Define the terms transactions, Schedule, Complete Schedule and Serial Schedule.
22. Discuss various access modes and Isolation levels in SQL
23. Define Locking protocols. Describe Strict Two-Phase Locking.
24. Write a note on Transactions and Schedule.

25. What is Serializable Schedule

26. Why does DBMS Interleave Concurrent execution

27. Write a note on Performance of Locking

28. Describe how a typical lock manager is implemented. Why must look and unlock be atomic operations

29. Compare Deadlock detection and Deadlock prevention Schemes.

Unit – IV

30. Write about various problems caused by Redundancy

31. What is decomposition? What problems may be caused by the use of decomposition

32. What is Functional dependency? Explain

33. Write about closure of a set of Functional dependency

34. Write a note on Lossless-Join Decomposition

35. Describe Dependency-Processing Decomposition

36. Define 1NF,2NF,3Nf and BCNF

37. Explain Multi valued dependencies with example

38. What are the main objectives in designing a secure database applications

39. What is an authorization graph? Explain SQL's GRANT and REVOKE commands in terms of their effect on this graph

40. Write about Multilevel relations.

Unit – V

41. What are Structured data types?

42. Define Inheritance. Explain how new types extend existing types.

43. Write a note on Object Identity

44. Compare ORDBMS and OODBMS

45. Explain ODMG Data model and ODL

46. Write about OQL

47. Compare DBMS and IR Systems

48. What is Vector Space Model, and What are its advantages

49. What support is there for managing text in a DBMS

50. What is Signature file? Explain

SECTION – C [8 Marks]

Unit – I

1. Discuss in detail about describing and storing data in DBMS.
2. Describe about the conceptual design with the ER Model.
3. Explain how to convert an ER diagram into tables.
4. What is a View? Explain updates on views with examples.
5. Write a note on the following:
   a) Class Hierarchy
   b) Aggregation
6. Discuss Key Constraints and Participation Constraints in ER Model.
7. Write a detailed note on Relationships and Relationship Sets.
8. Explain how to translate Entity Sets and Relationship Sets into Tables.
9. Explain how to Convert Weak Entity sets and Class Hierarchies into Tables.
10. With a suitable example Explain about translating ER diagrams with aggregation.

Unit – II

11. Illustrate Set Operations in SQL.

12. What is nested query? Explain how Set Comparison Operators can be used.

13. List out and explain various aggregate operators in SQL.

14. Explain the use of GROUPBY and HAVING Classes with examples.

15. Discuss in detail about NULL values.

16. Explain Complex Integrity Constraints in SQL.

17. What is a Trigger? Explain with an example.

18. What operation does SQL provide over (Multi) Set of tuples and how would you use these in writing queries?

19. What are range variables in SQL? What support does SQL offer for String Pattern Matching?

20. Writing Queries in SQL considering the given Schemes.

Unit – III

21. Define the terms Atomicity, Consistency, Isolation and Durability and illustrate them through examples.

22. Discuss the Anomalies due to Interleaved executions.

23. Discuss the Lock Based Concurrency Control.

24. Explain the transaction Characteristics in SQL.

25. Discuss 2PL, Serializability and Recoverability.

26. Explain in detail about Lock Management.

27. Describe how to deal with Deadlocks.

28. Write a detailed note on Concurrent execution of Transactions.

29. How are transactions created and terminated in SQL? What is Phantom problem?

Unit – IV

30. Explain Second Normal Form with example.

31. With a suitable example explain 3NF.

32. Discuss Boyce-Codd Normal Form.

33. Write about the properties of Decompositions.

34. Explain Fourth Normal Form with an example.

35. What is Join Dependency? Explain Fifth Normal Form.

36. Compare 3NF and BCNF.

37. Give examples of insert, delete and update anomalies. Can null values help address these anomalies.

38. What are the two main approaches to access control? Explain Discretionary Access Control.

39. Discuss Mandatory Access Control.

Unit – V

40. Define Inheritance. Explain with example.

41. Illustrate the difference between RDBMS and ORDBMS database design through examples.

42. Discuss the ORDBMS implementation challenges.

43. Explain OODBMS in detail.

44. Compare RDBMS, ORDBMS and OODBMS.

45. Explain in detail about Web Search Engines.

46. What is an Inverted Index? Explain with a neat diagram.

47. Explain how Signature files can be used for indexing text documents.

48. What is Information Retrieval? Explain.

49. What are Structured Data types? What kind of operations should be provided for each of the structured Data Types.

50. How can we measure document similarities? Explain.

KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS)

COIMBATORE-641029

QUESTION BANK

SUBJECT CODE: (18PCS208)

TITLE OF THE PAPER: SOFTWARE PROJECT MANAGEMENT

DEPARTMENT OF COMPUTER SCIENCE (PG)

2019

Prepared by

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DEPARTMENT OF COMPUTER SCIENCE (PG)

QUESTION BANK

SOFTWARE PROJECT MANAGEMENT (18PCS208)

CONTENTS

Section A

UNIT I

1. Which of the following is not considered as a risk in project management?
a) Specification delays b) Product competition
c) Testing d) Staff turnover

2. The process each manager follows during the life of a project is known as
a) Project Management b) Manager life cycle
c) Project Management Life Cycle d) All of the mentioned

3. A 66.6% risk is considered as
a) very low b) low c) moderate d) high

4. Quality planning is the process of developing a quality plan for
a) team b) project c) customers d) project manager

5. RAD stands for
a) Relative Application Development b) Rapid Application Development
c) Rapid Application Document d) None of the mentioned

6. Which one of the following models is not suitable for accommodating any change?
a) Build & Fix Model b) Prototyping Model
c) RAD Model d) Waterfall Model

7. Which is not one of the types of prototype of Prototyping Model?
a) Horizontal Prototype b) Vertical Prototype
c) Diagonal Prototype d) Domain Prototype

8. Which one of the following is not a phase of Prototyping Model?
a) Quick Design b) Coding
c) Prototype Refinement d) Engineer Product

9. Which determines who can have access to which parts of the system?
a) Necessity b) security c) Consistency d) Isolation
10. Who records the proceeding of the meeting?
a) Chair person b) moderator c) scribe d) developer
11. The Periodic revisions and up gradations are usually called as
a) Version b) Patches c) project d) product
12. Which denotes the length and Complexity of the Project?
a) Sectors b) Iteration c) Radius d) diameter
13. A reasonable limit is a
a) UCL and LCL b) LCL and mean c) UCL and mean d) medium

14. In SMART criteria R refers to
a) Result b) Result-Oriented c) Reference d) Reference Oriented
15. Defect prevention is done by
a) Quality Control b) Quality Assurance c) SQA d) Audit
16. Risk management comprises of how many phases?
a) 2 b) 3 c) 4 d) 5
17. In PDCA cycle the corrective actions are taken in
a) Plan b) Do c) Check d) Act.
18. RAD Model has
a) 2 phases b) 3 phase c) 5 phases d) 6 phases

19. SDLC stands for
a) Software Development Life Cycle b) System Development Life cycle
c) Software Design Life Cycle d) System Design Life Cycle

20. The spiral model was originally proposed by
a) IBM b) Barry Boehm c) Pressman d) Royce

UNIT II

21. Identify the disadvantage of Spiral Model.
a) Doesn't work well for smaller projects
b) High amount of risk analysis
c) Strong approval and documentation control
d) Additional Functionality can be added at a later date

22. How is Incremental Model different from Spiral Model?
a) Progress can be measured for Incremental Model
b) Changing requirements can be accommodated in Incremental Model
c) Users can see the system early in Incremental Model
d) All of the mentioned

23. Which of the following categories is part of the output of software process?
a) computer programs
b) documents that describe the computer programs
c) data
d) all the above

24. Which is a software configuration management concept that helps us to control change without seriously impeding justifiable change?
a) Baselines b) Source code
c) Data model d) None of the mentioned

25. Software Configuration Management can be administered in several ways. These include
a) A single software configuration management team for the whole organization
b) A separate configuration management team for each project
c) Software Configuration Management distributed among the project members
d) All of the mentioned

26. What combines procedures and tools to manage different versions of configuration objects that are created during the software process?
a) Change control b) Version control
c) SCIs d) None of the mentioned

27. What complements the formal technical review by assessing a configuration object for characteristics that are generally not considered during review?
a) Software configuration audit b) Software configuration management
c) Baseline d) None of the mentioned

28. Which of the following is the process of assembling program components, data, and libraries, and then compiling and linking these to create an executable system?
a) System building b) Release management
c) Change management d) Version management

29. Which of the following is not a Version management feature?
a) Version and release identification b) Build script generation
c) Project support d) Change history recording

30. Which method recommends that very frequent system builds should be carried out with automated testing to discover software problems?
a) Agile method b) Parallel compilation method
c) Large systems method d) All of the mentioned

31. Which of the following is not a build system feature?
a) Minimal recompilation b) Documentation generation
c) Storage management d) Reporting

32. Which of the following is a collection of component versions that make up a system?
a) Version b) Codeline
c) Baseline d) None of the mentioned

33. Which of the following is a configuration item?
a) Design & Test specification b) Source code
c) Log information d) All of the mentioned

34. Which of the following is a part of system release?
a) electronic and paper documentation describing the system
b) packaging and associated publicity that have been designed for that release
c) an installation program that is used to help install the system on target hardware
d) all of the mentioned

35. Which of the following is not included in failure costs?
a) rework
b) repair
c) failure mode analysis
d) none of the mentioned

36. Which requirements are the foundation from which quality is measured?
a) Hardware
b) Software
c) Programmers
d) None of the mentioned

37. Which of the following is not a SQA plan for a project?
a) evaluations to be performed
b) amount of technical work
c) audits and reviews to be performed
d) documents to be produced by the SQA group

38. Degree to which design specifications are followed in manufacturing the product is called
a) Quality Control
b) Quality of conformance
c) Quality Assurance
d) None of the mentioned

39. Which of the following is not included in External failure costs?
a) testing
b) help line support
c) warranty work
d) complaint resolution

40. Which of the following is not an appraisal cost in SQA?
a) inter-process inspection
b) maintenance
c) quality planning
d) testing

UNIT III

41. Who identifies, documents, and verifies that corrections have been made to the software?
a) Project manager
b) Project team
c) SQA group
d) All of the mentioned

42. The primary objective of formal technical reviews is to find _____ during the process so that they do not become defects after release of the software.
a) errors
b) equivalent faults
c) failure cause
d) none of the mentioned

43. What is not included in prevention costs?

a) quality planning
b) formal technical reviews
c) test equipment
d) equipment calibration and maintenance

44. Which of the following is not a diagram studied in Requirement Analysis ?
a) Use Cases
b) Entity Relationship Diagram
c) State Transition Diagram
d) Activity Diagram

45. How many feasibility studies is conducted in Requirement Analysis ?
a) Two
b) Three
c) Four
d) None of the mentioned

46. How many phases are there in Requirement Analysis ?
a) Three
b) Four
c) Five
d) Six

47. Which two requirements are given priority during Requirement Management of a product ?
a) User and Developer
b) Functional and Non-functional
c) Enduring and Volatile
d) All of the mentioned

48. Which of the following are parameters involved in computing the total cost of a software development project?
a) Hardware and software costs
b) Effort costs
c) Travel and training costs
d) All of the mentioned

49. Which of the following costs is not part of the total effort cost?
a) Costs of networking and communications
b) Costs of providing heating and lighting office space
c) Costs of lunch time food
d) Costs of support staff

50. What is related to the overall functionality of the delivered software?
a) Function-related metrics
b) Product-related metrics
c) Size-related metrics
d) None of the mentioned

51. A _____ is developed using historical cost information that relates some software metric to the project cost.
a) Algorithmic cost modeling
b) Expert judgement
c) Estimation by analogy
d) Parkinson's Law

52. Which one is not a size measure for software product?
a) LOC
b) Halstead's program length
c) Function Count
d) Cyclomatic Complexity

53.COCOMO was developed initially by
a) B.Beizer
b) Rajiv Gupta
c) B.W.Bohem
d) Gregg Rothermal

54. Estimation of size for a project is dependent on
a) Cost
b) Time
c) Schedule
d) None of the mentioned

55. What are the types of requirements ?
a) Availability
b) Reliability
c) Usability
d) All of the mentioned

56. Select the developer-specific requirement ?
a) Portability
b) Maintainability
c) Availability
d) Both a and b

57. Which one of the following is not a step of requirement engineering?
a) elicitation
b) design
c) analysis
d) documentation

58. FAST stands for
a) Functional Application Specification Technique
b) Fast Application Specification Technique
c) Facilitated Application Specification Technique
d) None of the mentioned

59. QFD stands for
a) quality function design
b) quality function development
c) quality function deployment
d) none of the mentioned

60. The user system requirements are the parts of which document ?
a) SDD
b) SRS
c) DDD
d) SRD

UNIT IV

61. Which testing is concerned with behavior of whole product as per specified requirements?
a) Acceptance testing
b) Component testing
c) System testing
d) Integration testing

62. System testing is a
a) Black box testing
b) White box testing
c) Grey box testing
d) Both a and b

63. System architecture is determined during which phase?

a) Requirement gathering b) Implementation
c) Development d) Design

64.Verifying that whether software components are functioning correctly and identifying the defects in them is objective of which level of testing?
a) Integration testing b) Acceptance testing
c) Unit testing d) System Testing

65. Who is responsible for component testing?
a) Software tester b) Designer
c) User d) Developer

66. Component testing is a
a) Black box testing b) White box testing
c) Grey box testing d) Both a and b

67. Which of the following is not other name for structural testing?
a) White box testing b) Glass box testing
c) Behavioral testing d) None of the above

68. Which techniqe is applied for usability testing?
a) White box b) Black box
c) Grey box e) Combination of all

69. In which of the following type of testing, testing is done without planning and documentation?
a) Unit testing b) Retesting
c) Ad hoc testing d) Regression testing

70. Which of the following term describes testing?
a) Finding broken code b) Evaluating deliverable to find errors
c) A stage of all projects d) None of the mentioned

71. What is Cyclomatic complexity?
a) Black box testing b) White box testing
c) Yellow box testing d) Green box testing

72. Lower and upper limits are present in which chart?
a) Run chart b) Bar chart
c) Control chart d) None of the mentioned

73. Maintenance testing is performed using which methodology?
a) Retesting b) Sanity testing
c) Breadth test and depth test d) Confirmation testing

74. White Box techniques are also classified as

a) Design based testing b) Structural testing
c) Error guessing technique d) None of the mentioned

75. Exhaustive testing is
a) always possible b) practically possible
c) impractical but possible d) impractical and impossible

76. Which of the following is/are White box technique?
a) Statement Testing b) Decision Testing
c) Condition Coverage d) All of the mentioned

77. Which tool is use for structured designing ?
a) Program flowchart b) Structure chart
c) Data-flow diagram d) Module

78. A step by step instruction used to solve a problem is known as
a) Sequential structure b) A List
c) A plan d) An Algorithm

79. In Design phase, which is the primary area of concern ?
a) Architecture b) Data
c) Interface d) All of the mentioned

80. The importance of software design can be summarized in a single word which is:
a) Efficiency b) Accuracy
c) Quality d) Complexity

UNIT V

81. Software Maintenance includes
a) Error corrections b) Enhancements of capabilities
c) Deletion of obsolete capabilities d) All of the mentioned

82. Maintenance is classified into how many categories?
a) two b) three
c) four d) five

83. The modification of the software to match changes in the ever changing environment, falls under which category of software maintenance?
a) Corrective b) Adaptive
c) Perfective d) Preventive

84. How many phases are there in Taute Maintenance Model?
a) six b) seven

c) eight d) nine

85. What type of software testing is generally used in Software Maintenance?
a) Regression Testing b) System Testing
c) Integration Testing d) Unit Testing

86. Selective retest techniques may be more economical than the "retest-all"technique.How many selective retest techniques are there?
a) two b) three
c) four d) five

87. Which selective retest technique selects every test case that causes a modified program to produce a different output than its original version?
a) Coverage b) Minimization
c) Safe d) Maximization

88. _____ measures the ability of a regression test selection technique to handle realistic applications.
a) Efficiency b) Precision
c) Generality d) Inclusiveness

89. Which regression test selection technique exposes faults caused by modifications?
a) Efficiency b) Precision
c) Generality d) Inclusiveness

90. The process of generating analysis and design documents is known as
a) Software engineering b) Software re-engineering
c) Reverse engineering d) Re-engineering

91. What is a software patch?
a) Required or Critical Fix b) Emergency Fix
c) Daily or routine Fix d) None of the mentioned

92. Which one of the following is not a maintenance model?
a) Waterfall model b) Reuse-oriented model
c) Iterative enhancement model d) Quick fix model

93. What does ACT stands for in In Boehm model for software maintenance?
a) Actual change track b) Annual change track
c) Annual change traffic d) Actual change traffic

94. Choose the suitable options with respect to regression testing.
a) It helps in development of software
b) It helps in maintenance of software
c) It helps in development & maintenance of software
d) none of the mentioned

95. What are legacy systems?
a) new systems
b) old systems
c) under-developed systems
d) none of the mentioned

96. Which of the following manuals is not a user documentation?
a) Beginner's Guide
b) Installation guide
c) Reference Guide
d) SRS

97. Which of the following manuals is a user documentation?
a) SRS -Software Requirement Specification
b) SDD -Software Design Document
c) System Overview
d) None of the mentioned

98. The process of transforming a model into source code is known as
a) Forward engineering
b) Reverse engineering
c) Re-engineering
d) Reconstructing

99. How many stages are there in Iterative-enhancement model used during software maintenance?
a) two
b) three
c) four
d) five

100. Which one of the following is not a software quality model?
a) ISO 9000
b) McCall model
c) Boehm model
d) ISO 9126

ANSWER KEY

UNIT –I

1. c) Testing

2. c) Project Management Life Cycle

3. d) high

4. b) project

5. b) Rapid Application Development

6. d) Waterfall Model

7. c) Diagonal Prototype

8. b) Coding

9. b) security

10. c) scribe

11. a) Version

12. c) Radius

13. a) UCL and LCL

14. b) Result-Oriented

15. b) Quality Assurance

16. b) 3

17. d) Act.

18. c) 5 phases

19. a) Software Development Life Cycle

20. b) Barry Boehm

UNIT –II

21. a) Doesn't work well for smaller projects

22. a) Progress can be measured for Incremental Model

23. d) all the above

24. a) Baselines

25. a) A single software configuration management team for the whole organization

26. b) Version control

27. a) Software configuration audit

28. a) System building

29. b) Build script generation

30. a) Agile method

31. c) Storage management

32. c) Baseline

33. d) All of the mentioned

34. d) all of the mentioned

35. d) none of the mentioned

36. b) Software

37. b) amount of technical work

38. b) Quality of conformance

39. a) testing

40. c) quality planning

UNIT –III

41. a) Black box testing

42. c) System testing

43. d) Design

44. c) Unit testing

45. d) Developer

46. b) White box testing

47. c) Behavioral testing

48. b) Black box

49. c) Ad hoc testing

50. b) Evaluating deliverable to find errors

51. b) White box testing

52. a) Run chart

53. c) Breadth test and depth test

54. b) Structural testing

55. c) impractical but possible

56. d) All of the mentioned

57. b) Structure chart

58. d) An Algorithm

59. d) All of the mentioned

60. c) Quality

UNIT –IV

61. c) System testing

62. a) Black box testing

63. d) Design

64. c) Unit testing

65. d) Developer

66. b) White box testing

67. c) Behavioral testing

68. b) Black box

69. c) Ad hoc testing

70. b) Evaluating deliverable to find errors

71. a) Run chart

72. b) White box testing

73. c) Breadth test and depth test

74. b) Structural testing

75. c) impractical but possible

76. d) All of the mentioned

77. b) Structure chart

78. d) An Algorithm

79. d) All of the mentioned

80. c) Quality

UNIT –V

81. d) All of the mentioned

82. c) four

83. b) Adaptive

84. c) eight

85. a) Regression Testing

86. b) three

87. c) Safe

88. c) Generality

89. d) Inclusiveness

90. c) Reverse engineering

91. b) Emergency Fix

92. a) Waterfall model

93. c) Annual change traffic

94. c) It helps in development & maintenance of software

95. b) old systems

96. d) SRS

97. c) System Overview

98. a) Forward engineering

99. b) three

100. a) ISO 9000

Section -B

UNIT I

1. What is a project life cycle model?
2. What are the advantages and disadvantages of the waterfall model?
3. What are the advantages and disadvantages of the prototype model?
4. What are the advantages and disadvantages of the RAD model?
5. What are the advantages and disadvantages of the spiral model?
6. Compare prototype and RAD models.
7. Discuss about idea generation in product development phases.
8. Discuss about Alpha testing and Beta testing in product development phases.
9. Discuss about production and maintenance in product development phases.
10. What is metrics?

UNIT II

11. Discuss about metrics in software configuration management.
12. Discuss about software configuration management tools and automation.
13. How do you define Quality?
14. Why the quality is important in software?
15. Discuss about Quality control.
16. Discuss about Quality Assurance.
17. Discuss about software quality Analyst's function.
18. Write about software quality assurance tools.
19. Write about Risk management cycle.
20. Write about Risk Identification.

UNIT III

21. Write about inputs and start criteria for software requirement gathering.
22. Write about dimensions of software requirement gathering.
23. Write about the step to be followed during requirement gathering.
24. Write about outputs and quality records from the requirement gathering.
25. Discuss about skill sets required during the requirements phase.
26. List down the Challenges during the requirements management phase.
27. Metrics for the requirement phase.
28. What is Estimation?
29. When and why is Estimation done?
30. What are the three Phases of Estimation?

UNIT IV

31. Write a note on Design to standards.
32. Write a note on Design for portability.
33. Write a note on design for testability
34. Write a note on Diagnosability.
35. Write a note on design for maintainability.
36. Write a note on design for install ability.
37. Write a note on inter-operability.
38. Discuss about white box testing.
39. Discuss about black box testing.
40. Discuss about integration testing.

UNIT V

41. Write about Configuration management during the maintenance phase.
42. Skill sets for people in the maintenance phase.
43. Write about estimating size, effort and people resources for the maintenance phase.
44. Write about the Metrics for the maintenance phase.
45. List out the Challenges in building global teams.
46. What are the activities that make up testing?
47. List out the models for the execution of global teams.
48. Some effective management techniques for managing global team.
49. Write notes on effect of internet on project management.
50. Characteristics of applications for the internet

Section -C

UNIT I

1. Explain in detail about product development life cycle.
2. Explain in detail about project life cycle models.
3. Explain about Waterfall model and RAD model.
4. Explain about prototype model and spiral model.
5. Explain in detail about metrics.
6. Discuss about the metrics (i) roadmap (ii) a typical metrics strategy.
7. Discuss about set target and track them in metrics.
8. Discuss about understanding and trying to minimize variability.
9. Give an account on People and organizational issue in metrics program.
10. Give an account on pitfalls to watch out for in metrics programs.

UNIT II

11. Explain in detail about activities of software project management.
12. Explain in detail about configuration account and audits.

13. Explain in detail about software quality assurance.
14. Explain in detail about software quality assurance tools.
15. Explain in detail about SQA organizational structures.
16. Explain in detail about Risk management.
17. Explain in detail about common risk categories, risks, symptoms and mitigation.
18. Write about Defect classification and analysis tools.
19. Explain about Reviews and inspections.
20. Discuss about cost and benefits of quality.

UNIT III

21. Write about Dimensions of requirements gatherings
22. Write about the steps to be followed during requirement gathering.
23. What is estimation? Explain in detail about the three phases of estimation.
24. Explain in detail about formal models for size estimation.
25. Discuss about divide and conquer method
26. Write about lines of code model.
27. Explain about function points model.
28. How you are translating size estimation into effort estimate?
29. How you are translating effort estimation into schedule estimates?
30. Discuss about common challenge during Estimation.

UNIT IV

31. Write a note on user interface issues for design phase.
32. Write about challenges during design and development phases.
33. Explain about (i) Architecture (ii) reusability for design phase
34. Explain about (i) constrains (ii) standards for design phase
35. Explain about (i) portability (ii) user interface issues for design phase
36. Explain about (i) testability (ii) diagnosability for design phase
37. Explain about (i) maintainability (ii) install ability (iii) inter- operability
38. Explain in detail about activities of testing.
39. Explain in detail about White box and black box testing
40. Explain in detail about integration testing and system testing

UNIT V

41. Write about the major activities during the maintenance phase.
42. Explain Management issues during the maintenance phase.
43. Explain in detail about Evolution of globalization issues in project management
44. Explain models for the execution of global projects.
45. Explain the effect of the internet on project management.
46. Explain the effect on project management activities in detail

47. Explain user Interface Issues and Design for Testability.
48. Explain about Design for Installability and Inter–Operability.
49. Explain about People Capability Maturity Model (P-CMM).
50. How to estimate size, effort and people resources for maintenance phase?

KONGUNADU ARTS AND SCIENCE COLLEGE (Autonomous)

(AUTONOMOUS)

COIMBATORE -29.

QUESTION BANK

SUBJECT CODE : 17PCS310

TITLE : UNIX AND LINUX PROGRAMMING

DEPARTMENT OF COMPUTER SCIENCE [PG]

NOVEMBER 2018

PREPARED BY

B.RAJKUMAR

Dept of Computer Science (PG).

KONGUNADU ARTS AND SCIENCE COLLEGE **(Autonomous)**

COIMBATORE -29**.**

CONTENT

SECTION A (1 Mark)

UNIT I

1.What is the command used to see the help pages in Unix?
a) **man** b) help c) help pages d) manual

2. What do you mean by kernel?
a) operating system b) core operating system c) hardware d) **all the above**

3. What was the origin of Unix operating system?
a) C language b) Bell Laboratory c) minix and Linus Torvalds d) **All the above**

4. What is a shell?
a) **is a program that is used for giving inputs to the machine.** **b)** is a virus
c) is a third party software for doing programs. d) Is a hardware

5. Pick out the editor
a) vi editor b) vim editor c) nano editor d) **All the above**

6.In UNIX resources are shared by all the users, so UNIX system is called .
a) multiuser b) portable c) featureless d) multitasking

7.What terminology is not used in Linux?
a) Shell b) Process c) File d) Folder

8.What is the command for viewing date and time in the terminal?
a) **date** b) time c) date | time d) none of the above

9.What command can be sued to switch user from one user?
a) switch b) **su** c) suser d) none of the above

10.Which commands will give you information about how much disk space each file in the current directory uses?
a) ls -l b) ls -la c) **du** d) ls -a

11.What is the 'man' command used for?
a) **to display information about the syntax for a command**
b) it is a standard alias to 'ls -la | more'
c) it is the replacement for the 'boy' command
d) it is used to display formatted html pages

12. What command is used for finding current directory?
a) **pwd** b) cwd c) ewd d) awk

13.What are the files will be touched in the case of creating one user?
a) /etc/passwd b) /etc/shadow c) /etc/group d) **all the above**

14. Which file has the encrypted password of the user?
a) /etc/passwd b) **/etc/shadow** c) /etc/group d) all the above

15.The command can be used for changing the password
a) **passwd** b) password c) setpasswd d) both a & c

16.Which is the command used for create a directory
a) **mkdir** b) rmdir c) chdir d) none of the above

17.Which command can be used for deleting the directory & its contains?
a) rmdir b) **rm -rf** c) removedir d) both a & b

18.cat command is used for --------
a) creating a new file b) viewing the content of a specified file
c) concatenating two files d) **all the above**

19.What is the purpose of du command?
a) **disk usage** b) disk utility c) disk ultimatum d) all the above

20.Which language is used for the development of unix OS?
a) **C** b) java c) perl d) all the above

UNIT II

21.What is shell script?
a) **is a snippet that is used to perform a specified task.** b) is a virus
c) is an another flavour of Linux d) none of the above

22.What is the expansion of BASH shell?
a) **Bourne Again SHell** b) Bourne Agent SHell
c) Bourne Agency SHell d) None of the above

23.What is the purpose of head and tail commands in Linux?
a) it will delete the first and last 10 lines of the file specified
b) **it will display the first and last 10 lines of a file**
c) no such command in Linux
d) It is available only in demo version for the option (a) purpose

24. UNIX shell is both.
a) Interpreter, Scripting language b) **Interactive, Responsive language**

c) interpreter, executing language d) high level, low level language

25. Which of the following function(s) are performed by an interactive shell?.
a) job control b) history c) aliases d) **job control, history, aliases**

26. Which one of the following is arguably the best shell to use.
a) **Bash** b) korn c) C d) Bourne

27.Which command is used for preparing a file for printing.
a) cd b) cat c) print d) **pr**

28.Which one of the following command will be used for searching "director" in emp.lst?
a) grep "director" b) grep -v "director" emp.lst
c) grep -director emp.lst d) **grep "director" emp.lst**

29.Which symbol will be used with grep command to match the pattern pat at the beginning of a line?
a) ^pat b) pat$ c) **$pat** d) pat^

30.Full form of sed is
a) Sequential Data b) Sequence Editor c) **Stream Editor** d) Serial Data

31.Full form of grep is .
a) **Globally search with Regular Expressions and Print** b) Global Read Expression and Print
c) Goto Regular Expression and Print d) Goto and read execute print

32.Which of the following is a filter command?
a) date b) cat c) cd d) **grep**

33.Which command is used to extract specific columns from the file?
a) cat b) cut c) **grep** d) paste

34.Choose incorrect statement.
a) Shell scripts can accept arguments. b) **Shell scripts are compiled.**
c) Shell scripts are interpreted. d) Shell supports programming.

35.Which command is used for taking input from the user in shell script
a) echo b) **read** **c)** Both a) and b) d) sprint

36.Which command is used to display the content.
a).**echo** b) read c). Both a) and b) d) cd

37.Which commands are executed directly by the shell. These commands will not have a separate process running for each.
a) External b) **Internal** c) Background d) Foreground

38.The shell prompt when further input is needed, by default it is.
a) > b) & c) **$** d) #

39.Which is works as a command interpreter.
a) Hardware b) Kernel c) **Shell** d) CPU

40.Which shell offers a command history feature
a) C shell b) Visual shell c) **Bourne shell** d) Korn shell

UNIT III

41.What is the meaning of $ sign in awk programming?
a) the word following is the name of variable
b) **we are referring to a field or column in the current line**
c) $ sign is used for comment
d) none of the mentioned

42. Which command is used for viewing hidden files and inode numbers?
a) ls -l b) ls -a c) **ls -lai** d) pwd.

43.Which command is used for updating the time stamp.
a) hang b) **touch** c) halt d) spot

44. Which command is used for creating a dummy file with no contents.
a) hang b) **touch** c) halt d) spot

45.What is the purpose of secure copy?
a) **it is used to copy one file from remote location in a secure manner.**
b) it is used to copy a local file in a secure manner
c) it is not for real copying. It will create a shortcut.
d) none of the above

46.Which command is used for changing the ownership of the file or direcory
a) chown b) chgrp c) **chmod** d) all the above

47.Which command can be used for deleting the directory ?
a) **rmdir** b) rm -rf c) removedir d) both a & b

48.Where will the configuration files placed?
a) **/etc** b) /bin c) /home d) /mnt

49. which is the home directory of the user root
a) / b) /root c) /home/root d) /etc/root

50. which is the virtual file system that indicating the processes in Linux.
a) **/proc** b) /etc/proc c) /proc/cpuinfo d) /proc/virtual

51. What is the purpose /tmp directory
a) storing temporary files b) containing some default unix socket files
c) **both a &b** d) store the deleted files

52.Which of the following is not a valid escape sequence in UNIX?
a) \n b) \t c) \v d) **\d**

53. Which command is used for changing the current directory?
a) **cd** b) cp c) pwd d) rm

54.Which command is used for creating directories?
a) **mkdir** b) rmdir c) cp d) cd

55.How do you delete a file?
a) **rm filename** b) touch filename c) cut filename d) less filename

56.If there are three links for a file then the number of copies of the file would be
a) **One** b) two c) three d) four

57.The permission 746 can be represented as
a) rwxrwx- -x b) rw- -w-r-x c) rwxr-xr-x d) **rwxr- -rw–**

58.The size of any block in the unix file system is
a.) 512 bytes b) 1024 bytes c) 2048 bytes d) **Any of the above**

59. entry in inode table is of size
a) 64 kb b) 32kb c) 32 bytes d) **64 bytes**

60.In awk program, the statement "print" with no items
a) is equivalent to "print $0" b) prints the entire current record
c) **is equivalent to "print $0" & prints the entire current record** d) none of the mentioned

UNIT IV

61.Which person was the team leader of the Linux OS project?
a) Karl Pearson b) Sam Jackson c) **Linus Torvalds** d) Steve jobs

62.Which is the flavour of Linux.
a) Zoombra b) **Fedora** c) Cobra d) Anaconda

63.Ubuntu is derived from.
a) **Debian** b) Slackware c) Knoppix d) Solaris

64.What is the purpose of touch command?
a) updating the time stamp b) create dummy files c) **both a & b** d) copy file

65. How can stop a process?
a) **kill <process id>** b) stop <process id> c) pause <process id> d) All the above

66. Which language is used for the development of Linux OS?
a) **C** b) java c) perl d) all the above

67.pick out the command for rebooting the machine?
a) reboot b) reboot -f c) init 6 d) **all the above**

68.What is the command for viewing all the process in the particular machine?
a) **top** b) bottom c) left d) right

69.Pick out the flavor of Linux.
a) ubuntu b) slackware c) suse d) **all the above**

70.Pick out the remote login shells.
a) SSH b) telnet c) putty (third party tool) d) **all the above**

71.The modes of the vi editor are
a) inpute mode b) comman mode c) ex mode d) **all the above**

72. In which year linux kernel 1.0 is launched.
a) 1995 b) **1994** c) 1997 d) 2001

73.Which command is used for extracting the details of the operating system?.
a) cd b) echo c) wc d) **uname**

74.if statement ends with .
a) end b) end if c) **fi** d) stop

75.case statement ends with.
a) end b) end case c) **esac** d) stop

76.vi always starts in following mode.
a) **command** b) last line c) insert d) ex

77. Which command is used with the vi editor to save file and remain in the editing mode?
a) :q b) **:w** **c)** :q! d) :

78.PWD stands for.
a) **present working directory** b) present working diary
c) past working directory d) past working diary

79.Which command is used to close the vi editor?
a) q b) wq c) **both q and wq** d) close

80.In vi editor, which command reads the content of another file?
a) read b) r c) **ex** d) rd

UNIT V

81.Which facilities are provided by the kernel?
a) Memory Management b) Process Management
c) Interprocess Communication (IPC) d) **All**

82. What is System Call in Linux?
a) Function b) **Predefined Function** c) Properties d) Process

83.Give the expansion of SGID.
a) **Set Group ID** b) Set Global ID c) Set Globe ID d) All the above

84.Which command display the status of a process.
a) ls b) grep c) **ps** d) cat

85.Which of the following system call is used to create named pipe?
a) pipe b) open c) mknod d) **fifo**

86.Which system call is used by the process to send a signal to other process(es).
a) signal b) msgsnd c) kill d) sndsignal

87.The kernel handles a signal only when process is in:
a) User mode b) **Kernel mode** c) both d) Sleeping mode

88.Which is true regarding pipes?
a) **half duplex** b) full duplex
c) message boundaries are preserved d) Unordered data

89.Advantage of FIFO over pipe is
a) related processes can communicate b) **unrelated processes can communicate**
c) No process can communicate d) All the above

90.What mkfifo() creats?
a) pipe b) unnamed pipe c) **named pipe** d) msg queue

91.Which one of the following is not system V IPC ?
a) Shared Memory b) Semaphores c) **FIFO** d) Message Queues

92.Message queues are created in
a) userspace b) **kernelspace**
c) userspace & kernelspace d) All the mentioned

93.Which call to use to set the resource count of semaphore?
a) semget( ) b) semctl( ) c) sem_setcount( ) d) **sem_set_count( )**

94. Race condition can be avoided by using
a) semaphore b) mutex c) socket d) **both semaphore & mutex**

95. Which signal is generated when we press control-C?
a) **SIGINT** b) SIGTERM c) SIGKILL d) SIGSEGV

96.Which signal is generated when we press ctrl-Z?
a) SIGKILL b) **SIGSTOP** c) SIGABRT d) SIGINT

97.Which of the following signal cannot be handled or ignored?
a) SIGINT b) SIGCHLD c) **SIGKILL** d) SIGALRM

98.Signals are handled using which system call?
a) kill b) **signal** c) both d) sig

99.The kill system call is used to
a) Send shutdown messages to all by superuser b) **Send a signal to a process**
c) Kill processes d) Stop the processes

100.What is a context switch?
a) **Kernel switches from executing one process to another**
b) Process switches from kernel mode to user mode
c) Process switches from user mode to kernel mode d) Process to Printer

Answer Key for Section A (1 Mark)

UNIT I

1. a) **man**
2. d) **all the above**
3. d) **All the above**
4. a) **is a program that is used for giving inputs to the machine.**
5. d) **All the above**
6. **a)** multiuser
7. d) Folder
8. a) **date**
9. b) **su**
10. c) **du**
11. a) **to display information about the syntax for a command**
12. a) **pwd**
13. d) **all the above**
14. b) **/etc/shadow**
15. a) **passwd**
16. a) **mkdir**
17. b) **rm -rf**
18. d) **all the above**
19. a) **disk usage**
20. a) **C**

UNIT II

21. a) **is a snippet that is used to perform a specified task.**
22. a) **Bourne Again SHell**
23. b) **it will display the first and last 10 lines of a file**
24. b) **Interactive, Responsive language**
25. d) **job control, history, aliases**
26. a) **Bash**
27. d) **pr**
28. d) **grep "director" emp.lst**
29. c) **$pat**
30. c) **Stream Editor**
31. a) **Globally search with Regular Expressions and Print**
32. d) **grep**
33. c) **grep**
34. b) **Shell scripts are compiled.**
35. b) **read**
36. a).**echo**
37. b) **Internal**
38. c) **$**
39. c) **Shell**
40. c) **Bourne shel**

UNIT III

41. b) **we are referring to a field or column in the current line**
42. c) **ls -lai**
43. b) **touch**
44. b) **touch**
45. a) **it is used to copy one file from remote location in a secure manner.**
46. c) **chmod**
47. a) **rmdir**
48. a) **/etc**
49. **c) /home/root**
50. a) **/proc**
51. c) **both a &b**
52. d) **\d**
53. a) **cd**
54. a) **mkdir**
55. a) **rm filename**
56. a. **One**
57. d) **rwxr- -rw–**
58. d) **Any of the above**
59. d) **64 bytes**
60. c) **is equivalent to “print $0” & prints the entire current record**

UNIT IV

61. c) **Linus Torvalds**
62. b) **Fedora**
63. a) **Debian**
64. c) **both a & b**
65. a) **kill <process id>**
66. a) **C**
67. d) **all the above**
68. a) **top**
69. d) **all the above**
70. d) **all the above**
71. d) **all the above**
72. b) **1994**
73. d) **uname**
74. c) **fi**
75. c) **esac**
76. a) **command**
77. b) **:w**
78. a) **present working directory**
79. c) **both q and wq**
80. c) **ex**

UNIT V

81. d) **All**
82. b) **Predefined Function**
83. a) **Set Group ID**
84. c) **ps**
85. d) **fifo**
86. **a) signal**
87. b) **Kernel mode**
88. a) **half duplex**
89. b) **unrelated processes can communicate**
90. c) **named pipe**
91. c) **FIFO**
92. b) **kernelspace**
93. d) **sem_set_count( )**
94. d) **both semaphore & mutex**
95. a) **SIGINT**
96. b) **SIGSTOP**
97. c) **SIGKILL**
98. b) **signal**
99. b) **Send a signal to a process**
100. a) **Kernel switches from executing one process to another**

SECTION B (5 Marks)

UNIT I

101.What is the role of kernel in unix OS?
102.Write a short note ls and mv commands:
103.Explain how Creating a Directory and Delete a directory with example
104.How to Copying a file from one directory to another
105.Explain how to Moving the files between Directories
106.Write a note on Directory and a File.
107.Give Short notes on Unix operating system.
108.Write a note on command structure in Unix.
109.How to logging in Unix.
110.Explain internal and external commands.

UNIT II

111.Explain the head commands with syntax, options and examples:
112.Explain the tail commands with syntax, options and examples:
113.Explain SED operations.
114.How to display beginning and end of file in Unix.
115.what do you mean by unix session.
116.Write a note on Aliases in unix.
117.Explain cut and paste command in unix.
118.Write a note on grep options.
119.Differentiate grep and sed commands
120.Explain about predefine variables.

UNIT III

121.Discuss about operations of AWK.
122.Explain the standard file descriptors with suitable commands.
123.Describe the following commands: chown, chmod, expr.
124.Explain the cut command.
125.Write a note on commands for disk space management in unix
126.Explain the pipe feature in Unix with examples.
127.Explain the standard file descriptors with suitable commands.
128.Describe the following commands: chown, chmod, expr.
129.Give Short notes important files in C shell.
130.Write a note on Environmental variables.

UNIT IV

131. What is the role of linux kernel in linux OS?
132. Explain about Linux distribution.
133. Discuss about Linux file read write operations..
134. Write a note on stat and fstat.
135. Give Short notes on Linux operating system.
136. Write s shell program using conditions.
137. How case statement used in shell script.
138. Explain how to change the owner permission in linux.
139. Write a note on shell variables.
140. What are the different modes of vi editor.

UNIT V

141. Discuss about signal sets.
142. Write short notes on ps command.
143. Discuss about zombie process.
144. Explain the advantages of signals.
145. What are the thread attributes in linux.
146. How to cancel a thread in linux.
147. What do you mean by IPC
148. Explain shared memory.
149. Write a note on message queue.
150. What is named pipes.

SECTION C (8 Marks)

UNIT I

151.Explain the following commands with examples: ls, rm, cp, mv, chown, chmod.
152.What is kernel and explain its functions
153.Discuss in detail about Unix architecture.
154.Discuss about any five general purpose unix commands .
155.List out some features of unix.
156.Discuss in detail about Internal and External commands.
157.Explain the following commands with examples: passed, path, who,uname.
158.Explain the following commands with examples: mkdir, rmdir, od
159.Discuss about tty and stty commands in unix.
160.Explain Unix command structures.

UNIT II

161.Explain various filter commands.
162.Briefly point out the purpose of the grep
163.Briefly point out the purpose of the sed
164.What is a Shell and Explain its responsibilities
165.Write a note on pipes and redirection in Unix
166.Explain variables in unix with example .
167.Discuss about SED command
168.Discuss about simple filters in Unix .
169.Write a note on GREP command.
170.Write a short note on job control and aliases.

UNIT III

171.Briefly point out the purpose of the awk
172.Discuss about AWK string functions.
173.Which are the different file systems supported by Unix?
174.Explain various file system supported by Linux OS.
175.Write a short note on awk command
176.Discuss in detail about c shell features.
177.List out some Unix file management commands.
178.Write a note on directory API.
179.Write a note Unix file structures.
180.Explain link, unlink, symlink commands.

UNIT IV

181. Write a short note on linux file permissions.
182. Explain create system call in detail
183. Explain read system call.
184. Explain GNU Linux and Free software foundation .
185. Discuss about Vi editor.
186. Discuss about conditions and control structure in Linux.
187. Write a note on system calls in Linux.
188. Explain IF and FOR control structures in shell script.
189. Explain lseek system call with example.
190. Discuss about special files in Linux.

UNIT V

191. Differentiate between a process, a program and a job.
192. Explain various job control commands and their options with examples.
193. Explain background and foreground job?
194. Write a short note on process in Linux.
195. Discuss about signals in Linux.
196. Explain process states and process controls.
197. Explain process relationship in linux.
198. Write about the thread synchronisation in linux.
199. Discuss about Interprocess communication using pipes.
200. Explain semaphores with example.