Code | A |

Total Printed Pages : 24

SKILL ASSISTANT PROFESSOR

COMPUTER SCIENCE ENGG./IT

OMR Sr. No._____ Booklet Sr. No. 100121

Time : 90 Minutes Total Questions : 100 Max. Marks : 100

Roll No. (in Figure)_____ (in Words)_____

(Signature of the Candidate) (Signature of the Invigilator)

IMPORTANT

DO NOT OPEN THE BOOKLET UNLESS YOU ARE ASKED TO DO SO

FIRST READ FOLLOWING INSTRUCTIONS CAREFULLY.

1. The candidate will fill up required particulars including his/her roll no. and signature on the OMR sheet with ball point pen (Black/Blue) in the appropriate boxes.
2. Ten minutes before the commencement of the test, question booklet and OMR sheet will be distributed to the candidates.
3. Immediately on opening the question-booklet, the candidate should check the booklet & OMR sheet and ensure himself/herself that it contains 100 multiple choice questions (Sr. No. **1** to **100**). Discrepancy, if any, should be reported by the candidate to the invigilator within 5 (five) minutes of the opening of the question booklet and should ask the invigilator for replacement.
4. **For each question, four suggested answers A, B, C, D are given. The candidate is to choose only one answer which he/she considers the correct or the best one. If candidate darkens more than one circle or cutting/overwriting/erasing (by eraser, white fluid or any other chemicals) then such answer(s) shall not be evaluated.**
5. The answers should be marked by darkening appropriate circle provided in front of the concerned serial number on the OMR Sheet only with **black/blue pen. Use of pencil is not allowed.** For instance, while answering the Question No.26 of the question booklet, the correct answer **A** or **B** or **C** or **D** at serial No. 26 of OMR sheet should only be darkened.
6. The candidate should be careful in handling the question-paper and in darkening the answers on the OMR Sheet. **The second question booklet/OMR sheet will not be supplied in case there is no discrepancy in the booklet/OMR sheet already supplied.**
7. Bringing of incriminating materials/electronic gadgets/devices including cell phone in the premises of the examination centre is strictly prohibited. Possessing of incriminating materials electronic gadgets/ devices and any other aiding material in the examination room will be a serious offence and it will attract the cancellation of the candidature.
8. The candidate will not be permitted to leave the examination hall before the conclusion of the test. The candidate should make sure that question-booklet including OMR sheet is handed over to the invigilator before leaving the examination hall at the end of the test, failing which, a case of use of unfair-means/ misbehavior will be registered against him/her, in addition to lodging of an FIR with the police. Further, OMR sheet of such a candidate will not be evaluated.
9. The candidate can do rough-work on the back of the title cover of question booklet. Rough-work on OMR sheet is **prohibited**.
10. ***Mobile Phones are not at all allowed inside the Examination Hall.***
11. It is for the information that entire examination shall be recorded by video camera and impersonation shall lead to disqualification and registration of Police Case.
12. Programmable Calculator is not allowed.

SEAL

1. The number of bit strings of length eight that will either start with a 1 bit or end with two bits 00 shall be :

(A) 32 (B) 64

(C) 128 (D) 160

2. In which tree, for every node the height of its left subtree and right subtree differ almost by one ?

(A) Binary search tree (B) AVL tree

(C) Threaded Binary Tree (D) Complete Binary Tree

3. The graph K3,4 has :

(A) 3 edges (B) 4 edges

(C) 7 edges (D) 12 edges

4. Let $T(n)$ be the function defined by $T(n) = 1$ and $T(n) = 2T\ (n/2) + n$, which of the following is TRUE ?

(A) $T(n) = O(3n)$ (B) $T(n) = O(\log 2n)$

(C) $T(n) = O(n)$ (D) $T(n) = O(n^2)$

5. Which of the following permutations can be obtained in the output using a stack of size 3 elements assuming that input, sequence is 1, 2, 3, 4, 5 ?

(A) 3, 2, 1, 5, 4 (B) 5, 4, 3, 2, 1

(C) 3, 4, 5, 2, 1 (D) 3, 4, 5, 1, 2

6. The minimum number of states of the non-deterministic finite automation which accepts the language $\{a\ b\ a\ b^n \mid n \geq 0\} \cup \{a\ b\ a^n \mid n \geq 0\}$ is :

(A) 3 (B) 4

(C) 5 (D) 6

7. Given the following statements :

S1: SLR uses follow information to guide reductions. In case of LR and LALR parsers, the look-aheads are associated with the Items and they make use of the left context available to the parser.

S2 : LR grammar is a larger sub-class of context free grammar as compared to that SLR and LALR grammars.

Which of the following is *true* ?

(A) S1 is not correct and S2 is not correct

(B) S1 is not correct and S2 is correct

(C) S1 is correct and S2 is not correct

(D) S1 is correct and S2 is correct

8. Back propagation is a learning technique that adjusts weights in the neural network by propagating weight changes :

(A) Forward from source to sink

(B) Backward from sink to source

(C) Forward from source to hidden nodes

(D) Backward from sink to hidden nodes

9. Slots and facets are used in :

(A) Semantic Networks (B) Frames

(C) Rules (D) Syntax

10. What is the size of the Unicode character in Windows Operating System ?

(A) 8-Bits (B) 16-Bits

(C) 32-Bits (D) 64-Bits

11. Big Oh Notation deals with :

(A) Worst Case Analysis of Algorithm

(B) Best Case Analysis of Algorithm

(C) Average Case Analysis of Algorithm

(D) Randomized Algorithms

12. Recurrence relation is related to :

(A) Time Complexity

(B) Space Complexity

(C) Graphs

(D) Non-Deterministic Problems

13. In the index allocation scheme of blocks to a file, the maximum possible size of the file depends on :

(A) the size of the blocks, and the size of the address of the blocks

(B) the number of blocks used for the index, and the size of the blocks

(C) the size of the blocks, the number of blocks used for the index, and the size of the address of the blocks

(D) Cache memory

14. A computer system supports 32-bit virtual addresses as well as 32-bit physical addresses. Since the virtual address space is of the same size as the physical address space, the operating system designers decide to get rid of the virtual memory entirely. Which one of the following is *true* ?

(A) Efficient implementation of multi-user support is no longer possible

(B) The processor cache organization can be made more efficient now

(C) Hardware support for memory management is no longer needed

(D) CPU scheduling can be made more efficient now

15. A CPU generates 32-bit virtual addresses. The page size is 4 KB. The processor has a translation look-aside buffer (TLB) which can hold a total of 128 page table entries and is 4-way set associative. The minimum size of the TLB tag is :

(A) 11 bits (B) 13 bits

(C) 15 bits (D) 20 bits

16. Page fault occurs :

(A) When a requested page is in memory

(B) When a requested page is not in memory

(C) When a page is corrupted

(D) When an exception is thrown

17. Thrashing occurs when :

(A) A page fault occurs

(B) Processes on system frequently access pages not memory

(C) Processes on system are in running state

(D) Processes on system are in waiting state

18. How many 3-to-8 line decoders with an enable input are needed to construct a 6-to-64 line decoder without using any other logic gates ?

(A) 7 (B) 8

(C) 9 (D) 10

19. The Boolean function $x'y' + xy + x'y$ is equivalent to :

(A) $x' + y'$ (B) $x + y$

(C) $x + y'$ (D) $x' + y$

20. Which are the essential prime implicants of the following Boolean function ? $f(a, b, c) = a'c + ac' + b'c$:

(A) $a'c$ and ac' (B) $a'c$ and $b'c$

(C) $a'c$ only (D) ac' and bc'

21. Consider a multiplexer with X and Y as data inputs and Z as control input. Z = 0 selects input X, and Z = 1 selects input Y. What are the connections required to realize the 2-variable Boolean function $f = T + R$, without using any additional hardware ?

(A) R to X, 1 to Y, T to Z (B) T to X, R to Y, T to Z

(C) T to X, R to Y, 0 to Z (D) R to X, 0 to Y, T to Z

22. The height of a tree is the length of the longest root-to-leaf path in it. The maximum and minimum numbers of nodes in a binary tree of height 5 are :

(A) 63 and 6, respectively (B) 64 and 5, respectively

(C) 32 and 6, respectively (D) 31 and 5, respectively.

23. An algorithm performs $(\log N)^{1/2}$ find operations, N insert operations, $(\log N)^{1/2}$ delete operations, and $(\log N)^{1/2}$ decrease-key operations on a set of data items with keys drawn from a linearly ordered set. For a delete operation, a pointer is provided to the record that must be deleted. For the decrease-key operation, a pointer is provided to the record that has its key decreased. Which one of the following data structures is the most suited for the algorithm to use, if the goal is to achieve the best total asymptotic complexity considering all the operations ?

(A) Unsorted array (B) Min-heap

(C) Sorted array (D) Sorted doubly linked list

24. Which one of the following hash functions on integers will distribute keys most uniformly over 10 buckets numbered 0 to 9 for i ranging from 0 to 2020?

(A) $h(i) = i^2 \bmod 10$ (B) $h(i) = i^3 \bmod 10$

(C) $h(i) = (11 * i^2) \bmod 10$ (D) $h(i) = (12 * i) \bmod 10$

25. Given a hash table T with 25 slots that stores 2000 elements, the load factor α for T is :

(A) 80 (B) 50

(C) 40 (D) 30

26. The result evaluating the postfix expression 105 + 606 / * 8 – is :

(A) 284 (B) 213

(C) 142 (D) 71

27. Consider a B+ tree in which the search key is 12 bytes long, block size is 1024 bytes, record pointer is 10 bytes long and block pointer is 8 bytes long. The maximum number of keys that can be accommodated in each non-leaf node of the tree is :

(A) 40 (B) 50

(C) 60 (D) 70

28. Consider the tree arcs of a BFS traversal from a source node W in an unweighted, connected, undirected graph. The tree T formed by the tree arcs is a data structure for computing :

(A) the shortest path between every pair of vertices.

(B) the shortest path from W to every vertex in the graph.

(C) the shortest paths from W to only those nodes that are leaves of T.

(D) the longest path in the graph

29. A priority queue is implemented as a Max-Heap. Initially, it has 5 elements. The level-order traversal of the heap is : 10, 8, 5, 3, 2. Two new elements 1 and 7 are inserted into the heap in that order. The level-order traversal of the heap after the insertion of the elements is :

(A) 10, 8, 7, 3, 2, 1, 5
(B) 10, 8, 7, 2, 3, 1, 5
(C) 10, 8, 7, 1, 2, 3, 5
(D) 10, 8, 7, 5, 3, 2, 1

30. Which of the following options can be used to get global minima in k-Means Algorithm ?

1. Try to run algorithm for different centroid initialization
2. Adjust number of iterations
3. Find out the optimal number of clusters

(A) 2 and 3
(B) 1 and 3
(C) 1 and 2
(D) All of these

31. What is state space in AI ?

(A) The whole problem
(B) Your Definition to a problem
(C) Problem you design
(D) Representing your problem with variable and parameter

32. Which of the following techniques perform similar operations as dropout in a neural network ?

(A) Bagging
(B) Boosting
(C) Stacking
(D) Queue

33. Suppose that you have to minimize the cost function by changing the parameters. Which of the following techniques could be used for this ?

(A) Exhaustive Search

(B) Random Search

(C) Bayesian Optimization

(D) Any of these

34. In which of the following applications can we use deep learning to solve the problem ?

(A) Protein structure prediction

(B) Prediction of chemical reactions

(C) Detection of exotic particles

(D) All of the above

35. Out of all the 2-digit integers between 1 and 100, a 2-digit number has to be selected at random. What is the probability that the selected number is *not* divisible by 7 ?

(A) 13/90

(B) 12/90

(C) 78/90

(D) 77/90

36. Suppose there are 11 items in sorted order in an array. How many searches are required on the average, if binary search is employed and all searches are successful in finding the item ?

(A) 3.00

(B) 3.46

(C) 2.81

(D) 3.33

37. What is the output of the following program ?

```
#include <stdio.h>
intmain()
{
  inti=3;
  printf("%d",(++i)--);
  return0;
}
```

(A) 3 (B) 4

(C) 5 (D) None of these

38. What is the output of the following program ?

```
#include <stdio.h>
int main()
{
inti=5,j=10,k=15;
printf("%d",sizeof(k/=i+j));
printf("%d",k);
return 0;
}
```

(A) 4 15 (B) 4 1

(C) 2 5 (D) 2 1

39. Assume that float takes 4 bytes, determine the output of the following program :

```
#include <stdio.h>
int main()
{
floatarr[5] = {12.32, 10.7, 13.5, 47.2, 9.5};
float *ptr1 = &arr[1];
float *ptr2 = ptr1 + 3;
printf("%f ", *ptr1);
printf("\t%d", ptr2 - ptr1);
return 0;
}
```

(A) 12.32 12 (B) 12.32 3

(C) 10.7 3 (D) 10.7 12

40. Determine the output of the following program :

```
#include<stdio.h>
void f(int *p, int *q)
{
p = q;
*p = 2;
}
inti = 0, j = 1;
int main()
{
f(&i, &j);
printf("%d %d n", i, j);
return 0;
}
```

(A) 2 2 (B) 2 1

(C) 0 1 (D) 0 2

41. The design issue of Datalink Layer in OSI Reference Model is :

(A) Framing
(B) Representation of bits
(C) Synchronization of bits
(D) Connection control

42. Data Encryption Techniques are particularly used for :

(A) protecting data in Data Communication System
(B) reduce Storage Space Requirement
(C) enhances Data Integrity
(D) decreases Data Integrity

43. The technique of temporarily delaying outgoing acknowledgements so that they can be hooked onto the next outgoing data frame is known as :

(A) Bit stuffing
(B) Piggy backing
(C) Pipelining
(D) Broadcasting

44. Encryption and Decryption is the responsibility of ___ Layer.

(A) Physical
(B) Network
(C) Application
(D) Datalink

45. What is the propagation time if the distance between the two points is 48,900? Assume the propagation speed to be 2.4 × 108 meter/second in cable.

(A) 0.5 ms
(B) 20 ms
(C) 50 ms
(D) 200 ms

46. Comparing the time T1 taken for a single instruction on a pipelined CPU with time T2 taken on a non-pipelined but identical CPU, we can say that :

(A) T1 <= T2

(B) T1 >= T2

(C) T1 < T2

(D) T1 is T2 plus the time taken for one instruction fetch cycle

47. Assuming all numbers are in 2's complement representation, which of the following numbers is divisible by 11111011 ?

(A) 11100111 (B) 11100100

(C) 11010111 (D) 11011011

48. How many different non-isomorphic Abelian groups of order 4 are there ?

(A) 2 (B) 3

(C) 4 (D) 5

49. What is the cardinality of the set of integers X defined below? $X = \{n \mid 1 = n = 123, n \text{ is not divisible by either 2, 3 or 5}\}$?

(A) 28 (B) 33

(C) 37 (D) 44

50. Let G be an undirected graph. Consider a depth-first traversal of G, and let T be the resulting depth-first search tree. Let u be a vertex in G and let v be the first new (unvisited) vertex visited after visiting u in the traversal. Which of the following statements is always *true* ?

(A) {u,v} must be an edge in G, and u is a descendant of v in T

(B) {u,v} must be an edge in G, and v is a descendant of u in T

(C) If {u,v} is not an edge in G then u is a leaf in T

(D) If {u,v} is not an edge in G then u and v must have the same parent in T

51. When a test actually measures what it purports to measure, this characteristic of test is known as :

(A) Correlation
(B) Validity
(C) Reliability
(D) Variance

52. The Programmed learning is *not* used for :

(A) Teaching
(B) Networking
(C) Integrated Learning
(D) Evaluating

53. Education Technology has truly paved the way for learner to become :

(A) Aware, appreciative and equipped
(B) Honest, wise and aware
(C) Effective, honest and wise
(D) Creative, appreciative and wise.

54. In the context of an educational institution, the curriculum document of an educational programme is a significant :

(A) Input
(B) Process
(C) Output
(D) Feedback

55. Essential training skills require the skills of (i) design training programme, (ii) design exercises, (iii) conduct training needs analysis, (iv) evaluate the training programme and (v) design worksheets. In order of priority and smooth implementation, what should be work flow ?

(A) i, ii, iii, iv, v
(B) iii, i, ii, v, iv
(C) iii, ii, v, i, iv
(D) i, v, ii, iii, iv

56. The core objective of learning education technology is to get :

(A) Oriented
(B) Facilitated
(C) Integrated
(D) Evaluated

57. Learning objectives are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction. What is most crucial in writing a learning objective ?

(A) Performance criterion
(B) Action verb
(C) Intent of evaluation
(D) Teaching method

58. Measures are arranged in some meaningful manner :

(A) Discrete data
(B) Grouped data
(C) Ungrouped data
(D) Variable data

59. In order to implement a skill based curriculum effectively, one of the following component needs to be considered more comprehensively :

(A) Content outline
(B) Methods of implementation
(C) Learning outcomes
(D) End term assessment

60. Education technology is integrated in the teaching-learning process by :

(A) Using variety of teaching methods
(B) Designing new experimentations
(C) Reinforcement of learning
(D) Introducing, reinforcing and extending learning experiences.

61. Cognitive Learning Theory (CLT) implies that the different processes concerning learning can be explained by analyzing the mental processes first. It posits that with effective cognitive processes, learning is easier and new information can be stored in the memory for a long time. To implemented CLT effectively one has to consider predominantly :

(A) Behavioural factors of the learners
(B) Behavioural as well as personal factors of the learners
(C) Behavioural and environmental factors
(D) Behavioural, personal and environmental factors

62. These are first hand experience, which serve as foundation of our learning :

(A) Direct purposeful experience

(B) Direct personal engagement

(C) Direct educational engagement

(D) Direct educational experience

63. Operant conditioning can be described as a process that attempts to modify behavior through the use of positive and negative reinforcement. Through operant conditioning, an individual makes an association between a particular behavior and a consequence. Which of the following is a non-example of operant conditioning ?

(A) Parents rewarding the student's excellent grades with some prize.

(B) Students copy a diagram drawn on the board.

(C) A school teacher awards points to those students who are the calmest and well-behaved.

(D) Students help each other to develop a project detail.

64. A research design is :

(A) A way of conducting research not grounded in theory

(B) The choice between using quantitative or qualitative method

(C) The style in which you present your research, e.g.- graph

(D) A framework for every stage of the collection and analysis of data

65. In an experimental design, the dependent variable is :

(A) The one that is not manipulated and in which any changes are observed

(B) The one that is manipulated in order to observe any effects on the other

(C) A measure of the extent to which personal values affect research

(D) An ambiguous concept whose meaning depends on how it is defined

66. Involves the collection, organisation and analysis of numerical data :

(A) Assessment
(B) Measurement
(C) Test
(D) Statistics

67. When planning a lesson, a teacher can best help ensure that instruction will be effective and appropriate for students from a wide range of socio-economic backgrounds by asking himself or herself which of the following questions ?

(A) Will the lesson include opportunities for interaction among students from different backgrounds ?

(B) Will students have opportunities to ask questions and seek clarification at various points in the lesson ?

(C) Will the lesson be structured in a way that allows students to spend time working with self-selected peers to help process new learning ?

(D) Will the examples used to illustrate and explore lesson content be familiar and relevant to students with varied life experiences ?

68. Industrial training can be effectively assessed by :

(A) Rating scale
(B) Observation sheet
(C) Check list
(D) Performance diary

69. Studies in cybernetics provide a means for examining the design and function of any system, including social systems such as business management, training and organizational learning, including for the purpose of making them more efficient and effective. One of the following is not an example of cybernetics :

(A) Game Theory
(B) Systems Theory
(C) Trance Theory
(D) Perceptual Control Theory

70. A teacher regularly gives students brief quizzes of three to five questions covering material taught in the current or preceding lesson. Which of the following is likely to be the primary benefit of this practice ?

(A) helping improve instruction through ongoing feedback on teaching effectiveness

(B) minimizing the amount of re-teaching required for students to master curricular content

(C) ensuring that the teacher has adequate performance data to assign students a fair grade for the class

(D) enhancing students' engagement in the learning process and recognition of key learning goals

71. Consider the deviation each score is away from the mean of the distribution :

(A) Standard deviation (B) Mean deviation

(C) Median deviation (D) Maximum deviation

72. Prof. Ramesh and Prof. Suresh collected data on the same set of students using the same test and find their data is almost exactly the same. This indicates test has :

(A) Test-retest reliability

(B) Inter-rater reliability

(C) Alternate forms reliability

(D) Split half-reliability

73. A Vocational Institute teacher has been planning to have the students in a class carry out individual research projects in social setting in which each student would investigate and report on a self-selected topic. The teacher decides instead to have the students conduct and report on their research in groups. The group approach is likely to be particularly effective for the students because it :

(A) increases the students' overall learning efficiency and sense of contribution during the project.

(B) enables students who usually achieve at varied levels to perform at a level similar to that of high-achieving peers in the class.

(C) uses the students' interest in social interactions to enhance motivation and increase engagement in the learning process.

(D) prompts the students to use a greater variety of methods and approaches to pursue broader, more complex research topics.

74. While analysing the attitudinal performance of the learner you find that the learner has adapted values and has become more organised, can compare and contrast values and choices, begin to order and prioritise values and choose to commit to certain behaviour. In the taxonomy of affective domain, at what level you will place him ?

(A) Receiving

(B) Responding

(C) Valuing

(D) Organising

75. Teachers of science, entrepreneurship, and humanities are planning an integrated unit on the Industrial Revolution. This instructional approach can be expected to enhance student learning primarily by :

(A) facilitating students' accelerated achievement of content standards in multiple subject areas.

(B) presenting students with tasks that are responsive to their individual learning preferences.

(C) promoting students' ability to apply a wide range of academic problem-solving strategies.

(D) connecting ideas for students in ways that make content more authentic and meaningful.

76. Outcomes attained after gaining skills and knowledge of a course is termed as :

(A) Course Outcomes
(B) Programme Outcomes
(C) Session Outcomes
(D) Programme Specific Outcomes

77. Constructivist learning environments require students to utilize their prior knowledge and experiences to formulate new, related, and/or adaptive concepts in learning. Under this framework the role of the teacher becomes that of a facilitator, providing guidance so that learners can construct their own knowledge. To construct an effective learning environment, you will :

(A) write the objectives explicitly
(B) develop structured learning exercises
(C) design evaluation exercises
(D) draw the content outline explicitly

78. It is scientific and organised teaching-learning process and or a product :

(A) Instructional Technology
(B) Educational Technology
(C) Educational Media
(D) Audio, Video & Media Technology

79. The standard error is a statistical measure of :

(A) The normal distribution of scores around the sample mean
(B) The extent to which a sample mean is likely to differ from the population mean
(C) The clustering of scores at each end of a survey scale
(D) The degree to which a sample has been acturately stratified

80. A self-instructional strategy promotes :

(A) Group dynamics
(B) Focussed group learning
(C) Learning to learn attitude
(D) Problem solving attitude

81. One of the following is the best example of a teacher applying a constructivist approach to student learning :

(A) A math teacher has students use hands-on materials and real-world problems to acquire new concepts and practice skills.

(B) A language arts teacher provides students with a concrete reward each time they turn in a written assignment that is free of errors.

(C) A social studies teacher uses visual aids and a logical progression of ideas when presenting lectures about new or unfamiliar topics.

(D) A science teacher models the correct procedures for performing complex experiments before having students perform the experiments.

82. Trait of characteristic that can assume more than one value :

(A) Discrete data

(B) Unground data

(C) Population

(D) Variable data

83. Mr. X learnt car driving from a reputed training school and got a certificate of perfect driver in 15 days of learning and examination. Mr. X is able to drive his car very confidently on highways and empty roads but he has little hesitation in driving on busy streets. On the taxonomy of psychomotor domain, at what level his driving skills can be safely placed ?

(A) Imitation

(B) Precision

(C) Naturalisation

(D) Manipulation

84. How will you apply principle of distributed practise while training students to develop specific set of motor skills ?

(A) Providing them frequent short periods of intense practise.

(B) Giving them mass practise assignments.

(C) Developing ability to perform one motor skill effectively independent of their ability to perform over other motor skills.

(D) Motivating the students to learn independently and confidently.

85. Process of measuring, evaluating, identifying and prescribing using result to identify performance and problems, and then prescribing a solution :

(A) Assessment
(B) Evaluation
(C) Test
(D) Measurement

86. Motor learning is a change, resulting from practice. It often involves improving the accuracy of movements both simple and complex as one's environment changes. Motor learning is a relatively permanent skill as the capability to respond appropriately is acquired and retained. The stages of motor learning necessarily involve :

(A) Cognitive phase, Motor phase and Affective phase
(B) Cognitive phase, Associative phase and Autonomous phase
(C) Motor phase, Associative phase and Affective phase
(D) Cognitive phase, Associative phase and Affective phase

87. Direct Instructional Model gives priority to :

(A) Critical Thinking
(B) Global Learning
(C) Analytical Thinking
(D) Mastery Learning

88. Domains of performance are essential to be recognised to identify adequate knowledge, skills and attitude to be developed among students. These knowledge, skills and attitudes are integrated in the curriculum document systematically. How the domains of performance can be assessed ?

(A) Identification of learning elements
(B) Conducting job analysis survey
(C) Identification of performance indicators
(D) Conducting performance need survey

89. A well-made outcome based curriculum document essentially comprises of :

(A) Syllabus, content and study references

(B) Content outline, instructional methods and experimentations

(C) Instructional strategies, learning experiences and performance assessment

(D) Content outline, instructional strategies and study references.

90. Learning is meaningful if it is organized in such a way as to emphasize and call for understanding, insight, initiative, and cooperation. When the learner is capable of gaining insight or understanding into the learning situation, then and only then will learning take place. Meaningful learning is reflected in learner's behaviour by :

(A) Comprehending and memorisation

(B) Organisation of learning elements

(C) Purposeful engagement and performance

(D) Acquisition of desired knowledge.

91. A type of diagram that is used to cluster complex apparently unrelated data into natural and meaningful groups :

(A) Dogbone diagram (B) Affinity diagram

(C) Fishbone diagram (D) Natural Diagram

92. Positive reinforcement provides better learning opportunities for the learners. This can be achieved by :

(A) Providing stimulus and feedback

(B) Keeping strict observation

(C) Evaluating reports on performance

(D) Observing and punishing for non-performance

93. Part of the subgroup of the given population in which every member has an equal chance of being included in the sample :

(A) Continuous data
(B) Ungrouped data
(C) Grouped data
(D) Random sample

94. CALL stands for :

(A) Computer Ability in Language Learning
(B) Computer Aided Language Learning
(C) Computer Aided Linguistic Learner
(D) Computer Aided Lab Lesson

95. An Industrial Management Teacher is introducing a long-term project with several components. Students will be required to conduct research and interviews on a self-selected topic, write a report, and make an oral presentation. At this point in instruction, the teacher can best promote all students' ability to achieve the goals of the project by using which of the following strategies ?

(A) Assigning students partners to provide support throughout the project and scheduling regular times for the partners to meet
(B) Reassuring students that they possess all of the skills and abilities needed to complete the project tasks
(C) Organizing project tasks in a step-by-step sequence and providing students with directions and reminders for completing each step
(D) Explaining to students how the objectives of the project fit into a larger instructional plan.

96. Scaled replica of real objects are called :

(A) Realia
(B) Mock-up
(C) Model
(D) Replica

97. Students are most likely to be intrinsically motivated to learn and master subject matter when they :

(A) know that they will be tested on their understanding of the content in the near future.

(B) believe that the work they are doing is interesting and relates to their own lives.

(C) perceive that their performance compares favorably with that of peers engaged in the same tasks.

(D) anticipate that they will receive positive reinforcement for achieving instructional objectives.

98. In which of the following situations is a teacher most clearly using reflection and self-assessment to improve professional practice ?

(A) A teacher reviews videotapes of his or her instruction with a more experienced teacher to identify teaching strengths and challenges.

(B) A teacher asks another teacher to review his or her lesson plans prior to instruction and provide feedback on planned activities and materials.

(C) A teacher engages in co-teaching with a more experienced teacher when introducing particularly challenging content to students.

(D) A teacher creates a comprehensive description of activities used during each grading period to submit to the department chairperson.

99. Case study essentially helps in :

(A) Develop problem solving skills

(B) Develop higher order cognitive skills

(C) Simplifying complex concepts

(D) Understanding life issues

100. Rubrics are important tool of assessment that :

(A) Requires lot of time to develop exact performance statement

(B) Need to be continuously revised till it becomes useful

(C) Helps faculty grade/score more accurately, fairly and reliably

(D) Clarifies quality expectations to students about their assignments

SVSU Recrutment Examination 2019 Loaded Key Sheet for : 31 - Skill Assistant Professor (Computer Science Engg/IT) , Set Code : A									
Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key
1	A	21	A	41	A	61	D	81	A
2	B	22	A	42	A	62	A	82	D
3	D	23	B	43	B	63	B	83	B
4	C	24	D	44	C	64	D	84	A
5	C	25	C	45	D	65	A	85	A
6	C	26	C	46	B	66	D	86	B
7	C	27	C	47	A	67	D	87	D
8	B	28	C	48	A	68	D	88	B
9	B	29	B	49	B	69	C	89	C
10	B	30	D	50	C	70	A	90	C
11	A	31	D	51	B	71	B	91	B
12	A	32	A	52	B	72	B	92	A
13	B	33	D	53	A	73	C	93	D
14	C	34	D	54	A	74	D	94	B
15	C	35	D	55	B	75	D	95	C
16	B	36	A	56	C	76	A	96	C
17	B	37	D	57	B	77	B	97	B
18	C	38	A	58	B	78	B	98	A
19	D	39	C	59	C	79	B	99	B
20	A	40	D	60	D	80	C	100	C

SVSU Recrutment Examination 2019 Loaded Key Sheet for : 31 - Skill Assistant Professor (Computer Science Engg/IT) , Set Code : B									
Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key
1	C	21	D	41	C	61	A	81	C
2	B	22	A	42	C	62	B	82	B
3	B	23	D	43	C	63	B	83	A
4	C	24	A	44	B	64	B	84	B
5	D	25	C	45	B	65	C	85	C
6	A	26	D	46	B	66	A	86	B
7	A	27	A	47	A	67	D	87	B
8	A	28	A	48	A	68	B	88	A
9	B	29	B	49	B	69	A	89	A
10	D	30	C	50	C	70	A	90	B
11	C	31	D	51	D	71	B	91	C
12	C	32	B	52	D	72	D	92	B
13	C	33	A	53	D	73	B	93	B
14	C	34	A	54	C	74	C	94	C
15	B	35	B	55	A	75	C	95	D
16	D	36	C	56	B	76	B	96	D
17	D	37	A	57	B	77	A	97	A
18	A	38	B	58	C	78	D	98	B
19	D	39	D	59	D	79	B	99	D
20	D	40	C	60	D	80	C	100	A

SVSU Recrutment Examination 2019 Loaded Key Sheet for : 31 - Skill Assistant Professor (Computer Science Engg/IT) , Set Code : C									
Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key
1	B	21	B	41	D	61	B	81	C
2	D	22	C	42	A	62	D	82	B
3	D	23	A	43	A	63	B	83	B
4	A	24	B	44	A	64	C	84	C
5	D	25	D	45	B	65	C	85	D
6	D	26	C	46	D	66	B	86	D
7	D	27	C	47	C	67	A	87	A
8	A	28	C	48	C	68	D	88	B
9	D	29	C	49	C	69	B	89	D
10	A	30	B	50	C	70	C	90	A
11	C	31	B	51	A	71	C	91	D
12	D	32	B	52	B	72	B	92	D
13	A	33	A	53	B	73	A	93	D
14	A	34	A	54	B	74	B	94	C
15	B	35	B	55	C	75	C	95	A
16	C	36	C	56	A	76	B	96	B
17	D	37	C	57	D	77	B	97	B
18	B	38	B	58	B	78	A	98	C
19	A	39	B	59	A	79	A	99	D
20	A	40	C	60	A	80	B	100	D

SVSU Recrutment Examination 2019

Loaded Key Sheet for : 31 - Skill Assistant Professor (Computer Science Engg/IT) , Set Code : D

Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key	Q.No.	Key
1	C	21	B	41	B	61	B	81	C
2	D	22	B	42	D	62	C	82	A
3	A	23	A	43	D	63	B	83	B
4	A	24	A	44	A	64	B	84	B
5	B	25	B	45	D	65	A	85	C
6	C	26	C	46	D	66	A	86	D
7	D	27	C	47	D	67	B	87	D
8	B	28	B	48	A	68	C	88	A
9	A	29	B	49	D	69	B	89	B
10	A	30	C	50	A	70	B	90	B
11	B	31	D	51	C	71	C	91	B
12	C	32	A	52	C	72	D	92	C
13	A	33	A	53	B	73	D	93	A
14	B	34	A	54	A	74	A	94	D
15	D	35	B	55	D	75	B	95	B
16	C	36	D	56	B	76	D	96	A
17	C	37	C	57	C	77	A	97	A
18	C	38	C	58	C	78	D	98	B
19	C	39	C	59	B	79	D	99	D
20	B	40	C	60	A	80	D	100	B