National Testing Agency

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Computer & Systems Sciences 890

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PART A

Section Id :	128206289
Section Number :	1
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Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	128206468
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 12820610265 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

An upper-layer packet is split into 10 frames, each of which has an 80 percent chance of arriving undamaged. If no error control is done by the data link protocol, how many times must the message be sent on average to get the entire thing through (in transmissions)?

(a) 18.6

(b) 27.9

(c) 9.3

(d) None of the above

Options :

12820640579. A

12820640580. B

12820640581. C

12820640582. D

Question Number : 2 Question Id : 12820610266 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider building a CSMA/CD network running at 1 Gbps over a 1-km cable with no repeaters. The signal speed in the cable is 200,000 km/sec. What is the minimum frame size?

(a) 10000 bytes

(b) 100000 bits

(c) 1250 bits

(d) None of the above

Options :

12820640583. A

12820640584. B

12820640585. C

12820640586. D

Question Number : 3 Question Id : 12820610267 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

If two communicating stations X and Y are linked through two intermediate routers, r_1 and r_2; then determine the number of times each packet visits Network Layer (NL) and Data Link Layer (DLL) for single transmission from X to Y.

(a) NL - 4, DLL - 4

(b) NL - 4, DLL - 3

(c) NL - 4, DLL - 6

(d) NL - 2, DLL – 6

Options :

12820640587. A

12820640588. B

12820640589. C

12820640590. D

Question Number : 4 Question Id : 12820610268 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

To deliver a message to the correct application program running on a host, the address must be consulted is

(a) port
(b) physical
(c) IP
(d) None

Options :

12820640591. A

12820640592. B

12820640593. C

12820640594. D

Question Number : 5 Question Id : 12820610269 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Manchester encoding is principally designed to

(a) ensure that the line remains unbalanced.
(b) have more than one symbol per bit period.
(c) increase the bandwidth of a signal transmitted on the medium
(d) ensure that a transition occurs in the center of each bit period.

Options :

12820640595. A

12820640596. B

12820640597. C

12820640598. D

Question Number : 6 Question Id : 12820610270 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The concept of pipelining is most effective in improving performance if the tasks being performed in different stages:

(a) require different amount of time
(b) require about the same amount of time
(c) require different amount of time with time difference between any two tasks being same
(d) require different amount with time difference between any two tasks being different

Options :

12820640599. A

12820640600. B

12820640601. C

12820640602. D

Question Number : 7 Question Id : 12820610271 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Given that $(292)_{10} = (1204)_x$ in some number system x. The base x of that number system is

(a) 2

(b) 8

(c) 10

(d) None of the above

Options :

12820640603. A

12820640604. B

12820640605. C

12820640606. D

Question Number : 8 Question Id : 12820610272 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following is not functionally a complete set?

(a) AND, OR

(b) NOR

(c) NAND

(d) AND, OR, NOT

Options :

12820640607. A

12820640608. B

12820640609. C

12820640610. D

Question Number : 9 Question Id : 12820610273 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Assume that for a certain processor, a read request takes 50 nanoseconds on a cache miss and 5 nanoseconds on a cache hit. Suppose while running a program, it was observed that 70% of the processor's read requests result in a cache hit. The average read access time in nanoseconds is

(a) 10

(b) 12

(c) 13

(d) 18.5

Options :

12820640611. A

12820640612. B

12820640613. C

12820640614. D

Question Number : 10 Question Id : 12820610274 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The number of min-terms after minimizing the following Boolean expression is
[D' + AB' + A'C + AC'D + A'C'D]'

(a) 1
(b) 46
(c) 56
(d) 76

Options :
12820640615. A
12820640616. B
12820640617. C
12820640618. D

Question Number : 11 Question Id : 12820610275 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0
The speed up of a pipeline processing over an equivalent non-pipeline processing is defined by the ratio:

(a) $S = n\,T_n/(k + n - 1)\,T_p$
(b) $S = n\,T_n/(k + n + 1)\,T_p$
(c) $S = n\,T_n/(k - n + 1)\,T_p$
(d) $S = (k + n - 1)\,T_p/n\,T_n$

where n → no. Of tasks, T_n → time of completion of each task, k → no. Of segments of pipeline, T_p → clock cycle time, S → speed up ratio.

Options :
12820640619. A
12820640620. B
12820640621. C
12820640622. D

Question Number : 12 Question Id : 12820610276 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 2 Wrong Marks : 0
Consider a system running ten I/O -bound tasks and one CPU –bound task. Assume that the I/O -bound tasks issue an I/O operation once for every millisecond of CPU computing and that each I/O operation takes 10 milliseconds to complete. Also assume that the context switching overhead is 0.1 millisecond and that all processes are long-running tasks. The CPU utilization for a round-robin scheduler when the time quantum is 1 millisecond?

(a) 78%
(b) 91%
(c) 98%
(d) 80%

Options :
12820640623. A

12820640624. B

12820640625. C

12820640626. D

Question Number : 13 Question Id : 12820610277 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Assume we have a demand-paged memory. The page table is held in registers. It takes 8 milliseconds to service a page fault if an empty page is available or the replaced page is not modified, and 20 milliseconds if the replaced page is modified. Memory access time is 100 nanoseconds. Assume that the page to be replaced is modified 70 percent of the time. What is the maximum acceptable page-fault rate for an effective access time of no more than 200 nanoseconds?

(a) 0.0006
(b) 0.00006
(c) 0.006
(d) None of the above

Options :

12820640627. A

12820640628. B

12820640629. C

12820640630. D

Question Number : 14 Question Id : 12820610278 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following scheduling algorithms could result in starvation?

(i) First-come, first-served
(ii) Shortest job first
(iii) Round robin
(iv) Priority

(a) ii and iv
(b) i and iii
(c) iv Only
(d) None of the above

Options :

12820640631. A

12820640632. B

12820640633. C

12820640634. D

Question Number : 15 Question Id : 12820610279 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Overlay is

(a) A part of an operating system
(b) A specific memory location
(c) A single contiguous memory that was used in the olden days for running large program by swapping
(d) Overloading the system with many user files.

Options :

12820640635. A

12820640636. B

12820640637. C

12820640638. D

Question Number : 16 Question Id : 12820610280 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

In which of the following directory system, it is possible to have multiple complete paths for a file, the starting from the root directory?

(a) Single level directory
(b) Two level directory
(c) Tree structured directory
(d) Acyclic graph directory

Options :

12820640639. A

12820640640. B

12820640641. C

12820640642. D

Question Number : 17 Question Id : 12820610281 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A transparent DBMS

(a) Cannot hide sensitive information from users
(b) Keep its logical structure hidden from users
(c) Keeps its physical structure hidden from users
(d) Both (b) and (c)

Options :

12820640643. A

12820640644. B

12820640645. C

12820640646. D

Question Number : 18 Question Id : 12820610282 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

A locked file can be

(a) Accessed by only one user
(b) Modified by users with the correct password
(c) Is used to hide sensitive information
(d) Both (b) and (c)

Options :

12820640647. A

12820640648. B

12820640649. C

12820640650. D

Question Number : 19 Question Id : 12820610283 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Let F = {D → AC, A → DB, B → E, E → D} that hold on the attribute set {A, B. C, D,E}, then the highest normal form that hold is

(a) BCNF
(b) 3NF
(c) 2NF
(d) None of the above

Options :

12820640651. A

12820640652. B

12820640653. C

12820640654. D

Question Number : 20 Question Id : 12820610284 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following statements are correct about an array?

1. The array int num[26]; can store 26 elements.
2. The expression num[1] designates the very first element in the array.
3. It is necessary to initialize the array at the time of declaration.
4. The declaration num[SIZE] is allowed if SIZE is a macro.

(a) 1
(b) 2,4
(c) 2,3
(d) 1,4

Options :

12820640655. A

12820640656. B

12820640657. C

12820640658. D

Question Number : 21 Question Id : 12820610285 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the output of following statements?

```
int i = 3;
printf("%d%d",i,i++);
```

(a) 34
(b) 43
(c) 44
(d) 33

Options :

12820640659. A

12820640660. B

12820640661. C

12820640662. D

Question Number : 22 Question Id : 12820610286 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The following program fragment

```
int a = 4, b = 6;
print ("%d", a == b);
```

(a) outputs an error message
(b) prints 0
(c) prints 1
(d) none of the above

Options :

12820640663. A

12820640664. B

12820640665. C

12820640666. D

Question Number : 23 Question Id : 12820610287 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider the following program

```
float myFunc(float *array, int size)
{
   float x =0;
   if (size! = 0)
        X = *array + myFunc(array+1, size-1);
        return x;
}

void main ()
{
   float array [5] = {0, 0.5, 1.0, 1.5, 2};
   printf("%f\n",myFunc(array,5));
}
```

What is the output of the program and how many times that the function "myFunc" is called?

(a) 3 and 6
(b) 5 and 5
(c) 5 and 6
(d) None of the above

Options :

12820640667. A
12820640668. B
12820640669. C
12820640670. D

Question Number : 24 Question Id : 12820610288 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

How many RAM chips of size (256K x 1 bit) are required to build 1 M byte memory?

(a) 8
(b) 10
(c) 32
(d) 24

Options :

12820640671. A
12820640672. B
12820640673. C
12820640674. D

Question Number : 25 Question Id : 12820610289 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Property of locality of reference may fail if a program has

(a) Many conditional jumps
(b) many unconditional jumps
(c) many operands
(d) all of these

Options :

12820640675. A

12820640676. B

12820640677. C

12820640678. D

Question Number : 26 Question Id : 12820610290 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The strategy by which algorithms are expressed in terms of general ideas, each of which can be further developed in general terms is called:

(a) Top-Down design
(b) Pseudo-coding
(c) Software engineering
(d) Bottom-Up design

Options :

12820640679. A

12820640680. B

12820640681. C

12820640682. D

Question Number : 27 Question Id : 12820610291 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the output of the following arithmetic expression?

5+3*2%10-8*6

(a) -37
(b) -42
(c) -32
(d) -28

Options :

12820640683. A

12820640684. B

12820640685. C

12820640686. D

Question Number : 28 Question Id : 12820610292 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is the expected number of operations needed to examine all the edges terminated at a particular vertex given an adjacency matrix representation of the graph? (assume n vertices are in the graph and m edges terminate at the desired node.)

(a) O(m)

(b) O(n)

(c) $O(m^2)$

(d) $O(n^2)$

Options :

12820640687. A

12820640688. B

12820640689. C

12820640690. D

Question Number : 29 Question Id : 12820610293 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Which of the following circuit can be used as parallel to serial converter?

(a) Multiplexer

(b) Demultiplexer

(c) Decoder

(d) Digital counter

Options :

12820640691. A

12820640692. B

12820640693. C

12820640694. D

Question Number : 30 Question Id : 12820610294 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The preorder traversal sequence of a binary search tree is 30, 20, 10, 15, 25, 23, 39, 35, 42. Which one of the following is the post order traversal sequence of the same tree?

(a) 10, 20, 15, 23, 25, 35, 42, 39, 30

(b) 15, 10, 25, 23, 20, 42, 35, 39, 30

(c) 15, 20, 10, 23, 25, 42, 35, 39, 30

(d) 15, 10, 23, 25, 20, 25, 42, 39, 30

Options :

12820640695. A

12820640696. B

12820640697. C

12820640698. D

Question Number : 31 Question Id : 12820610295 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The minimum number of nodes in a binary tree of depth d (root is at level 0) is

(a) $2d - 1$

(b) $2d + 1 - 1$

(c) $d + 1$

(d) d

Options :

12820640699. A

12820640700. B

12820640701. C

12820640702. D

Question Number : 32 Question Id : 12820610296 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The number of possible parenthesizations of a sequence of n matrices is

(a) (n)

(b) θ (n lg n)

(c) Ω (2n)

(d) None of the above

Options :

12820640703. A

12820640704. B

12820640705. C

12820640706. D

Question Number : 33 Question Id : 12820610297 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

(a) 80

(b) 50

(c) 40

(d) 30

Options :

12820640707. A

12820640708. B

12820640709. C

12820640710. D

Question Number : 34 Question Id : 12820610298 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider the following array of elements.

⟨89,19,50,17,12,15,2,5,7,11,6,9,100⟩

The minimum number of interchanges needed to convert it into a max-heap is

(a) 4
(b) 5
(c) 2
(d) 3

Options :

12820640711. A

12820640712. B

12820640713. C

12820640714. D

Question Number : 35 Question Id : 12820610299 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider a complete binary tree where the left and right subtrees of the root are max-heaps. The lower bound for the number of operations to convert it into a heap is

(a) Ω (log n)
(b) Ω (n)
(c) Ω (n log n)
(d) Ω (n2)

Options :

12820640715. A

12820640716. B

12820640717. C

12820640718. D

Question Number : 36 Question Id : 12820610300 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Consider two decision problems Q1, Q2 such that Q1 reduces in polynomial time to 3-SAT and 3-SAT reduces in polynomial time to Q2. Which one of the following is consistent with the above statement?

(a) Q1 is in NP, Q2 is NP hard.
(b) Q2 is in NP, Q1 is NP hard.
(c) Both Q1 and Q2 are in NP.
(d) Both Q1 and Q2 are NP hard.

Options :

12820640719. A

12820640720. B

12820640721. C

12820640722. D

Question Number : 37 Question Id : 12820610301 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Assume that the algorithms considered here sort the input sequences in ascending order. If the input is already in ascending order, which of the following are TRUE?

I. Quick sort runs in $\Theta(n^2)$ time
II. Bubble sort runs in $\Theta(n^2)$ time
III. Merge sort runs in $\Theta(n)$ time
IV. Insertion sort runs in $\Theta(n)$ time

(a) I and II only
(b) I and III only
(c) II and IV only
(d) I and IV only

Options :

12820640723. A

12820640724. B

12820640725. C

12820640726. D

Question Number : 38 Question Id : 12820610302 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The minimum number of nodes in an AVL tree (height balanced binary tree) of height 9 is

(a) 54
(b) 64
(c) 87
(d) None of these

Options :

12820640727. A

12820640728. B

12820640729. C

12820640730. D

Question Number : 39 Question Id : 12820610303 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Every context-free grammar (CFG) can beconverted into an equivalent

(a) Greiback Normal Form(GNF)
(b) Chomsky Normal Form(CNF)
(c) (a) and (b) both
(d) none of these

Options :

12820640731. A

12820640732. B

12820640733. C

12820640734. D

Question Number : 40 Question Id : 12820610304 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The cardinality of the power set of {0, 1, 2, 10, 15} is

.

(a) 8
(b) 10
(c) 32
(d) 14

Options :

12820640735. A

12820640736. B

12820640737. C

12820640738. D

Question Number : 41 Question Id : 12820610305 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Let R be a relation on the set of positive integers such that aRb if and only if a and b are distinct and have a common divisor other than 1. Which of the following statements about R is true?

(a) R is symmetric and reflexive but not transitive
(b) R is reflexive but not symmetric and not transitive
(c) R is transitive but not reflexive and not symmetric
(d) R is symmetric but not reflexive and not transitive

Options :

12820640739. A

12820640740. B

12820640741. C

12820640742. D

Question Number : 42 Question Id : 12820610306 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

The Floyd-Warshall algorithm for all-pair shortest paths computation is based on

(a) Greedy paradigm
(b) Divide-and-Conquer paradigm
(c) Dynamic Programming paradigm.
(d) Neither Greedy nor Divide-and-Conquer nor Dynamic Programming paradigm

Options :

12820640743. A

12820640744. B

12820640745. C

12820640746. D

Question Number : 43 Question Id : 12820610307 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Let X be a random variable with PDF given by

$$f_X(x) = \begin{cases} cx^2 & |x| \leq 1 \\ 0 & \text{otherwise} \end{cases}$$

The value of constant c is

(a) 1.5
(b) 2.5
(c) 3.5
(d) 4.5

Options :

12820640747. A

12820640748. B

12820640749. C

12820640750. D

Question Number : 44 Question Id : 12820610308 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

For a Poisson Distribution, if mean(m) = 1, then P(1) is

(a) 1.5
(b) e
(c) 2/e
(d) 1/e

Options :

12820640751. A

12820640752. B

12820640753. C

12820640754. D

Question Number : 45 Question Id : 12820610309 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

On a positive edge-triggered S-Rflip-flop, the outputs reflect the input condition when

(a) The clock pulse is LOW
(b) The clock pulse is HIGH
(c) The clock pulse transitions from LOW to HIGH
(d) The clock pulse transitions from HIGH to LOW

Options :

12820640755. A

12820640756. B

12820640757. C

12820640758. D

Question Number : 46 Question Id : 12820610310 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Research ethics do not include

(a) Honesty
(b) Subjectivity
(c) Integrity
(d) objectivity

Options :

12820640759. A

12820640760. B

12820640761. C

12820640762. D

Question Number : 47 Question Id : 12820610311 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

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

Options :

12820640763. A

12820640764. B

12820640765. C

12820640766. D

Question Number : 48 Question Id : 12820610312 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

Research objectives falls into a number of categories that include

(a) planning to get answers for what, why & where type of questions.
(b) formulative, concept, and planning for research methods
(c) exploratory, descriptive, diagnostic and experimentation research
(d) considering the logic behind the methods we use in the context of the research

Options :

12820640767. A

12820640768. B

12820640769. C

12820640770. D

Question Number : 49 Question Id : 12820610313 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

If a study is "reliable", this means that

(a) It was conducted by a reputable researcher who can be trusted
(b) The measures devised for concepts are stable on different occasions
(c) The findings can be generalized to other social settings
(d) The methods are stated clearly enough for the research to be replicated

Options :

12820640771. A

12820640772. B

12820640773. C

12820640774. D

Question Number : 50 Question Id : 12820610314 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct Marks : 2 Wrong Marks : 0

What is a research design?

(a) A way of conducting research that is not grounded in theory
(b) A way of conducting research that is not grounded in theory
(c) The style in which you present your research findings, e.g. a graph
(d) A framework for every stage of the collection and analysis of data

Options :

12820640775. A

12820640776. B

12820640777. C

12820640778. D