

Topic:- CSA1_SHAAN_NOV21A

- 1) Which of the statements given below is/are correct?
It is always important and useful to include an "alt" attribute on "img" tag in HTML because
- users who cannot see the image due to vision impairment can have a textual description of the image (which can be spoken aloud by a screenreader).
 - If the image fails to load (slow connection, broken path, etc.) then alt text is displayed instead.
 - SEO (Search Engine Optimization) benefits.

Choose the correct answer from the options given below:

[Question ID = 2331][Question Description = 51_q5Nz_PG_CMS_Q01]

- A only [Option ID = 9321]
- B and C only [Option ID = 9322]
- C only [Option ID = 9323]
- A, B, and C [Option ID = 9324]

Correct Answer :-

- A only [Option ID = 9321]

- 2) What does the following function f() in 'C' return?
int f(unsigned int N) { unsigned int counter = 0; while(N > 0) { counter += N & 1; N = N >> 1;} return counter == 1; }

[Question ID = 2332][Question Description = 51_q5Nz_PG_CMS_Q02]

- 1 if N is odd, otherwise 0 [Option ID = 9325]
- 1 if N is a power of 2, otherwise 0 [Option ID = 9326]
- 1 if the binary representation of N is all 1's, otherwise 0 [Option ID = 9327]
- 1 if the binary representation of N has any 1's, otherwise 0 [Option ID = 9328]

Correct Answer :-

- 1 if N is odd, otherwise 0 [Option ID = 9325]

- 3) Consider the following recursive function F() in Java that takes an integer value and returns a string value:
public static String F(int N) {

```
if ( N == 0) return "";
return F(N - 3) + N + F(N - 2) + N;
}
```

The value of F(5) is:

[Question ID = 2333][Question Description = 51_q5Nz_PG_CMS_Q03]

- 2-25-3-135 [Option ID = 9329]
- 2-25-1-3-135 [Option ID = 9330]
- 1-462-2-1462 [Option ID = 9331]
- 2-25-3-1-135 [Option ID = 9332]

Correct Answer :-

- 2-25-3-135 [Option ID = 9329]

- 4) Match List I with List II

List I (Programming Term)	List II (Meaning)
A. JNDI	I. Runtime support for running Java programs
B. RMI	II. The API in support of naming and directory services
C. JMX	III. The methods provided by the Java development kit and runtime support for calling remote methods
D. JRE	IV. The compiler and class libraries to develop Java applications

Choose the correct answer from the options given below:

[Question ID = 2334][Question Description = 51_q5Nz_PG_CMS_Q04]

- A - II, B - III, C - IV, D - I [Option ID = 9333]
- A - II, B - IV, C - III, D - I [Option ID = 9334]
- A - I, B - III, C - IV, D - II [Option ID = 9335]
- A - III, B - III, C - IV, D - I [Option ID = 9336]

Correct Answer :-

- A - II, B - III, C - IV, D - I [Option ID = 9333]

- 5) Match List I with List II

List I (Programming Paradigm)	List II (Characteristic)
A. Imperative	I. Declarative, clausal representation, theorem proving
B. Object-oriented	II. Side-effect free, declarative, expression evaluation
C. Logic	III. Imperative, abstract data type
D. Functional	IV. Command-based, procedural

Choose the correct answer from the options given below:

[Question ID = 2335][Question Description = 51_q5Nz_PG_CMS_Q05]

- A - IV, B - III, C - I, D - II [Option ID = 9337]
- A - III, B - IV, C - I, D - II [Option ID = 9338]
- A - IV, B - III, C - II, D - I [Option ID = 9339]
- A - III, B - III, C - I, D - IV [Option ID = 9340]

Correct Answer :-

- A - IV, B - III, C - I, D - II [Option ID = 9337]

- 6) Suppose you have eight 'black and white' images taken with a 1-megapixel camera and one 'B-color' image taken by an 8-megapixel camera. How much hard disk space in total do you need to store these images on your computer?[Question ID = 2336][Question Description = 51_q5Nz_PG_CMS_Q06]

- 1 GB [Option ID = 9341]
- 4 MB [Option ID = 9342]
- 3 MB [Option ID = 9343]
- 3 GB [Option ID = 9344]

Correct Answer :-

- 1 GB [Option ID = 9341]

- 7) Which of the statements given below are correct?
The midpoint (or Bresenham) algorithm for rasterizing lines is optimized relative to DDA algorithm in that

- it avoids round-off operations.
- it is incremental.
- it uses only integer arithmetic.
- all straight lines can be displayed as straight (exact).

Choose the correct answer from the options given below:

[Question ID = 2337][Question Description = 51_q5Nz_PG_CMS_Q07]

- A and B only [Option ID = 9345]
- A and C only [Option ID = 9346]
- A, B, and D [Option ID = 9347]
- A, B, and C only [Option ID = 9348]

Correct Answer :-

- A and B only [Option ID = 9345]

- 8) What is the transformation matrix M that transforms a square in the xy-plane defined by $(1, 1)^T, (-1, 1)^T, (-1, -1)^T$ and $(1, -1)^T$ to a parallelogram whose corresponding vertices are $(2, 1)^T, (0, 1)^T, (-2, -1)^T$ and $(0, -1)^T$?

[Question ID = 2338][Question Description = 51_q5Nz_PG_CMS_Q08]

- M = $\begin{bmatrix} 1 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ [Option ID = 9349]
- M = $\begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ [Option ID = 9350]
- M = $\begin{bmatrix} 1 & 1 & 1 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ [Option ID = 9351]
- M = $\begin{bmatrix} 1 & 1 & 0 \\ 1 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ [Option ID = 9352]

Correct Answer :-

- M = $\begin{bmatrix} 1 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ [Option ID = 9349]

- 9) Suppose a Bezier curve P(t) is defined by the following four control points in the xy-plane: $P_0 = (-2, 0)$; $P_1 = (-2, 4)$; $P_2 = (2, 4)$; and $P_3 = (2, 0)$. Then which of the following statements are correct?

- Bezier curve P(t) has degree 3.
- $P(\frac{1}{2}) = (0, 3)$.
- Bezier curve P(t) may extend outside the convex hull of its control points.

Choose the correct answer from the options given below:

[Question ID = 2339][Question Description = 51_q5Nz_PG_CMS_Q09]

- A and B only [Option ID = 9353]
- A and C only [Option ID = 9354]
- B and C only [Option ID = 9355]
- A, B, and C [Option ID = 9356]

Correct Answer :-

- A and B only [Option ID = 9353]

- 10) Given below are two statements

Statement I: The maximum number of sides that a triangle might have when clipped to a rectangular viewport is 6.

Statement II: In 3D graphics, the perspective transformation is nonlinear in z.

In light of the above statements, choose the correct answer from the options given below

[Question ID = 2340][Question Description = 51_q5Nz_PG_CMS_Q10]

- Both Statement I and Statement II are true. [Option ID = 9357]
- Both Statement I and Statement II are false [Option ID = 9358]
- Statement I is true but Statement II is false [Option ID = 9359]
- Statement I is false but Statement II is true [Option ID = 9360]

Correct Answer :-

- Both Statement I and Statement II are true. [Option ID = 9357]

- 11) In software testing, beta testing is the testing performed by _____.

[Question ID = 2341][Question Description = 51_q5Nz_PG_CMS_Q11]

- potential customers at the developer's location [Option ID = 9361]
- potential customers at their own locations [Option ID = 9362]
- product developers at the customer's location [Option ID = 9363]
- product developers at their own locations [Option ID = 9364]

Correct Answer :-

- potential customers at the developer's location [Option ID = 9361]

- 12) The V components in MVC are responsible for:[Question ID = 2342][Question Description = 51_q5Nz_PG_CMS_Q12]

- User interface. [Option ID = 9365]
- Security of the system. [Option ID = 9366]
- Business logic and domain objects. [Option ID = 9367]
- Translating between user interface actions/events and operations on the domain objects. [Option ID = 9368]

Correct Answer :-

- User interface. [Option ID = 9365]

- 13) In software engineering, what kind of notation do formal methods predominantly use?[Question ID = 2343][Question Description = 51_q5Nz_PG_CMS_Q13]

- textual [Option ID = 9369]

- 3. diagrammatic [Option ID = 9370]
- 4. computer code [Option ID = 9372]

Correct Answer ->
• textual [Option ID = 9369]

14) If every requirement stated in the Software Requirement Specification (SRS) has only one interpretation, then SRS is said to be [Question ID = 2344][Question Description = 51_g5Nz_PG_CMS_Q14]

- 1. correct [Option ID = 9373]
- 2. consistent [Option ID = 9374]
- 3. unambiguous [Option ID = 9375]
- 4. verifiable [Option ID = 9376]

Correct Answer ->
• correct [Option ID = 9373]

15) A system has 99.99% uptime and has a mean-time-between-failure of 1 day. How fast does the system has to repair itself in order to reach this availability goal? [Question ID = 2345][Question Description = 51_g5Nz_PG_CMS_Q15]

- 1. 9 seconds [Option ID = 9377]
- 2. 10 seconds [Option ID = 9378]
- 3. 11 seconds [Option ID = 9379]
- 4. 12 seconds [Option ID = 9380]

Correct Answer ->
• 9 seconds [Option ID = 9377]

16) In the context of Software Configuration Management (SCM), what kind of files should be committed to your source control repository?

- A. Code files
- B. Documentation files
- C. Output files
- D. Automatically generated files that are required for your system to be used

Choose the correct answer from the options given below:

[Question ID = 2346][Question Description = 51_g5Nz_PG_CMS_Q16]

- 1. A and B only [Option ID = 9381]
- 2. B and C only [Option ID = 9382]
- 3. C and D only [Option ID = 9383]
- 4. D and A only [Option ID = 9384]

Correct Answer ->
• A and B only [Option ID = 9381]

17) Match List I with List II

List I	List II
(Software Process Model)	(Description)
A. Waterfall Model	I. Software can be developed incrementally
B. Evolutionary Model	II. Requirement compromises are inevitable
C. Component-based Software Engineering	III. Explicit recognition of risk
D. Spiral Development	IV. Inflexible partitioning of the project into stages

Choose the correct answer from the options given below:

[Question ID = 2347][Question Description = 51_g5Nz_PG_CMS_Q17]

- 1. A - IV, B - I, C - III, D - II [Option ID = 9385]
- 2. A - I, B - IV, C - II, D - III [Option ID = 9386]
- 3. A - II, B - III, C - I, D - IV [Option ID = 9387]
- 4. A - IV, B - I, C - II, D - III [Option ID = 9388]

Correct Answer ->
• A - IV, B - I, C - III, D - II [Option ID = 9385]

18) Identify the correct order of the following five levels of Capability Maturity Model (from lower to higher) to measure the maturity of an organisation's software process.

- A. Defined
- B. Optimizing
- C. Initial
- D. Managed
- E. Repeatable

Choose the correct answer from the options given below:

[Question ID = 2348][Question Description = 51_g5Nz_PG_CMS_Q18]

- 1. C, A, E, D, B [Option ID = 9389]
- 2. C, E, A, D, B [Option ID = 9390]
- 3. C, B, D, E, A [Option ID = 9391]
- 4. C, E, A, D, B [Option ID = 9392]

Correct Answer ->
• C, A, E, D, B [Option ID = 9389]

19) Given below are two statements

Statement I: Cleanroom software process model incorporates the statistical quality certification of code increments as they accumulate into a system.

Statement II: Cleanroom software engineering follows the classic analysis, design, code, test, and debug cycle to software development and focussing on defect removal rather than defect prevention.

In light of the above statements, choose the correct answer from the options given below:

[Question ID = 2349][Question Description = 51_g5Nz_PG_CMS_Q19]

- 1. Both Statement I and Statement II are true [Option ID = 9393]
- 2. Both Statement I and Statement II are false [Option ID = 9394]
- 3. Statement I is true but Statement II is false [Option ID = 9395]
- 4. Statement I is false but Statement II is true [Option ID = 9396]

Correct Answer ->
• Both Statement I and Statement II are true [Option ID = 9393]

20) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : Software developers donot do exhaustive software testing in practice.

Reason R : Even for small inputs, exhaustive testing is too computationally intensive (e.g., takes too long) to run all the tests.

In light of the above statements, choose the correct answer from the options given below:

[Question ID = 2350][Question Description = 51_g5Nz_PG_CMS_Q20]

- 1. Both A and R are true and R is the correct explanation of A [Option ID = 9397]
- 2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 9398]
- 3. A is true but R is false [Option ID = 9399]
- 4. A is false but R is true [Option ID = 9400]

Correct Answer ->
• Both A and R are true and R is the correct explanation of A [Option ID = 9397]

21) Which of the following are logically equivalent?

- A. $\neg p \rightarrow (q \rightarrow r)$ and $q \rightarrow (p \vee r)$
- B. $(p \rightarrow q) \rightarrow r$ and $p \rightarrow (q \rightarrow r)$
- C. $(p \rightarrow q) \rightarrow (r \rightarrow s)$ and $(p \rightarrow r) \rightarrow (q \rightarrow s)$

Choose the correct answer from the options given below:

[Question ID = 2351][Question Description = 51_g5Nz_PG_CMS_Q21]

- 1. A only [Option ID = 9401]
- 2. A and B only [Option ID = 9402]
- 3. B and C only [Option ID = 9403]
- 4. A and C only [Option ID = 9404]

Correct Answer ->
• A and C only [Option ID = 9401]

22) Which of these statements about the floor and ceiling functions are correct?

Statement I: $\lfloor 2x \rfloor = \lfloor x \rfloor + \lfloor x + (1/2) \rfloor$ for all real number x

Statement II: $\lfloor x + y \rfloor = \lfloor x \rfloor + \lfloor y \rfloor$ for all real numbers x and y

[Question ID = 2352][Question Description = 51_g5Nz_PG_CMS_Q22]

- 1. Both Statement I and Statement II are true [Option ID = 9405]
- 2. Both Statement I and Statement II are false [Option ID = 9406]
- 3. Statement I is true but Statement II is false [Option ID = 9407]
- 4. Statement I is false but Statement II is true [Option ID = 9408]

Correct Answer ->
• Both Statement I and Statement II are true [Option ID = 9405]

23) How many ways are there to assign 5 different jobs to 4 different employees if every employee is assigned at least 1 job? [Question ID = 2353][Question Description = 51_g5Nz_PG_CMS_Q23]

- 1. 1024 [Option ID = 9409]
- 2. 625 [Option ID = 9410]
- 3. 240 [Option ID = 9411]
- 4. 20 [Option ID = 9412]

Correct Answer ->
• 1024 [Option ID = 9409]

24) A company stores products in a warehouse. Storage bins in this warehouse are specified by their aisle, location in the aisle, and self. There are 50 aisles, 85 horizontal locations in each aisle, and 5 shelves throughout the warehouse. What is the least number of products the company can have so that at least two products must be stored in the same bin? [Question ID = 2354][Question Description = 51_g5Nz_PG_CMS_Q24]

- 1. 251 [Option ID = 9413]
- 2. 426 [Option ID = 9414]
- 3. 4251 [Option ID = 9415]
- 4. 21251 [Option ID = 9416]

Correct Answer ->
• 251 [Option ID = 9413]

25) Let us assume a person climbing the stairs can take one stair or two stairs at a time. How many ways can this person climb a flight of eight stairs? [Question ID = 2355][Question Description = 51_g5Nz_PG_CMS_Q25]

- 1. 21 [Option ID = 9417]
- 2. 24 [Option ID = 9418]
- 3. 31 [Option ID = 9419]
- 4. 34 [Option ID = 9420]

Correct Answer ->
• 21 [Option ID = 9417]

26) For which value of n is Wheel graph W_n regular? [Question ID = 2356][Question Description = 51_g5Nz_PG_CMS_Q26]

- 1. 2 [Option ID = 9421]
- 2. 3 [Option ID = 9422]
- 3. 4 [Option ID = 9423]
- 4. 5 [Option ID = 9424]

Correct Answer ->
• 2 [Option ID = 9421]

27) Which of the following Graphs is(are) planar?

- A. 
- B. 
- C. 

Choose the correct answer from the options given below:

[Question ID = 2357][Question Description = 51_g5Nz_PG_CMS_Q27]

- 1. A and B only [Option ID = 9425]
- 2. B and C only [Option ID = 9426]
- 3. A only [Option ID = 9427]
- 4. B only [Option ID = 9428]

Correct Answer ->
• A and B only [Option ID = 9425]

28) Match List I with List II

Set I	Set II
Identity Law	Identity Law
$A \cdot X + X = A$	II. Absorption Law
$B \cdot X + 0 = X$	III. Idempotent Law
$C \cdot X + 1 = 1$	IV. Domination Law
$D \cdot X + X = X$	

Choose the correct answer from the options given below:

- [Question ID = 2358] [Question Description = S1_q5Nz_PG_CMS_Q28]
- A. II, B. I, C. II, D. IV [Option ID = 9427]
 - A. I, B. III, C. IV, D. II [Option ID = 9432]
 - A. III, B. I, C. IV, D. II [Option ID = 9431]
 - A. II, B. IV, C. I, D. I [Option ID = 9432]

Correct Answer :-
 • A. II, B. I, C. II, D. IV [Option ID = 9427]

29) Let $(X, *)$ be a semigroup. Furthermore, for every a and b in X , if $a * b$, then $a^*b^* = b^*a^*$.

Based on the defined semigroup, choose the correct equalities from the options given below:

- For every a in X , $a^*a = a$
- For every a, b in X , $a^*b^* = a^*b$
- For every a, b, c in X , $a^*b^*c^* = a^*c^*$

- [Question ID = 2359] [Question Description = S1_q5Nz_PG_CMS_Q29]
- A and B only [Option ID = 9433]
 - A and C only [Option ID = 9434]
 - B and C only [Option ID = 9435]
 - A, B and C [Option ID = 9436]

Correct Answer :-
 • A and B only [Option ID = 9433]

30) Consider the following linear optimization problem:

Maximize $Z = 6x + 5y$
 Subject to $2x + 3y \leq 5$
 $x + 3y \leq 11$
 $4x + y \leq 15$
 and $x \geq 0, y \geq 0$.

The optimal solution of the problem is:

- [Question ID = 2360] [Question Description = S1_q5Nz_PG_CMS_Q30]
- 15 [Option ID = 9437]
 - 25 [Option ID = 9438]
 - 31.25 [Option ID = 9439]
 - 41.44 [Option ID = 9440]

Correct Answer :-
 • 15 [Option ID = 9437]

31) Which of the following languages are not regular?

- $L = \{0^k1^k \mid k \geq 0\}$
- $L = \{c^kba^{2k} \mid k \geq 0\}$
- $L = \{0^n1^n \mid n \geq k, k > 0\}$

Choose the correct answer from the options given below:

- [Question ID = 2361] [Question Description = S1_q5Nz_PG_CMS_Q31]
- A and B only [Option ID = 9441]
 - A and C only [Option ID = 9442]
 - B and C only [Option ID = 9443]
 - A, B and C [Option ID = 9444]

Correct Answer :-
 • A and B only [Option ID = 9441]

32) Any string of terminals that can be generated by the following context free grammar (where S is start nonterminal symbol)

$$S \rightarrow XY$$

$$X \rightarrow 0X \mid 1X \mid 0$$

$$Y \rightarrow Y0 \mid Y1 \mid 0$$

- [Question ID = 2362] [Question Description = S1_q5Nz_PG_CMS_Q32]
- has at least one 1 [Option ID = 9445]
 - should end with 0 [Option ID = 9446]
 - has no consecutive 2's or 1's [Option ID = 9447]
 - has at least two 0's [Option ID = 9448]

Correct Answer :-
 • has at least one 1 [Option ID = 9445]

33) Let

$$L_1 = \{0^n1^m \mid n \geq 1, m \geq 1\}$$

$$L_2 = \{0^m1^m \mid n \geq 1, m \geq 1\}$$

$$L_3 = \{0^n1^0 \mid n \geq 1\}$$

Which of the following are correct statements?

- $L_3 = L_1 \cap L_2$
- L_1 and L_2 are context free languages but L_3 is not a context free language
- L_1 and L_2 are not context free languages but L_3 is a context free language
- L_1 is a subset of L_3

Choose the correct answer from the options given below:

- [Question ID = 2363] [Question Description = S1_q5Nz_PG_CMS_Q33]
- A and B only [Option ID = 9449]
 - A and C only [Option ID = 9450]
 - A and D only [Option ID = 9451]
 - A only [Option ID = 9452]

Correct Answer :-
 • A and B only [Option ID = 9449]

34) Given below are two statements

Statement I: The family of context free languages is closed under homomorphism

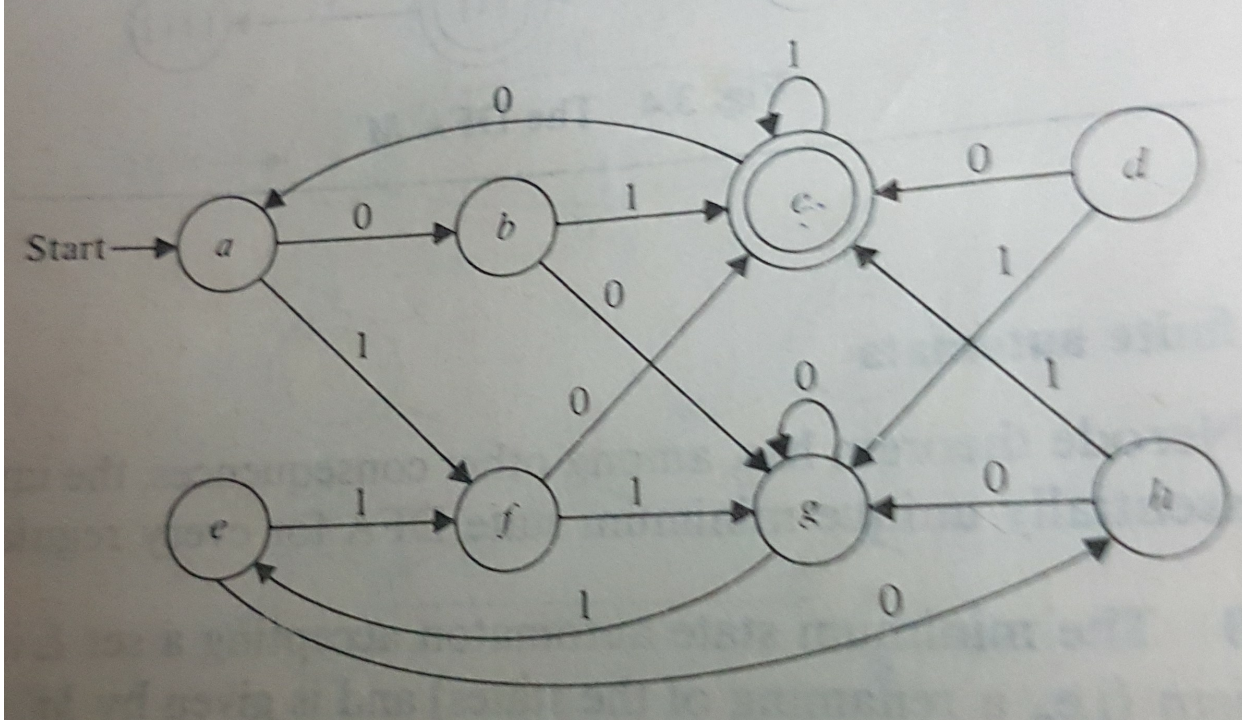
Statement II: The family of context free languages is closed under reversal

In light of the above statements, choose the correct answer from the options given below

- [Question ID = 2364] [Question Description = S1_q5Nz_PG_CMS_Q34]
- Both Statement I and Statement II are true [Option ID = 9453]
 - Both Statement I and Statement II are false [Option ID = 9454]
 - Statement I is true but Statement II is false [Option ID = 9455]
 - Statement I is false but Statement II is true [Option ID = 9456]

Correct Answer :-
 • Both Statement I and Statement II are true [Option ID = 9453]

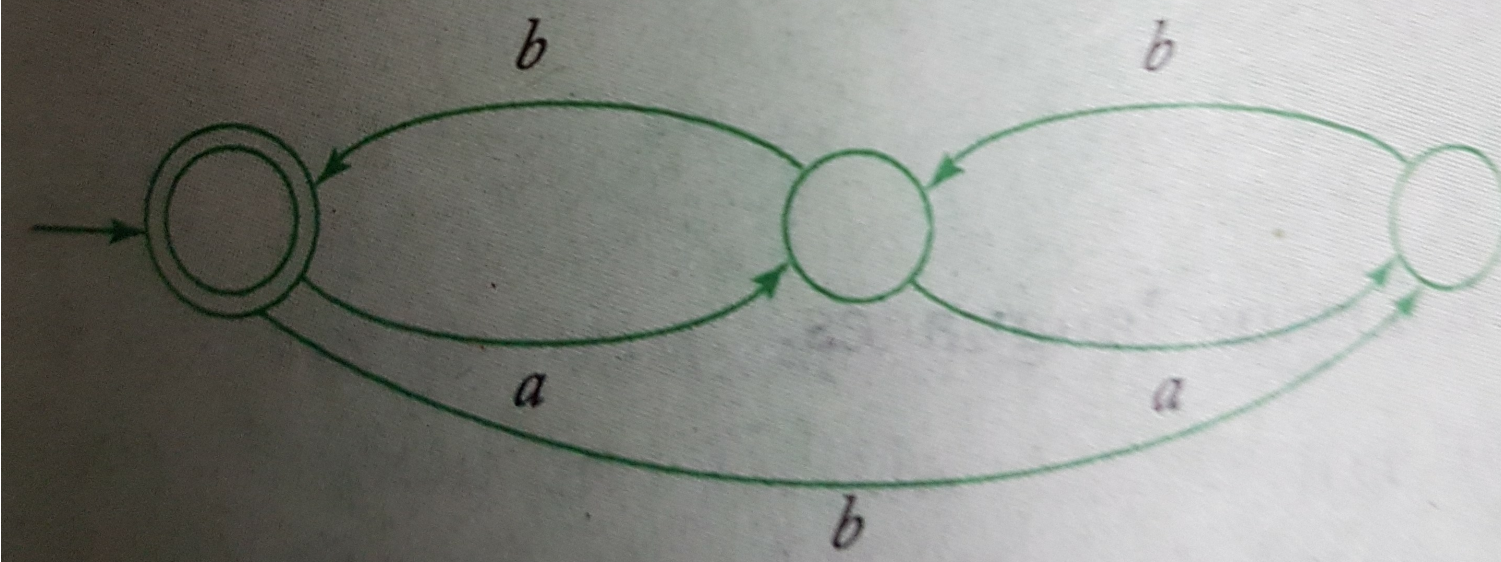
35) What is the minimum number of states required to the finite automaton equivalent to the transition diagram given below?



- [Question ID = 2365] [Question Description = S1_q5Nz_PG_CMS_Q35]
- 3 [Option ID = 9457]
 - 4 [Option ID = 9458]
 - 5 [Option ID = 9459]
 - 6 [Option ID = 9460]

Correct Answer :-
 • 3 [Option ID = 9457]

36) Find the regular expression for the language accepted by the automata given below.



[Question ID = 2366][Question Description = S1_q5Nz_PG_CMS_Q34]
 1. $\{aa^2(a-b)ab\}$ [Option ID = 9461]
 2. $\{a-babab-bb-aa^2(a-b)ab\}$ [Option ID = 9462]
 3. $\{ababab-bb-aa^2(a-b)ab\}$ [Option ID = 9463]
 4. $\{a^2(a-b)abab-bb-aa^2(a-b)ab\}$ [Option ID = 9464]

Correct Answer :-
 • $\{aa^2(a-b)ab\}$ [Option ID = 9461]

37) What language is accepted by the pushdown automaton
 $M = (\{q_0, q_1, q_2\}, \{a, b\}, \{a, b\}, \delta, q_0, z, \{q_2\})$

with
 $\delta(q_0, a, a) = \{(q_0, aa)\}; \delta(q_0, b, a) = \{(q_0, ba)\}$
 $\delta(q_0, a, z) = \{(q_0, az)\}; \delta(q_0, b, z) = \{(q_0, bz)\}$
 $\delta(q_0, \lambda, b) = \{(q_1, b)\}; \delta(q_0, \lambda, a) = \{(q_1, a)\}$
 $\delta(q_1, a, a) = \{(q_1, \lambda)\}; \delta(q_1, b, b) = \{(q_1, \lambda)\}$
 $\delta(q_1, \lambda, z) = \{(q_2, z)\}?$

[Question ID = 2367][Question Description = S1_q5Nz_PG_CMS_Q37]
 1. $L = \{w \mid n_a(w) = n_b(w), w \in \{a, b\}^*\}$ [Option ID = 9465]
 2. $L = \{w \mid n_a(w) = n_b(w), w \in \{a, b\}^*\}$ [Option ID = 9466]
 3. $L = \{w \mid n_a(w) = n_b(w), w \in \{a, b\}^*\}$ [Option ID = 9467]
 4. $L = \{w \mid n_a(w) = n_b(w), w \in \{a, b\}^*\}$ [Option ID = 9468]

Correct Answer :-
 • $L = \{w \mid n_a(w) = n_b(w), w \in \{a, b\}^*\}$ [Option ID = 9465]

38) Match List I with List II

List I	List II
Production Rules A, S → XY X → 0 Y → 1	Grammar
B, S → aS bSS ε	I. Greibach Normal Form
C, S → AB A → 0A 1A 0 B → 0A	II. Context Sensitive Grammar
D, S → aAbc Ab → bA	III. Chomsky Normal Form
AC → Ebcc bb → Bb bB → aa aA	IV. S-Grammar

Choose the correct answer from the options given below:
 [Question ID = 2368][Question Description = S1_q5Nz_PG_CMS_Q38]
 1. A - II, B - I, C - IV, D - III [Option ID = 9469]
 2. A - III, B - I, C - I, D - IV [Option ID = 9470]
 3. A - III, B - IV, C - I, D - II [Option ID = 9471]
 4. A - III, B - III, C - I, D - II [Option ID = 9472]

Correct Answer :-
 • A - III, B - I, C - IV, D - II [Option ID = 9469]

39) Which of the following concepts can be used to identify loops?

- A. Depth first ordering
- B. Dominators
- C. Reducible graphs

Choose the correct answer from the options given below:
 [Question ID = 2369][Question Description = S1_q5Nz_PG_CMS_Q39]
 1. A and B only [Option ID = 9473]
 2. A and C only [Option ID = 9474]
 3. B and C only [Option ID = 9475]
 4. A, B and C [Option ID = 9476]

Correct Answer :-
 • A and B only [Option ID = 9473]

40) Given below are two statements

Statement I: LL(1) and LR are examples of Bottom-up parsers.

Statement II: Recursive descent parser and SLR are examples of Top-down parsers

In light of the above statements, choose the correct answer from the options given below

[Question ID = 2370][Question Description = S1_q5Nz_PG_CMS_Q40]
 1. Both Statement I and Statement II are true [Option ID = 9477]
 2. Both Statement I and Statement II are false [Option ID = 9478]
 3. Statement I is true but Statement II is false [Option ID = 9479]
 4. Statement I is false but Statement II is true [Option ID = 9480]

Correct Answer :-
 • Both Statement I and Statement II are true [Option ID = 9477]

41) The postfix form of the expression $(A + B) * (C * D - E) + F / G$ is _____. [Question ID = 2371][Question Description = S1_q5Nz_PG_CMS_Q41]

- 1. $A * B + C * D * E / G + * -$ [Option ID = 9481]
- 2. $A * B + C * D * E * F * G /$ [Option ID = 9482]
- 3. $A * B + C * D * E * F * G /$ [Option ID = 9483]
- 4. $A * B + C * D * E * F * G /$ [Option ID = 9484]

Correct Answer :-
 • $A * B + C * D * E * F * G /$ [Option ID = 9481]

42) A double-ended queue (deque) supports adding and removing items from both the ends of the queue. The operations supported by deque are AddFront(adding item to front of the queue), AddRear(adding item to the rear of the queue), RemoveFront(removing item from the front of the queue), and RemoveRear(removing item from the rear of the queue). You are given only stacks to implement this data structure. You can implement only push and pop operations. What's the time complexity of performing AddFront() and AddRear() assuming m is the size of the stack and n is the number of elements? [Question ID = 2372][Question Description = S1_q5Nz_PG_CMS_Q42]

- 1. O(m) and O(n) [Option ID = 9485]
- 2. O(1) and O(1) [Option ID = 9486]
- 3. O(m) and O(1) [Option ID = 9487]
- 4. O(m) and O(m) [Option ID = 9488]

Correct Answer :-
 • O(m) and O(1) [Option ID = 9485]

43) Two balanced binary trees are given with m and n elements, respectively. They can be merged into a balanced binary search tree in ____ time.

[Question ID = 2373][Question Description = S1_q5Nz_PG_CMS_Q43]
 1. $O(m * n)$ [Option ID = 9489]
 2. $O(m + n)$ [Option ID = 9490]
 3. $O(m * n)$ [Option ID = 9491]
 4. $O(m * \log(m * n))$ [Option ID = 9492]

Correct Answer :-
 • $O(m * n)$ [Option ID = 9489]

44) A data structure is required for storing a set of integers such that each of the following operations can be done in $O(\log n)$ time, where n is the number of elements in the set.

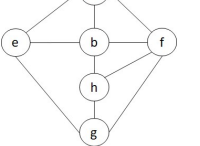
- Deletion of the smallest element
- Insertion of an element if it is not already present in the set

Which of the following data structures can be used for this purpose?

[Question ID = 2374][Question Description = S1_q5Nz_PG_CMS_Q44]
 1. A heap can be used but not a balanced binary search tree. [Option ID = 9493]
 2. A balanced binary search tree can be used but not a heap. [Option ID = 9494]
 3. Both balanced binary search tree and heap can be used. [Option ID = 9495]
 4. Neither balanced binary search tree nor heap can be used. [Option ID = 9496]

Correct Answer :-
 • A heap can be used but not a balanced binary search tree. [Option ID = 9493]

45) Consider the following graph.



I. a b e g h e
II. a b f e h g
III. a b f h g e
IV. a f g h b e

Which are depth first traversals of the above graph?
[Question ID = 2375][Question Description = 51_q5Nz_PG_CMS_Q45]
1. I, II, and IV only [Option ID = 9497]
2. I and IV only [Option ID = 9498]
3. II, III, and IV only [Option ID = 9499]
4. I, II, and IV only [Option ID = 9500]

Correct Answer :-
• I, II, and IV only [Option ID = 9497]

46) Given below are two statements
Statement I: In an undirected graph, number of odd degree vertices is even.
Statement II: In an undirected graph, sum of degrees of all vertices is even.
In light of the above statements, choose the correct answer from the options given below.

[Question ID = 2376][Question Description = 51_q5Nz_PG_CMS_Q46]
1. Both Statement I and Statement II are true. [Option ID = 9501]
2. Both Statement I and Statement II are false. [Option ID = 9502]
3. Statement I is true but Statement II is false. [Option ID = 9503]
4. Statement I is false but Statement II is true. [Option ID = 9504]

Correct Answer :-
• Both Statement I and Statement II are true. [Option ID = 9501]

47) Which of the given options provides the increasing order of asymptotic complexity of functions f1, f2, f3 and f4?
A. f1(n) = 2^n
B. f2(n) = n^2
C. f3(n) = n log n
D. f4(n) = n!n^n

Choose the correct answer from the options given below
[Question ID = 2377][Question Description = 51_q5Nz_PG_CMS_Q47]
1. C, B, D, A [Option ID = 9505]
2. C, B, A, D [Option ID = 9506]
3. B, C, A, D [Option ID = 9507]
4. B, C, D, A [Option ID = 9508]

Correct Answer :-
• C, B, D, A [Option ID = 9505]

48) The order of a leaf node in a B+ tree is the maximum number of (value, data record pointer) pairs it can hold. Given that the block size is 1K bytes, data record pointer is 7 bytes long, the value field is 9 bytes long and a block pointer is 6 bytes long, what is the order of the leaf node?
[Question ID = 2378][Question Description = 51_q5Nz_PG_CMS_Q48]
1. 63 [Option ID = 9509]
2. 64 [Option ID = 9510]
3. 67 [Option ID = 9511]
4. 68 [Option ID = 9512]

Correct Answer :-
• 63 [Option ID = 9509]

49) A hash function h defined as h(key)=key mod 7, with linear probing, is used to insert the keys 44, 45, 79, 55, 91, 18, 63 into a table indexed from 0 to 6. What will be the location of key 18?
[Question ID = 2379][Question Description = 51_q5Nz_PG_CMS_Q49]
1. 1 [Option ID = 9513]
2. 4 [Option ID = 9514]
3. 5 [Option ID = 9515]
4. 6 [Option ID = 9516]

Correct Answer :-
• 3 [Option ID = 9513]

50) In the following table, the left column contains the names of standard graph algorithms and the right column contains the time complexities of the algorithms. Here, n and m are number of vertices and edges, respectively. Match each algorithm with its time complexity.

List I	List II
A. Bellman-Ford algorithm	i. O(m^2 log n)
B. Kruskal's algorithm	ii. O(n^2)
C. Floyd-Warshall algorithm	iii. O(n^3)
D. Topological sorting	iv. O(n+m)

Choose the correct answer from the options given below:
[Question ID = 2380][Question Description = 51_q5Nz_PG_CMS_Q50]
1. A - iii, B - i, C - ii, D - iv [Option ID = 9517]
2. A - ii, B - iv, C - iii, D - i [Option ID = 9518]
3. A - iii, B - iv, C - i, D - ii [Option ID = 9519]
4. A - ii, B - i, C - iii, D - iv [Option ID = 9520]

Correct Answer :-
• A - iii, B - i, C - ii, D - iv [Option ID = 9517]

51) Which agent deals with the happy and unhappy state?
[Question ID = 2381][Question Description = 51_q5Nz_PG_CMS_Q51]
1. Utility based agent [Option ID = 9521]
2. Model based agent [Option ID = 9522]
3. Goal based Agent [Option ID = 9523]
4. Learning agent [Option ID = 9524]

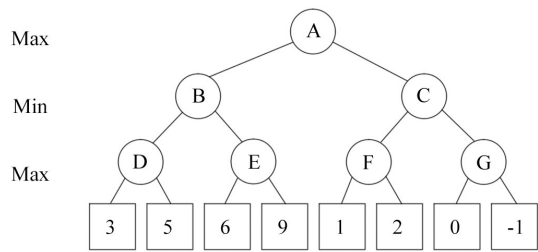
Correct Answer :-
• Utility based agent [Option ID = 9521]

52) Given below are two statements
Statement I: Breadth-First Search is optimal when all the step costs are equal whereas uniform-cost search is optimal with any step-cost.
Statement II: When all the step costs are same uniform-cost search expands more nodes at depth d than the Breadth-First Search.

In light of the above statements, choose the correct answer from the options given below
[Question ID = 2382][Question Description = 51_q5Nz_PG_CMS_Q52]
1. Both Statement I and Statement II are true [Option ID = 9525]
2. Both Statement I and Statement II are false [Option ID = 9526]
3. Statement I is true but Statement II is false [Option ID = 9527]
4. Statement I is false but Statement II is true [Option ID = 9528]

Correct Answer :-
• Both Statement I and Statement II are true [Option ID = 9525]

53) Consider the given tree below. Calculate the value at the root of the tree using alpha-beta pruning algorithm.



[Question ID = 2383][Question Description = 51_q5Nz_PG_CMS_Q53]
1. 3 [Option ID = 9529]
2. 5 [Option ID = 9530]
3. 6 [Option ID = 9531]
4. 9 [Option ID = 9532]

Correct Answer :-
• 3 [Option ID = 9529]

54) Which among the following statement(s) is/are FALSE?
A. Greedy best-first search is not optimal but is often efficient.
B. A* is complete and optimal provided h(n) is admissible or consistent.
C. Recursive best-first search is efficient in terms of time complexity but poor in terms of space complexity.
D. h(n) = 0 is an admissible heuristic for the 8-puzzle.

[Question ID = 2384][Question Description = 51_q5Nz_PG_CMS_Q54]
1. A only [Option ID = 9533]
2. A and D only [Option ID = 9534]
3. C only [Option ID = 9535]
4. C and D only [Option ID = 9536]

Correct Answer :-
• A only [Option ID = 9533]

55) Consider the sentence below.
There is a country that borders both India and Pakistan.
Which of the following logical expressions express the above sentence correctly when the predicate Country(x) represents that x is a country and Borders(x, y) represents that the countries x and y share the border?

[Question ID = 2385][Question Description = 51_q5Nz_PG_CMS_Q55]
1. $\exists x (\text{Country}(x) \wedge \text{Border}(x, \text{India}) \wedge \text{Border}(x, \text{Pakistan}))$ [Option ID = 9537]
2. $\exists x (\text{Country}(x) \Rightarrow (\text{Border}(x, \text{India}) \wedge \text{Border}(x, \text{Pakistan})))$ [Option ID = 9538]
3. $\exists x (\text{Country}(x) \Rightarrow (\text{Border}(x, \text{India}) \wedge \text{Border}(x, \text{Pakistan})))$ [Option ID = 9539]
4. $\exists x (\text{Border}(\text{Country}(x), \text{India}) \wedge \text{Pakistan})$ [Option ID = 9540]

Correct Answer :-
• $\exists x (\text{Country}(x) \wedge \text{Border}(x, \text{India}) \wedge \text{Border}(x, \text{Pakistan}))$ [Option ID = 9537]

56) Next five questions are based on the following passage.
Consider a domain consisting of three Boolean variables Toothache, Cavity, and Catch. The full joint distribution is a 2x2x2 table as shown in the figure below.

	toothache	toothache
catch	0.108	0.012
catch	0.072	0.008
cavity	0.016	0.064
cavity	0.144	0.576

The marginal probability of cavity P(cavity) is _____ [Question ID = 2386][Question Description = 51_q5Nz_PG_CMS_Q56]
1. 0.200 [Option ID = 9541]
2. 0.216 [Option ID = 9542]
3. 0.120 [Option ID = 9543]
4. 0.080 [Option ID = 9544]

Correct Answer :-
• 0.200 [Option ID = 9541]

57) The probability of a cavity, given evidence of a toothache, P(cavity | toothache) is _____ [Question ID = 2387][Question Description = 51_q5Nz_PG_CMS_Q57]
1. 0.400 [Option ID = 9545]
2. 0.600 [Option ID = 9546]
3. 0.280 [Option ID = 9547]
4. 0.216 [Option ID = 9548]

Correct Answer :-
• 0.400 [Option ID = 9545]

58) The probability of a toothache, given evidence of a cavity, P(toothache | cavity) is _____ [Question ID = 2388][Question Description = 51_q5Nz_PG_CMS_Q58]
1. 0.400 [Option ID = 9549]
2. 0.600 [Option ID = 9550]
3. 0.280 [Option ID = 9551]
4. 0.216 [Option ID = 9552]

Correct Answer :-
• 0.400 [Option ID = 9549]

59) P(cavity | V toothache) is _____ [Question ID = 2389][Question Description = 51_q5Nz_PG_CMS_Q59]
1. 0.200 [Option ID = 9553]
2. 0.120 [Option ID = 9554]

3. 0.280 [Option ID = 9535]
4. 0.296 [Option ID = 9536]

Correct Answer :-
• 0.200 [Option ID = 9533]

60) The probability for Cavity, given that either Toothache or Catch is true, $P(\text{Cavity} | \text{toothache} \vee \text{catch})$ is _____ [Question ID = 2390][Question Description = S1_q5Nz_PG_CMS_Q60]

- 0.6000 [Option ID = 9537]
- 0.5384 [Option ID = 9538]
- 0.8000 [Option ID = 9539]
- 0.4615 [Option ID = 9540]

Correct Answer :-
• 0.6000 [Option ID = 9537]

61) Which of the DBMS component ensures that concurrent execution of multiple operations on the database results into a consistent database state?

[Question ID = 2391][Question Description = S1_q5Nz_PG_CMS_Q61]

- Logs [Option ID = 9541]
- Buffer manager [Option ID = 9542]
- File manager [Option ID = 9543]
- Transaction processing system [Option ID = 9544]

Correct Answer :-
• Logs [Option ID = 9541]

62) Consider following two statements:

Statement I: Relational database schema represents the logical design of the database.

Statement II: Current snapshot of a relation only provides the degree of the relation.

In the context to the above statements, choose the correct option from the options given below:

[Question ID = 2392][Question Description = S1_q5Nz_PG_CMS_Q62]

- Statement I is TRUE but Statement II is FALSE [Option ID = 9545]
- Statement I is FALSE but Statement II is TRUE [Option ID = 9546]
- Both Statement I and Statement II are FALSE [Option ID = 9547]
- Both Statement I and Statement II are TRUE [Option ID = 9548]

Correct Answer :-
• Statement I is TRUE but Statement II is FALSE [Option ID = 9545]

63) Given a fixed-length record file that is ordered on the key field. The file needs B disk blocks to store R number of records. Find the average access time needed to access any record of the given file using binary search.

[Question ID = 2393][Question Description = S1_q5Nz_PG_CMS_Q63]

- $\frac{B}{2}$
[Option ID = 9549]
- $B * R$ [Option ID = 9570]
- R [Option ID = 9571]
- $\log_2 B$
[Option ID = 9572]

Correct Answer :-
• $\frac{B}{2}$
[Option ID = 9549]

64) Given the following STUDENT-COURSE scheme: STUDENT (Rollno, Name, courseNo) COURSE (courseNo, courseName, capacity), where Rollno is the primary key of relation STUDENT and courseNo is the primary key of relation COURSE. Attribute courseName of COURSE takes unique values only. Which of the following query(ies) will find total number of students enrolled in each course, along with its courseName.

- SELECT courseName, count(*) total from STUDENT natural join COURSE group by courseName;
- SELECT C.courseName, count(*) total from STUDENT S, COURSE C where S.courseNo=C.courseNo group by courseName;
- SELECT courseName, count(*) total from COURSE C where courseNo in (SELECT courseNo from STUDENT);

[Question ID = 2394][Question Description = S1_q5Nz_PG_CMS_Q64]

- A and B only [Option ID = 9573]
- C only [Option ID = 9574]
- A only [Option ID = 9575]
- B only [Option ID = 9576]

Correct Answer :-
• A and B only [Option ID = 9573]

65) Given the following STUDENT-COURSE scheme: STUDENT (Rollno, Name, CourseNo) COURSE (CourseNo, CourseName, Capacity), where Rollno is the primary key of relation STUDENT and CourseNo is the primary key of relation COURSE. Attribute CourseName of COURSE takes unique values only. The number of records in COURSE and STUDENT tables are 3 and 5 respectively. Following relational algebraic query is executed: R=STUDENT X COURSE

Match List I with List II in context to the above problem statement.

List I	List II
A. Degree of table R	I. 15
B. Cardinality of table R	II. NIL
C. Foreign key of relation STUDENT	III. 6
D. Foreign key of relation COURSE	IV. CourseNo

Choose the correct answer from the options given below:

[Question ID = 2395][Question Description = S1_q5Nz_PG_CMS_Q65]

- A, III, B, I, C, IV, D, II [Option ID = 9577]
- A, I, B, III, C, IV, D, II [Option ID = 9578]
- A, I, B, III, C, IV, D, II options 3 and 4 are same
- A, I, B, III, C, II, D, IV [Option ID = 9580]

Correct Answer :-
• A, III, B, I, C, IV, D, II [Option ID = 9577]

66) Suppose a B+ tree is used for indexing a database file. Consider the following information:

size of the search key field: 10 bytes, block size = 1024 bytes, size of the record pointer = 9 bytes, size of the block pointer = 8 bytes.

Let K be the order of internal node and L be the order of leaf node of B+ tree, then (K, L) = _____.

[Question ID = 2396][Question Description = S1_q5Nz_PG_CMS_Q66]

- (17, 53) [Option ID = 9581]
- (10, 52) [Option ID = 9582]
- (10, 64) [Option ID = 9583]
- (34, 31) [Option ID = 9584]

Correct Answer :-
• (17, 53) [Option ID = 9581]

67) Given a relation scheme R(x,y,z,w) with functional dependencies set F={x→y, z→w}. All attributes take single and atomic values only.

- Relation R is in First Normal FORM
- Relation R is in Second Normal FORM
- Primary key of R is xz

Choose the correct answer from the options given below:

[Question ID = 2397][Question Description = S1_q5Nz_PG_CMS_Q67]

- C only [Option ID = 9585]
- B and C only [Option ID = 9586]
- A and C only [Option ID = 9587]
- B only [Option ID = 9588]

Correct Answer :-
• C only [Option ID = 9585]

68) A company is consuming parts in the manufacturing of other products. Each of the part is either manufactured within the company or purchased from the external suppliers or both. For each part, partnumber, partname is maintained. Attribute batchnumber is maintained if the consumed part is manufactured in the company. If part is purchased from external supplier, then supplier name is maintained. Which of the following constraints need to be considered when modelling class/subclass concepts in ERD for the given problem.

[Question ID = 2398][Question Description = S1_q5Nz_PG_CMS_Q68]

- Total specialization and overlapping constraints [Option ID = 9589]
- Disjoint constraint only [Option ID = 9590]
- Partial participation [Option ID = 9591]
- Partial participation and disjoint constraints [Option ID = 9592]

Correct Answer :-
• Total specialization and overlapping constraints [Option ID = 9589]

69) A transaction may be in one of the following states during its execution life cycle in concurrent execution environment.

- FAILED
- TERMINATED
- PARTIALLY COMMITTED
- COMMITTED
- ACTIVE

Given a transaction in active state during its execution, find its next transitioned state from the options given below:

[Question ID = 2399][Question Description = S1_q5Nz_PG_CMS_Q69]

- A only [Option ID = 9593]
- Either A or C only [Option ID = 9594]
- C only [Option ID = 9595]
- D only [Option ID = 9596]

Correct Answer :-
• A only [Option ID = 9593]

70) Which of the following is used to create a database schema?

[Question ID = 2400][Question Description = S1_q5Nz_PG_CMS_Q70]

- DMB [Option ID = 9597]
- DDL [Option ID = 9598]
- HTAL [Option ID = 9599]
- XML [Option ID = 9600]

Correct Answer :-
• DML [Option ID = 9597]

71) Given memory access time as p nanoseconds and additional q nanoseconds for handling the page fault. What is the effective memory access time if a page fault occurs once for every 100 instructions?

[Question ID = 2401][Question Description = S1_q5Nz_PG_CMS_Q71]

- $p + \frac{q}{100}$
[Option ID = 9601]
- $\frac{p+q}{100}$
[Option ID = 9602]
- $p + q$
[Option ID = 9603]
- $\frac{p}{100} + q$
[Option ID = 9604]

Correct Answer :-
• $p + \frac{q}{100}$
[Option ID = 9601]

72) In a file allocation system, the following allocation schemes are used:

- Contiguous
- Indexed
- Linked allocation

Which of the allocation scheme(s) given above will not suffer from external fragmentation? Choose the correct answer from the options given below:

[Question ID = 2402][Question Description = S1_q5Nz_PG_CMS_Q72]

- A only [Option ID = 9605]
- B and C only [Option ID = 9606]
- A and B only [Option ID = 9607]
- C only [Option ID = 9608]

Correct Answer :-
• A only [Option ID = 9605]

73) Given below are three statements related to interrupt handling mechanism

- Interrupt handler routine is not stored at a fixed address in the memory.
- CPU hardware has a dedicated wire called the interrupt request line used for handling interrupts
- Interrupt vector contains the memory addresses for specialized interrupt handlers.

In the context of above statements, choose the correct answer from the options given below:

[Question ID = 2403][Question Description = S1_q5Nz_PG_CMS_Q73]

- A is TRUE only [Option ID = 9609]
- Both B and C are TRUE only [Option ID = 9610]
- Both A and B are TRUE only [Option ID = 9611]
- Both A, C are TRUE only [Option ID = 9612]

Correct Answer :-
• A is TRUE [Option ID - 9695]

74) Match List I with List II

List I	List II
System calls	Description
A. fork()	I. Sends a signal from one process to another process
B. exec()	II. Indicates termination of the current process
C. kill()	III. Loads the specified program in the memory
D. exit()	IV. Creates a child process

Choose the correct answer from the options given below:

[Question ID = 2404][Question Description = 51_q5Nz_PG_CMS_Q74]

1. A - I, B - III, C - IV, D - II [Option ID = 9613]
2. A - IV, B - III, C - I, D - II [Option ID = 9614]
3. A - IV, B - I, C - II, D - III [Option ID = 9615]
4. A - IV, B - III, C - II, D - I [Option ID = 9616]

Correct Answer :-
• A - I, B - III, C - IV, D - I [Option ID = 9613]

75) Consider the following 3 processes with the length of the CPU burst time given in milliseconds:

Process	Arrival Time	Burst Time
P1	0	8
P2	1	4
P3	2	9

What is the average waiting time for these processes if they are scheduled using preemptive shortest job first scheduling algorithm?

[Question ID = 2405][Question Description = 51_q5Nz_PG_CMS_Q75]

1. 5.9 [Option ID = 9617]
2. 4.6 [Option ID = 9618]
3. 4.66 [Option ID = 9619]
4. 5 [Option ID = 9620]

Correct Answer :-
• 5.5 [Option ID = 9617]

Topic:- CSA1_SHAAN_NOV21B

1) Read the following and answer the questions:

Consider a machine with 16 GB main memory and 32-bits virtual address space, with page size as 4KB. Frame size and page size is same for the given machine.

The number of bits reserved for the frame offset is _____. [Question ID = 2406][Question Description = 51_q5Nz_PG_CMS_Q76]

1. 12 [Option ID = 9621]
2. 14 [Option ID = 9622]
3. 32 [Option ID = 9623]
4. 8 [Option ID = 9624]

Correct Answer :-
• 12 [Option ID = 9621]

2) Read the following and answer the questions:

Consider a machine with 16 GB main memory and 32-bits virtual address space, with page size as 4KB. Frame size and page size is same for the given machine.

Find number of pages required for the given virtual address space [Question ID = 2407][Question Description = 51_q5Nz_PG_CMS_Q77]

1. 2²⁰ [Option ID = 9625]
2. 2²⁰ [Option ID = 9626]
3. 2²⁰ [Option ID = 9627]
4. 2²⁰ [Option ID = 9628]

Correct Answer :-
• 2²⁰ [Option ID = 9625]

3) Read the following and answer the questions:

Consider a machine with 16 GB main memory and 32-bits virtual address space, with page size as 4KB. Frame size and page size is same for the given machine.

What is the minimum number of bits needed for the physical address? [Question ID = 2408][Question Description = 51_q5Nz_PG_CMS_Q78]

1. 28 [Option ID = 9629]
2. 34 [Option ID = 9630]
3. 24 [Option ID = 9631]
4. 12 [Option ID = 9632]

Correct Answer :-
• 28 [Option ID = 9629]

4) Read the following and answer the questions:

Consider a machine with 16 GB main memory and 32-bits virtual address space, with page size as 4KB. Frame size and page size is same for the given machine.

What is the size of page table for handling the given virtual address space, given that each page table entry is of size 2 bytes?

[Question ID = 2409][Question Description = 51_q5Nz_PG_CMS_Q79]

1. 2MB [Option ID = 9633]
2. 2MB [Option ID = 9634]
3. 32MB [Option ID = 9635]
4. 12MB [Option ID = 9636]

Correct Answer :-
• 2MB [Option ID = 9633]

5) Read the following and answer the questions:

Consider a machine with 16 GB main memory and 32-bits virtual address space, with page size as 4KB. Frame size and page size is same for the given machine.

If a process of size 34KB is to be executed on this machine, then what will be the size of internal fragmentation for this process? [Question ID = 2410][Question Description = 51_q5Nz_PG_CMS_Q80]

1. 4KB [Option ID = 9637]
2. Zero [Option ID = 9638]
3. 1MB [Option ID = 9639]
4. 2MB [Option ID = 9640]

Correct Answer :-
• 4KB [Option ID = 9637]

Topic:- CSA1_SHAAN_NOV21C

1) Match List I with List II

List I	List II
A. Odd Function	I. NAND gate
B. Universal Gate	II. XOR gate
C. 2421 code	III. Amplification
D. Buffer	IV. Self-Complementing

Choose the correct answer from the options given below:

[Question ID = 2411][Question Description = 51_q5Nz_PG_CMS_Q81]

1. A - I, B - II, C - III, D - IV [Option ID = 9641]
2. A - II, B - I, C - IV, D - III [Option ID = 9642]
3. A - I, B - III, C - II, D - IV [Option ID = 9643]
4. A - IV, B - II, C - III, D - I [Option ID = 9644]

Correct Answer :-
• A - I, B - II, C - III, D - IV [Option ID = 9641]

2) The Octal equivalent of hexadecimal (D.C)16 is: [Question ID = 2412][Question Description = 51_q5Nz_PG_CMS_Q82]

1. (15.4)8 [Option ID = 9645]
2. (65.4)8 [Option ID = 9646]
3. (15.3)8 [Option ID = 9647]
4. (61.3)8 [Option ID = 9648]

Correct Answer :-
• (15.4)8 [Option ID = 9645]

3) A digital computer has a common bus system for 8 registers 16 bits each. How many multiplexers are required to implement common bus? What size of multiplexers is required?

[Question ID = 2413][Question Description = 51_q5Nz_PG_CMS_Q83]

1. 16, 8x1 [Option ID = 9649]
2. 8, 16x1 [Option ID = 9650]
3. 8, 8x1 [Option ID = 9651]
4. 16, 16x1 [Option ID = 9652]

Correct Answer :-
• 16, 8x1 [Option ID = 9649]

4) Which of the following is not an example of pseudo-instruction? [Question ID = 2414][Question Description = 51_q5Nz_PG_CMS_Q84]

1. ORG [Option ID = 9653]
2. DEC [Option ID = 9654]
3. END [Option ID = 9655]
4. HLT [Option ID = 9656]

Correct Answer :-
• ORG [Option ID = 9653]

5) The reverse Polish notation of the following infix expression $[A*(B+C*(D-E))] / ((F*(G+H))$ is _____. [Question ID = 2415][Question Description = 51_q5Nz_PG_CMS_Q85]

1. ABCE+*FGH+* [Option ID = 9657]
2. ABCE+*FGH+* [Option ID = 9658]
3. ABCE+*FGH+* [Option ID = 9659]
4. ABCE+*FGH+* [Option ID = 9660]

Correct Answer :-
• ABCE+*FGH+* [Option ID = 9657]

6) Arrange the following in the increasing order of complexity.

- A. I/O Module
- B. I/O processor
- C. I/O Channel
- D. DMA

Choose the correct answer from the options given below

[Question ID = 2416][Question Description = 51_q5Nz_PG_CMS_Q86]

1. D, C, B, A [Option ID = 9661]
2. C, D, A, B [Option ID = 9662]
3. A, B, C, D [Option ID = 9663]
4. A, D, C, B [Option ID = 9664]

Correct Answer :-
• D, C, B, A [Option ID = 9661]

7) The characteristics of the combinational circuits are:

- A. Output at any time is function of inputs at that time
- B. Contains memory elements
- C. Do not have feedback paths
- D. Clock is used to trigger the circuits to obtain outputs

Choose the correct answer from the options given below:

[Question ID = 2417][Question Description = 51_q5Nz_PG_CMS_Q87]

1. A and B only [Option ID = 9665]
2. B and C only [Option ID = 9666]
3. A and C only [Option ID = 9667]
4. B and D only [Option ID = 9668]

Correct Answer :-
• A and B only [Option ID = 9665]

8) The cache coherence problem can be solved

- A. by having multiprot memory
- B. allow only nonshared data to be stored in cache
- C. using a snoopy cache controller
- D. using memory interleaving

Choose the correct answer from the options given below:

[Question ID = 2418][Question Description = 51_q5Nz_PG_CMS_Q88]

1. A and C only [Option ID = 9669]
2. B and C only [Option ID = 9670]
3. D and C only [Option ID = 9671]
4. B and D only [Option ID = 9672]

Correct Answer :-
• A and C only [Option ID = 9669]

9) Given below are two statements

Statement I: CISC computers have a large number of addressing modes.
Statement II: In RISC machines memory access is limited to load and store instructions.

In light of the above statements, choose the correct answer from the options given below

[Question ID = 2419][Question Description = S1_q5Nz_PG_CMS_Q89]

- Both Statement I and Statement II are true [Option ID = 9673]
- Both Statement I and Statement II are false [Option ID = 9674]
- Statement I is true but Statement II is false [Option ID = 9675]
- Statement I is false but Statement II is true [Option ID = 9676]

Correct Answer :-

- Both Statement I and Statement II are true [Option ID = 9673]

10) Which of the following statement is true?

- Control memory is part of the hardwired control unit.
- Program control instructions are used to alter the sequential flow of the program.
- The register indirect addressing mode for accessing memory operand is similar to displacement addressing mode.
- CPU utilization is not affected by the introduction of interrupts.

[Question ID = 2420][Question Description = S1_q5Nz_PG_CMS_Q90]

- A [Option ID = 9677]
- B [Option ID = 9678]
- C [Option ID = 9679]
- D [Option ID = 9680]

Correct Answer :-

- A [Option ID = 9677]

11) Match List I with List II

List I	List II
A. Data Link Layer	i. True end-to-end layer
B. Network Layer	ii. Token Management
C. Transport Layer	iii. Produce billing information
D. Session Layer	iv. Piggybacking

Choose the correct answer from the options given below:

[Question ID = 2421][Question Description = S1_q5Nz_PG_CMS_Q91]

- A - IV, B - III, C - I, D - II [Option ID = 9681]
- A - IV, B - III, C - I, D - III [Option ID = 9682]
- A - II, B - III, C - I, D - IV [Option ID = 9683]
- A - IV, B - I, C - III, D - II [Option ID = 9684]

Correct Answer :-

- A - IV, B - III, C - I, D - II [Option ID = 9681]

12) Given below are two statements

Statement I:

Telnet, Ftp, Http are application layer protocol

Statement II:

The Iridium project was planned to launch 66 low orbit satellites.

In light of the above statements, choose the correct answer from the options given below

[Question ID = 2422][Question Description = S1_q5Nz_PG_CMS_Q92]

- Both Statement I and Statement II are true [Option ID = 9685]
- Both Statement I and Statement II are false [Option ID = 9686]
- Statement I is true but Statement II is false [Option ID = 9687]
- Statement I is false but Statement II is true [Option ID = 9688]

Correct Answer :-

- Both Statement I and Statement II are true [Option ID = 9685]

13) Which of the following statement is False?[Question ID = 2423][Question Description = S1_q5Nz_PG_CMS_Q93]

- Packet switching leads to better utilization of bandwidth resources than circuit switching. [Option ID = 9689]
- Packet switching results in less variation in the delay than circuit switching. [Option ID = 9690]
- Packet switching sender and receiver can use any bit rate, format or framing method unlike circuit switching. [Option ID = 9691]
- Packet switching can lead to reordering unlike circuit switching. [Option ID = 9692]

Correct Answer :-

- Packet switching leads to better utilization of bandwidth resources than circuit switching. [Option ID = 9689]

14) In Ethernet when Manchester coding is used, the bit rate is _____.[Question ID = 2424][Question Description = S1_q5Nz_PG_CMS_Q94]

- Half the baud rate [Option ID = 9693]
- twice the baud rate [Option ID = 9694]
- Thrice the baud rate [Option ID = 9695]
- Same as the baud rate [Option ID = 9696]

Correct Answer :-

- Half the baud rate [Option ID = 9693]

15) The address of class B host is to be split into subnets with 6-bit subnet number. What is the maximum number of the subnets and the maximum number of hosts in each subnet?[Question ID = 2425][Question Description = S1_q5Nz_PG_CMS_Q95]

- 62 subnets and 262142 hosts [Option ID = 9697]
- 64 subnets and 1024 hosts [Option ID = 9698]
- 64 subnets and hosts 262142 [Option ID = 9699]
- 62 subnets and 1022 hosts [Option ID = 9700]

Correct Answer :-

- 62 subnets and 262142 hosts [Option ID = 9697]

16) In electronic mail, which of the following protocols allows the transfer of multimedia?[Question ID = 2426][Question Description = S1_q5Nz_PG_CMS_Q96]

- IMAP [Option ID = 9701]
- SMTP [Option ID = 9702]
- POP3 [Option ID = 9703]
- MIME [Option ID = 9704]

Correct Answer :-

- IMAP [Option ID = 9701]

17) A message is encrypted using public key cryptography to send a message from sender to receiver. Which one of the following statements is True?

[Question ID = 2427][Question Description = S1_q5Nz_PG_CMS_Q97]

- Sender encrypts using receiver's public key [Option ID = 9705]
- Sender encrypts using his own public key [Option ID = 9706]
- Receiver encrypts using sender's public key [Option ID = 9707]
- Receiver decrypts using his own public key [Option ID = 9708]

Correct Answer :-

- Sender encrypts using receiver's public key [Option ID = 9705]

18) Which of the following statements are true?

- Frequency division multiplexing technique can be handled by digital circuits.
- Time division multiplexing technique can be handled by analog circuits
- Wavelength division multiplexing technique is used with optical fiber for combining two signals.
- Frequency division multiplexing technique can be applied when the bandwidth of a link is greater than the bandwidth of the signals to be transmitted.

Choose the correct answer from the options given below:

[Question ID = 2428][Question Description = S1_q5Nz_PG_CMS_Q98]

- B and D only [Option ID = 9709]
- C and D only [Option ID = 9710]
- A and D only [Option ID = 9711]
- B and D only [Option ID = 9712]

Correct Answer :-

- B and D only [Option ID = 9709]

19) Which of the following statements are true?

- X.25 is connection-oriented network
- X.25 doesn't support switched virtual circuits.
- Frame relay service provides acknowledgments.
- Frame relay service provides detection of transmission errors.

Choose the correct answer from the options given below:

[Question ID = 2429][Question Description = S1_q5Nz_PG_CMS_Q99]

- A and D only [Option ID = 9713]
- B and D only [Option ID = 9714]
- C and D only [Option ID = 9715]
- B and C only [Option ID = 9716]

Correct Answer :-

- A and D only [Option ID = 9713]

20) Let G(x) be the generator polynomial used for CRC checking. The condition that should be satisfied by the G(x) to catch all errors consisting of an odd number of inverted bits is:[Question ID = 2430][Question Description = S1_q5Nz_PG_CMS_Q100]

- (x+1) is factor of G(x) [Option ID = 9717]
- (x-1) is factor of G(x) [Option ID = 9718]
- (x²+1) is factor of G(x) [Option ID = 9719]
- (1-x²) is factor of G(x) [Option ID = 9720]

Correct Answer :-

- (x+1) is factor of G(x) [Option ID = 9717]

Topic:- GP_26NDV_SHZ_A

1) Study the given table carefully and answer the questions that follow

The following table has semester fees for four different courses in 5 different years.

Years	BCA	MCA	MTech	MPhil
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે.

આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે.

Year	BCA	MCA	MTech	MPhil
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

What is the difference between the average semester fees of BCA and average semester fees of MCA during 2016-2020?

આશરે 2016-2020 ના વર્ષોમાં આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે.

[Question ID = 2431][Question Description = S2_q5Nz_PG_GP24_Q01]

- 27200/27200 [Option ID = 9721]
- 2786/2786 [Option ID = 9722]
- 2786/2786 [Option ID = 9723]
- 27400/27400 [Option ID = 9724]

Correct Answer :-

- 27200/27200 [Option ID = 9721]

2) Study the given table carefully and answer the questions that follow

The following table has semester fees for four different courses in 5 different years.

Years	BCA	MCA	MTech	MPhil
2016	25000	52000	61400	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે.

આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે. આશરે 100 માર્કો આપવાના છે.

Year	BCA	MCA	MTech	MPhil
2016	25000	52000	61400	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

2018	27000	54000	62000	30000
2019	27000	55700	62900	30000
2020	28000	56800	63700	30000

Handwritten notes: 27/60, 55/60, 62/60, 30/60, 36400, 1449%.

Which course has highest percentage fee increase from 2019 to 2020?

Which course has highest percentage fee increase from 2019 to 2020?

- BCA
- MCA
- MTEch
- MPhil

Correct Answer: MCA

Study the given table carefully and answer the questions that follow

Years	BCA	MCA	MTEch	MPhil
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27400	55700	62900	33400
2020	28000	56800	63700	33900

Which course has the lowest percentage fee increase from 2017-2018?

Which course has the lowest percentage fee increase from 2017-2018?

- BCA
- MCA
- MTEch
- MPhil

Correct Answer: MCA

Study the given table carefully and answer the questions that follow

Years	BCA	MCA	MTEch	MPhil
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27400	55700	62900	33400
2020	28000	56800	63700	33900

Find out the difference between total semester fees (for all courses) 2018 and 2019

Find out the difference between total semester fees (for all courses) 2018 and 2019

- 3250/3250
- 3270/3270
- 3100/3100
- 3100/3100

Correct Answer: 3250/3250

Study the given table carefully and answer the questions that follow

Years	BCA	MCA	MTEch	MPhil
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27400	55700	62900	33400
2020	28000	56800	63700	33900

Find out the average of difference of fees of MCA and MTEch for 2016-2020.

Find out the average of difference of fees of MCA and MTEch for 2016-2020.

- 7700/7700
- 7600/7600
- 7600/7600
- 7750/7750

Correct Answer: 7700/7700

Topic: GP_26MOV_SH2_B

1) The web portal of Swayam Prabha is maintained by

1) The web portal of Swayam Prabha is maintained by

- Indian Institute of Technology, Kharagpur
- Indian Institute of Technology, Delhi
- Google India
- INFLIBNET

Correct Answer: Indian Institute of Technology, Kharagpur

2) The National Repository of Open Educational Resources is managed by

2) The National Repository of Open Educational Resources is managed by

- Indian Institute of Technology, Delhi
- Indira Gandhi National Open University
- Central Institute of Educational Technology
- University Grants Commission

Correct Answer: Indira Gandhi National Open University

3) Given below are two statements

Statement I: The ability to form and use symbols (words, gestures, signs, images, and so on) are accomplished in the preoperational period.

Statement II: According to Piaget, preoperational children do not have a tendency to be egocentric.

In light of the above statements, choose the most appropriate answer from the options given below

In light of the above statements, choose the most appropriate answer from the options given below

- Both Statement I and Statement II are correct
- Both Statement I and Statement II are incorrect
- Statement I is correct but Statement II is incorrect
- Statement I is incorrect but Statement II is correct

Correct Answer: Both Statement I and Statement II are correct

4) SWAYAM platform was developed by

4) SWAYAM platform was developed by

- MHRD
- Google
- Microsoft
- IT, Delhi
- Adobe Inc.

Choose the correct answer from the options given below:

Choose the correct answer from the options given below:

- उत्तर का अर्थ है (उत्तर चुनिए), उत्तर चुनिए
- उत्तर
- उत्तर
- उत्तर
- उत्तर

Correct Answer: उत्तर चुनिए

5) SWAYAM platform was developed by

5) SWAYAM platform was developed by

- MHRD
- Google
- Microsoft
- IT, Delhi
- Adobe Inc.

Choose the correct answer from the options given below:

Choose the correct answer from the options given below:

- उत्तर का अर्थ है (उत्तर चुनिए), उत्तर चुनिए
- उत्तर
- उत्तर
- उत्तर
- उत्तर

Correct Answer: उत्तर चुनिए

6) SWAYAM platform was developed by

6) SWAYAM platform was developed by

- MHRD
- Google
- Microsoft
- IT, Delhi
- Adobe Inc.

1. A and B only/આ A ઓ B

(Option ID = 9753)

2. A and C only/આ A ઓ C

(Option ID = 9754)

3. B and D only/આ B ઓ D

(Option ID = 9755)

4. D and E only/આ D ઓ E

(Option ID = 9756)

Correct Answer :-

A and B only/આ A ઓ B

(Option ID = 9753)

5) Match List I with List II

List I	List II
MOC Platform	Developer
A. Coursera	Anant Agarwal
B. Udacity	Sebastian Thrun
C. Edx	Andrew Ng, Daphne Koller
D. Khan Academy	Sebastian Thrun

Choose the correct answer from the options given below:

ગ્રહ-1 નો ગ્રહ-2 નો ગ્રહો દર્શાવે :

ગ્રહ-1	ગ્રહ-2
ગુરુ ગ્રહોત્તર	શુક્ર ગ્રહોત્તર
A. ગ્રહોત્તર	J. ગ્રહોત્તર
B. ગ્રહોત્તર	K. ગ્રહોત્તર
C. E ઓ ગ્રહોત્તર	HL. ગ્રહોત્તર, ગ્રહોત્તર
D. ગ્રહોત્તર	IV. ગ્રહોત્તર

સૌથી વધુ શક્ય છે કે નહીં સમજાવો :

(Question ID = 2440) Question Description = 52_q5Nz_PG_GP24_Q10

1. A, I, B, E, C, III, D, IV (Option ID = 9757)
2. A, II, B, IV, C, I, D, II (Option ID = 9758)
3. A, IV, B, I, C, II, D, III (Option ID = 9759)
4. A, II, B, III, C, IV, D, I (Option ID = 9760)

Correct Answer :-

A, I, B, E, C, III, D, IV (Option ID = 9757)

6) If a researcher has to test a hypothesis whether the difference between the means of two groups are significant, s/he will use:

સૌથી વધુ શક્ય છે કે નહીં સમજાવો કે જો બે જૂથો વચ્ચે અંકોમાં તફાવત છે, તો તે શક્ય છે કે નહીં સમજાવો :

(Question ID = 2441) Question Description = 52_q5Nz_PG_GP24_Q11

1. Chi-square test/નિષ્કર્ષ ચકાસણી (Option ID = 9761)
2. Correlation coefficient/સંબંધ ગુણક (Option ID = 9762)
3. Sign test/સહિત ચકાસણી (Option ID = 9763)
4. Student's t-test/સ્ટુડન્ટ ટ-ચકાસણી (Option ID = 9764)

Correct Answer :-

Chi-square test/નિષ્કર્ષ ચકાસણી (Option ID = 9761)

7) Which of the following are the stages of meta analysis?

- A. Understand the literature
- B. Conduct new studies to fill the gap
- C. Develop inclusion and exclusion criteria of the study
- D. Locating primary studies
- E. Identify secondary data

Choose the correct answer from the options given below:

આવશ્યક છે કે નહીં સમજાવો (જો વાસ્તવિકતા) કે નહીં સમજાવો :

- A. સમજાવો નહીં સમજાવો
- B. સમજાવો નહીં સમજાવો કે નહીં સમજાવો
- C. સમજાવો કે નહીં સમજાવો આ સમજાવો સમજાવો સમજાવો
- D. સમજાવો સમજાવો નહીં સમજાવો
- E. સમજાવો સમજાવો કે નહીં સમજાવો

સૌથી વધુ શક્ય છે કે નહીં સમજાવો :

(Question ID = 2442) Question Description = 52_q5Nz_PG_GP24_Q12

1. A, B and D only/આ A, B ઓ D (Option ID = 9765)
2. B, C and D only/આ B, C ઓ D (Option ID = 9766)
3. A, C and D only/આ A, C ઓ D (Option ID = 9767)
4. B, D and E only/આ B, D ઓ E (Option ID = 9768)

Correct Answer :-

A, B and D only/આ A, B ઓ D (Option ID = 9765)

8) Given below are two statements

Statement I: Parametric statistics are more powerful than non-parametric statistics

Statement II: Parametric statistics are assumption free statistics

In light of the above statements, choose the correct answer from the options given below

સૌથી વધુ શક્ય છે કે નહીં સમજાવો :

1. Statement I and Statement II are true/બંને I અને II સાચા છે (Option ID = 9769)
2. Both Statement I and Statement II are false/બંને I અને II ખોટા છે (Option ID = 9770)
3. Statement I is true but Statement II is false/બંને I સાચા છે, II ખોટા છે (Option ID = 9771)
4. Statement I is false but Statement II is true/બંને I ખોટા છે, II સાચા છે (Option ID = 9772)

Correct Answer :-

Both Statement I and Statement II are true/બંને I અને II સાચા છે (Option ID = 9769)

9) Which among the following methods is commonly used in anthropological research?

આવશ્યક છે કે નહીં સમજાવો (જો વાસ્તવિકતા) કે નહીં સમજાવો :

1. Survey method/નિષ્કર્ષ ચકાસણી (Option ID = 9773)
2. Case study method/સ્થાન અભ્યાસ (Option ID = 9774)
3. Life history method/જીવન ઇતિહાસ (Option ID = 9775)
4. Ethnographic method/જાણી જાણી (Option ID = 9776)

Correct Answer :-

Survey method/નિષ્કર્ષ ચકાસણી (Option ID = 9773)

10) Given below are two statements

Statement I: Exploratory studies mainly aim at developing hypotheses or questions for further research.

Statement II: The goal of formal study is to test the hypotheses or answer the questions posed.

In light of the above statements, choose the correct answer from the options given below

સૌથી વધુ શક્ય છે કે નહીં સમજાવો :

1. Statement I and Statement II are true/બંને I અને II સાચા છે (Option ID = 9777)
2. Both Statement I and Statement II are false/બંને I અને II ખોટા છે (Option ID = 9778)
3. Statement I is true but Statement II is false/બંને I સાચા છે, II ખોટા છે (Option ID = 9779)
4. Statement I is false but Statement II is true/બંને I ખોટા છે, II સાચા છે (Option ID = 9780)

Correct Answer :-

Both Statement I and Statement II are true/બંને I અને II સાચા છે (Option ID = 9777)

11) In communication, entropy refers to

સંચારણામાં એન્ટ્રોપી (એન્ટ્રોપી) નો અર્થ શું છે ?

1. Predictable message/પ્રકાશ્ય સંદેશ (Option ID = 9781)
2. Unpredictable message/અપ્રકાશ્ય સંદેશ (Option ID = 9782)
3. Ordinary speech/સામાન્ય વાણી (Option ID = 9783)
4. Defensive speech/રક્ષણાત્મક વાણી (Option ID = 9784)

Correct Answer :-

Predictable message/પ્રકાશ્ય સંદેશ (Option ID = 9781)

12) Keeping quiet because of fear of punishment in communication is an _____ barrier.

સંચારણામાં ડરને કારણે શાંતિ રાખવાને કારણે સંચારણામાં અવરોધક શું છે ?

1. Institutional/સંસ્થા (Option ID = 9785)
2. Interpersonal/અંતરંગ (Option ID = 9786)
3. Inceptive/અંગત (Option ID = 9787)
4. Individual/વ્યક્તિ (Option ID = 9788)

Correct Answer :-

Institutional/સંસ્થા (Option ID = 9785)

13) A general code of conduct circulated among the employees of an institution is an example of:

આવશ્યક છે કે નહીં સમજાવો (જો વાસ્તવિકતા) કે નહીં સમજાવો :

1. Downward communication/અડધા સંચારણા (Option ID = 9789)
2. Lateral communication/અડધા સંચારણા (Option ID = 9790)
3. Horizontal communication/અડધા સંચારણા (Option ID = 9791)
4. Upward communication/અડધા સંચારણા (Option ID = 9792)

Correct Answer :-

Downward communication/અડધા સંચારણા (Option ID = 9789)

14) What is a blog?

વેબ્લોગ શું છે ?

1. Internet/રજીટ (Option ID = 9793)
2. Search engine/સર્ચ એન્જિન (Option ID = 9794)
3. Personal website in the form of a Journal/વ્યક્તિગત વેબસાઇટ જેટલું સંચારણા સાધન (Option ID = 9795)
4. Online journal/વેબસાઇટ (Option ID = 9796)

Correct Answer :-

Internet/રજીટ (Option ID = 9793)

15) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Teachers should accept students as they are and with whatever cognitive level they have.

Reason R: Moralizing, being judgemental, exposing ignorance are barriers to successful communication.

In light of the above statements, choose the correct answer from the options given below

સૌથી વધુ શક્ય છે કે નહીં સમજાવો (જો વાસ્તવિકતા) કે નહીં સમજાવો :

1. Both A and R are true and R is the correct explanation of A/આ બંને સાચા છે અને R, A નો સાચો સમજાવો છે (Option ID = 9797)
2. Both A and R are true but R is NOT the correct explanation of A/આ બંને સાચા છે પરંતુ R, A નો સાચો સમજાવો નથી (Option ID = 9798)
3. A is true but R is false/આ સાચું છે પરંતુ R ખોટું છે (Option ID = 9799)
4. A is false but R is true/આ ખોટું છે પરંતુ R સાચું છે (Option ID = 9800)

Correct Answer :-

Both A and R are true and R is the correct explanation of A/આ બંને સાચા છે અને R, A નો સાચો સમજાવો છે (Option ID = 9797)

Correct Answer :-
• Both A and B are true and B is the correct explanation of A (A) (B) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (Option ID - 9797)

16) Which one of the following fractions is the largest?
[Question ID = 2451] [Question Description = 52_q5Nz_PG_GP24_Q21]
1. 5/8 (Option ID - 9801)
2. 11/16 (Option ID - 9802)
3. 31/40 (Option ID - 9803)
4. 47/64 (Option ID - 9804)
Correct Answer :-
• 5/8 (Option ID - 9801)

17) Find the next two terms in the series.
A, D, H, M, ...
[Question ID = 2452] [Question Description = 52_q5Nz_PG_GP24_Q22]
1. Q, X, Q, X (Option ID - 9805)
2. R, Y, R, Y (Option ID - 9806)
3. S, Z, S, Z (Option ID - 9807)
4. T, A, T, A (Option ID - 9808)
Correct Answer :-
• Q, X, Q, X (Option ID - 9805)

18) The ages of Swati and Manisha are in the ratio of 5:6 and the sum of their ages is 55 years. What will be the ratio of their ages after 5 years?
[Question ID = 2453] [Question Description = 52_q5Nz_PG_GP24_Q23]
1. 6/7 (Option ID - 9809)
2. 7/6 (Option ID - 9810)
3. 6/5 (Option ID - 9811)
4. 5/6 (Option ID - 9812)
Correct Answer :-
• 6/7 (Option ID - 9809)

19) Given below are two statements:
Statement I: A vehicle's speed of 30.6 km/hr is the same as 20 m/s.
Statement II: The speed of a bus is 72 km/hr. The distance covered by the bus in 10 seconds is 100 meter.
In light of the above statements, choose the correct answer from the options given below.
[Question ID = 2454] [Question Description = 52_q5Nz_PG_GP24_Q24]
1. Both Statement I and Statement II are true (Option ID - 9813)
2. Both Statement I and Statement II are false (Option ID - 9814)
3. Statement I is true but Statement II is false (Option ID - 9815)
4. Statement I is false but Statement II is true (Option ID - 9816)
Correct Answer :-
• Both Statement I and Statement II are true (Option ID - 9813)

20) The average of ten numbers is 11. If each number is multiplied by 7, then the average of the new set of numbers is:
[Question ID = 2455] [Question Description = 52_q5Nz_PG_GP24_Q25]
1. 70/70 (Option ID - 9817)
2. 110/10 (Option ID - 9818)
3. 77/7 (Option ID - 9819)
4. 7/7 (Option ID - 9820)
Correct Answer :-
• 70/70 (Option ID - 9817)

21) Which of the following statements correctly apply to deductive arguments?
A. Deductive arguments are either valid or invalid.
B. There must be a necessary relation between the premises and the conclusion.
C. Adding new premises improves the validity.
D. False premises may lead to a true conclusion.
Choose the correct answer from the options given below:
[Question ID = 2456] [Question Description = 52_q5Nz_PG_GP24_Q26]
1. A, B and C only (Option ID - 9821)
2. A, B and D only (Option ID - 9822)
3. A, C and D only (Option ID - 9823)
4. B, C and D only (Option ID - 9824)
Correct Answer :-
• A, B and C only (Option ID - 9821)

22) Identify the fallacy committed in the argument:
Since no tragic actors are idiots and some comedians are not idiots, so some comedians are not tragic actors.
[Question ID = 2457] [Question Description = 52_q5Nz_PG_GP24_Q27]
1. Fallacy of the Illicit Process of Major Term (Option ID - 9825)
2. Fallacy of the Illicit Process of Minor Term (Option ID - 9826)
3. Existential Fallacy (Option ID - 9827)
4. Fallacy of Exclusion Premises (Option ID - 9828)
Correct Answer :-
• Fallacy of the Illicit Process of Major Term (Option ID - 9825)

23) "No one has been able to prove the existence of extrasensory perception. We must therefore conclude that extrasensory perception is a myth". Which of the following fallacies is committed in this argument?
[Question ID = 2458] [Question Description = 52_q5Nz_PG_GP24_Q28]
1. Appeal to ignorance (Option ID - 9829)
2. Appeal to authority (Option ID - 9830)
3. Appeal to emotional authority (Option ID - 9831)
4. Appeal to tradition (Option ID - 9832)
Correct Answer :-
• Appeal to ignorance (Option ID - 9829)

24) Which one of the following statements is true with reference to Simanyatadris inference?
[Question ID = 2459] [Question Description = 52_q5Nz_PG_GP24_Q29]
1. The middle term is related to the major term as a cause (Option ID - 9833)
2. The middle term is related to the major term as an effect (Option ID - 9834)
3. The middle term is related to the major term neither as a cause nor as an effect (Option ID - 9835)
4. The middle term is related to the major term both as a cause and as an effect (Option ID - 9836)
Correct Answer :-
• The middle term is related to the major term as a cause (Option ID - 9833)

25) Given below are two statements:
Statement I: According to Nyaya, universals are eternal entities which are distinct from, but inhere in many individuals.
Statement II: The universal is the basis of the notion of sameness that we have with regard to all the individuals of a certain class.
In light of the above statements, choose the correct answer from the options given below.
[Question ID = 2460] [Question Description = 52_q5Nz_PG_GP24_Q30]
1. Both Statement I and Statement II are true (Option ID - 9837)
2. Both Statement I and Statement II are false (Option ID - 9838)
3. Statement I is true but Statement II is false (Option ID - 9839)
4. Statement I is false but Statement II is true (Option ID - 9840)
Correct Answer :-
• Both Statement I and Statement II are true (Option ID - 9837)

26) Which one of the following is a type of malware embedded in a program on a computer that will set off a malicious function when certain conditions are met?
[Question ID = 2461] [Question Description = 52_q5Nz_PG_GP24_Q31]
1. Worm (Option ID - 9841)
2. Trojan (Option ID - 9842)
3. Spyware (Option ID - 9843)
4. Logic bomb (Option ID - 9844)
Correct Answer :-
• Worm (Option ID - 9841)

27) Which memory is used as part of the processor?
[Question ID = 2462] [Question Description = 52_q5Nz_PG_GP24_Q32]
1. RAM (Option ID - 9845)
2. ROM (Option ID - 9846)
3. Register (Option ID - 9847)
4. Hard disk (Option ID - 9848)
Correct Answer :-
• RAM (Option ID - 9845)

28) Given below are two statements:
Statement I: The MAC address identifies which device is connected at a given IP address.
Statement II: MAC addresses are unique to each device.
In light of the above statements, choose the correct answer from the options given below.
[Question ID = 2463] [Question Description = 52_q5Nz_PG_GP24_Q33]
1. Both Statement I and Statement II are true (Option ID - 9849)
2. Both Statement I and Statement II are false (Option ID - 9850)
3. Statement I is true but Statement II is false (Option ID - 9851)
4. Statement I is false but Statement II is true (Option ID - 9852)
Correct Answer :-
• Both Statement I and Statement II are true (Option ID - 9849)

- 1. Both Statement I and Statement II are true/ವಿವರ I ಮತ್ತು II ಸರಿ ಇವೆ (Option ID - 9849)
- 2. Both Statement I and Statement II are false/ವಿವರ I ಮತ್ತು II ತಪ್ಪು ಇವೆ (Option ID - 9850)
- 3. Statement I is true but Statement II is false/ವಿವರ I ಸರಿ ಆದರೆ II ತಪ್ಪು ಇವೆ (Option ID - 9851)
- 4. Statement I is false but Statement II is true/ವಿವರ I ತಪ್ಪು ಆದರೆ II ಸರಿ ಇವೆ (Option ID - 9852)

Correct Answer :-
• Both Statement I and Statement II are true/ವಿವರ I ಮತ್ತು II ಸರಿ ಇವೆ (Option ID - 9849)

29) Following are some statements regarding most of the web browsers. Choose the correct statements.

- A. They have a home page
- B. They do not have the ability to store users' favourite pages
- C. They have hyperlinks to allow users to navigate
- D. They do not keep a history of websites visited by the users

Choose the correct answer from the options given below:

ಸರಿಯಾದ ಉತ್ತರವನ್ನು ಆಯ್ಕೆ ಮಾಡಿ. ಕೆಳಕಂಡಂತಿರುವ ಹೆಚ್ಚಿನ ವೆಬ್ ಬ್ರೌಸರ್‌ಗಳಿಗೆ:

- A. ಮನೆ ಪುಟ ಇದೆ
- B. ಉಪಯುಕ್ತ ವೆಬ್‌ಗಳನ್ನು ಸಂಗ್ರಹಿಸುವ ಸಾಮರ್ಥ್ಯವಿಲ್ಲ
- C. ಉಪಯುಕ್ತ ವೆಬ್‌ಗಳಿಗೆ ಹೈಪರ್‌ಲಿಂಕ್‌ಗಳನ್ನು ಒದಗಿಸುತ್ತದೆ
- D. ಭೇಟಿ ಮಾಡಿದ ವೆಬ್‌ಗಳನ್ನು ಇತಿಹಾಸವಾಗಿ ಸಂಗ್ರಹಿಸುವ ಸಾಮರ್ಥ್ಯವಿಲ್ಲ

ಅಧಿಕಾರವು ನೀಡಿದ ಸರಿಯಾದ ಉತ್ತರವು:

[Question ID = 2464][Question Description = 52_q5Nz_PG_GP24_Q34]

- 1. A and C only/ವಿವರ A ಮತ್ತು C (Option ID - 9853)
- 2. A and B only/ವಿವರ A ಮತ್ತು B (Option ID - 9854)
- 3. A and D only/ವಿವರ A ಮತ್ತು D (Option ID - 9855)
- 4. A and C only/ವಿವರ A ಮತ್ತು C (Option ID - 9856)

Correct Answer :-
• A and C only/ವಿವರ A ಮತ್ತು C (Option ID - 9853)

30) Match List I with List II

List I	List II
Type of memory	Fabrication method
A. Dynamic Random Access Memory (DRAM)	I. Flip-Flops
B. Static Random Access Memory (SRAM)	II. Floating gate transistors and capacitors
C. Programmable Read Only Memory (PROM)	III. Transistors and capacitors
D. Erasable Programmable Read Only Memory (EPROM)	IV. Matrix of fuses

Choose the correct answer from the options given below:

ಘಟನೆ I ಮತ್ತು II ನ್ನು ಹೊಂದಿಸಿ:

ಘಟನೆ I	ಘಟನೆ II
A. ಡೈನಾಮಿಕ್ ರಾನ್ಡಮ್ ಅಕ್ಸೆಸ್ ಮೆಮೊರಿ (DRAM)	I. ಫ್ಲಿಪ್-ಫ್ಲಾಪ್
B. ಸ್ಟಾಟಿಕ್ ರಾನ್ಡಮ್ ಅಕ್ಸೆಸ್ ಮೆಮೊರಿ (SRAM)	II. ಫ್ಲಾಟಿಂಗ್ ಗೇಟ್ ಟ್ರಾನ್ಸಿಸ್ಟರ್‌ಗಳು ಮತ್ತು ಕಾಪೆಸಿಟರ್‌ಗಳು
C. ಪ್ರೊಗ್ರಾಂಮಬಲ್ ರೀಡ್-ಓನ್ಲಿ ಮೆಮೊರಿ (PROM)	III. ಟ್ರಾನ್ಸಿಸ್ಟರ್‌ಗಳು ಮತ್ತು ಕಾಪೆಸಿಟರ್‌ಗಳು
D. ಏರ್ಸೆಬಲ್ ಪ್ರೊಗ್ರಾಂಮಬಲ್ ರೀಡ್-ಓನ್ಲಿ ಮೆಮೊರಿ (EPROM)	IV. ಫುಸ್‌ಗಳ ಮ್ಯಾಟ್ರಿಕ್ಸ್

ಅಧಿಕಾರವು ನೀಡಿದ ಸರಿಯಾದ ಉತ್ತರವು:

- [Question ID = 2465][Question Description = 52_q5Nz_PG_GP24_Q35]
- 1. A - III, B - I, C - IV, D - II (Option ID - 9857)
- 2. A - II, B - I, C - III, D - IV (Option ID - 9858)
- 3. A - IV, B - II, C - I, D - III (Option ID - 9859)
- 4. A - III, B - IV, C - I, D - II (Option ID - 9860)

Correct Answer :-
• A - III, B - I, C - IV, D - II (Option ID - 9857)

31) Which one of the following Millennium Development Goals is about ensuring Environmental sustainability?

ಹೊಂದಿಕೆಯಾದ ಉತ್ತರವು ಕೆಳಕಂಡಂತಿರುವ ಮಿಲೆನಿಯಂ ಡೆವಲಪ್‌ಮೆಂಟ್ ಗೋಲುಗಳಲ್ಲಿ ಯಾವುದು? (Option ID = 9861)

- 1. Goal 1/ಗೋಲು 1 (Option ID - 9861)
- 2. Goal 3/ಗೋಲು 3 (Option ID - 9862)
- 3. Goal 5/ಗೋಲು 5 (Option ID - 9863)
- 4. Goal 7/ಗೋಲು 7 (Option ID - 9864)

Correct Answer :-
• Goal 7/ಗೋಲು 7 (Option ID - 9864)

32) The air pollutant NOx is a combination of

ನೈಟ್ರೋಜನ್ ಡೈಆಕ್ಸೈಡ್ (NOx) ಯು ಏನು?

- [Question ID = 2467][Question Description = 52_q5Nz_PG_GP24_Q37]
- 1. Nitrous oxide and Nitrogen dioxide/ನೈಟ್ರಸ್ ಆಕ್ಸೈಡ್ ಮತ್ತು ನೈಟ್ರೋಜನ್ ಡೈಆಕ್ಸೈಡ್ (Option ID - 9865)
- 2. Nitrous oxide and Nitric oxide/ನೈಟ್ರಸ್ ಆಕ್ಸೈಡ್ ಮತ್ತು ನೈಟ್ರಿಕ್ ಆಕ್ಸೈಡ್ (Option ID - 9866)
- 3. Nitrogen dioxide and Nitric oxide/ನೈಟ್ರೋಜನ್ ಡೈಆಕ್ಸೈಡ್ ಮತ್ತು ನೈಟ್ರಿಕ್ ಆಕ್ಸೈಡ್ (Option ID - 9867)
- 4. Nitrogen pentoxide and Nitrogen dioxide/ನೈಟ್ರೋಜನ್ ಪೆಂಟಾಕ್ಸೈಡ್ ಮತ್ತು ನೈಟ್ರೋಜನ್ ಡೈಆಕ್ಸೈಡ್ (Option ID - 9868)

Correct Answer :-
• Nitrous oxide and Nitrogen dioxide/ನೈಟ್ರಸ್ ಆಕ್ಸೈಡ್ ಮತ್ತು ನೈಟ್ರೋಜನ್ ಡೈಆಕ್ಸೈಡ್ (Option ID - 9865)

33) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Schistosomiasis is a polluted water borne disease.

Reason R: Schistosomiasis is mainly caused due to the presence of sulphate in water.

In light of the above statements, choose the correct answer from the options given below

ಕೆಳಕಂಡಂತಿರುವ ಎರಡು ಹೇಳಿಕೆಗಳಿವು: A ಮತ್ತು R. A ಸರಿಯಾದ ಹೇಳಿಕೆ ಮತ್ತು R ತಪ್ಪಾದ ಹೇಳಿಕೆ.

Assertion (A): Schistosomiasis is a polluted water borne disease.

Reason (R): Schistosomiasis is mainly caused due to the presence of sulphate in water.

ಮೇಲಿನ ಹೇಳಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ, ಕೆಳಕಂಡಂತಿರುವ ಉತ್ತರವನ್ನು ಆಯ್ಕೆ ಮಾಡಿ.

[Question ID = 2468][Question Description = 52_q5Nz_PG_GP24_Q38]

- 1. Both A and R are true and R is the correct explanation of A/(A ಮತ್ತು R ಸರಿ ಮತ್ತು R A ಯ ಸರಿಯಾದ ವಿವರಣೆ (Option ID - 9869)
- 2. Both A and R are true but R is NOT the correct explanation of A/(A ಮತ್ತು R ಸರಿ ಆದರೆ R A ಯ ಸರಿಯಾದ ವಿವರಣೆ (Option ID - 9870)
- 3. A is true but R is false/(A ಸರಿ ಆದರೆ R ತಪ್ಪು (Option ID - 9871)
- 4. A is false but R is true/(A ತಪ್ಪು ಆದರೆ R ಸರಿ (Option ID - 9872)

Correct Answer :-
• Both A and R are true and R is the correct explanation of A/(A ಮತ್ತು R ಸರಿ ಮತ್ತು R A ಯ ಸರಿಯಾದ ವಿವರಣೆ (Option ID - 9869)

34) Article 48A of the Indian Constitution directs the states to ensure protection and improvement of

ನೀರು ಮತ್ತು ಸಸ್ಯಗಳ ಸಂರಕ್ಷಣೆ ಮತ್ತು ಸುಧಾರಣೆ (Option ID = 9873)

- 1. Education/ಶಿಕ್ಷಣ (Option ID - 9873)
- 2. Environment/ವಿವರಣೆ (Option ID - 9874)
- 3. Business/ವಿವರಣೆ (Option ID - 9875)
- 4. Mineral resource/ನೈಸರ್ಗಿಕ ಸಂಪನ್ಮೂಲ (Option ID - 9876)

Correct Answer :-
• Education/ಶಿಕ್ಷಣ (Option ID - 9873)

35) Which of the following states has maximum wind power potential in India as per MWRE's latest report?

ಭಾರತದಲ್ಲಿ ಯಾವ ರಾಜ್ಯವು ಅತ್ಯಧಿಕ ಗಾಳಿ ಶಕ್ತಿ ಸಂಪನ್ಮೂಲವನ್ನು ಹೊಂದಿದೆ? (Option ID = 9877)

- [Question ID = 2470][Question Description = 52_q5Nz_PG_GP24_Q40]
- 1. Rajasthan/ರಾಜಸ್ಥಾನ (Option ID - 9877)
- 2. Tamil Nadu/ತಮಿಳುನಾಡು (Option ID - 9878)
- 3. Karnataka/ಕರ್ನಾಟಕ (Option ID - 9879)
- 4. Gujarat/ಗುಜರಾತ್ (Option ID - 9880)

Correct Answer :-
• Rajasthan/ರಾಜಸ್ಥಾನ (Option ID - 9877)

36) NSQF will be aligned with International Standard Classification of Occupations maintained by

NSQF ಅನ್ನು ಯಾವ ಅಂತರರಾಷ್ಟ್ರೀಯ ವೃತ್ತಿಪರ ವರ್ಗೀಕರಣದೊಂದಿಗೆ ಹೊಂದಿಸಲಾಗುವುದು? (Option ID = 9881)

- [Question ID = 2471][Question Description = 52_q5Nz_PG_GP24_Q41]
- 1. ILO/ಐಟಿಐಐಐ (Option ID - 9881)
- 2. UNESCO/ಯುನೆಸ್ಕೋ (Option ID - 9882)
- 3. NCFE/ನ್ಯಾಷನಲ್ ಕೌನ್ಸಿಲ್ ಫಾರ್ ಫಿಲ್ಡ್ ಇನ್ ಸ್ಟ್ರಕ್ಷನ್ (Option ID - 9883)
- 4. Ministry of Skill Development/ಕೌಶಲ್ ಸಂವಹನ ಇಲಾಖೆ (Option ID - 9884)

Correct Answer :-
• ILO/ಐಟಿಐಐಐ (Option ID - 9881)

37) SARTHAQ is

ಸಾರ್ಥಾಕ್ ಯೋಜನೆ ಯಾವುದು? (Option ID = 9885)

- [Question ID = 2472][Question Description = 52_q5Nz_PG_GP24_Q42]
- 1. A training programme for teachers launched by the Government of India/ಭಾರತ ಸರ್ಕಾರದಿಂದ ಆಯೋಜಿಸಿದ ಶಿಕ್ಷಕರಿಗಾಗಿ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ (Option ID - 9885)
- 2. Implementation plan for NEP-2020/NEP-2020 ಅನುಷ್ಠಾನ ಯೋಜನೆ (Option ID - 9886)
- 3. A Government of India initiative to provide psychological support for students and teachers for mental health and emotional well-being/ಭಾರತ ಸರ್ಕಾರದಿಂದ ಆಯೋಜಿಸಿದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಮತ್ತು ಶಿಕ್ಷಕರಿಗಾಗಿ ಮನಃಶಾಸ್ತ್ರ ಮತ್ತು ಅಧ್ಯಾತ್ಮಿಕವಾಗಿ ಸುಸ್ಥರಾಗಲು ಸಹಾಯ ಮಾಡುವ ಯೋಜನೆ (Option ID - 9887)
- 4. An organization for supporting the differently-abled children/ವಿಭಿನ್ನ ಸಾಮರ್ಥ್ಯದ ಮಕ್ಕಳಿಗೆ ಸಹಾಯ ಮಾಡುವ ಸಂಸ್ಥೆ (Option ID - 9888)

Correct Answer :-
• A training programme for teachers launched by the Government of India/ಭಾರತ ಸರ್ಕಾರದಿಂದ ಆಯೋಜಿಸಿದ ಶಿಕ್ಷಕರಿಗಾಗಿ ತರಬೇತಿ ಕಾರ್ಯಕ್ರಮ (Option ID - 9885)

38) Given below are two statements

Statement I: The National Knowledge Commission recommended opening 500 universities to enable India to attain a Gross Enrollment Ratio of at least 20 % by 2015

Statement II: The need to establish an Independent Regulatory Authority for Higher Education (RAHE) was recommended by the National Knowledge Commission

In light of the above statements, choose the most appropriate answer from the options given below

ಕೆಳಕಂಡಂತಿರುವ ಎರಡು ಹೇಳಿಕೆಗಳಿವು:

ಹೇಳಿಕೆ I: 2015 ರವರೆಗೆ ಭಾರತದಲ್ಲಿ ಕನಿಷ್ಠ 20% ಗ್ರಾಸ್ ಎನ್‌ರೋಲ್ಮೆಂಟ್ ರೇಷಿಯೋ ಅನ್ನು ಸಾಧಿಸಲು 500 ವಿಶ್ವವಿದ್ಯಾನಿಲಯಗಳನ್ನು ತೆರೆದಿಡುವುದು ಅಗತ್ಯವಿದೆ.

ಹೇಳಿಕೆ II: ಹೆಚ್ಚಿನ ಶಿಕ್ಷಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸ್ವತಂತ್ರ ನಿಯಂತ್ರಣ ಅಧಿಭೋಗವನ್ನು (RAHE) ಸ್ಥಾಪಿಸುವುದು ಅಗತ್ಯವಿದೆ.

ಮೇಲಿನ ಹೇಳಿಕೆಗಳ ಆಧಾರದ ಮೇಲೆ, ಕೆಳಕಂಡಂತಿರುವ ಉತ್ತರವನ್ನು ಆಯ್ಕೆ ಮಾಡಿ.

[Question ID = 2473][Question Description = 52_q5Nz_PG_GP24_Q43]

- 1. Both Statement I and Statement II are correct/ವಿವರ I ಮತ್ತು II ಸರಿ (Option ID - 9889)
- 2. Both Statement I and Statement II are incorrect/ವಿವರ I ಮತ್ತು II ತಪ್ಪು (Option ID - 9890)
- 3. Statement I is correct but Statement II is incorrect/ವಿವರ I ಸರಿ ಆದರೆ II ತಪ್ಪು (Option ID - 9891)
- 4. Statement I is incorrect but Statement II is correct/ವಿವರ I ತಪ್ಪು ಆದರೆ II ಸರಿ (Option ID - 9892)

Correct Answer :-
• Both Statement I and Statement II are correct/ವಿವರ I ಮತ್ತು II ಸರಿ (Option ID - 9889)

39) Which of the following statement(s) do NOT hold true with respect to the Vocational Education as per NPE-2020?

- A. Voc degrees introduced in 2013 will be discontinued
- B. Lok Vidya courses will replace existing vocational courses
- C. Focus areas for vocational education will be chosen on skills gap analysis without mapping local opportunities
- D. National Committee for integration of Vocational Education will be constituted
- E. Vocational education will be integrated into all schools and higher education institutions in a phased manner over the next decade

Choose the correct answer from the options given below:

ಕೆಳಕಂಡಂತಿರುವ ಹೇಳಿಕೆಗಳಲ್ಲಿ ಯಾವುದು NPE-2020 ನ ಪ್ರಕಾರ ಸರಿಯಾಗಿಲ್ಲ?

- A. 2013 ರಲ್ಲಿ ಪರಿಚಯಿಸಿದ ವೃತ್ತಿಪರ ಡಿಗ್ರಿಗಳು 2020 ರವರೆಗೆ ರದ್ದುಪಡಿಸಲ್ಪಡುತ್ತವೆ
- B. ಲೋಕ್ ವಿದ್ಯಾ ಕೋರ್ಸುಗಳು ಅಸ್ತಿತ್ವದಲ್ಲಿರುವ ವೃತ್ತಿಪರ ಕೋರ್ಸುಗಳನ್ನು ಬದಲಿಸುತ್ತವೆ
- C. ವೃತ್ತಿಪರ ಶಿಕ್ಷಣಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸ್ಥಳೀಯ ಅವಕಾಶಗಳನ್ನು ಗುರುತಿಸದೆ ಕೌಶಲ್ ಅಂತರಾಳದ ವಿಶ್ಲೇಷಣೆಯ ಆಧಾರದ ಮೇಲೆ ಗುರುತಿಸುವುದು ಸರಿಯಾಗಿದೆ
- D. ವೃತ್ತಿಪರ ಶಿಕ್ಷಣದ ಸಂಯೋಜನೆಗಾಗಿ ವೃತ್ತಿಪರ ಶಿಕ್ಷಣ ಸಂಯೋಜನಾ ಸಮಿತಿ ಸ್ಥಾಪಿಸಲಾಗುವುದು
- E. ವೃತ್ತಿಪರ ಶಿಕ್ಷಣವು 10 ವರ್ಷಗಳಲ್ಲಿ ಹಂತಹಂತವಾಗಿ ಎಲ್ಲಾ ಶಾಲೆ ಮತ್ತು ಹೆಚ್ಚಿನ ಶಿಕ್ಷಣ ಸಂಸ್ಥೆಗಳಲ್ಲಿ ಸಂಯೋಜಿಸಿದಂತೆ ಸಂಯೋಜಿಸಲಾಗುವುದು

ಅಧಿಕಾರವು ನೀಡಿದ ಸರಿಯಾದ ಉತ್ತರವು:

[Question ID = 2474][Question Description = 52_q5Nz_PG_GP24_Q44]

