UGC NET 2021 Computer Science N Applications

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

A. 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).

B. If the image fails to load (slow connection, broken path, etc.) then alt text is displayed instead.

C. SEO (Search Engine Optimization) benefits.

Choose the *correct* answer from the options given below:

[Question ID = 2331][Question Description = S1_qSNz_PG_CMS_Q01]
1. A only [Option ID = 9321]
2. B and C only [Option ID = 9322]
3. C only [Option ID = 9323]
4. 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 = S1_qSNz_PG_CMS_Q02]
1. 1 if N is odd, otherwise 0 [Option ID = 9325]
2. 1 if N is a power of 2, otherwise 0 [Option ID = 9326]
3. 1 if the binary representation of N is all 1's, otherwise 0 [Option ID = 9327]
4. 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 = S1_qSNz_PG_CMS_Q03]
1. -2-25-3-135 [Option ID = 9329]
2. -2-25-1-3-135 [Option ID = 9330]
3. -1-145-2-245 [Option ID = 9331]
4. -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. JDK	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 = S1_qSNz_PG_CMS_Q04]
1. A - II , B - III, C - IV, D - I [Option ID = 9333]
2. A - II, B - IV, C - III, D - I [Option ID = 9334]
3. A - I, B - III, C - IV, D - II [Option ID = 9335]
4. A - III, B - II, 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 = S1_qSNz_PG_CMS_Q05]
1. A - IV, B - III, C - I, D - II [Option ID = 9337]
2. A - III, B - IV, C - I, D - II [Option ID = 9338]
3. A - IV, B - III, C - II, D - I [Option ID = 9339]
4. A - II, 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 '8-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 = S1_qSNz_PG_CMS_Q06]
1. 1 GB [Option ID = 9341]
2. 4 MB [Option ID = 9342]
3. 3 MB [Option ID = 9343]
4. 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

A. it avoids round-off operations.

B. it is incremental.

C. it uses only integer arithmetic.

D. all straight lines can be displayed as straight (exact).

Choose the *correct* answer from the options given below:

[Question ID = 2337][Question Description = S1_qSNz_PG_CMS_Q07]
1. A and B only [Option ID = 9345]
2. A and C only [Option ID = 9346]
3. A, B, C, and D [Option ID = 9347]
4. 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 = S1_qSNz_PG_CMS_Q08]
1. M =
$$\begin{bmatrix} 1 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$
[Option ID = 9349]
2. M =
$$\begin{bmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$
[Option ID = 9350]
3. M =
$$\begin{bmatrix} 1 & 1 & 1 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$
[Option ID = 9351]
4. 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?

A. Bezier curve P(t) has degree 3.

B. $P\left(\frac{1}{2}\right) = (0, 3)$.

C. 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 = S1_qSNz_PG_CMS_Q09]
1. A and B only [Option ID = 9353]
2. A and C only [Option ID = 9354]
3. B and C only [Option ID = 9355]
4. 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 = S1_qSNz_PG_CMS_Q10]
1. Both Statement I and Statement II are true. [Option ID = 9357]
2. Both Statement I and Statement II are false [Option ID = 9358]
3. Statement I is true but Statement II is false [Option ID = 9359]
4. 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 = S1_qSNz_PG_CMS_Q11]
1. potential customers at the developer's location [Option ID = 9361]
2. potential customers at their own locations [Option ID = 9362]
3. product developers at the customer's location [Option ID = 9363]
4. 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 = S1_qSNz_PG_CMS_Q12]
1. User interface. [Option ID = 9365]
2. Security of the system. [Option ID = 9366]
3. Business logic and domain objects. [Option ID = 9367]
4. 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 = S1_qSNz_PG_CMS_Q13]
1. textual [Option ID = 9369]

2. diagrammatic [Option ID = 9370]
3. mathematical [Option ID = 9371]
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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 (Software Process Model)	List II (Description)
A. Waterfall Model	I. Software can be developed incrementally
B. Evolutionary Model	II. Requirement compromises are inevitable
C. Component-based Software Engineeering	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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q18]
1. C, A, E, D, B [Option ID = 9389]
2. C, E, A, B, D [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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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

List I	List II
Identity	Name
A. x + x =x	I. Identity Law
B. x + 0 = x	II. Absorption Law
C. x +1 = 1	III. Idempotent law
D. x + xy = x	IV. Domination Law

Choose the correct answer from the options given below:

[Question ID = 2358][Question Description = S1_qSNz_PG_CMS_Q28]
1. A - III, B -I , C - II, D - IV [Option ID = 9429]
2. A - I, B -III, C - IV, D - II [Option ID = 9430]
3. A - III, B -I , C - IV, D - II [Option ID = 9431]
4. A - III, B -IV , C - I, D - II [Option ID = 9432]

Correct Answer :-
- A - III, B -I , C - II, D - IV [Option ID = 9429]

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 seimigroup, choose the *correct* equalities from the options given below:

A. For every a in X, a*a = a
B. For every a, b in X, a*b *a= a
C. For every a, b, c in X, a*b *c= a*c

[Question ID = 2359][Question Description = S1_qSNz_PG_CMS_Q29]
1. A and B only [Option ID = 9433]
2. A and C only [Option ID = 9434]
3. B and C only [Option ID = 9435]
4. 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 <= 5

x+3y <= 11

4x + y <=15

and x>=0, y >= 0.

The optimal solution of the problem is:

[Question ID = 2360][Question Description = S1_qSNz_PG_CMS_Q30]
1. 15 [Option ID = 9437]
2. 25 [Option ID = 9438]
3. 31.72 [Option ID = 9439]
4. 41.44 [Option ID = 9440]

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

31) Which of the following languages are not regular?

A. $L=\{ (01)^i 0^k \mid n > k, k>=0 \}$

B. $L=\{ c^n b^k a^{n+k} \mid n >= 0, k>=0 \}$

C. $L=\{ 0^n 1^k \mid n=k \}$

Choose the *correct* answer from the options given below:

[Question ID = 2361][Question Description = S1_qSNz_PG_CMS_Q31]
1. A and B only [Option ID = 9441]
2. A and C only [Option ID = 9442]
3. B and C only [Option ID = 9443]
4. 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_qSNz_PG_CMS_Q32]
1. has at least one 1 [Option ID = 9445]
2. should end with 0 [Option ID = 9446]
3. has no consecutive 0's or 1's [Option ID = 9447]
4. has at least two 0's [Option ID = 9448]

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

33) Let
$L_1 = \{ 0^n 1^n 0^m \mid n>=1, m>=1 \}$

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

$L_3 = \{ 0^n 1^n 0^n \mid n>=1\}$

Which of the following are correct statements?

A. $L_3 = L_1 \cap L_2$

B. L_1 and L_2 are context free languages but L_3 is not a context free language

C. L_1 and L_2 are not context free languages but L_3 is a context free language

D. L_1 is a subset of L_3

Choose the *correct* answer from the options given below:

[Question ID = 2363][Question Description = S1_qSNz_PG_CMS_Q33]
1. A and B only [Option ID = 9449]
2. A and C only [Option ID = 9450]
3. A and D only [Option ID = 9451]
4. 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

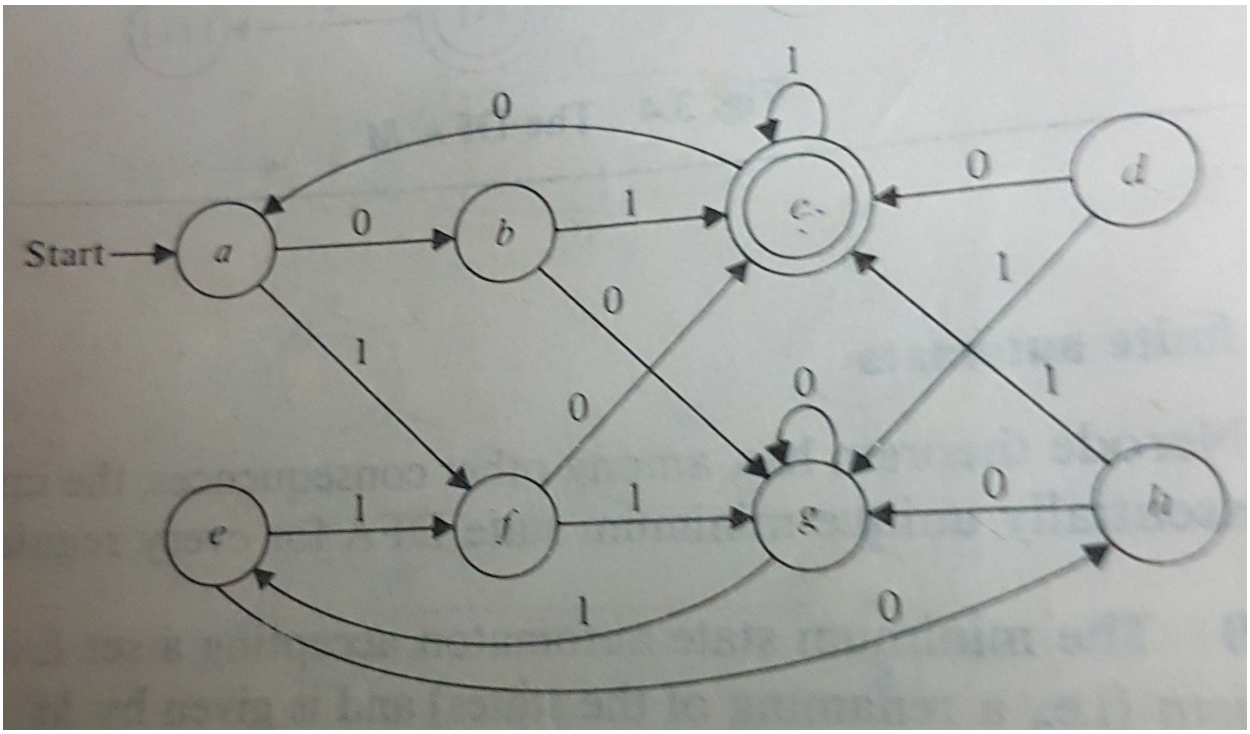
Statement II: The family of context free languages is closed under reversal

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

[Question ID = 2364][Question Description = S1_qSNz_PG_CMS_Q34]
1. Both Statement I and Statement II are true [Option ID = 9453]
2. Both Statement I and Statement II are false [Option ID = 9454]
3. Statement I is true but Statement II is false [Option ID = 9455]
4. 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]

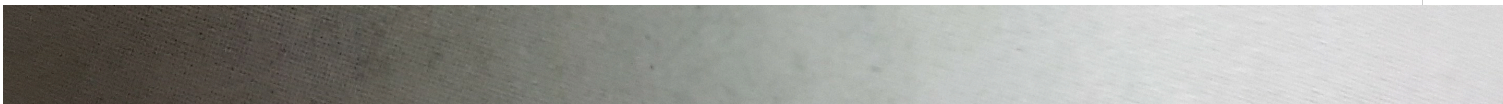
35) What is the minimum number of states required to the finite automaton equivalent to the transition diagram given below?

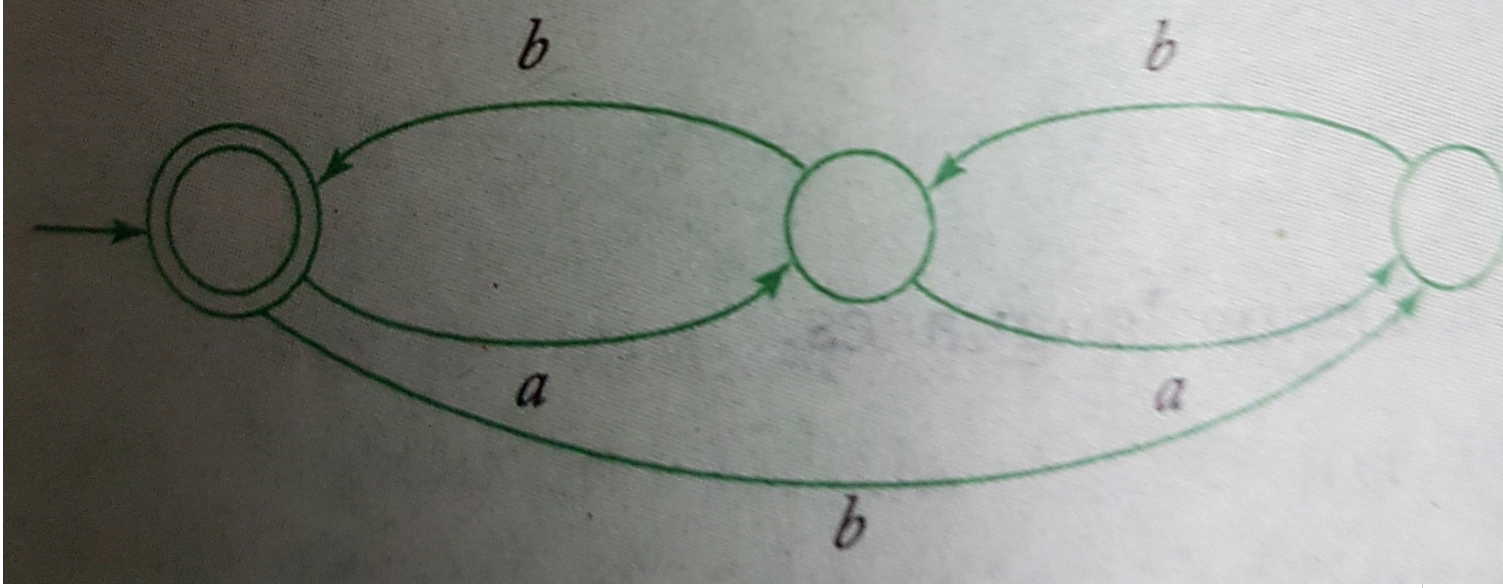


[Question ID = 2365][Question Description = S1_qSNz_PG_CMS_Q35]
1. 3 [Option ID = 9457]
2. 4 [Option ID = 9458]
3. 5 [Option ID = 9459]
4. 6 [Option ID = 9460]

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_qSNz_PG_CMS_Q36]
1. (aa'(a+b)ab)' [Option ID = 9461]
2. (a+b)ab(ab+bb+ aa'(a+b)ab)' [Option ID = 9462]
3. a'ab(ab+bb+ aa'(a+b)ab)' [Option ID = 9463]
4. a'(a+b)ab(ab+bb+ aa'(a+b)ab)' [Option ID = 9464]

Correct Answer :-
- (aa'(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, z}, δ, q_0, z, {q_2})

with δ(q_0, a, a) ={ (q_0, aa) }; δ(q_0, b, a) ={(q_0, ba)}

δ(q_0, a, b) ={ (q_0, ab) }; δ(q_0, b, b) ={ (q_0, bb) }

δ(q_0, a, z) ={ (q_0, az) }; δ(q_0, b, z) ={ (q_0, bz) }

δ(q_0, λ, b) ={ (q_1, b) }; δ(q_0, λ, a) ={ (q_1, a) }

δ(q_1, a, a) ={ (q_1, λ) }; δ(q_1, b, b) ={ (q_1, λ) }

δ(q_1, λ, z) ={ (q_2, z) }?

[Question ID = 2367][Question Description = S1_qSNz_PG_CMS_Q37]
1. L = { w | n_a(w) = n_b(w), w ∈ {a, b}*} [Option ID = 9465]
2. L = { w | n_a(w) <= n_b(w), w ∈ {a, b}*} [Option ID = 9466]
3. L = { w | n_a(w) >= n_b(w), w ∈ {a, b}*} [Option ID = 9467]
4. L= {ww^R | w ∈ {a, b}*} [Option ID = 9468]

Correct Answer :-
- L = { w | n_a(w) = n_b(w), w ∈ {a, b}*} [Option ID = 9465]

38) Match **List I** with **List II**

List I	**List II**
Production Rules	Grammar
A. S → XY X → 0 Y→ 1	I. Greibach Normal Form
B. S → aS| bSS|c	II. Context Sensitive Grammar
C. S → AB A → 0A | 1A | 0 B → 0A	III. Chomsky Normal Form
D. S → aAbc Ab → bA Ac → Bbcc bB → Bb aB→ **aa| aaA**	IV. S- Grammar

Choose the **correct** answer from the options given below:

[Question ID = 2368][Question Description = S1_qSNz_PG_CMS_Q38]
1. A - III, B -I , C - IV, D - II [Option ID = 9469]
2. A - III, B -II , C - I, D - IV [Option ID = 9470]
3. A - III, B -IV, C - I, D - II [Option ID = 9471]
4. A - IV, 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_qSNz_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_qSNz_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_qSNz_PG_CMS_Q41]
1. A B + C D * E - F 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 (dequeue) supports adding and removing items from both the ends of the queue. The operations supported by dequeue 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_qSNz_PG_CMS_Q42]
1. O(m) and O(n) [Option ID = 9485]
2. O(1) and O(n) [Option ID = 9486]
3. O(n) and O(1) [Option ID = 9487]
4. O(n) and O(m) [Option ID = 9488]

Correct Answer :-
- O(m) and O(n) [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_qSNz_PG_CMS_Q43]
1. O(m*n) [Option ID = 9489]
2. O(m+n) [Option ID = 9490]
3. O(m*log 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.

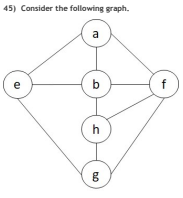
- **Deletion of the smallest element**
- **Insertion of an element if it is not already present in the set**

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

[Question ID = 2374][Question Description = S1_qSNz_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.



Among the following sequences

I. a b e g h f
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 = S1_qSNz_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, III, 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 = S1_qSNz_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. $f2(n) = n^{3/2}$

C. f3(n) = n log n

D. $f4(n) = n^{\log n}$

Choose the *correct* answer from the options given below

[Question ID = 2377][Question Description = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q49]
1. 3 [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
Standard graph algorithms	Time complexities
A. Bellman-Ford algorithm	I. O(m*log n)
B. Kruskal's algorithm	II. $O(n^2)$
C. Floyd-Warshall algorithm	III. O(n*m)
D. Topological sorting	IV. O(n+m)

Choose the correct answer from the options given below:

[Question ID = 2380][Question Description = S1_qSNz_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 = S1_qSNz_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.

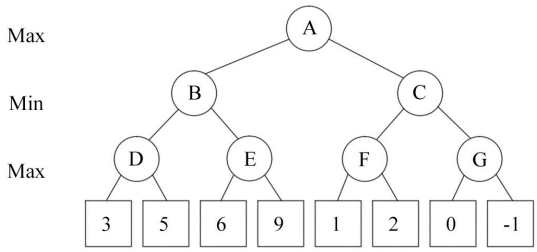
Statement II: When all the step costs are same uniform-cost search expends more nodes at depth d than the Breadth-First Search.

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

[Question ID = 2382][Question Description = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q55]
1. ∃c Country(c) ∧ Border (c, India) ∧ Border (c,Pakistan) [Option ID = 9537]
2. ∃c Country(c) ⇒ [Border (c, India) ∧ Border (c,Pakistan)] [Option ID = 9538]
3. [∃c Country(c)] ⇒ [Border (c, India) ∧ Border (c,Pakistan)] [Option ID = 9539]
4. ∃c Border (Country(c), India ∧ Pakistan) [Option ID = 9540]

Correct Answer :-
- ∃c Country(c) ∧ Border (c, India) ∧ Border (c,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 2×2×2 table as shown in the figure below.

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

The marginal probability of cavity P(cavity) is _____.[Question ID = 2386][Question Description = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_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 ∨ toothache) is _____.[Question ID = 2389][Question Description = S1_qSNz_PG_CMS_Q59]
1. 0.200 [Option ID = 9553]
2. 0.120 [Option ID = 9554]

3. 0.280 [Option ID = 9555]
4. 0.600 [Option ID = 9556]

Correct Answer :-
- 0.200 [Option ID = 9553]

60) The probability for *Cavity*, given that either *Toothache* or *Catch* is true, P(Cavity | toothache ∨ catch) is _____.[Question ID = 2390][Question Description = S1_qSNz_PG_CMS_Q60]
1. 0.6000 [Option ID = 9557]
2. 0.5384 [Option ID = 9558]
3. 0.8000 [Option ID = 9559]
4. 0.4615 [Option ID = 9560]

Correct Answer :-
- 0.6000 [Option ID = 9557]

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_qSNz_PG_CMS_Q61]
1. Logs [Option ID = 9561]
2. Buffer manager [Option ID = 9562]
3. File manager [Option ID = 9563]
4. Transaction processing system [Option ID = 9564]

Correct Answer :-
- Logs [Option ID = 9561]

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_qSNz_PG_CMS_Q62]
1. Statement I is TRUE but Statement II is FALSE [Option ID = 9565]
2. Statement I is FALSE but Statement II is TRUE [Option ID = 9566]
3. Both Statement I and Statement II are FALSE [Option ID = 9567]
4. Both Statement I and Statement II are TRUE [Option ID = 9568]

Correct Answer :-
- Statement I is TRUE but Statement II is FALSE [Option ID = 9565]

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_qSNz_PG_CMS_Q63]
1. $\frac{B}{2}$

   [Option ID = 9569]
2. B + R [Option ID = 9570]
3. B [Option ID = 9571]
4. $\log_2 B$

   [Option ID = 9572]

Correct Answer :-
- $\frac{B}{2}$

  [Option ID = 9569]

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.

A. SELECT coursename, count(*) 'total' from STUDENT natural join COURSE group by coursename;

B. SELECT C.coursename, count(*) 'total' from STUDENT S, COURSE C where S.courseno=C.courseno group by coursename;

C. SELECT coursename, count(*) 'total' from COURSE C where courseno in (SELECT courseno from STUDENT);

[Question ID = 2394][Question Description = S1_qSNz_PG_CMS_Q64]
1. A and B only [Option ID = 9573]
2. C only [Option ID = 9574]
3. A only [Option ID = 9575]
4. 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 algebra 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_qSNz_PG_CMS_Q65]
1. A -III , B -I , C -IV , D - II [Option ID = 9577]
2. A -I , B -III , C -IV , D - II [Option ID = 9578]
3. A -I , B -III , C -IV , D - II
   (options 2 and 4 are same)

   [Option ID = 9579]
4. 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_qSNz_PG_CMS_Q66]
1. (57, 53) [Option ID = 9581]
2. (50, 52) [Option ID = 9582]
3. (60, 64) [Option ID = 9583]
4. (34, 31) [Option ID = 9584]

Correct Answer :-
- (57, 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.

A. Relation R is in First Normal FORM

B. Relation R is in Second Normal FORM

C. Primary key of R is xz

Choose the *correct* answer from the options given below:

[Question ID = 2397][Question Description = S1_qSNz_PG_CMS_Q67]
1. C only [Option ID = 9585]
2. B and C only [Option ID = 9586]
3. A and C only [Option ID = 9587]
4. 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_qSNz_PG_CMS_Q68]
1. Total specialization and overlapping constraints [Option ID = 9589]
2. Disjoint constraint only [Option ID = 9590]
3. Partial participation [Option ID = 9591]
4. 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.

A. FAILED

B. TERMINATED

C. PARTIALLY COMMITTED

D. COMMITTED

E. 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_qSNz_PG_CMS_Q69]
1. A only [Option ID = 9593]
2. Either A or C only [Option ID = 9594]
3. C only [Option ID = 9595]
4. 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_qSNz_PG_CMS_Q70]
1. DML [Option ID = 9597]
2. DDL [Option ID = 9598]
3. HTML [Option ID = 9599]
4. 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_qSNz_PG_CMS_Q71]
1. $p + \frac{q}{100}$

   [Option ID = 9601]
2. $\frac{p+q}{100}$

   [Option ID = 9602]
3. $p+q$

   [Option ID = 9603]
4. $\frac{p}{100}+q$

   [Option ID = 9604]

Correct Answer :-
- $p + \frac{q}{100}$

  [Option ID = 9601]

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

A. Contiguous

B. Indexed

C. 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_qSNz_PG_CMS_Q72]
1. A only [Option ID = 9605]
2. B and C only [Option ID = 9606]
3. A and B only [Option ID = 9607]
4. C only [Option ID = 9608]

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

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

A. Interrupt handler routine is not stored at a fixed address in the memory.

B. CPU hardware has a dedicated wire called the interrupt request line used for handling interrupts

C. 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_qSNz_PG_CMS_Q73]
1. A is TRUE only [Option ID = 9609]
2. Both B and C are TRUE only [Option ID = 9610]
3. Both A and B are TRUE only [Option ID = 9611]
4. Both A, C are TRUE only [Option ID = 9612]

Correct Answer :-
- A is TRUE only [Option ID = 9609]

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 = S1_qSNz_PG_CMS_Q74]
1. A - II , B - III , C - IV , D - I [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 - II , 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 = S1_qSNz_PG_CMS_Q75]
1. 5.5 [Option ID = 9617]
2. 2.66 [Option ID = 9618]
3. 4.66 [Option ID = 9619]
4. 6 [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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q77]
1. 2^{10} [Option ID = 9625]
2. 2^{20} [Option ID = 9626]
3. 2^{30} [Option ID = 9627]
4. 2^{12} [Option ID = 9628]

Correct Answer :-
- 2^{10} [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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q79]
1. 2MB [Option ID = 9633]
2. 2KB [Option ID = 9634]
3. 32MB [Option ID = 9635]
4. 12KB [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 = S1_qSNz_PG_CMS_Q80]
1. 4KB [Option ID = 9637]
2. Zero [Option ID = 9638]
3. 1KB [Option ID = 9639]
4. 2KB [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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q82]
1. $(15.6)_8$ [Option ID = 9645]
2. $(61.6)_8$ [Option ID = 9646]
3. $(15.3)_8$ [Option ID = 9647]
4. $(61.3)_8$ [Option ID = 9648]

Correct Answer :-
- $(15.6)_8$ [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 = S1_qSNz_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 = S1_qSNz_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 = S1_qSNz_PG_CMS_Q85]
1. ABCDE+*+FGH+*/ [Option ID = 9657]
2. ABCDE*+*+FGH+*/ [Option ID = 9658]
3. ABCDE+*+FGH*+/ [Option ID = 9659]
4. ABCDE+*+FGH+*/ [Option ID = 9660]

Correct Answer :-
- ABCDE+*+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 = S1_qSNz_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 = S1_qSNz_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 multiport memory

B. allow only nonshared data to be stored in cache

C. using a snoopy cache controller

D. uisng memory interleaving

Choose the *correct* answer from the options given below:

[Question ID = 2418][Question Description = S1_qSNz_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 of 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_qSNz_PG_CMS_Q89]
1. Both Statement I and Statement II are true [Option ID = 9673]
2. Both Statement I and Statement II are false [Option ID = 9674]
3. Statement I is true but Statement II is false [Option ID = 9675]
4. 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?

A. Control memory is part of the hardwired control unit.

B. Program control instructions are used to alter the sequential flow of the program.

C. The register indirect addressing mode for accessing memory operand is similar to displacement addressing mode.

D. CPU utilization is not affected by the introduction of interrupts.

[Question ID = 2420][Question Description = S1_qSNz_PG_CMS_Q90]
1. A [Option ID = 9677]
2. B [Option ID = 9678]
3. C [Option ID = 9679]
4. 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_qSNz_PG_CMS_Q91]
1. A - IV, B - III, C - I, D - II [Option ID = 9681]
2. A - IV, B - II, C - I, D - III [Option ID = 9682]
3. A - II, B - III, C - I, D - IV [Option ID = 9683]
4. 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_qSNz_PG_CMS_Q92]
1. Both Statement I and Statement II are true [Option ID = 9685]
2. Both Statement I and Statement II are false [Option ID = 9686]
3. Statement I is true but Statement II is false [Option ID = 9687]
4. 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_qSNz_PG_CMS_Q93]
1. Packet switching leads to better utilization of bandwidth resources than circuit switching. [Option ID = 9689]
2. Packet switching results in less variation in the delay than circuit switching. [Option ID = 9690]
3. Packet switching sender and receiver can use any bit rate, format or framing method unlike circuit switching. [Option ID = 9691]
4. 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_qSNz_PG_CMS_Q94]
1. Half the baud rate [Option ID = 9693]
2. twice the baud rate [Option ID = 9694]
3. Thrice the baud rate [Option ID = 9695]
4. 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_qSNz_PG_CMS_Q95]
1. 62 subnets and 262142 hosts [Option ID = 9697]
2. 64 subnets and 1024 hosts [Option ID = 9698]
3. 64 subnets and hosts 262142 [Option ID = 9699]
4. 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_qSNz_PG_CMS_Q96]
1. IMAP [Option ID = 9701]
2. SMTP [Option ID = 9702]
3. POP3 [Option ID = 9703]
4. 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_qSNz_PG_CMS_Q97]
1. Sender encrypts using receiver's public key [Option ID = 9705]
2. Sender encrypts using his own public key [Option ID = 9706]
3. Receiver decrypts using sender's public key [Option ID = 9707]
4. 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?

A. Frequency division multiplexing technique can be handled by digital circuits.

B. Time division multiplexing technique can be handled by analog circuits

C. Wavelength division multiplexing technique is used with optical fiber for combining two signals.

D. 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_qSNz_PG_CMS_Q98]
1. B and D only [Option ID = 9709]
2. C and D only [Option ID = 9710]
3. A and D only [Option ID = 9711]
4. B and D only [Option ID = 9712]

Correct Answer :-
- B and D only [Option ID = 9709]

19) Which of the following statements are true?
A. X.25 is connection-oriented network

B. X.25 doesn't support switched virtual circuits.

C. Frame relay service provides acknowledgements.

D. Frame relay service provides detection of transmission errors.

Choose the *correct* answer from the options given below:

[Question ID = 2429][Question Description = S1_qSNz_PG_CMS_Q99]
1. A and D only [Option ID = 9713]
2. B and D only [Option ID = 9714]
3. C and D only [Option ID = 9715]
4. 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_qSNz_PG_CMS_Q100]
1. (x+1) is factor of G(x) [Option ID = 9717]
2. (x-1) is factor of G(x) [Option ID = 9718]
3. (x^2+1) is factor of G(x) [Option ID = 9719]
4. ($1-x^2$) is factor of G(x) [Option ID = 9720]

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

Topic:- GP_26NOV_SH2_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

निम्नलिखित तालिकी को ध्यानपूर्वक पढ़िए और उसके बाद दिए गए प्रश्नों के उत्तर दीजिए :

निम्नलिखित तालिकी में पांच विभिन्न पाठ्यक्रमों के लिए पांच वर्षों की सेमेस्टर शुल्क दिए गए हैं

वर्ष	बी सी ए फीस	एम सी ए फीस	एम टेक फीस	एम फिल
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32000
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?

वर्ष 2016-2020 के दौरान बी सी ए के औसत सेमेस्टर शुल्क तथा एम सी ए के औसत सेमेस्टर शुल्क में क्या अंतर है ?

[Question ID = 2431][Question Description = S2_qSNz_PG_GP24_Q01]
1. 27200/27200 [Option ID = 9721]
2. 27365/27365 [Option ID = 9722]
3. 27580/27580 [Option ID = 9723]
4. 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	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

निम्नलिखित तालिकी को ध्यानपूर्वक पढ़िए और उसके बाद दिए गए प्रश्नों के उत्तर दीजिए :

निम्नलिखित तालिकी में पांच विभिन्न पाठ्यक्रमों के लिए पांच वर्षों की सेमेस्टर शुल्क दिए गए हैं

वर्ष	बी सी ए फीस	एम सी ए फीस	एम टेक फीस	एम फिल
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000

2018	27200	54200	62500	32000
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

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

निम्न पाठ्यक्रम में वर्ष 2019 से वर्ष 2020 के बीच शुल्क में अधिकतम प्रतिशत की वृद्धि हुई है ?

[Question ID = 2432][Question Description = S2_qSNz_PG_GP24_Q02]
1. BCA/बी सी ए [Option ID = 9725]
2. MCA/एम सी ए [Option ID = 9726]
3. MTech/एम टेक [Option ID = 9727]
4. MPhil/एम फिल [Option ID = 9728]

Correct Answer :-
- BCA/बी सी ए [Option ID = 9725]

3) 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

निम्नलिखित तालिकी को ध्यानपूर्वक पढ़िए और उसके बीच दिए गए प्रश्नों के उत्तर दीजिए :

निम्नलिखित तालिकी में चार विभिन्न पाठ्यक्रमों के लिए पांच वर्षों की सेमेस्टर शुल्क दिए गए हैं

वर्ष	बी सी ए/बी सी ए	एम सी ए/एम सी ए	एम टेक/एम टेक	एम फिल/एम फिल
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32000
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

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

निम्न पाठ्यक्रम में वर्ष 2017 से वर्ष 2018 के बीच शुल्क में न्यूनतम प्रतिशत की वृद्धि हुई है ?

[Question ID = 2433][Question Description = S2_qSNz_PG_GP24_Q03]
1. BCA/बी सी ए [Option ID = 9729]
2. MCA/एम सी ए [Option ID = 9730]
3. MTech/एम टेक [Option ID = 9731]
4. MPhil/एम फिल [Option ID = 9732]

Correct Answer :-
- BCA/बी सी ए [Option ID = 9729]

4) 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

निम्नलिखित तालिकी को ध्यानपूर्वक पढ़िए और उसके बीच दिए गए प्रश्नों के उत्तर दीजिए :

निम्नलिखित तालिकी में चार विभिन्न पाठ्यक्रमों के लिए पांच वर्षों की सेमेस्टर शुल्क दिए गए हैं

वर्ष	बी सी ए/बी सी ए	एम सी ए/एम सी ए	एम टेक/एम टेक	एम फिल/एम फिल
2016	25000	52000	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32000
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

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

वर्ष 2018 तथा वर्ष 2019 के सभी पाठ्यक्रमों के लिए कुल सेमेस्टर शुल्क में अंतर ज्ञात कीजिए

[Question ID = 2434][Question Description = S2_qSNz_PG_GP24_Q04]
1. 3250/3250 [Option ID = 9733]
2. 3270/3270 [Option ID = 9734]
3. 3150/3150 [Option ID = 9735]
4. 3100/3100 [Option ID = 9736]

Correct Answer :-
- 3250/3250 [Option ID = 9733]

5) 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

निम्नलिखित तालिकी को ध्यानपूर्वक पढ़िए और उसके बीच दिए गए प्रश्नों के उत्तर दीजिए :

निम्नलिखित तालिकी में चार विभिन्न पाठ्यक्रमों के लिए पांच वर्षों की सेमेस्टर शुल्क दिए गए हैं

वर्ष	बी सी ए/बी सी ए	एम सी ए/एम सी ए	एम टेक/एम टेक	एम फिल/एम फिल
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

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

वर्ष 2016-2020 के लिए एम सी ए तथा एम टेक के सेमेस्टर शुल्क पर औसत अंतर ज्ञात कीजिए

[Question ID = 2435][Question Description = S2_qSNz_PG_GP24_Q05]
1. 7700/7700 [Option ID = 9737]
2. 7600/7600 [Option ID = 9738]
3. 7650/7650 [Option ID = 9739]
4. 7750/7750 [Option ID = 9740]

Correct Answer :-
- 7700/7700 [Option ID = 9737]

Topic:- GP_26NOV_SH2_B

1) The web portal of Swayam Prabha is maintained by

स्वयं प्रभा की वेब पोर्टल का अनुरक्षण निम्नलिखित में से किसके द्वारा किया जाता है ?

[Question ID = 2436][Question Description = S2_qSNz_PG_GP24_Q06]
1. Indian Institute of Technology, Kharagpur/भारतीय प्रौद्योगिकी संस्थान, खड़गपुर [Option ID = 9741]
2. Doordarshan/दूरदर्शन [Option ID = 9742]
3. Google India office/गूगल इंडिया ऑफिस [Option ID = 9743]
4. INFLIBNET centre/इन्फलिबनेट केंद्र [Option ID = 9744]

Correct Answer :-
- Indian Institute of Technology, Kharagpur/भारतीय प्रौद्योगिकी संस्थान, खड़गपुर [Option ID = 9741]

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

राष्ट्रीय मुक्त शैक्षणिक स्रोत संग्रह (नेशनल रिपोजिटरी ऑफ ओपन एडुकेशनल रिसोर्सेज) का प्रबंधन _____ द्वारा किया जाता है

[Question ID = 2437][Question Description = S2_qSNz_PG_GP24_Q07]
1. Indian Institute of Technology, Delhi/भारतीय प्रौद्योगिकी संस्थान, दिल्ली [Option ID = 9745]
2. Indira Gandhi National Open University/इंदिरा गांधी राष्ट्रीय मुक्त विश्वविद्यालय [Option ID = 9746]
3. Central Institute of Educational Technology, NCERT/केंद्रीय शैक्षणिक प्रौद्योगिकी संस्थान, एन सी ई आर टी [Option ID = 9747]
4. University Grants Commission/विश्वविद्यालय अनुदान आयोग [Option ID = 9748]

Correct Answer :-
- Indian Institute of Technology, Delhi/भारतीय प्रौद्योगिकी संस्थान, दिल्ली [Option ID = 9745]

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

नीचे दो कथन दिए गए हैं :

कथन - I : संकेतों (शब्द, भाव-भंगिमा, संकेत, बिंब आदि) के निर्माण तथा उपयोग की क्षमता पूर्व-संक्रियात्मक चरण में निष्पादित होती है

कथन - II : पियाजे के अनुसार, पूर्व-संक्रियात्मक बच्चों में अहंकेंद्रित होने की प्रवृत्ति नहीं होती है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2438][Question Description = S2_qSNz_PG_GP24_Q08]
1. Both Statement I and Statement II are correct/कथन I और II दोनों सही हैं [Option ID = 9749]
2. Both Statement I and Statement II are incorrect/कथन I और II दोनों गलत हैं [Option ID = 9750]
3. Statement I is correct but Statement II is incorrect/कथन I सत्य है , किन्तु कथन II गलत है | [Option ID = 9751]
4. Statement I is incorrect but Statement II is correct/कथन I असत्य है , किन्तु कथन II सही है [Option ID = 9752]

Correct Answer :-
- Both Statement I and Statement II are correct/कथन I और II दोनों सही हैं [Option ID = 9749]

4) SWAYAM platform was developed by

A. MHRD (now Ministry of Education), Government of India

B. Google

C. Microsoft

D. IIT, Delhi

E. Adobe Inc.

Choose the *correct* answer from the options given below:

स्वयं प्लेटफॉर्म का विकास _____ द्वारा किया गया है

A. एम एच आर डी (अब शिक्षा मंत्रालय), भारत सरकार

B. गूगल

C. माइक्रोसॉफ्ट

D. आई आई टी दिल्ली

E. एडोब इंक

नीचे दिए गए विकल्पों में से सही उत्तर चुनें :

[Question ID = 2439][Question Description = S2_qSNz_PG_GP24_Q09]

1. A and B only/केवल A और B

[Option ID = 9753]
2. A and C only/केवल A और C

[Option ID = 9754]
3. B and D only/केवल B और D

[Option ID = 9755]
4. D and E only/केवल D और E

[Option ID = 9756]

Correct Answer :-
- A and B only/केवल A और B

[Option ID = 9753]

5) Match List I with List II

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

Choose the correct answer from the options given below:

सूची -I को सूची -II से सुमेलित कीजिए :

सूची -I	सूची -II
मूक प्रोटोकॉल	विश्लेषण
A. कोर्सेरा	I. अनन्त अगरवाल
B. उडासिटी	II. सलमान खान
C. ई डी एक्स	III. एंड्रयू एन.जी, डाफ्ने कोलर
D. खान एकेडेमी	IV. सेबास्टियन थ्रुन

नीचे दिए गए विकल्पों में से सही उत्तर चुनिए :

[Question ID = 2440][Question Description = S2_qSNz_PG_GP24_Q10]

1. A - I, B - II, C - III, D - IV [Option ID = 9757]
2. A - III, 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 - II, 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:

यदि किसी शोधकर्ता को इस परिकल्पना का परिक्षण करना हो कि क्या दो समूहों के औसत के बीच का अंतर सार्थक है, तो वह निम्नमें उपयोग करेगा ?

[Question ID = 2441][Question Description = S2_qSNz_PG_GP24_Q11]
1. Chi-square test/काई वर्ग परीक्षण [Option ID = 9761]
2. Correlation coefficient/सह संबंध गुणांक [Option ID = 9762]
3. Sign test/चिह्न परीक्षण [Option ID = 9763]
4. Student's t-test/छात्र टी-परीक्षण [Option ID = 9764]

Correct Answer :-
- Chi-square test/काई वर्ग परीक्षण [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:

निम्नलिखित में से चरण जो पृष्ठीकर विश्लेषण (मेटा एनालाइसिस) के चरण हैं :

A. साहित्य को समझना

B. अंतर को पाट सकने के लिए नये नये अध्ययन करना

C. विशेषताओं के लिए समावेशन और अपवर्जन आमंदंड विकसित करना

D. प्राथमिक अध्ययन का पता लगाना

E. द्वितीयक आंकड़ों की पहचान करना

नीचे दिए गए विकल्पों में से सही उत्तर चुनें :

[Question ID = 2442][Question Description = S2_qSNz_PG_GP24_Q12]

1. A, B and D only/केवल A, B और D [Option ID = 9765]
2. B, C and D only/केवल B, C और D [Option ID = 9766]
3. A, C and D only/केवल A, C और D [Option ID = 9767]
4. B, D and E only/केवल B, D और E [Option ID = 9768]

Correct Answer :-
- A, B and D only/केवल A, B और 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

नीचे दो कथन दिए गए हैं :

कथन - I : प्राचलिक सांख्यिकीय की तुलना में प्राचल सांख्यिकीय अधिक शक्तिशाली हैं

कथन - II : प्राचल सांख्यिकीय अस्वीकृत मुक्त सांख्यिकीय होती है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2443][Question Description = S2_qSNz_PG_GP24_Q13]

1. Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9769]
2. Both Statement I and Statement II are false/कथन I और II दोनों असत्य हैं [Option ID = 9770]
3. Statement I is true but Statement II is false/कथन I सत्य है , किन्तु कथन II असत्य है । [Option ID = 9771]
4. Statement I is false but Statement II is true/कथन I असत्य है , किन्तु कथन II सत्य है [Option ID = 9772]

Correct Answer :-
- Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9769]

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

निम्नलिखित में से किस पृणाली का उपयोग नृविज्ञानी शोध में किया जाता है ?

[Question ID = 2444][Question Description = S2_qSNz_PG_GP24_Q14]
1. Survey method/सर्वेक्षण विधि पृणाली [Option ID = 9773]
2. Case study method/व्यक्ति अध्ययन पृणाली [Option ID = 9774]
3. Life history method/जीवन-वृत्त पृणाली [Option ID = 9775]
4. Ethnographic method/वृत्तांत पृण पृणाली [Option ID = 9776]

Correct Answer :-
- Survey method/सर्वेक्षण विधि पृणाली [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

नीचे दो कथन दिए गए हैं :

कथन - I : अन्वेषणीय अध्ययन का लक्ष्य मुख्यतः आगे के शोध के लिए परिकल्पना अथवा प्रश्नों का निर्माण करना होता है

कथन - II : औपचारिक अध्ययन का लक्ष्य परिकल्पना का परिक्षण करना अथवा पूछे गये प्रश्नों को उत्तर देना होता है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2445][Question Description = S2_qSNz_PG_GP24_Q15]

1. Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9777]
2. Both Statement I and Statement II are false/कथन I और II दोनों असत्य हैं [Option ID = 9778]
3. Statement I is true but Statement II is false/कथन I सत्य है , किन्तु कथन II असत्य है । [Option ID = 9779]
4. Statement I is false but Statement II is true/कथन I असत्य है , किन्तु कथन II सत्य है [Option ID = 9780]

Correct Answer :-
- Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9777]

11) In communication, entropy refers to

संप्रेषण में सिंसीयत (एंट्रोपी) का किससे संबंध है ?

[Question ID = 2446][Question Description = S2_qSNz_PG_GP24_Q16]
1. Predictable message/पूर्वानुमेय संदेश (प्रीडिक्टेबल मेसेज) [Option ID = 9781]
2. Unpredictable message/अपूर्वानुमेय संदेश (अनप्रीडिक्टेबल मेसेज) [Option ID = 9782]
3. Oratory/भाषणकारी वक्तृता (ओरेटरी) [Option ID = 9783]
4. Defensive speech/आत्मरक्षा वाक् (डिफेंसिव स्पीच) [Option ID = 9784]

Correct Answer :-
- Predictable message/पूर्वानुमेय संदेश (प्रीडिक्टेबल मेसेज) [Option ID = 9781]

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

संप्रेषण में दंड के भय से चुप रहना एक _____ अवरोध है :

[Question ID = 2447][Question Description = S2_qSNz_PG_GP24_Q17]
1. Institutional/संस्थागत [Option ID = 9785]
2. Interactional/अन्तर्क्रिया विषयक [Option ID = 9786]
3. Incentive/प्रेरणात्मक [Option ID = 9787]
4. Individual/व्यक्तिगत [Option ID = 9788]

Correct Answer :-
- Institutional/संस्थागत [Option ID = 9785]

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

किसी संस्थान में कर्मचारियों के लिये जारी की जाने वाली सामान्य आचार संहिता _____ का एक उदाहरण है

[Question ID = 2448][Question Description = S2_qSNz_PG_GP24_Q18]
1. Downward communication/अधोमुख संप्रेषण [Option ID = 9789]
2. Lateral communication/पार्श्विक संप्रेषण [Option ID = 9790]
3. Horizontal communication/समस्तरीय संप्रेषण [Option ID = 9791]
4. Upward communication/अधिमुख संप्रेषण [Option ID = 9792]

Correct Answer :-
- Downward communication/अधोमुख संप्रेषण [Option ID = 9789]

14) What is a blog?
ब्लॉग क्या है ?

[Question ID = 2449][Question Description = S2_qSNz_PG_GP24_Q19]
1. Internet/इन्टरनेट [Option ID = 9793]
2. Search engine/खोज इंजन [Option ID = 9794]
3. Personal website in the form of a journal/डायरी जर्नल की तरह के व्यक्तिगत वेबसाइट [Option ID = 9795]
4. Online journal/ऑनलाइन जर्नल [Option ID = 9796]

Correct Answer :-
- Internet/इन्टरनेट [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

नीचे दो कथन दिए गए हैं : एक को अभिकथन (A) और दूसरे को तर्क (R) कहा गया है

अभिकथन (A) : शिक्षकों को चाहिए कि वे विद्यार्थियों को उसी रूप में स्वीकार करें जैसा कि वे हैं और जो भी उनका संज्ञानात्मक स्तर है

तर्क (R) : सिद्धान्तप्रतिपादन, निर्णयात्मकता (जजमेंटल) होना आलोचना (एक्सपोजिंग) को उजागर करना सफल संप्रेषण के मार्ग में अवरोध हैं

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2450][Question Description = S2_qSNz_PG_GP24_Q20]

1. Both **A** and **R** are true and **R** is the correct explanation of **A**/(A) और (R) दोनों सत्य हैं और (R), (A) की सही व्याख्या है [Option ID = 9797]
2. Both **A** and **R** are true but **R** is NOT the correct explanation of **A**/(A) और (R) दोनों सत्य हैं परन्तु (R), (A) की सही व्याख्या नहीं है [Option ID = 9798]
3. **A** is true but **R** is false/(A) सही है परन्तु (R) असत्य है [Option ID = 9799]
4. **A** is false but **R** is true/(A) असत्य है परन्तु (R) सत्य है [Option ID = 9800]

Correct Answer :-

- Both A and R are true and R is the correct explanation of A/(A) और (R) दोनों सत्य हैं और (R), (A) की सही व्याख्या है [Option ID = 9797]

16) Which one of the following fractions is the largest?

निम्नलिखित में से कौन सबसे बड़ा भिन्न है ?

[Question ID = 2451][Question Description = S2_qSNz_PG_GP24_Q21]

1. 5/8/5/8 [Option ID = 9801]
2. 11/16/11/16 [Option ID = 9802]
3. 31/40/31/40 [Option ID = 9803]
4. 67/80/67/80 [Option ID = 9804]

Correct Answer :-

- 5/8/5/8 [Option ID = 9801]

17) Find the next two terms in the series.

A, D, H, M, ____, ____

निम्नलिखित श्रेणी में अगले दो पद ज्ञात कीजिए :

A, D, H, M, ____, ____

[Question ID = 2452][Question Description = S2_qSNz_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?

स्वाति और मनीषा की उम्र 5:6 अनुपात में है तथा दोनों की उम्र का योग 55 वर्ष है पांच वर्ष बाद उनकी उम्र का क्या अनुपात होगा ?

[Question ID = 2453][Question Description = S2_qSNz_PG_GP24_Q23]

1. 6:7/6:7 [Option ID = 9809]
2. 7:6/7:6 [Option ID = 9810]
3. 6:5/6:5 [Option ID = 9811]
4. 5:6/5:6 [Option ID = 9812]

Correct Answer :-

- 6:7/6:7 [Option ID = 9809]

19) Given below are two statements

Statement I: A vehicle's speed of 30.6 km/hr is the same as 5.8 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

नीचे दो कथन दिए गए हैं :

कथन - I : किसी वाहन की गति 30.6 किमी/घंटा, 5.8 मीटर/सेकंड के बराबर है

कथन - II : किसी बस की गति 72 किमी/घंटा है बस 10 सेकंड में 100 मीटर की दूरी तय करती है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2454][Question Description = S2_qSNz_PG_GP24_Q24]

1. Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9813]
2. Both Statement I and Statement II are false/कथन I और II दोनों असत्य हैं [Option ID = 9814]
3. Statement I is true but Statement II is false/कथन I सत्य है , किन्तु कथन II असत्य है | [Option ID = 9815]
4. Statement I is false but Statement II is true/कथन I असत्य है , किन्तु कथन II सत्य है [Option ID = 9816]

Correct Answer :-

- Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [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:

दस संख्याओं का औसत 11 है यदि प्रत्येक संख्या को 7 से गुणा किया जाय, तो संख्याओं के इस नये सेट का औसत होगा :

[Question ID = 2455][Question Description = S2_qSNz_PG_GP24_Q25]

1. 70/70 [Option ID = 9817]
2. 110/110 [Option ID = 9818]
3. 77/77 [Option ID = 9819]
4. 76/76 [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:

निम्नलिखित तर्क के संबंध में निम्नलिखित में से कौन-से कथन सही हैं ?

A. निगमनात्मक तर्क मान्य अथवा अमान्य होते हैं ?

B. आधार वाक्य तथा निष्कर्ष के बीच आवश्यक संबंध अवश्य होना चाहिए

C. नये आधार वाक्य जोड़े जाने पर मान्यता में सुधार होता है

D. गलत आधार वाक्य से सही निष्कर्ष निकल सकता है

नीचे दिए गए विकल्पों में से सही उत्तर चुनें :

[Question ID = 2456][Question Description = S2_qSNz_PG_GP24_Q26]

1. A, B and C only/केवल A, B और C [Option ID = 9821]
2. A, B and D only/केवल A, B और D [Option ID = 9822]
3. A, C and D only/केवल A, C और D [Option ID = 9823]
4. B, C and D only/केवल B, C और D [Option ID = 9824]

Correct Answer :-

- A, B and C only/केवल A, B और C [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.

तर्क में हुए दोष की पहचान कीजिए चूँकि कोई त्रासद अभिनेता मुर्ख नहीं होता; और कुछ हास्याभिनेता मुर्ख नहीं होते हैं; अतः कुछ हास्याभिनेता त्रासद अभिनेता नहीं होते हैं

[Question ID = 2457][Question Description = S2_qSNz_PG_GP24_Q27]

1. Fallacy of the Illicit Process of Major Term/साध्य की निषिद्ध प्रक्रिया का दोष [Option ID = 9825]
2. Fallacy of the Illicit Process of Minor Term/पक्ष की निषिद्ध प्रक्रिया का दोष [Option ID = 9826]
3. Existential Fallacy/अस्तित्वपूरक दोष [Option ID = 9827]
4. Fallacy of Exclusive Premises/व्यावर्तक आधार वाक्य का दोष [Option ID = 9828]

Correct Answer :-

- Fallacy of the Illicit Process of Major Term/साध्य की निषिद्ध प्रक्रिया का दोष [Option ID = 9825]

23) "No one has been able to prove the existance of extrasensory perception. We must therefore conclude that extrasensory perception is a myth". Which of the following fallacies is committed in this argument?

"कोई भी अतींद्रिय प्रत्यक्ष के अस्तित्व को साबित नहीं कर पाया है अतः हमें यह निष्कर्ष निकालना चाहिए कि अतींद्रिय प्रत्यक्ष एक मिथक है " इस तर्क में कौन-सा दोष हुआ है ?

[Question ID = 2458][Question Description = S2_qSNz_PG_GP24_Q28]

1. Appeal to ignorance/अनभिज्ञता का अनुरोध [Option ID = 9829]
2. Straw man/स्ट्रामैन [Option ID = 9830]
3. Appeal to unqualified authority/अप्रतिबंध प्राधिकार का अनुरोध [Option ID = 9831]
4. Red herring/दिग्भ्रमित करना (रेड हेरिंग) [Option ID = 9832]

Correct Answer :-

- Appeal to ignorance/अनभिज्ञता का अनुरोध [Option ID = 9829]

24) Which one of the following statements is true with reference to Sāmānyatodṛṣṭā inference?

समान्यतोदृष्टा अनुमान के संबंध में निम्नलिखित में से कौन-से कथन सही हैं ?

[Question ID = 2459][Question Description = S2_qSNz_PG_GP24_Q29]

1. The middle term is related to the major term as a cause/हेतु का संबंध साहा से कारण के रूप में होता है [Option ID = 9833]
2. The middle term is related to the major term as an effect/हेतु का संबंध साहा से कार्य के रूप में होता है [Option ID = 9834]
3. The middle term is related to the major term neither as a cause nor as an effect/हेतु का संबंध साहा से न कारण के रूप में और न ही कार्य के रूप में होता है [Option ID = 9835]
4. The middle term is related to the major term both as a cause and an effect/हेतु का संबंध साहा से कारन और कार्य दोनों रूपों में होता है [Option ID = 9836]

Correct Answer :-

- The middle term is related to the major term as a cause/हेतु का संबंध साहा से कारण के रूप में होता है [Option ID = 9833]

25) Given below are two statements

Statement I: According to Nyāya, 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

नीचे दो कथन दिए गए हैं :

कथन - I : न्याय के अनुसार 'सामान्य' नित्य सत्ता हैं जो विशेष के माध्यम से प्रकट होता है और विशेष में ही रहता है

कथन - II : 'सामान्य' 'अभिन्नता' के उस विचार का आधार है जो किसी विशेष वर्ग की /के सभी वस्तुओं/व्यक्तियों में पाया जाता है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2460][Question Description = S2_qSNz_PG_GP24_Q30]

1. Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9837]
2. Both Statement I and Statement II are false/कथन I और II दोनों असत्य हैं [Option ID = 9838]
3. Statement I is true but Statement II is false/कथन I सत्य है , किन्तु कथन II असत्य है | [Option ID = 9839]
4. Statement I is false but Statement II is true/कथन I असत्य है , किन्तु कथन II सत्य है [Option ID = 9840]

Correct Answer :-

- Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [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?

किसी कंप्यूटर के प्रोग्राम में अन्तःस्थापित वह किस प्रकार का मालवेअर है जो कुछ शर्तें पूरी होने पर ख़राब प्रकार्य को प्रवृत्त करता है ?

[Question ID = 2461][Question Description = S2_qSNz_PG_GP24_Q31]

1. Worm/वर्म [Option ID = 9841]
2. Trojan/ट्रोजन [Option ID = 9842]
3. Spyware/स्पाईवेअर [Option ID = 9843]
4. Logic bomb/लॉजिक बम [Option ID = 9844]

Correct Answer :-

- Worm/वर्म [Option ID = 9841]

27) Which memory is used as part of the processor?

किस मेमरी का उपयोग प्रोसेसर के एक भाग में के रुप में किया जाता है ?

[Question ID = 2462][Question Description = S2_qSNz_PG_GP24_Q32]

1. RAM/रैम [Option ID = 9845]
2. ROM/रोम [Option ID = 9846]
3. Registers/रजिस्टर [Option ID = 9847]
4. Hard disk/हार्डडिस्क [Option ID = 9848]

Correct Answer :-

- RAM/रैम [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

नीचे मैक (एम ए सी) एड्रेस के संबंध में दो कथन दिए गए हैं

कथन - I : मैक (एम ए सी) एड्रेस यह इस तथ्य की पहचान करता है कि दिए गए आई पी एड्रेस पर कौन सा यंत्र (डिवाइस) लगा हुआ है

कथन - II : मैक (एम ए सी) एड्रेस प्रत्येक यंत्र (डिवाइस) के लिए अद्वितीय होते हैं

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2463][Question Description = S2_qSNz_PG_GP24_Q33]

1. Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [Option ID = 9849]
2. Both Statement I and Statement II are false/कथन I और II दोनों असत्य हैं [Option ID = 9850]
3. Statement I is true but Statement II is false/कथन I सत्य है , किन्तु कथन II असत्य है । [Option ID = 9851]
4. Statement I is false but Statement II is true/कथन I असत्य है , किन्तु कथन II सत्य है [Option ID = 9852]

Correct Answer :-
- Both Statement I and Statement II are true/कथन I और II दोनों सत्य हैं [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:

अधिकांश वेब ब्राउजर के संबंध में नीचे कुछ कथन दिए गए हैं उन्हीं कथनों को चुनिए:

A. उनका होम पेज होता है

B. पृष्ठांकन की स्थित पेजों को संग्रहण करने की उनकी क्षमता नहीं होती

C. उनमें पास पृष्ठांकन को संचालन की अनुमति देने के लिए हाइपर लिंक होते हैं

D. उनमें पास पृष्ठांकन द्वारा संचालित वेबसाइटों का कोई पूर्णकृत नहीं होता

नीचे दिए गए विकल्पों में से सही उत्तर चुनें :

[Question ID = 2464][Question Description = S2_qSNz_PG_GP24_Q34]

1. A and C only/केवल A और C [Option ID = 9853]
2. A and B only/केवल A और B [Option ID = 9854]
3. B and D only/केवल B और D [Option ID = 9855]
4. A and D only/केवल A और D [Option ID = 9856]

Correct Answer :-
- A and C only/केवल A और 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:

सूची -I को सूची -II से सुमेलित कीजिए :

सूची -I	सूची -II
मेमोरी के प्रकार	संरचना पद्धति (फैब्रिकेशन मेथड)
A. गतिशील रैण्डम एक्सेस मेमोरी (डूम)	I. फ्लिप - फ्लॉप
B. स्टेटिक रैण्डम एक्सेस मेमोरी (एसआर)	II. फ्लोटिंग गेट ट्रांजिस्टर्स एण्ड कैपेसिटर्स
C. प्रोग्रैमेबिल रीड ओनली मेमोरी (पीआर)	III. ट्रांजिस्टर्स एण्ड कैपेसिटर्स
D. इरेजेबल प्रोग्रैमेबिल रीड ओनली मेमोरी (एपीआर)	IV. मैट्रिक्स ऑफ फ्यूजेज

नीचे दिए गए विकल्पों में से सही उत्तर चुनिए :

[Question ID = 2465][Question Description = S2_qSNz_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 Millenium Development Goals is about ensuring Environmental Sustainability?

निम्नलिखित में से कौन-सा सहस्राब्दि विकास लक्ष्य पर्यावरण संबंधी दायित्वीयता सुनिश्चित करने के संबंध में है ?

[Question ID = 2466][Question Description = S2_qSNz_PG_GP24_Q36]

1. Goal-1/लक्ष्य - 1 [Option ID = 9861]
2. Goal-3/लक्ष्य - 3 [Option ID = 9862]
3. Goal-5/लक्ष्य - 5 [Option ID = 9863]
4. Goal-7/लक्ष्य - 7 [Option ID = 9864]

Correct Answer :-
- Goal-1/लक्ष्य - 1 [Option ID = 9861]

32) The air pollutant NOx is a combination of

वायु-प्रदूषक नाइट्रोजन ऑक्साइड है ?

[Question ID = 2467][Question Description = S2_qSNz_PG_GP24_Q37]

1. Nitrous oxide and Nitrogen dioxide/नाइट्रस ऑक्साइड और नाइट्रोजन डाइऑक्साइड [Option ID = 9865]
2. Nitrous oxide and Nitric oxide/नाइट्रस ऑक्साइड और नाइट्रिक ऑक्साइड [Option ID = 9866]
3. Nitrogen dioxide and Nitric oxide/नाइट्रोजन डाइऑक्साइड और नाइट्रिक ऑक्साइड [Option ID = 9867]
4. Nitrogen pentoxide and Nitrogen dioxide/नाइट्रोजन पेंटा ऑक्साइड और नाइट्रोजन डाइऑक्साइड [Option ID = 9868]

Correct Answer :-
- Nitrous oxide and Nitrogen dioxide/नाइट्रस ऑक्साइड और नाइट्रोजन डाइऑक्साइड [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

नीचे दो कथन दिए गए हैं : एक को अभिकथन (A) और दूसरे को तर्क (R) कहा गया है

अभिकथन (A) : शिस्टो सोमियासिस एक दूषित जल जनित रोग है

तर्क (R) : शिस्टोसोमियासिस रोग मुख्यतः पानी में सल्फेट की उपस्थिति के कारण होता है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2468][Question Description = S2_qSNz_PG_GP24_Q38]

1. Both **A** and **R** are true and **R** is the correct explanation of **A**/(A) और (R) दोनों सत्य हैं और (R), (A) की सही व्याख्या है [Option ID = 9869]
2. Both **A** and **R** are true but **R** is NOT the correct explanation of **A**/(A) और (R) दोनों सत्य हैंकिन्तु (R), (A) की सही व्याख्या नहीं है [Option ID = 9870]
3. **A** is true but **R** is false/(A) सत्य है किन्तु (R) असत्य है [Option ID = 9871]
4. **A** is false but **R** is true/(A) असत्य है किन्तु (R) सत्य है [Option ID = 9872]

Correct Answer :-
- Both **A** and **R** are true and **R** is the correct explanation of **A**/(A) और (R) दोनों सत्य हैं और (R), (A) की सही व्याख्या है [Option ID = 9869]

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

भारत के संविधान के अनुच्छेद 48 क (48 A) में राज्यों को _____ एवं संरक्षण तथा संवर्धन सुनिश्चित करने के लिए निदेश दिया गया है

[Question ID = 2469][Question Description = S2_qSNz_PG_GP24_Q39]

1. Education/शिक्षा [Option ID = 9873]
2. Environment/पर्यावरण [Option ID = 9874]
3. Businesses/व्यवसाय [Option ID = 9875]
4. Mineral resources/खनिज व्यवसाय [Option ID = 9876]

Correct Answer :-
- Education/शिक्षा [Option ID = 9873]

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

एम. एन. आर. ई. की आवधिक रिपोर्ट के अनुसार निम्नलिखित में से किस राज्य में भारत में पवन ऊर्जा की अधिकतम संभावना है ?

[Question ID = 2470][Question Description = S2_qSNz_PG_GP24_Q40]

1. Rajasthan /राजस्थान [Option ID = 9877]
2. Tamil Nadu/तमिलनाडु [Option ID = 9878]
3. Karnataka/कर्नाटक [Option ID = 9879]
4. Gujarat/गुजरात [Option ID = 9880]

Correct Answer :-
- Rajasthan /राजस्थान [Option ID = 9877]

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

एन एस क्यू एफ _____ को अनुरक्षण में अंतरराष्ट्रीय व्यवसाय मानक वर्गीकरण के साथ समन्वित हो जाएगा ?

[Question ID = 2471][Question Description = S2_qSNz_PG_GP24_Q41]

1. ILO/आई एल ओ [Option ID = 9881]
2. UNESCO/यूनेस्को [Option ID = 9882]
3. NCFVE/एन क्यू एफ वी ई [Option ID = 9883]
4. Ministry of Skill Development/कौशल विकास मंत्रालय [Option ID = 9884]

Correct Answer :-
- ILO/आई एल ओ [Option ID = 9881]

37) SARTHAQ is
सार्थक (एस ए आर टी एच ए क्यू) है :

[Question ID = 2472][Question Description = S2_qSNz_PG_GP24_Q42]

1. A training programme for teachers launched by the Government of India/भारत सरकार द्वारा प्रारंभ किए गए शिक्षकों के लिए प्रशिक्षण पाठ्यक्रम [Option ID = 9885]
2. Implementation plan for NEP 2020/नई ई पी - 2020 हेतु कार्यान्वयन योजना [Option ID = 9886]
3. A Government of India initiative to provide psychological support for students and teachers for mental health and emotional well being/मानसिक स्वास्थ्य तथा भावात्मक सुदृढ़ावस्था के लिए विद्यार्थियों तथा शिक्षकों को मनोवैज्ञानिक सहायता प्रदान करने हेतु भारत सरकार का एक पहल [Option ID = 9887]
4. An organization for supporting the differently abled children/दिव्यांग बच्चों की सहायता के लिए एक एजेंसिका [Option ID = 9888]

Correct Answer :-
- A training programme for teachers launched by the Government of India/भारत सरकार द्वारा प्रारंभ किए गए शिक्षकों के लिए प्रशिक्षण पाठ्यक्रम [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 Enrolment Ratio of at least 20 % by 2015

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

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

नीचे दो कथन दिए गए हैं :

कथन - I : राष्ट्रीय ज्ञान आयोग ने वर्ष 2015 तक भारत में सकल नामांकन अनुपात कम से कम 20% पूरा करने के लिए यहां 500 विश्वविद्यालय खोले जाने की सिफारिश की है

कथन - II : राष्ट्रीय ज्ञान आयोग ने एक स्वायत्त उच्चतर शिक्षा विनियामक प्राधिकरण की स्थापना की सिफारिश की है

उपर्युक्त कथनों के आलोक में निम्नलिखित विकल्पों में से सही उत्तर चुनें :

[Question ID = 2473][Question Description = S2_qSNz_PG_GP24_Q43]

1. Both Statement I and Statement II are correct/कथन I और II दोनों सही हैं [Option ID = 9889]
2. Both Statement I and Statement II are incorrect/कथन I और II दोनों गलत हैं [Option ID = 9890]
3. Statement I is correct but Statement II is incorrect/कथन I सही है , किन्तु कथन II गलत है । [Option ID = 9891]
4. Statement I is incorrect but Statement II is correct/कथन I गलत है , किन्तु कथन II सही है [Option ID = 9892]

Correct Answer :-
- Both Statement I and Statement II are correct/कथन I और II दोनों सही हैं [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. B. 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:

एन पी ई 2020 के अनुसार व्यावसायिक शिक्षा के संदर्भ में निम्नलिखित में से कौन से सही नहीं है ?

A. वर्ष 2013 में शुरू की गई बी वोक डिग्री को समाप्त कर दिया जाएगा

B. चर्चित व्यावसायिक पाठ्यक्रम के स्थान पर लोक विद्या पाठ्यक्रम शुरू किया जाएगा

C. स्थानीय अवसरों की मैपिंग किए बिना कौशल अंतर विश्लेषण पर व्यावसायिक शिक्षा के लिए केंद्रीय क्षेत्र चुना जाएगा

D. व्यावसायिक शिक्षा के समेकन हेतु एक राष्ट्रीय आयोग गठित किया जाएगा

E. अगले दशक में सभी विद्यालयी तथा उच्चतर शिक्षा संस्थानों में चरणबद्ध तरीके से व्यावसायिक शिक्षा समेकित की जाएगी

नीचे दिए गए विकल्पों में से सही उत्तर चुनें :

[Question ID = 2474][Question Description = S2_qSNz_PG_GP24_Q44]

1. A, B and C only/केवल A, B और C [Option ID = 9893]
2. B, C and D only/केवल B, C और D [Option ID = 9894]
3. C, D and E only/केवल C, D और E [Option ID = 9895]
4. A, C and D only/केवल A, C और D [Option ID = 9896]

Correct Answer :-
- A, B and C only/केवल A, B और C [Option ID = 9893]

40) Match List I with List II

List I	List II
A. Taxila	I. Tantrik teachings
B. Ujjain	II. Dvaita school of thought
C. Vikramshila	III. Medicine
D. Manyakheta	IV. Astronomy

Choose the correct answer from the options given below:

सूची -I को सूची -II से सुमेलित कीजिए :

सूची -I	सूची -II
A. तक्षशिला	I. तांत्रिक शिक्षा
B. उज्जैन	II. द्वैतवाद विद्यालय
C. विक्रमशिला	III. चिकित्सा
D. मान्यखेत	IV. खगोल ज्ञानार्जन

नीचे दिए गए विकल्पों में से सही उत्तर चुनिए :

[Question ID = 2475][Question Description = S2_qSNz_PG_GP24_Q45]

1. A - I, B - IV, C - III, D - II [Option ID = 9897]
2. A - II, B - III, C - IV, D - I [Option ID = 9898]
3. A - III, B - IV, C - I, D - II [Option ID = 9899]
4. A - IV, B - III, C - II, D - I [Option ID = 9900]

Correct Answer :-
- A - I, B - IV, C - III, D - II [Option ID = 9897]

Topic:- GP_26NOV_SH2_C

1) Read the passage carefully and answer the questions that follows

Assessment is central to almost all forms of education around the world, and in recent years, a wider variety of assessment has tended to be used. One such form of this change is the use of peer and self-assessment. Self-assessment can be defined as "the ability to critically assess one's own work" (Brew, 1999) and peer assessment as "making judgments about, or commenting upon, each other's work". As with all assessment methods, both have their own strengths and weaknesses. It can be argued that peer and self-assessment with careful initiation and moderation are effective methods of assessment. However, this brief note will argue that in the high stakes environments of most educational settings, these methods are inappropriate, as the making is unreliable.

Peer and self-assessment have become increasingly common as methods of assessment. particularly in further and higher education. They are used as methods to reduce the marking loads of teachers and it is claimed, to enhance group work and the critical thinking skills of students. It is also claimed that if marking criteria are discussed and agreed at the start, students' marking does not differ significantly from teachers. In studies where the assessment of different teachers is compared, and also in studies where teacher's and peer's and or self-assessments are compared, it has generally been found that, provided criteria are discussed and agreed in advance, marks tend to be similar. Thus, it could be argued that with the right initial training, there is no difference between work being marked by a teacher or a student.

नीचे दिये गद्यांश को पढ़ें और प्रश्नों के उत्तर दीजिए :

विश्व भर में लगभग सभी प्रकार की शिक्षा में मूल्यांकन एक अति महत्वपूर्ण स्थान है, तथा हाल के वर्षों में एक अधिक व्यापक प्रकार के मूल्यांकन का उपयोग करने की प्रवृत्ति देखने को मिली है मूल्यांकन का यह परिभाषित प्रकार है यह सक्षम मूल्यांकन तथा स्व-मूल्यांकन का उपयोग स्व मूल्यांकन को इस प्रकार परिभाषित किया जा सकता है, "अपने कार्य के मूल्यांकन की क्षमता" (ब्रू, 1999) तथा यह सक्षम मूल्यांकन को, "एक दूसरे के कार्य को मूल्यांकन करना, अथवा उस पर टिप्पणी करना" के रूप में परिभाषित है "जैसा कि सभी मूल्यांकन पद्धतियों के साथ में ज्ञात है, इन दोनों की भी अपनी-अपनी शक्तियां तथा कमजोरीयां हैं यहाँ यह तर्क दिया जा सकता है कि सावधानीपूर्वक पहल तथा नियंत्रण के साथ सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन, मूल्यांकन की प्रभावी पद्धतियां हैं परंतु इस संक्षिप्त टिप्पण में यह तर्क दिया जा सकता है कि अधिकांश शैक्षिक स्थितियों में जहां कार्य सीखे बड़ी संख्या पे लगी होती हैं, ऐसे वातावरण में ये पद्धतियां उपयुक्त नहीं हैं क्योंकि अंकन (संकेत देने की विधि) विश्वसनीय नहीं है

सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन निरंतरता आगे की शिक्षा तथा उच्चतर शिक्षा में मूल्यांकन पद्धतियों के रूप में व्यापकी प्रचलित हो रही हैं ये शिक्षणार्थी द्वारा संकेत दिए जाने के कार्यभार को कम कर रही हैं, तथा यह भी दावा किया जा रहा है कि इनसे शिक्षार्थियों के सकारात्मक चिंतन में भी वृद्धि होगी यह भी दावा किया जाता है कि यदि आंकन में दो अंकन आकांड पर चर्चा कर उस पर सहमति बनाई जाए, शिक्षकों के द्वारा दिए जाने वाले विद्यार्थियों के अंकन में कोई विशेष अंतर नहीं होगा सामान्यतः यह पाया गया है कि यदि आंकन में आकांक्षों पर चर्चा द्वारा सहमति बनाई जाए, तो ऐसे आंकलनों में जहां विभिन्न शिक्षकों के मूल्यांकन की तुलना की जाती है, वहां अंकन एक समान रहता है इस प्रकार यह पाया जा सकता है कि आंकन में सकारात्मक प्रशिक्षण के बाद विभिन्न शिक्षक अथवा विद्यार्थी के द्वारा दिए जाने वाले अंकन वर्तन में कोई अंतर नहीं होगा

What is the focus of this text?

इस पाठ्य सामग्री का फोकस बिंदु क्या है ?

[Question ID = 2476][Question Description = S2_qSNz_PG_GP24_Q46]

1. Peer assessment/सह सक्षम मूल्यांकन [Option ID = 9901]
2. Assessment and Education/मूल्यांकन तथा शिक्षा [Option ID = 9902]
3. Assessment in general/सामान्य तौर पर मूल्यांकन [Option ID = 9903]
4. Peer and Self-assessment/सह सक्षम मूल्यांकन तथा स्व मूल्यांकन [Option ID = 9904]

Correct Answer :-
- Peer assessment/सह सक्षम मूल्यांकन [Option ID = 9901]

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	60200	30000
2017	26500	53500	61400	32000
2018	27200	54200	62500	32600
2019	27600	55700	62900	33400
2020	28000	56800	63700	33900

नीचे दिये गद्यांश को पढ़ें और प्रश्नों के उत्तर दीजिए :

विश्व भर में लगभग सभी प्रकार की शिक्षा में मूल्यांकन एक अति महत्वपूर्ण स्थान है, तथा हाल के वर्षों में एक अधिक व्यापक प्रकार के मूल्यांकन का उपयोग करने की प्रवृत्ति देखने को मिली है मूल्यांकन का यह परिभाषित प्रकार है यह सक्षम मूल्यांकन तथा स्व-मूल्यांकन का उपयोग स्व मूल्यांकन को इस प्रकार परिभाषित किया जा सकता है, "अपने कार्य के मूल्यांकन की क्षमता" (ब्रू, 1999) तथा यह सक्षम मूल्यांकन को, "एक दूसरे के कार्य को मूल्यांकन करना, अथवा उस पर टिप्पणी करना" के रूप में परिभाषित है "जैसा कि सभी मूल्यांकन पद्धतियों के साथ में ज्ञात है, इन दोनों की भी अपनी-अपनी शक्तियां तथा कमजोरीयां हैं यहाँ यह तर्क दिया जा सकता है कि सावधानीपूर्वक पहल तथा नियंत्रण के साथ सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन, मूल्यांकन की प्रभावी पद्धतियां हैं परंतु इस संक्षिप्त टिप्पण में यह तर्क दिया जा सकता है कि अधिकांश शैक्षिक स्थितियों में जहां कार्य सीखे बड़ी संख्या पे लगी होती हैं, ऐसे वातावरण में ये पद्धतियां उपयुक्त नहीं हैं क्योंकि अंकन (संकेत देने की विधि) विश्वसनीय नहीं है

सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन निरंतरता आगे की शिक्षा तथा उच्चतर शिक्षा में मूल्यांकन पद्धतियों के रूप में व्यापकी प्रचलित हो रही हैं ये शिक्षणार्थी द्वारा संकेत दिए जाने के कार्यभार को कम कर रही हैं, तथा यह भी दावा किया जा रहा है कि इनसे शिक्षार्थियों के सकारात्मक चिंतन में भी वृद्धि होगी यह भी दावा किया जाता है कि यदि आंकन में दो अंकन आकांड पर चर्चा कर उस पर सहमति बनाई जाए, शिक्षकों के द्वारा दिए जाने वाले विद्यार्थियों के अंकन में कोई विशेष अंतर नहीं होगा सामान्यतः यह पाया गया है कि यदि आंकन में आकांक्षों पर चर्चा द्वारा सहमति बनाई जाए, तो ऐसे आंकलनों में जहां विभिन्न शिक्षकों के मूल्यांकन की तुलना की जाती है, वहां अंकन एक समान रहता है इस प्रकार यह पाया जा सकता है कि आंकन में सकारात्मक प्रशिक्षण के बाद विभिन्न शिक्षक अथवा विद्यार्थी के द्वारा दिए जाने वाले अंकन वर्तन में कोई अंतर नहीं होगा

What benefits accrue from self-assessment and peer-assessment of students?

स्व मूल्यांकन तथा सह सक्षम मूल्यांकन के क्या लाभ हैं ?

[Question ID = 2477][Question Description = S2_qSNz_PG_GP24_Q47]

1. Ability to criticise other's work/दूसरों के कार्यों की विवेचना करने की क्षमता [Option ID = 9905]
2. Enhancement of group work and critical thinking of students/विद्यार्थियों की समूह कार्य तथा विवेचनात्मक चिंतन में वृद्धि [Option ID = 9906]
3. Promotes uniform assessment/समान मूल्यांकन नीति को अग्रसर करते हैं [Option ID = 9907]
4. These methods do not require marking/ऐसी पद्धतियों में अंकन की आवश्यकता नहीं होती [Option ID = 9908]

Correct Answer :-
- Ability to criticise other's work/दूसरों के कार्यों की विवेचना करने की क्षमता [Option ID = 9905]

3) 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

नीचे दिये गद्यांश को पढ़ें और प्रश्नों के उत्तर दीजिए :

विश्व भर में लगभग सभी प्रकार की शिक्षा में मूल्यांकन एक अति महत्वपूर्ण स्थान है, तथा हाल के वर्षों में एक अधिक व्यापक प्रकार के मूल्यांकन का उपयोग करने की प्रवृत्ति देखने को मिली है मूल्यांकन का यह परिभाषित प्रकार है यह सक्षम मूल्यांकन तथा स्व-मूल्यांकन का उपयोग स्व मूल्यांकन को इस प्रकार परिभाषित किया जा सकता है, "अपने कार्य के मूल्यांकन की क्षमता" (ब्रू, 1999) तथा यह सक्षम मूल्यांकन को, "एक दूसरे के कार्य को मूल्यांकन करना, अथवा उस पर टिप्पणी करना" के रूप में परिभाषित है "जैसा कि सभी मूल्यांकन पद्धतियों के साथ में ज्ञात है, इन दोनों की भी अपनी-अपनी शक्तियां तथा कमजोरीयां हैं यहाँ यह तर्क दिया जा सकता है कि सावधानीपूर्वक पहल तथा नियंत्रण के साथ सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन, मूल्यांकन की प्रभावी पद्धतियां हैं परंतु इस संक्षिप्त टिप्पण में यह तर्क दिया जा सकता है कि अधिकांश शैक्षिक स्थितियों में जहां कार्य सीखे बड़ी संख्या पे लगी होती हैं, ऐसे वातावरण में ये पद्धतियां उपयुक्त नहीं हैं क्योंकि अंकन (संकेत देने की विधि) विश्वसनीय नहीं है

सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन निरंतरता आगे की शिक्षा तथा उच्चतर शिक्षा में मूल्यांकन पद्धतियों के रूप में व्यापकी प्रचलित हो रही हैं ये शिक्षणार्थी द्वारा संकेत दिए जाने के कार्यभार को कम कर रही हैं, तथा यह भी दावा किया जा रहा है कि इनसे शिक्षार्थियों के सकारात्मक चिंतन में भी वृद्धि होगी यह भी दावा किया जाता है कि यदि आंकन में दो अंकन आकांड पर चर्चा कर उस पर सहमति बनाई जाए, शिक्षकों के द्वारा दिए जाने वाले विद्यार्थियों के अंकन में कोई विशेष अंतर नहीं होगा सामान्यतः यह पाया गया है कि यदि आंकन में आकांक्षों पर चर्चा द्वारा सहमति बनाई जाए, तो ऐसे आंकलनों में जहां विभिन्न शिक्षकों के मूल्यांकन की तुलना की जाती है, वहां अंकन एक समान रहता है इस प्रकार यह पाया जा सकता है कि आंकन में सकारात्मक प्रशिक्षण के बाद विभिन्न शिक्षक अथवा विद्यार्थी के द्वारा दिए जाने वाले अंकन वर्तन में कोई अंतर नहीं होगा

What argument the author desires to make?

लेखक क्या तर्क देना चाहता है ?

[Question ID = 2478][Question Description = S2_qSNz_PG_GP24_Q48]

1. Self-assessment and peer-assessment are innovative assessment practices/स्व मूल्यांकन तथा सह-सक्षम मूल्यांकन अभिनवेशी मूल्यांकन पद्धतियां हैं [Option ID = 9909]
2. Assessment is central to education/शिक्षा में मूल्यांकन केंद्रीय बिंदु है [Option ID = 9910]
3. Peer and self-assessments are inappropriate in high-stake examinations/सह सक्षम मूल्यांकन तथा स्व मूल्यांकन उच्च परीक्षाओं में अनुपयुक्त नहीं हैं जहां सभी दांव पर लगी होती हैं [Option ID = 9911]
4. Peer assessment is common in higher education/सह सक्षम मूल्यांकन उच्चतर शिक्षा में व्यवहार है [Option ID = 9912]

Correct Answer :-
- Self-assessment and peer-assessment are innovative assessment practices/स्व मूल्यांकन तथा सह-सक्षम मूल्यांकन अभिनवेशी मूल्यांकन पद्धतियां हैं [Option ID = 9909]

4) Read the passage carefully and answer the questions that follows

Assessment is central to almost all forms of education around the world, and in recent years, a wider variety of assessment has tended to be used. One such form of this change is the use of peer and self-assessment. Self-assessment can be defined as "the ability to critically assess one's own work" (Brew, 1999) and peer assessment as "making judgments about, or commenting upon, each other's work". As with all assessment methods, both have their own strengths and weaknesses. It can be argued that peer and self-assessment with careful initiation and moderation are effective methods of assessment. However, this brief note will argue that in the high stakes environments of most educational settings, these methods are inappropriate, as the making is unreliable.

Peer and self-assessment have become increasingly common as methods of assessment. particularly in further and higher education. They are used as methods to reduce the marking loads of teachers and it is claimed, to enhance group work and the critical thinking skills of students. It is also claimed that if marking criteria are discussed and agreed at the start, students' marking does not differ significantly from teachers. In studies where the assessment of different teachers is compared, and also in studies where teacher's and peer's and or self-assessments are compared, it has generally been found that, provided criteria are discussed and agreed in advance, marks tend to be similar. Thus, it could be argued that with the right initial training, there is no difference between work being marked by a teacher or a student.

नीचे दिये गद्यांश को पढ़ें और प्रश्नों के उत्तर दीजिए :

विश्व भर में लगभग सभी प्रकार की शिक्षा में मूल्यांकन एक अति महत्वपूर्ण स्थान है, तथा हाल के वर्षों में एक अधिक व्यापक प्रकार के मूल्यांकन का उपयोग करने की प्रवृत्ति देखने को मिली है मूल्यांकन का यह परिभाषित प्रकार है यह सक्षम मूल्यांकन तथा स्व-मूल्यांकन का उपयोग स्व मूल्यांकन को इस प्रकार परिभाषित किया जा सकता है, "अपने कार्य के मूल्यांकन की क्षमता" (ब्रू, 1999) तथा यह सक्षम मूल्यांकन को, "एक दूसरे के कार्य को मूल्यांकन करना, अथवा उस पर टिप्पणी करना" के रूप में परिभाषित है "जैसा कि सभी मूल्यांकन पद्धतियों के साथ में ज्ञात है, इन दोनों की भी अपनी-अपनी शक्तियां तथा कमजोरीयां हैं यहाँ यह तर्क दिया जा सकता है कि सावधानीपूर्वक पहल तथा नियंत्रण के साथ सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन, मूल्यांकन की प्रभावी पद्धतियां हैं परंतु इस संक्षिप्त टिप्पण में यह तर्क दिया जा सकता है कि अधिकांश शैक्षिक स्थितियों में जहां कार्य सीखे बड़ी संख्या पे लगी होती हैं, ऐसे वातावरण में ये पद्धतियां उपयुक्त नहीं हैं क्योंकि अंकन (संकेत देने की विधि) विश्वसनीय नहीं है

सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन निरंतरता आगे की शिक्षा तथा उच्चतर शिक्षा में मूल्यांकन पद्धतियों के रूप में व्यापकी प्रचलित हो रही हैं ये शिक्षणार्थी द्वारा संकेत दिए जाने के कार्यभार को कम कर रही हैं, तथा यह भी दावा किया जा रहा है कि इनसे शिक्षार्थियों के सकारात्मक चिंतन में भी वृद्धि होगी यह भी दावा किया जाता है कि यदि आंकन में दो अंकन आकांड पर चर्चा कर उस पर सहमति बनाई जाए, शिक्षकों के द्वारा दिए जाने वाले विद्यार्थियों के अंकन में कोई विशेष अंतर नहीं होगा सामान्यतः यह पाया गया है कि यदि आंकन में आकांक्षों पर चर्चा द्वारा सहमति बनाई जाए, तो ऐसे आंकलनों में जहां विभिन्न शिक्षकों के मूल्यांकन की तुलना की जाती है, वहां अंकन एक समान रहता है इस प्रकार यह पाया जा सकता है कि आंकन में सकारात्मक प्रशिक्षण के बाद विभिन्न शिक्षक अथवा विद्यार्थी के द्वारा दिए जाने वाले अंकन वर्तन में कोई अंतर नहीं होगा

Which one of the following captures the meaning of "Assessment is central to almost all forms of education"

निम्नलिखित में से कौन-सा कथन "मूल्यांकन लगभग सभी प्रकार की शिक्षा का केंद्रीय बिंदु है" के अर्थ को दृष्टांकित करता है ?

[Question ID = 2479][Question Description = S2_qSNz_PG_GP24_Q49]

1. Assessment is pivotal to education in all forms/मूल्यांकन सभी प्रकार की शिक्षा की धुरी है [Option ID = 9913]
2. Assessment is education in all forms/मूल्यांकन सभी प्रकार की शिक्षा है [Option ID = 9914]
3. Assessment education is key to education in all forms/मूल्यांकन शिक्षा सभी प्रकार की शिक्षा की कुंजी है [Option ID = 9915]
4. Assessment is peripheral to education in all forms/मूल्यांकन सभी प्रकार की शिक्षा का परिधीय रूप है [Option ID = 9916]

Correct Answer :-
- Assessment is pivotal to education in all forms/मूल्यांकन सभी प्रकार की शिक्षा की धुरी है [Option ID = 9913]

5) Read the passage carefully and answer the questions that follows

Assessment is central to almost all forms of education around the world, and in recent years, a wider variety of assessment has tended to be used. One such form of this change is the use of peer and self-assessment. Self-assessment can be defined as "the ability to critically assess one's own work" (Brew, 1999) and peer assessment as "making judgments about, or commenting upon, each other's work". As with all assessment methods, both have their own strengths and weaknesses. It can be argued that peer and self-assessment with careful initiation and moderation are effective methods of assessment. However, this brief note will argue that in the high stakes environments of most educational settings, these methods are inappropriate, as the making is unreliable.

Peer and self-assessment have become increasingly common as methods of assessment. particularly in further and higher education. They are used as methods to reduce the marking loads of teachers and it is claimed, to enhance group work and the critical thinking skills of students. It is also claimed that if marking criteria are discussed and agreed at the start, students' marking does not differ significantly from teachers. In studies where the assessment of different teachers is compared, and also in studies where teacher's and peer's and or self-assessments are compared, it has generally been found that, provided criteria are discussed and agreed in advance, marks tend to be similar. Thus, it could be argued that with the right initial training, there is no difference between work being marked by a teacher or a student.

नीचे दिये गद्यांश को पढ़ें और प्रश्नों के उत्तर दीजिए :

विश्व भर में लगभग सभी प्रकार की शिक्षा में मूल्यांकन एक अति महत्वपूर्ण स्थान है, तथा हाल के वर्षों में एक अधिक व्यापक प्रकार के मूल्यांकन का उपयोग करने की प्रवृत्ति देखने को मिली है मूल्यांकन का यह परिभाषित प्रकार है यह सक्षम मूल्यांकन तथा स्व-मूल्यांकन का उपयोग स्व मूल्यांकन को इस प्रकार परिभाषित किया जा सकता है, "अपने कार्य के मूल्यांकन की क्षमता" (ब्रू, 1999) तथा यह सक्षम मूल्यांकन को, "एक दूसरे के कार्य को मूल्यांकन करना, अथवा उस पर टिप्पणी करना" के रूप में परिभाषित है "जैसा कि सभी मूल्यांकन पद्धतियों के साथ में ज्ञात है, इन दोनों की भी अपनी-अपनी शक्तियां तथा कमजोरीयां हैं यहाँ यह तर्क दिया जा सकता है कि सावधानीपूर्वक पहल तथा नियंत्रण के साथ सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन, मूल्यांकन की प्रभावी पद्धतियां हैं परंतु इस संक्षिप्त टिप्पण में यह तर्क दिया जा सकता है कि अधिकांश शैक्षिक स्थितियों में जहां कार्य सीखे बड़ी संख्या पे लगी होती हैं, ऐसे वातावरण में ये पद्धतियां उपयुक्त नहीं हैं क्योंकि अंकन (संकेत देने की विधि) विश्वसनीय नहीं है

सह-सक्षम मूल्यांकन तथा स्व-मूल्यांकन निरंतरता आगे की शिक्षा तथा उच्चतर शिक्षा में मूल्यांकन पद्धतियों के रूप में व्यापकी प्रचलित हो रही हैं ये शिक्षणार्थी द्वारा संकेत दिए जाने के कार्यभार को कम कर रही हैं, तथा यह भी दावा किया जा रहा है कि इनसे शिक्षार्थियों के सकारात्मक चिंतन में भी वृद्धि होगी यह भी दावा किया जाता है कि यदि आंकन में दो अंकन आकांड पर चर्चा कर उस पर सहमति बनाई जाए, शिक्षकों के द्वारा दिए जाने वाले विद्यार्थियों के अंकन में कोई विशेष अंतर नहीं होगा सामान्यतः यह पाया गया है कि यदि आंकन में आकांक्षों पर चर्चा द्वारा सहमति बनाई जाए, तो ऐसे आंकलनों में जहां विभिन्न शिक्षकों के मूल्यांकन की तुलना की जाती है, वहां अंकन एक समान रहता है इस प्रकार यह पाया जा सकता है कि आंकन में सकारात्मक प्रशिक्षण के बाद विभिन्न शिक्षक अथवा विद्यार्थी के द्वारा दिए जाने वाले अंकन वर्तन में कोई अंतर नहीं होगा

"Students' marking does not differ significantly from teachers", means:

"शिक्षणार्थी द्वारा विद्यार्थियों एवं आंकलक से अंकन (संकेत देने की विधियों) में विशेष अंतर नहीं होता " इसका अर्थ है :

[Question ID = 2480][Question Description = S2_qSNz_PG_GP24_Q50]

1. Marks that differ radically from teachers/वो अंक जो शिक्षकों शिक्षणार्थी द्वारा दिये जाते हैं, भिन्न होते हैं [Option ID = 9917]
2. Marks do not differ peripherally/अंक परिधीय रूप से भिन्न नहीं होते हैं [Option ID = 9918]
3. Marks that are almost similar/वे अंक लगभग समान होते हैं [Option ID = 9919]
4. Marks may or may not differ/अंक भिन्न हो सकते हैं अथवा नहीं भी हो सकते हैं [Option ID = 9920]

Correct Answer :-
- Marks that differ radically from teachers/वो अंक जो शिक्षकों शिक्षणार्थी द्वारा दिये जाते हैं, भिन्न होते हैं [Option ID = 9917]