

Telangana State Council Higher Education

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	Computer Science and Engineering 1st Aug 2022 Shift1
Subject Name :	Computer Science and Engineering
Creation Date :	2022-08-01 13:14:58
Duration :	180
Total Marks :	200
Display Marks:	No
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Computer Science and Engineering

Group Number :	1
Group Id :	81959959
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	200
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Mathematics

Section Id :	819599227
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	50
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	819599263
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 81959911631 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If p, q and r are 3 real numbers satisfying the matrix equation,

$$[p \quad q \quad r] \begin{bmatrix} 3 & 4 & 1 \\ 3 & 2 & 3 \\ 2 & 0 & 2 \end{bmatrix} = [3 \quad 0 \quad 1] \text{ then } 2p + q - r \text{ is equal to}$$

Options :

1. ✓ -3
2. ✗ -1
3. ✗ 4
4. ✗ 2

Question Number : 2 Question Id : 81959911632 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\text{If } f(\alpha) = \begin{bmatrix} \cos\alpha & \sin\alpha \\ -\sin\alpha & \cos\alpha \end{bmatrix} \text{ then } f(\alpha)f(\beta) =$$

Options :

1. ✗ $f(\alpha) - f(\beta)$

2. ✘ $f(\alpha) + f(\beta)$

3. ✘ $f(\alpha - \beta)$

4. ✔ $f(\alpha + \beta)$

Question Number : 3 Question Id : 81959911633 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The value of "x" which satisfies the following equations

$$x + y + z = 9, 2x + 5y + 7z = 52 \text{ and } 2x + y - z = 0 \text{ is}$$

Options :

1. ✘ 0

2. ✔ 1

3. ✘ 2

4. ✘ 3

Question Number : 4 Question Id : 81959911634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The solutions of the equation $\begin{vmatrix} x & 2 & -1 \\ 2 & 5 & x \\ -1 & 2 & x \end{vmatrix} = 0$ are

Options :

1. ✔ 3, -1

2. ✘ $-3, 1$

3. ✘ $3, 1$

4. ✘ $-3, -1$

Question Number : 5 Question Id : 81959911635 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\frac{x+1}{(2x-a)(x+2)} = \frac{3}{2x-a} + \frac{b}{x+2} \text{ then } (a, b) =$$

Options :

1. ✘ $(1, 5)$

2. ✘ $(5, 1)$

3. ✘ $(-5, 1)$

4. ✔ $(-5, -1)$

Question Number : 6 Question Id : 81959911636 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\text{If } \frac{x^2+x+1}{x^2+2x+1} = A + \frac{B}{(x+1)} + \frac{C}{(x+1)^2} \text{ then } A - B =$$

Options :

1. ✘ $4C$

2. ✘ $4C + 1$

3. ✓ $2C$

4. ✗ $3C$

Question Number : 7 Question Id : 81959911637 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Period of $4\sin\left(\frac{x}{2}\right) + 5\cos\left(\frac{x}{2}\right)$

Options :

1. ✗ π

2. ✗ 2π

3. ✗ 3π

4. ✓ 4π

Question Number : 8 Question Id : 81959911638 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $\sin x = \frac{p-q}{p+q}$ then $\tan\left(\frac{\pi}{4} - \frac{x}{2}\right) =$

Options :

1. ✓ $\sqrt{\frac{p}{q}}$

2. ✗ \sqrt{pq}

3. ✘ $\sqrt{\frac{q}{p}}$

4. ✘ 1

Question Number : 9 Question Id : 81959911639 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The numerical value of $\tan\left[2\tan^{-1}\left(\frac{1}{5}\right) - \frac{\pi}{4}\right]$ is

Options :

1. ✘ $\frac{7}{17}$

2. ✔ $\frac{-7}{17}$

3. ✘ $\frac{17}{7}$

4. ✘ $\frac{-17}{7}$

Question Number : 10 Question Id : 81959911640 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $\tan x + \cot x = \frac{4}{\sqrt{3}}$ then $x =$

Options :

1. ✔ $n\pi + \frac{\pi}{6}, n\pi + \frac{\pi}{3} \quad n \in \mathbb{Z}$

2. ✘ $2n\pi \pm \frac{\pi}{6}, 2n\pi \pm \frac{\pi}{3} \quad n \in \mathbb{Z}$

$$n\pi + \frac{\pi}{6}, n\pi - \frac{\pi}{3} \quad n \in \mathbb{Z}$$

3. ✘

$$n\pi + \frac{\pi}{4}, n \in \mathbb{Z}$$

4. ✘

Question Number : 11 Question Id : 81959911641 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

If in a ΔABC , if $\frac{\sin B}{\sin C} = 2\cos A$ then the triangle is

Options :

Equilateral triangle

1. ✘

Right angled triangle

2. ✘

Isosceles triangle

3. ✔

Scalene triangle

4. ✘

Question Number : 12 Question Id : 81959911642 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

If z is a complex number such that $|z| = 4$ and $\arg(z) = \frac{5\pi}{6}$ then $z =$

Options :

$$2\sqrt{3} + 2i$$

1. ✘

$$-2\sqrt{3} + 2i$$

2. ✔

3. ✘ $2\sqrt{3} - 2i$

4. ✘ $-\sqrt{3} + i$

Question Number : 13 Question Id : 81959911643 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The angle between the lines $kx + y + 9 = 0$ and $y - 3x = 4$ is 45° , then the value of "k" is

Options :

1. ✘ $2 \text{ or } \frac{1}{2}$

2. ✔ $2 \text{ or } -\frac{1}{2}$

3. ✘ $-2 \text{ or } \frac{1}{2}$

4. ✘ $-2 \text{ or } -\frac{1}{2}$

Question Number : 14 Question Id : 81959911644 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

If the two lines $2x - 3y = 5$ and $3x - 4y = 7$ are two diameters of a circle of radius 7, then the equation of the circle is

Options :

1. ✘ $x^2 + y^2 + 2x - 4y - 47 = 0$

2. ✘ $x^2 + y^2 = 49$

3. ✓ $x^2 + y^2 - 2x + 2y - 47 = 0$

4. ✗ $x^2 + y^2 = 17$

Question Number : 15 Question Id : 81959911645 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The parabola $(y + 1)^2 = a(x - 2)$ passes through the point $(-1, 2)$. The equation of its directrix is

Options :

1. ✗ $4x + 5 = 0$

2. ✓ $4x - 5 = 0$

3. ✗ $4x + 9 = 0$

4. ✗ $4x - 9 = 0$

Question Number : 16 Question Id : 81959911646 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

$P(3, 2)$ is a point on the ellipse $\frac{x^2}{18} + \frac{y^2}{8} = 1$ whose foci are S and S' . The sum of the distances from S and S' to the point $P(3, 2)$ is _____ units

Options :

1. ✗ $3\sqrt{2}$

2. ✗ $2\sqrt{3}$

3. ✘ $4\sqrt{3}$

4. ✔ $6\sqrt{2}$

Question Number : 17 Question Id : 81959911647 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

In a Hyperbola the transverse and conjugate axes are in the ratio 3:4. The eccentricity of the hyperbola is

Options :

1. ✘ $\frac{4}{3}$

2. ✘ $\frac{3}{2}$

3. ✘ $\frac{5}{4}$

4. ✔ $\frac{5}{3}$

Question Number : 18 Question Id : 81959911648 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

$$\lim_{x \rightarrow a} \frac{xe^{-x} - ae^{-a}}{x-a} =$$

Options :

1. ✘ e^{-a}

2. ✘ ae^{-a}

3. ✓ $(1 - a)e^{-a}$

4. ✗ $(1 + a)e^{-a}$

Question Number : 19 Question Id : 81959911649 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

If $y = \tan^{-1}\left(\frac{ax-b}{bx+a}\right)$ then $\frac{dy}{dx} =$

Options :

1. ✓ $\frac{1}{1+x^2}$

2. ✗ $\frac{1}{x^2-1}$

3. ✗ $\frac{1}{1-x^2}$

4. ✗ $\frac{-1}{1+x^2}$

Question Number : 20 Question Id : 81959911650 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

If $y = \left(\frac{1}{x}\right)^x$ then $y''(1) =$

Options :

1. ✗ e

2. ✗ 1

3. ✗ -1

4. ✓ 0

Question Number : 21 Question Id : 81959911651 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $u = \cos^{-1} \left[\frac{x^3 + y^3}{xy} \right]$, then $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} =$

Options :

1. ✗ $\cot u$

2. ✗ $\frac{1}{2} \tan u$

3. ✗ $-\frac{1}{2} \tan u$

4. ✓ $-\cot u$

Question Number : 22 Question Id : 81959911652 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The length of tangent at $\sqrt{x} + \sqrt{y} = 5$ at (9,4) is

Options :

1. ✓ $2\sqrt{13}$

2. ✗ $\sqrt{13}$

3. ✗ $4\sqrt{13}$

4. ✗ $5\sqrt{13}$

Question Number : 23 Question Id : 81959911653 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the displacement in time " t " of a particle is given by $s = ae^t + be^{-t}$, then the acceleration is equal to

Options :

- 1. ✘ Velocity
- 2. ✔ Displacement
- 3. ✘ Initial velocity
- 4. ✘ Negative of velocity

Question Number : 24 Question Id : 81959911654 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Minimum value of $\frac{1-x+x^2}{1+x+x^2}$

Options :

- 1. ✘ 1
- 2. ✘ 3
- 3. ✔ $\frac{1}{3}$
- 4. ✘ -3

Question Number : 25 Question Id : 81959911655 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The approximate value of $(1.0002)^{3000}$ is

Options :

1. ✓ 1.6

2. ✗ 1.4

3. ✗ 1.2

4. ✗ 1.8

Question Number : 26 Question Id : 81959911656 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\int \frac{dx}{(x+100)\sqrt{x+99}}$$

Options :

1. ✗ $2(x + 100)^{1/2} + C$

2. ✗ $3(x + 100)^{1/2} + C$

3. ✗ $2\tan^{-1}(\sqrt{x + 100}) + C$

4. ✓ $2\tan^{-1}(\sqrt{x + 99}) + C$

Question Number : 27 Question Id : 81959911657 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\int_0^1 \frac{1-x^2}{1+x^2} dx$$

Options :

1. ✘ $\frac{\pi}{4} - 1$

2. ✘ $\frac{\pi}{4} + 1$

3. ✔ $\frac{\pi}{2} - 1$

4. ✘ $\frac{\pi}{4}$

Question Number : 28 Question Id : 81959911658 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The area of the region enclosed by the curve $y = x \sin x$ and the x- axis between $x = 0$ and $x = 2\pi$ is _____ sq. units

Options :

1. ✔ 2π

2. ✘ 3π

3. ✘ 4π

4. ✘ $\frac{3\pi}{4}$

Question Number : 29 Question Id : 81959911659 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The volume generated by the rotation of the area bounded by the curve $y = e^x \sin x$, the x- axis and the lines $x = 0$, $x = \pi$ about x-axis is ____ cu. units

Options :

1. ✘ $\frac{\pi}{6}(e^{2\pi} - 1)$

2. ✔ $\frac{\pi}{8}(e^{2\pi} - 1)$

3. ✘ $\frac{\pi}{8}(e^{\pi} - 1)$

4. ✘ $\frac{\pi}{8}(e^{2\pi} + 1)$

Question Number : 30 Question Id : 81959911660 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The Mean Value of the function $f(x) = \frac{2}{e^x+1}$ on the interval $[0,2]$ is

Options :

1. ✘ $\log\left(\frac{2}{e^2+1}\right)$

2. ✘ $1 + \log\left(\frac{2}{e^2+1}\right)$

3. ✔ $2 + \log\left(\frac{2}{e^2+1}\right)$

4. ✘ $2 + \log(e^2 + 1)$

Question Number : 31 Question Id : 81959911661 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The Values of abscissa (x) and ordinates (y) of a curve are as follows

x	2.0	2.5	3.0	3.5	4.0
y	5.00	7.25	10.00	13.25	17.00

then the area under the curve (round off to two decimal places) is

Options :

1. ✘ 20.45
2. ✘ 20.47
3. ✔ 20.67
4. ✘ 20.57

Question Number : 32 Question Id : 81959911662 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The order and degree of the differential equation $\frac{d^2y}{dx^2} = \left(1 + \left(\frac{dy}{dx}\right)^2\right)^{\frac{1}{3}}$ is

Options :

1. ✘ 1, 6
2. ✔ 2, 3
3. ✘ 2, 2
4. ✘ 3, 2

Question Number : 33 Question Id : 81959911663 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$x = a\sin(\omega t + b)$ is a solution of

Options :

1. ✘ $\frac{dx}{dt} + \omega X = 0$

2. ✘ $\frac{d^2x}{dt^2} - \omega^2 X = 0$

3. ✔ $\frac{d^2x}{dt^2} + \omega^2 X = 0$

4. ✘ $\frac{dx}{dt} - \omega X = 0$

Question Number : 34 Question Id : 81959911664 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The solution of the differential equation $y - x \frac{dy}{dx} = a \left(y^2 + \frac{dy}{dx} \right)$ is

Options :

1. ✘ $y = k(a + x)(ay - 1)$

2. ✔ $y = k(a + x)(1 - ay)$

3. ✘ $y = k(ax + 1)(y - 1)$

4. ✘ $y = k(ax - 1)(y^2 - 1)$

Question Number : 35 Question Id : 81959911665 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The solution of the differential equation $\frac{dy}{dx} = x^3 - 2xy$ satisfying the condition $y(1) = 2$ is

Options :

1. ✘ $x^2 + 2y + 1 = 4e^{1-x^2}$

2. ✘ $2y - x^2 + 1 = 4e^{1+x^2}$

3. ✔ $2y - x^2 + 1 = 4e^{1-x^2}$

4. ✘ $x^2 - 2y + 1 = 4e^{1-x^2}$

Question Number : 36 Question Id : 81959911666 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Solution of $\frac{d^3y}{dx^3} + 3\frac{d^2y}{dx^2} - 4y = 0$ is

Options :

1. ✘ $y = C_1e^{-x} + (C_2 + C_3x)e^{2x}$

2. ✔ $y = C_1e^x + (C_2 + C_3x)e^{-2x}$

3. ✘ $y = C_1e^x + C_2e^{-x} + C_3e^{2x}$

4. ✘ $y = C_1e^{-x} + e^{2x}(C_2\cos 2x + C_3\sin 2x)$

Question Number : 37 Question Id : 81959911667 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The particular integral of $\frac{d^2y}{dx^2} - 3\frac{dy}{dx} + 2y = (e^x + 1)^2$ is

Options :

1. ✓ $xe^{2x} - 2xe^x + \frac{1}{2}$

2. ✗ $xe^{2x} - 2xe^x - 1$

3. ✗ $xe^{2x} + 2xe^x + 1$

4. ✗ $xe^{2x} - 2xe^x - \frac{1}{2}$

Question Number : 38 Question Id : 81959911668 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The Particular Integral of $\frac{d^3y}{dx^3} + 2\frac{d^2y}{dx^2} + \frac{dy}{dx} = \sin 2x$ is

Options :

1. ✗ $\frac{1}{50}(3\cos 2x + 4\sin 2x)$

2. ✗ $\frac{1}{50}(3\cos 2x + 2\sin 2x)$

3. ✓ $\frac{1}{50}(3\cos 2x - 4\sin 2x)$

4. ✗ $\frac{1}{50}(3\cos 2x + 2\sin 2x)$

Question Number : 39 Question Id : 81959911669 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The Particular Integral of $\frac{d^2y}{dx^2} - y = x^2$ is

Options :

1. ✓ $-(x^2 + 2)$

2. ✗ $x^2 - 2$

3. ✗ $(x^2 + 2)$

4. ✗ $2 - x^2$

Question Number : 40 Question Id : 81959911670 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$L\{(e^{3t} - e^{-3t})^2\} =$$

Options :

1. ✗ $\frac{2s}{s^2-36} + \frac{2}{s}$

2. ✗ $\frac{s}{s^2-36} - \frac{1}{s}$

3. ✓ $\frac{2s}{s^2-36} - \frac{2}{s}$

4. ✗ $\frac{s}{s^2-36} + \frac{1}{s}$

Question Number : 41 Question Id : 81959911671 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is FALSE

Options :

1. ✗ $L\{te^t\} = \frac{1}{(s-1)^2}$

2. ✘ If $L\{f(t)\} = F(s)$ then $L\{f(at)\} = \frac{1}{a}F\left(\frac{s}{a}\right)$

3. ✔ If $L\{f(t)\} = F(s)$ then $L\{e^{at}f(t)\} = F(s + a)$

4. ✘ If $L\{f(t)\} = F(s)$ then $L\{f(t - T)\} = e^{-st}F(s)$

Question Number : 42 Question Id : 81959911672 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

$$L\{te^{-t}\sin 3t\} =$$

Options :

1. ✘ $\frac{6s}{s^2+2s+10}$

2. ✔ $\frac{6(s+1)}{(s^2+2s+10)^2}$

3. ✘ $\frac{6(s-1)}{s^2+2s+10}$

4. ✘ $\frac{6(s-1)}{(s^2+2s+10)^2}$

Question Number : 43 Question Id : 81959911673 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

$$L\left\{\frac{\cos 2t - \cos 3t}{t}\right\} =$$

Options :

1. ✘ $\sqrt{\log\left(\frac{s^2+9}{s^2+4}\right)}$

2. ✘ $e^{\frac{s^2+9}{s^2+4}}$

3. ✘ $\log\left(\frac{s^2+9}{s^2+4}\right)$

4. ✔ $\log\sqrt{\frac{s^2+4}{s^2+9}}$

Question Number : 44 Question Id : 81959911674 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

$$L^{-1}\left\{\frac{2s+3}{s^2+2s+2}\right\} =$$

Options :

1. ✘ $e^{-t}(2\cos t + \sin t)$

2. ✘ $e^{-t}(2\sin t + \cos t)$

3. ✔ $e^t(2\cos t + \sin t)$

4. ✘ $e^t(2\sin t + \cos t)$

Question Number : 45 Question Id : 81959911675 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

$$L^{-1}\left\{\frac{1}{(s+1)(s^2+2s+2)}\right\} =$$

Options :

1. ✘ $e^t(1 + \cos t)$

2. ✘ $e^t(1 - \cos t)$

3. ✘ $e^{-t}(1 + \cos t)$

4. ✔ $e^{-t}(1 - \cos t)$

Question Number : 46 Question Id : 81959911676 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the Differential equation $\frac{d^2y}{dt^2} + 2\frac{dy}{dt} + y(t) = 0$ with
 $y(0) = -2$ and $y'(0) = 0$. The Laplace transform of $y(t)$ is

Options :

1. ✔ $\frac{-2(2+s)}{(s+1)^2}$

2. ✘ $\frac{2(2+s)}{(s+1)^2}$

3. ✘ $\frac{(2+s)}{(s+1)^2}$

4. ✘ $\frac{-(3+2s)}{(s+1)^2}$

Question Number : 47 Question Id : 81959911677 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Fourier series expansion of $f(x) = |x|$ over $(-\pi, \pi)$, the value of Fourier
coefficient $a_1 =$

Options :

1. ✘ $\frac{2}{\pi}$

2. ✘ $\frac{4}{\pi}$

3. ✘ $-\frac{2}{\pi}$

4. ✔ $-\frac{4}{\pi}$

Question Number : 48 Question Id : 81959911678 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $f(x) = x \sin x, 0 < x < 2\pi$ and Fourier series of $f(x)$ is given by

$$f(x) = \frac{a_0}{2} + \sum_{n=1}^{\infty} (a_n \cos nx + b_n \sin nx) \quad \text{then } b_1 =$$

Options :

1. ✘ 1

2. ✘ 0

3. ✘ -1

4. ✔ π

Question Number : 49 Question Id : 81959911679 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $f(x) = \begin{cases} x, & \text{when } 0 < x < \frac{\pi}{2} \\ \pi - x, & \text{when } \frac{\pi}{2} < x < \pi \end{cases}$ and the Fourier Series expansion

of $f(x)$ is given by $f(x) = \sum_{n=1}^{\infty} b_n \sin nx$ then the value of $b_2 =$

Options :

1. ✘ π

2. ✔ 0

3. ✘ $-\pi$

4. ✘ -1

Question Number : 50 Question Id : 81959911680 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $f(x) = e^{-x}$ then the value of " a_0 " in the Fourier series expansion of $f(x)$ in the interval $(-1, 1)$

Options :

1. ✔ $\frac{e^2-1}{e}$

2. ✘ $\frac{e^2+1}{e}$

3. ✘ $\frac{1-e^2}{e}$

4. ✘ $\frac{1}{e}$

Physics

Section Id :	819599228
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	25
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0

Sub-Section Number : 1
Sub-Section Id : 819599264
Question Shuffling Allowed : Yes

Question Number : 51 Question Id : 81959911681 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The quantity which has the same dimensional formula as that of linear momentum is

Options :

1. ✘ Pressure
2. ✘ Linear acceleration
3. ✔ Impulse
4. ✘ Gravitational constant

Question Number : 52 Question Id : 81959911682 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The temperature at which the electrical resistance of mercury drops to zero is

Options :

1. ✘ 11.2 K
2. ✘ 7.2 K
3. ✔ 4.2 K
4. ✘ 0 K

Question Number : 53 Question Id : 81959911683 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Pick the correct answer from the following two statements on photoelectric effect

(a) Threshold frequency varies from metal to metal

(b) Work function is constant for all metals

Options :

1. ✓ Only (a) is true

2. ✗ Only (b) is true

3. ✗ Both (a) & (b) are true

4. ✗ Both (a) & (b) are false

Question Number : 54 Question Id : 81959911684 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A graph between the temperature (on x-axis) and the pressure (on y-axis) for the given mass of an ideal gas at constant volume gives a straight line intercepts x-axis at

Options :

1. ✗ $0\text{ }^{\circ}\text{C}$

2. ✗ $273.15\text{ }^{\circ}\text{C}$

3. ✓ $-273.15\text{ }^{\circ}\text{C}$

4. ✗ $546.3\text{ }^{\circ}\text{C}$

Question Number : 55 Question Id : 81959911685 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A heat energy of 1400 J is given to an ideal gas at constant pressure and the workdone in expansion of its volume is 800 J. The increase in internal energy is

Options :

1. ✘ 2200 J
2. ✔ 600 J
3. ✘ 200 J
4. ✘ 3000 J

Question Number : 56 Question Id : 81959911686 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The angle made by the vector $(\mathbf{i} + \mathbf{j})$ with x-axis is

Options :

1. ✘ 0°
2. ✘ 30°
3. ✔ 45°
4. ✘ 90°

Question Number : 57 Question Id : 81959911687 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Two forces 20 N and 40 N act simultaneously at a point with an angle of 60° between them. The direction of their resultant is given by

Options :

1. ✓ $\tan^{-1} \left[\frac{\sqrt{3}}{2} \right]$

2. ✗ $\tan^{-1} \left[\frac{2}{\sqrt{3}} \right]$

3. ✗ $\tan^{-1} \left[\frac{\sqrt{3}}{4} \right]$

4. ✗ $\tan^{-1} \left[\frac{2\sqrt{3}}{3} \right]$

Question Number : 58 Question Id : 81959911688 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The dot product of force and velocity represents

Options :

1. ✗ Acceleration

2. ✗ Workdone

3. ✗ Momentum

4. ✓ Power

Question Number : 59 Question Id : 81959911689 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

A bullet fired from a gun travels maximum horizontal range of 40m. With what velocity
bullet is projected initially. ($g = 10 \text{ m/s}^2$, neglect air resistance)

Options :

1. ✓ 20 m/s

2. ✘ 4 m/s

3. ✘ 8 m/s

4. ✘ 160 m/s

Question Number : 60 Question Id : 81959911690 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A bomb is dropped from an aeroplane flying horizontally with constant velocity at some height from the ground. The path of the bomb is like

Options :

1. ✔ Parabola

2. ✘ Hyperbola

3. ✘ Circle

4. ✘ Ellipse

Question Number : 61 Question Id : 81959911691 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A body is projected into the air with a velocity of 19.6 m/s at an angle of 30° to the horizontal. The time during which the body remains in air is (neglect air resistance)

Options :

1. ✘ 0.5 s

2. ✘ 1 s

3. ✔ 2 s

4. ✘ 9.8 s

Question Number : 62 Question Id : 81959911692 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A body of mass m is sliding down on a rough inclined plane of ' θ ' angle of inclination.

The normal reaction acting on the body is balanced by which component of weight

Options :

1. ✘ $mg(\sin\theta - \cos\theta)$

2. ✘ $mg(\sin\theta + \cos\theta)$

3. ✘ $mg\sin\theta$

4. ✔ $mg\cos\theta$

Question Number : 63 Question Id : 81959911693 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A body of mass m dropped freely from a height of ' y ' from the ground. After travelling a distance of ' x ' downwards, its kinetic energy becomes (neglect air resistance)

Options :

1. ✘ $mg y$

2. ✔ $mg x$

3. ✘ $mg(y-x)$

4. ✘ 0

Question Number : 64 Question Id : 81959911694 Question Type : MCQ Option Shuffling : Yes Display

Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The workdone in lifting 6 cement bags each of mass 25 kg to the top of a building of height 10 m is ($g=10 \text{ m/s}^2$)

Options :

1. ✘ 2500 J

2. ✘ 600 J

3. ✔ 15000 J

4. ✘ 150 J

Question Number : 65 Question Id : 81959911695 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Pick the correct statement for a body falling freely in air

Options :

1. ✘ Its potential energy increases, kinetic energy decreases

2. ✔ Its potential energy decreases, kinetic energy increases

3. ✘ Its potential energy remains constant, kinetic energy increases

4. ✘ Its kinetic energy remains constant, potential energy increases

Question Number : 66 Question Id : 81959911696 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The displacement of a particle executing simple harmonic motion is given by

$y = 4 \sin \left(\pi t + \frac{\pi}{4} \right)$ where y is in metre and t is in second. The frequency of oscillation is

Options :

1. ✓ 0.5 Hz

2. ✗ 1 Hz

3. ✗ 2 Hz

4. ✗ 3.14 Hz

Question Number : 67 Question Id : 81959911697 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If ' l ' and ' T ' are the length and time period of oscillations of a simple pendulum at a given place respectively then

Options :

1. ✗ $l \propto \frac{1}{T}$

2. ✗ $l \propto \frac{l}{T^2}$

3. ✗ $l \propto \sqrt{T}$

4. ✓ $l \propto T^2$

Question Number : 68 Question Id : 81959911698 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The principle of sound used in the detection of dangerous gases in mines is

Options :

1. ✘ Echo
2. ✔ Beats
3. ✘ Reverberation
4. ✘ Doppler effect

Question Number : 69 Question Id : 81959911699 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

A person hears an echo of his own voice in 1 s from a distant hill. If the velocity of sound in air is 340 m/s, the distance between the person and the hill is

Options :

1. ✔ 170 m
2. ✘ 340 m
3. ✘ 510 m
4. ✘ 85 m

Question Number : 70 Question Id : 81959911700 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

S.I unit of the Young's modulus of the material of a wire is

Options :

1. ✘ Joule
2. ✘ Dyne

3. ✘ kg/m^3

4. ✔ Pascal

Question Number : 71 Question Id : 81959911701 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If 'd' is the density of liquid which rises to a height of 'h' in a capillary tube of radius 'r' ($r \ll h$) and ' θ ' is the angle of contact then the surface tension of the liquid is given by

Options :

1. ✘ $\frac{hrdg}{2\sin\theta}$

2. ✔ $\frac{hrdg}{2\cos\theta}$

3. ✘ $\frac{hrd}{2g\sin\theta}$

4. ✘ $\frac{hrdg}{\sin\theta}$

Question Number : 72 Question Id : 81959911702 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The resistance of the material of a wire is 5Ω . The resistance of another wire of same material having double length and half the radius is

Options :

1. ✔ 40Ω

2. ✘ 0.4Ω

3. ✘ 5Ω

4. ✘ 10Ω

Question Number : 73 Question Id : 81959911703 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Two currents 3 mA and 4.5 mA are flowing towards the junction in a circuit and three currents 1 mA, 4 mA and 'x' are flowing away. The value of 'x' (in mA) is

Options :

1. ✘ 12.5

2. ✘ 5

3. ✔ 2.5

4. ✘ 1.5

Question Number : 74 Question Id : 81959911704 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The force between two magnetic poles separated in air is 4×10^{-6} N. If the distance between them is doubled then the force becomes

Options :

1. ✘ 16×10^{-6} N

2. ✘ 16×10^{-12} N

3. ✘ 2×10^{-6} N

4. ✓ 10^{-6} N

Question Number : 75 Question Id : 81959911705 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The magnetic moment of a bar magnet of pole strength 50 A-m is 5 A-m^2 . The length of the bar magnet is

Options :

1. ✗ 0.05 m

2. ✓ 0.1 m

3. ✗ 0.25 m

4. ✗ 0.4 m

Chemistry

Section Id :	819599229
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	25
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	819599265
Question Shuffling Allowed :	Yes

Question Number : 76 Question Id : 81959911706 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The number of unpaired electrons present in Cl atom

Options :

1. ✘ Four
2. ✘ Three
3. ✘ Two
4. ✔ One

Question Number : 77 Question Id : 81959911707 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Stark effect is

Options :

1. ✘ Splitting of Spectral lines in Magnetic field
2. ✔ Splitting of Spectral lines in Electric field
3. ✘ Splitting of Spectral lines in Magnetic and Electric fields
4. ✘ Spectral lines do not split in Magnetic and Electric fields

Question Number : 78 Question Id : 81959911708 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

An Element A with Atomic number 12 combines with an Element B of Atomic number 8. Then the Compound formed is

Options :

1. ✓ Ionic AB
2. ✗ Covalent AB
3. ✗ Covalent A₂
4. ✗ Ionic A₂B

Question Number : 79 Question Id : 81959911709 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The number of moles of solute present in 1000ml of 0.2M solution are

Options :

1. ✗ 0.1 mole
2. ✓ 0.2 mole
3. ✗ 0.4 mole
4. ✗ 0.5 mole

Question Number : 80 Question Id : 81959911710 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is true for milk colloid system

Options :

1. ✓ Dispersed phase is Fat Globules

2. ✘ Dispersion medium is Fat Globules

3. ✘ Dispersed phase is Water

4. ✘ Dispersion medium is Milk

Question Number : 81 Question Id : 81959911711 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

5.6 g of KOH are dissolved in 1 Litre of Water. The P^H of the solution is

Options :

1. ✘ 1

2. ✔ 13

3. ✘ 14

4. ✘ 2

Question Number : 82 Question Id : 81959911712 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Among the following which is not Lewis Base

Options :

1. ✘ C_2H_2

2. ✔ BF_3

3. ✘ H_2O

4. ✘ OH^-

Question Number : 83 Question Id : 81959911713 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Composition of German Silver is

Options :

1. ✘ Ni ,Fe,Cr
2. ✔ Cu,Zn,Ni
3. ✘ Cu,Zn
4. ✘ Al,Cu,Mg

Question Number : 84 Question Id : 81959911714 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The method which is not used for Concentration of Ore

Options :

1. ✘ Hand picking
2. ✘ Froth floatation
3. ✘ Electromagnetic separation
4. ✔ Smelting

Question Number : 85 Question Id : 81959911715 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

The mass of a substance deposited by passing 1Coulomb of elecricity is

Options :

1. ✘ Atomic weight
2. ✘ Molecular weight
3. ✔ Electrochemical equivalent
4. ✘ Equivalent weight

Question Number : 86 Question Id : 81959911716 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

When the same quantity of electricity is passed through an aqueous solution of AgNO_3 and CuSO_4 . Solution connected in a series. The amount of Ag deposited is 1.08 g, the amount of Cu deposited is

Options :

1. ✘ 3.175 g
2. ✘ 63.5 g
3. ✘ 0.635 g
4. ✔ 0.3175 g

Question Number : 87 Question Id : 81959911717 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

In a Galvanic cell

Options :

Electrical energy is converted into Chemical energy

1. ✘

Mechanical energy is converted into Electrical energy

2. ✘

Chemical energy is converted into Electrical energy

3. ✔

Chemical energy is converted into Mechanical energy

4. ✘

Question Number : 88 Question Id : 81959911718 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Among the following which is not a secondary battery

Options :

Lithium- ion battery

1. ✘

Lead Storage battery

2. ✘

Ni-Cd battery

3. ✘

Leclanche battery

4. ✔

Question Number : 89 Question Id : 81959911719 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Among the following metals, which easily undergoes corrosion is

Options :

Au

1. ✘

2. ✓ Na

3. ✗ Cu

4. ✗ Pt

Question Number : 90 Question Id : 81959911720 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Which of the following is an example for Cathodic Coating

Options :

1. ✗ Zn coating on Fe

2. ✗ Al coating on Fe

3. ✗ Ba coating on Fe

4. ✓ Sn coating Fe

Question Number : 91 Question Id : 81959911721 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

When the Hard Water is boiled, the precipitate formed is

Options :

1. ✗ MgSO_4

2. ✗ MgCl_2

3. ✗ $\text{Ca}(\text{HCO}_3)_2$

4. ✓ CaCO_3

Question Number : 92 Question Id : 81959911722 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Chemical Formula of Zeolite is

Options :

1. ✗ $\text{K Al Si}_3\text{O}_8$

2. ✓ $\text{Na}_2\text{Al}_2\text{Si}_2\text{O}_8 \cdot x\text{H}_2\text{O}$

3. ✗ $\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$

4. ✗ $\text{K}_2\text{O Al}_2\text{O}_3 6\text{SiO}_2 2\text{H}_2\text{O}$

Question Number : 93 Question Id : 81959911723 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Which of the following is an odd compound

Options :

1. ✓ Buna-S

2. ✗ Polystyrene

3. ✗ PVC

4. ✗ Teflon

Question Number : 94 Question Id : 81959911724 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The configuration at every double bond in Natural Rubber is

Options :

1. ✘ Octet

2. ✔ Cis

3. ✘ Trans

4. ✘ Sextet

Question Number : 95 Question Id : 81959911725 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Blue gas mainly contains

Options :

1. ✔ CO, H₂

2. ✘ CH₄, H₂

3. ✘ CH₄, CO₂

4. ✘ CO, N₂

Question Number : 96 Question Id : 81959911726 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many grams of O₂ is required for combustion of 16 grams of methane (CH₄)

Options :

1. ✘ 32 g

2. ✔ 64 g

3. ✘ 16 g

4. ✘ 8g

Question Number : 97 Question Id : 81959911727 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Ozone layer depletion is due to

Options :

1. ✘ SO₂

2. ✘ CO₂

3. ✔ CFC

4. ✘ H₂

Question Number : 98 Question Id : 81959911728 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Hyacinth is useful in reduction of

Options :

1. ✘ Air pollution

2. ✘ Ozone layer depletion

3. ✘ Global warming

4. ✔ Water pollution

Question Number : 99 Question Id : 81959911729 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The parameter used to indicate the Water pollution is

Options :

1. ✔ BOD

2. ✘ Contaminant

3. ✘ pollutant

4. ✘ TLV

Question Number : 100 Question Id : 81959911730 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is Non-Renewable energy source

Options :

1. ✔ Coal

2. ✘ Wind energy

3. ✘ Solar energy

4. ✘ Tidal energy

Computer Science and Engineering

Section Id :	819599230
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	100
Number of Questions to be attempted :	100
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	819599266
Question Shuffling Allowed :	Yes

Question Number : 101 Question Id : 81959911731 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

How many NOR gates are needed to construct AND gate

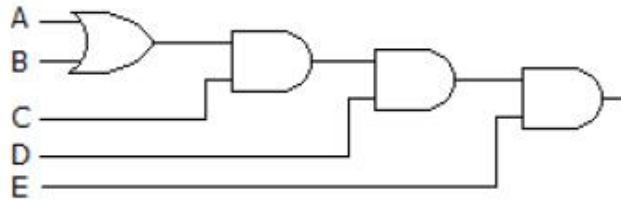
Options :

1. ✘ 4
2. ✔ 3
3. ✘ 2
4. ✘ 1

Question Number : 102 Question Id : 81959911732 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

A serial in/parallel out, 4-bit shift register initially contains all 1s. The data nibble 0111 is waiting to enter. After four clock pulses, the register contains _____.

Derive the Boolean expression for the logic circuit shown below:



Options :

1. ✓ $C(A+B)DE$
2. ✗ $[C(A+B)D + \bar{E}]$
3. ✗ $[[C(A+B)D]\bar{E}]$
4. ✗ $ABCDE$

Question Number : 103 Question Id : 81959911733 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The toggle condition in a master-slave J-K flip-flop means that Q and \bar{Q} will switch to their ----- state(s) at the -----.

Options :

1. ✓ opposite, active clock edge
2. ✗ inverted, positive clock edge
3. ✗ quiescent, negative clock edge
4. ✗ reset, synchronous clock edge

Question Number : 104 Question Id : 81959911734 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is a type of shift register counter?

Options :

1. ✘ Decade
2. ✘ Binary
3. ✔ Ring
4. ✘ BCD

Question Number : 105 Question Id : 81959911735 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Select the statement that best describes Read-Only Memory (ROM).

Options :

1. ✘ nonvolatile, used to store information that changes during system operation
2. ✔ nonvolatile, used to store information that does not change during system operation
3. ✘ volatile, used to store information that changes during system operation
4. ✘ volatile, used to store information that does not change during system operation

Question Number : 106 Question Id : 81959911736 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The following is one of the applications of a digital multiplexer:

Options :

1. ✘ data generation
2. ✘ serial-to-parallel conversion
3. ✘ parity checking

4. ✓ data selector

Question Number : 107 Question Id : 81959911737 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A circuit that responds to a specific set of signals to produce a related digital signal output is called a(n):

Options :

1. ✗ BCD matrix
2. ✗ display driver
3. ✓ encoder
4. ✗ decoder

Question Number : 108 Question Id : 81959911738 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is the output of $(A\bar{B}(\overline{A+C})) + \bar{A}B(A+B+C)$?

Options :

1. ✗ $\bar{A} + B(1 + \bar{A}C)$
2. ✓ $\bar{A} + B$
3. ✗ $\bar{B} + A$
4. ✗ $\bar{A} + \bar{B}$

Question Number : 109 Question Id : 81959911739 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

While forming groups in K-mapping the Don't care states are combined along with terms of

Options :

1. ✓ Minterms
2. ✗ Maxterms
3. ✗ SOP
4. ✗ POS

Question Number : 110 Question Id : 81959911740 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is the disadvantage of an S-R Flip-Flop

Options :

1. ✗ It has no Enable input
2. ✗ It has a RACE condition
3. ✗ It has no clock input
4. ✓ Invalid State

Question Number : 111 Question Id : 81959911741 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The number of address and data lines of 8086 _____.

Options :

1. ✗ 8 and 8
2. ✗ 16 and 16
3. ✓ 20 and 16
4. ✗ 16 and 20

Question Number : 112 Question Id : 81959911742 Question Type : MCQ Option Shuffling : Yes Display

Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

_____ register is used as a default counter in case of string and loop instructions.

Options :

1. ✘ AX
2. ✘ BX
3. ✔ CX
4. ✘ DX

Question Number : 113 Question Id : 81959911743 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Base Pointer (BP) contains offset address of _____ .

Options :

1. ✔ Data segment
2. ✘ Code segment
3. ✘ Stack segment
4. ✘ Extra segment

Question Number : 114 Question Id : 81959911744 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is not a machine control flag?

Options :

1. ✘ Direction flag
2. ✘ Interrupt flag

3. ✓ Overflow flag

4. ✗ Trap flag

Question Number : 115 Question Id : 81959911745 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Of the segment addresses are assigned as 0000H to F000H and the offset addresses values are from 0000H to FFFFH, then the physical addresses range from_____.

Options :

1. ✗ 0000H to FFFFH

2. ✗ 00000H to F0000H

3. ✓ 00000H to FFFFF

4. ✗ 0000H to FFF0H

Question Number : 116 Question Id : 81959911746 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The instruction MOV AX, [BX] is an example of

Options :

1. ✗ direct addressing mode

2. ✗ register addressing mode

3. ✗ register relative addressing mode

4. ✓ register indirect addressing mode

Question Number : 117 Question Id : 81959911747 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The instruction CMP to compare source and destination operands it perform

Options :

1. ✘ addition
2. ✔ subtraction
3. ✘ division
4. ✘ multiplication

Question Number : 118 Question Id : 81959911748 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In _____ of 8255, bidirectional i/o data transfer is possible.

Options :

1. ✘ mode0
2. ✔ mode2
3. ✘ mode1
4. ✘ bsr mode

Question Number : 119 Question Id : 81959911749 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The first microprocessor with an inbuilt floating point unit is

Options :

1. ✔ 80486
2. ✘ 80386
3. ✘ 80286
4. ✘ 8086

Question Number : 120 Question Id : 81959911750 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The pin that request the access of system bus is

Options :

1. ✘ HLDA
2. ✘ HLD
3. ✘ ADSTB
4. ✔ HRQ

Question Number : 121 Question Id : 81959911751 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

A time sharing system imply

Options :

1. ✘ more than one processor in the system
2. ✔ more than one program in memory
3. ✘ more than one memory in the system
4. ✘ more than one clock in a system

Question Number : 122 Question Id : 81959911752 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

The IPU in vector processor is used for

Options :

1. ✘ Fetching the vector instructions and execute them
2. ✘ Execute the all instructions

3. ✘ Execute only scalar instructions

4. ✔ Fetching all the instructions

Question Number : 123 Question Id : 81959911753 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is lowest in memory hierarchy?

Options :

1. ✘ Cache memory

2. ✔ Secondary memory

3. ✘ Registers

4. ✘ RAM

Question Number : 124 Question Id : 81959911754 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Write Through technique is used in which memory for updating the data

Options :

1. ✘ Virtual memory

2. ✘ Main memory

3. ✘ Auxiliary memory

4. ✔ Cache memory

Question Number : 125 Question Id : 81959911755 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

An interface that provides I/O transfer of data directly to and from the memory unit and peripheral is termed as

Options :

1. ✘ DDA
2. ✘ Serial interface
3. ✔ DMA
4. ✘ BR

Question Number : 126 Question Id : 81959911756 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Memory unit accessed by content is called _____.

Options :

1. ✘ Read only memory
2. ✘ Programmable Memory
3. ✘ Virtual Memory
4. ✔ Associative Memory

Question Number : 127 Question Id : 81959911757 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Virtual memory is -----

Options :

1. ✘ an extremely large main memory
2. ✘ an extremely large secondary memory
3. ✔ an illusion of an extremely large memory

4. ✘ a type of memory used in super computers

Question Number : 128 Question Id : 81959911758 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The pipelining process is also called as _____

Options :

1. ✔ Assembly line operation
2. ✘ Von Neumann cycle
3. ✘ Superscalar operation
4. ✘ A technique where a single instruction is executed

Question Number : 129 Question Id : 81959911759 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

SIMD represents an organization that _____.

Options :

1. ✘ refers to a computer system capable of processing several programs at the same time
2. ✔ represents organization of single computer containing a control unit, processor unit and a memory unit.
3. ✘ includes many processing units under the supervision of a common control unit
4. ✘ represents multiple computer systems

Question Number : 130 Question Id : 81959911760 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The sign followed by the string of digits is called as

Options :

1. ✘ Significant
2. ✘ Determinant
3. ✔ Mantissa
4. ✘ Exponent

Question Number : 131 Question Id : 81959911761 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What will be the data type returned for the following C function?

```
#include <stdio.h>
int func()
{
    Return(double)(char) 5.0;
}
}
```

Options :

1. ✘ char
2. ✔ int
3. ✘ double
4. ✘ multiple type-casting in return is illegal

Question Number : 132 Question Id : 81959911762 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What will be the output of the following C code?

```
# include <stdio.h>
void main()
{
1 < 2 ? return 1 : return 2;
}
```

Options :

1. ✘ returns 1
2. ✘ returns 2
3. ✘ Varies
4. ✔ Compile time error

Question Number : 133 Question Id : 81959911763 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In C language, FILE is of which data type?

Options :

1. ✘ int
2. ✘ char *
3. ✔ struct
4. ✘ float

Question Number : 134 Question Id : 81959911764 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the problem in the following C declarations?

```
int fun(int);
double fun(int);
int fun(float);
```

Options :

1. ✓ A function with same name cannot have different signatures
2. ✗ A function with same name can have different return types
3. ✗ A function with same name can have different number of parameters
4. ✗ A function with same name can have different number of parameters and can have different return types

Question Number : 135 Question Id : 81959911765 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Default Parameter Passing Mechanism is called as

Options :

1. ✓ Call by Value
2. ✗ Call by Reference
3. ✗ Call by Address
4. ✗ Call by Name

Question Number : 136 Question Id : 81959911766 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The _____ memory allocation function modifies the previous allocated space.

Options :

1. ✗ calloc
2. ✓ realloc
3. ✗ malloc
4. ✗ free

Question Number : 137 Question Id : 81959911767 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What will be the output of following statements?

```
char x[] = "hello hi";  
printf("%d%d", sizeof(*x), sizeof(x));
```

Options :

1. ✘ 88
2. ✘ 18
3. ✘ 29
4. ✔ 19

Question Number : 138 Question Id : 81959911768 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

A complete binary tree with n leaf nodes has

Options :

1. ✘ n+1 nodes
2. ✔ $2n-1$ nodes
3. ✘ $2n+1$ nodes
4. ✘ $n(n-1)/2$ nodes

Question Number : 139 Question Id : 81959911769 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Overflow condition in linked list may occur when attempting to

Options :

1. ✓ Create a node when free space pool is empty
2. ✗ Traverse the nodes when free space pool is empty
3. ✗ Create a node when linked list is empty.
4. ✗ May not occur overflow condition

Question Number : 140 Question Id : 81959911770 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the sorting techniques has highest best-case runtime complexity

Options :

1. ✗ Quick sort
2. ✓ Selection sort
3. ✗ Insertion sort
4. ✗ Bubble sort

Question Number : 141 Question Id : 81959911771 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

TCP/IP model does not have _____ layer but OSI model have this layer.

Options :

1. ✓ session layer
2. ✗ transport layer
3. ✗ application layer
4. ✗ network layer

Question Number : 142 Question Id : 81959911772 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is the function of Network Interface Cards?

Options :

1. ✓ connects the clients, servers and peripherals to the network through a port
2. ✗ allows you to segment a large network into smaller, efficient networks
3. ✗ connects networks with different protocols like TCP/IP
4. ✗ boost the signal between two cable segments or wireless access points

Question Number : 143 Question Id : 81959911773 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

A device that helps prevent congestion and data collisions

Options :

1. ✗ Gateway
2. ✗ Hub
3. ✓ Switch
4. ✗ Proxy server

Question Number : 144 Question Id : 81959911774 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

After doing low level format, what would be the next step in configuring the hard drive in a system

Options :

1. ✗ Install OS

2. ✘ Partition Hard disk
3. ✘ Confuration of DMA
4. ✔ Fomat DOS partition

Question Number : 145 Question Id : 81959911775 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A 25 pin Female connector on the back of your computer will typically be

Options :

1. ✘ Serial Port1
2. ✘ COM2 Port
3. ✘ Docking
4. ✔ Parrallel Port

Question Number : 146 Question Id : 81959911776 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

_____ cable carries signals of higher frequency ranges the _____ cable

Options :

1. ✘ Twisted –Pair, Coaxial
2. ✘ Twisted –Pair, fiber-Optic
3. ✔ Coaxial, Twisted –Pair
4. ✘ Coaxial, fiber-Optic

Question Number : 147 Question Id : 81959911777 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

_____ Handles the interconnection between most of the devices and the CPU

Options :

1. ✘ Northbridge
2. ✔ Southbridge
3. ✘ SRAM
4. ✘ PCI Slot

Question Number : 148 Question Id : 81959911778 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is correct regarding Class B Address of IP address

Options :

1. ✔ Network bit – 14, Host bit – 16
2. ✘ Network bit – 16, Host bit – 14
3. ✘ Network bit – 18, Host bit – 16
4. ✘ Network bit – 12, Host bit – 14

Question Number : 149 Question Id : 81959911779 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is the uses of subnetting

Options :

1. ✓ It divides one large network into several smaller ones
2. ✗ It divides network into network classes
3. ✗ It speeds up the speed of network
4. ✗ It divides one small network into further several smaller ones

Question Number : 150 Question Id : 81959911780 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Flow Control and Error Control are functions of which layer

Options :

1. ✗ Physical Layer
2. ✗ Application Layer
3. ✓ Data Link Layer
4. ✗ Network Layer

Question Number : 151 Question Id : 81959911781 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The turnaround time for short jobs during multiprogramming is usually shortened and that for long jobs is slightly _____

Options :

1. ✗ Shortened
2. ✗ Unchanged
3. ✓ Lengthened

Unpredictable

4. ✖

Question Number : 152 Question Id : 81959911782 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Select one which algorithms tend to minimize the process flow time?

Options :

First come First served

1. ✖

Earliest Deadline First

2. ✖

Shortest Job First

3. ✔

Longest Job First

4. ✖

Question Number : 153 Question Id : 81959911783 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

..... is an Overlay.

Options :

a part of an OS

1. ✖

a specific memory location

2. ✖

overloading the system with many user files

3. ✔

a contiguous memory that was used in the olden days for running

4. ✖

Question Number : 154 Question Id : 81959911784 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Each partition may contain _____ when memory is divided into several fixed sized partitions.

Options :

1. ✘ multiple processes at once
2. ✔ exactly one process
3. ✘ two process
4. ✘ at least one process

Question Number : 155 Question Id : 81959911785 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which memory is called separation of user logical memory and physical memory

Options :

1. ✘ Memory sharing
2. ✔ Virtual memory
3. ✘ Memory management
4. ✘ Memory control

Question Number : 156 Question Id : 81959911786 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Virtual Memory can be implemented via?

Options :

1. ✘ Simple division

2. ✘ Logical paging

3. ✔ Demand Paging

4. ✘ Complex division

Question Number : 157 Question Id : 81959911787 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which process is busy swapping pages in and out.

Options :

1. ✘ Division

2. ✘ External Fragmentation

3. ✔ Thrashing

4. ✘ Compaction

Question Number : 158 Question Id : 81959911788 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

An IPC facility provides at least two operations

Options :

1. ✘ Write & delete a message

2. ✘ Delete & receive a message

3. ✘ Send & delete a message

4. ✔ Receive & send a message

Question Number : 159 Question Id : 81959911789 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

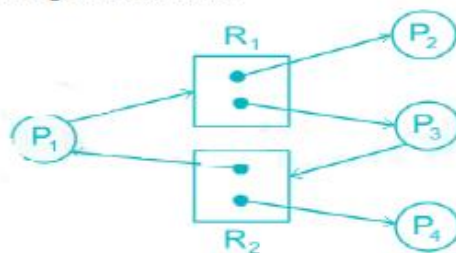
In _____ disk scheduling algorithm, the disk head moves from one end to other end of the disk, servicing the requests along the way. When the head reaches the other end, it immediately returns to the beginning of the disk without serving any requests on the return trip

Options :

- 1. ✘ LOOK
- 2. ✘ SCAN
- 3. ✘ C-LOOK
- 4. ✔ C-SCAN

Question Number : 160 Question Id : 81959911790 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Given set of four, two resources with two units each. The following resources allocation graph exists at a point in time



The graph indicates

Options :

- 1. ✔ Cycle but no deadlock
- 2. ✘ No Cycle but deadlock

3. ✘ Neither cycle nor deadlock

4. ✘ Cycle and deadlock

Question Number : 161 Question Id : 81959911791 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following constraints RDBMS doesn't check before creating the tables?

Options :

1. ✘ Not null

2. ✘ Primary keys

3. ✔ Data Structure

4. ✘ Data integrity

Question Number : 162 Question Id : 81959911792 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is the correct order of a SQL statement?

Options :

1. ✘ SELECT, GROUP BY, WHERE, HAVING

2. ✔ SELECT, WHERE, GROUP BY, HAVING

3. ✘ SELECT, HAVING, WHERE, GROUP BY

4. ✘ SELECT, WHERE, HAVING, GROUP BY

Question Number : 163 Question Id : 81959911793 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What type of join is the following SQL statement?

```
SELECT *FROM TableA INNER JOIN TableB ON TableA.ID = TableB.ID;
```

Options :

1. ✘ Block nested loop join
2. ✔ Nested loop join
3. ✘ Hash join
4. ✘ Equi join

Question Number : 164 Question Id : 81959911794 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is an invalid data type in SQL

Options :

1. ✘ number
2. ✘ clob
3. ✘ blob
4. ✔ lint

Question Number : 165 Question Id : 81959911795 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A table on the many side of a one to many or many to many relationship must:

Options :

1. ✘ Be in Second Normal Form (2NF)
2. ✘ Be in Third Normal Form (3NF)

3. ✘ Have a single attribute key
4. ✔ Have a composite key

Question Number : 166 Question Id : 81959911796 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following creates a virtual relation for storing the query?

Options :

1. ✘ Function
2. ✔ View
3. ✘ Procedure
4. ✘ Sub function

Question Number : 167 Question Id : 81959911797 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is used to input the entry and give the result in a variable in a procedure?

Options :

1. ✘ Put and Get
2. ✘ Get and Put
3. ✘ Out and In
4. ✔ In and Out

Question Number : 168 Question Id : 81959911798 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The CREATE TRIGGER statement is used to create the trigger. THE _____ clause specifies the table name on which the trigger is to be attached. The _____ specifies that this is an AFTER INSERT trigger.

Options :

1. ✘ For insert, On
2. ✔ On, For insert
3. ✘ For, Insert
4. ✘ For insert, Insert

Question Number : 169 Question Id : 81959911799 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following executes the query and identifies the result set, consisting of all rows that meet the query search criteria.

Options :

1. ✘ Fetching with a Cursor
2. ✔ Opening a cursor
3. ✘ Fetching bulk data with a cursor
4. ✘ Closing a cursor

Question Number : 170 Question Id : 81959911800 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is equivalent to multiple IF-ELSIF statements?

Options :

1. ✘ LOOP statement
2. ✘ FOR statement
3. ✘ WHILE statement
4. ✔ CASE statement

Question Number : 171 Question Id : 81959911801 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is a valid destructor of the class name "Country"

Options :

1. ✘ `int ~Country()`
2. ✔ `void Country()`
3. ✘ `int ~Country(Country obj)`
4. ✘ `void ~Country()`

Question Number : 172 Question Id : 81959911802 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following keyword supports dynamic method resolution?

Options :

1. ✔ Abstract
2. ✘ Virtual
3. ✘ Dynamic
4. ✘ Typeid

Question Number : 173 Question Id : 81959911803 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is the most preferred way of throwing and handling exceptions?

Options :

1. ✘ Throw by value and catch by reference
2. ✔ Throw by reference and catch by reference.
3. ✘ Throw by value and catch by value
4. ✘ Throw the pointer value and provide catch for the pointer type

Question Number : 174 Question Id : 81959911804 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is not recommended in a header file?

Options :

1. ✘ Type definitions
2. ✘ Class definitions
3. ✘ Function definitions
4. ✔ Template definitions

Question Number : 175 Question Id : 81959911805 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the difference between overloaded functions and overridden functions?

Options :

1. ✘ Overloading is a dynamic or run-time binding and Overriding is static or compile-time binding

2. ✓ Redefining a function in a friend class is called function overriding while Redefining a function in a derived class is called an overloaded function.

3. ✗ Overloading is a static or compile-time binding and Overriding is dynamic or run-time binding

4. ✗ Redefining a function in a friend class is called function overloading while Redefining a function in a derived class is called as overridden function

Question Number : 176 Question Id : 81959911806 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many copies of a class static member are shared between objects of the class?

Options :

1. ✗ A copy of the static member is shared by all objects of a class

2. ✓ A copy is created only when at least one object is created from that class

3. ✗ A copy of the static member is created for each initiation of the class

4. ✗ No memory is allocated for static members of a class

Question Number : 177 Question Id : 81959911807 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

class derived: public base1, public base2 { } is an example of

Options :

1. ✗ Polymorphic inheritance

2. ✓ Multilevel inheritance

3. ✗ Hierarchical inheritance

4. ✘ Multiple inheritance

Question Number : 178 Question Id : 81959911808 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If a member needs to have unique value for all the objects of that same class, declare the member as

Options :

1. ✔ Global variable outside class
2. ✘ Local variable inside constructor
3. ✘ Static variable inside class
4. ✘ Dynamic variable inside class

Question Number : 179 Question Id : 81959911809 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If we have object from ofstream class, then default mode of opening the file is _____.

Options :

1. ✘ ios::in
2. ✘ ios::out
3. ✘ ios::in|ios::trunc
4. ✔ ios::out|ios::trunc

Question Number : 180 Question Id : 81959911810 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Why we use :: template-template parameter?

Options :

1. ✘ binding
2. ✘ rebinding
3. ✔ both binding & rebinding
4. ✘ reusing

Question Number : 181 Question Id : 81959911811 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which one of the following is not a Java feature?

Options :

1. ✘ Object-oriented
2. ✘ Use of pointers
3. ✘ Portable
4. ✔ Dynamic and Extensible

Question Number : 182 Question Id : 81959911812 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is not the use of “this” keyword in Java?

Options :

1. ✘ Referring to the instance variable when a local variable has the same name
2. ✔ Passing itself to the method of the same class
3. ✘ Passing itself to another method

4. ✘ Calling another constructor in constructor chaining

Question Number : 183 Question Id : 81959911813 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is a type of polymorphism in Java Programming?

Options :

1. ✘ Multiple polymorphism
2. ✔ Compile time polymorphism
3. ✘ Multilevel polymorphism
4. ✘ Execution time polymorphism

Question Number : 184 Question Id : 81959911814 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is Truncation in Java?

Options :

1. ✘ Floating-point value assigned to a Floating type
2. ✔ Floating-point value assigned to an integer type
3. ✘ Integer value assigned to floating type
4. ✘ Integer value assigned to Integer type

Question Number : 185 Question Id : 81959911815 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What will be the output of the following Java code?

```
class result
{
    public static void main(string args[])
    {
        if(args.length>0)
        system.out.println(args.length);
    }
}
```

Options :

1. ✓ compiles and runs but does not print anything
2. ✗ compiles, runs and prints 0
3. ✗ compiles, runs and prints 1
4. ✗ does not compile

Question Number : 186 Question Id : 81959911816 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which one of the following is not an access modifier?

Options :

1. ✗ protected
2. ✓ void
3. ✗ public
4. ✗ private

Question Number : 187 Question Id : 81959911817 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What are the major components of the JDBC?

Options :

1. ✓ DriverManager, Driver, Connection, Statement, and ResultSet
2. ✗ DriverManager, Driver, Connection, and Statement
3. ✗ DriverManager, Statement, and ResultSet
4. ✗ DriverManager, Connection, Statement, and ResultSet

Question Number : 188 Question Id : 81959911818 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The doGet() method in the example extracts values of the parameter's type and number by using _____.

Options :

1. ✓ request.getParameter()
2. ✗ request.setParameter()
3. ✗ responce.getParameter()
4. ✗ responce.getAttribute()

Question Number : 189 Question Id : 81959911819 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the output of this Java program?

```
class A
{
    public int i;
    private int j;
}
class B extends A
{
    void display()
    {
        super.j = super.i + 1;
        system.out.println(super.i + " " + super.j);
    }
}
class inheritance
{
    public static void main(String args[])
    {
        B.obj = new B();
        obj.i=1;
        obj.j=2;
        obj.display();
    }
}
```

Options :

1. ✘ 22
2. ✘ 33
3. ✘ Compilation Error
4. ✔ Runtime Error

Question Number : 190 Question Id : 81959911820 Question Type : MCQ Option Shuffling : Yes Display
Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A
Minimum Instruction Time : 0
Correct Marks : 1 Wrong Marks : 0

Which exception could be handled by the catch block for below

```
public class Test
{
    public static void main(string args[]) {
    try{
        int a= integer.parseInt("four");
    }
    }
}
```

Options :

1. ✘ IllegalStateException
2. ✔ NumberFormatException
3. ✘ ClassCastException
4. ✘ ArrayIndexOutOfBoundsException

Question Number : 191 Question Id : 81959911821 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which of the following is not the element associated with the HTML table layout?

Options :

1. ✘ alignment
2. ✔ color
3. ✘ size
4. ✘ spanning

Question Number : 192 Question Id : 81959911822 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which HTML tag is used to insert an image?

Options :

1. ✘ ``
2. ✘ ``
3. ✔ ``
4. ✘ ``

Question Number : 193 Question Id : 81959911823 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is the use of `<hr/>` tag in HTML?

Options :

1. ✘ For making content appearance italics
2. ✘ To create vertical rule between sections
3. ✘ To create a line break
4. ✔ To create horizontal rule between sections

Question Number : 194 Question Id : 81959911824 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Where is Client-side JavaScript code is embedded within HTML documents?

Options :

1. ✘ A URL that uses the special javascript:code
2. ✔ A URL that uses the special javascript:protocol

3. ✘ A URL that uses the special javascript:encoding

4. ✘ A URL that uses the special javascript:stack

Question Number : 195 Question Id : 81959911825 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What will be the output of the following JavaScript program?

```
function hyd(javascript)
{
    return (javascript ? "yes" : "no");
}
bool ans=true;
console.log(hyd(ans))';
```

Options :

1. ✘ Compilation error

2. ✘ Runtime error

3. ✔ yes

4. ✘ no

Question Number : 196 Question Id : 81959911826 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Why JavaScript Engine is needed?

Options :

1. ✘ Both Compiling & Interpreting the JavaScript

2. ✘ Parsing the javascript

3. ✔ Interpreting the JavaScript

4. ✘ Compiling the JavaScript

Question Number : 197 Question Id : 81959911827 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

What is PHP?

Options :

1. ✘ PHP is a close-source programming language
2. ✘ PHP is not used to develop dynamic and interactive websites
3. ✔ PHP is a server-side scripting language
4. ✘ Is a Hyper Text Markup Language

Question Number : 198 Question Id : 81959911828 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

How to define a function in PHP?

Options :

1. ✘ functionName(parameters) {function body}
2. ✘ function {function body}
3. ✔ function functionName(parameters) {function body}
4. ✘ data type functionName(parameters) {function body}

Question Number : 199 Question Id : 81959911829 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

PHP recognizes constructors by the name _____

Options :

1. ✓ `function _construct()`
2. ✗ `function -construct()`
3. ✗ `classname()`
4. ✗ `_construct()`

Question Number : 200 Question Id : 81959911830 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0

Which variable is used to collect form data sent with both the GET and POST methods?

Options :

1. ✗ `$_BOTH`
2. ✗ `$REQUEST`
3. ✓ `$_REQUEST`
4. ✗ `$BOTH`