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 3rd Aug 2021 Shift1
Subject Name :	Computer Science and Engineering
Creation Date :	2021-08-04 15:47:33
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

Computer Science and Engineering

Group Number :	1
Group Id :	80089497

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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

Mathematics

Section Id :	800894376
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
Sub-Section Number :	1
Sub-Section Id :	800894430
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 80089419246 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $A = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 1 \\ 0 & 1 & 0 \end{bmatrix}$, then $A^{50} =$

Options :

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1. ✖ $\begin{bmatrix}1 & 0 & 0\\0 & 1 & 0\\0 & 0 & 1\end{bmatrix}$

2. ✔ $\begin{bmatrix}1 & 0 & 0\\25 & 1 & 0\\25 & 0 & 1\end{bmatrix}$

3. ✖ $\begin{bmatrix}1 & 0 & 0\\24 & 1 & 0\\24 & 0 & 1\end{bmatrix}$

4. ✖ $\begin{bmatrix}1 & 0 & 0\\50 & 1 & 0\\50 & 0 & 1\end{bmatrix}$

Question Number : 2 Question Id : 80089419247 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $a+b+c=0$, $\begin{vmatrix}ax & by & cz\\bz & cx & ay\\cy & az & bx\end{vmatrix} = k\begin{vmatrix}x & y & z\\z & x & y\\y & z & x\end{vmatrix} = abc(x^3+y^3+z^3)-xyz(a^3+b^3+c^3)$, then $k=$

Options :

1. ✖ xyz

2. ✔ abc

3. ✖ $x+y+z$

4. ✖ 0

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Question Number : 3 Question Id : 80089419248 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Consider the statements with reference to the 3×3 matrices A and B and k is a constant .

I) $A = kB \Rightarrow |A| = k|B|$.

II) adj (AB)=adj(B) adj(A) .

III) for a matrix C, if A=BC$\Rightarrow$ C=$B^{-1}A$

Which of the above statements are correct?

Options :

1. ✖ Only I and II are correct

2. ✔ Only II is correct

3. ✖ Only III is correct

4. ✖ Only II and III are correct

Question Number : 4 Question Id : 80089419249 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If the solution of the system of equations $x-y+z=4, 2x+y-3z=0, x+y+z=2$ is (x,y,z),

then x+y+z=

Options :

1. ✖ 0

2. ✖ 3

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3. ✔ 2

4. ✖ 4

Question Number : 5 Question Id : 80089419250 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $\frac{3x-2}{(x+1)(2x^2+3)} = \frac{A}{x+1} - \frac{Bx+C}{2x^2+3}$, then $A + B + C =$

Options :

1. ✖ 2

2. ✔ -4

3. ✖ 0

4. ✖ -2

Question Number : 6 Question Id : 80089419251 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $y = \frac{a^x+a^{-x}}{2}$, $x > 0$ and $a > 1$ then $x =$

Options :

1. ✖ $\frac{a^y-a^{-y}}{2}$

2. ✔

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$\log_a\left(y+\sqrt{y^2-1}\right)$

$\log_a\left(\frac{y-\sqrt{y^2-1}}{2}\right)$

3. ✖

$\log_{1/a} y$

4. ✖

Question Number : 7 Question Id : 80089419252 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $a^{2019-x} \cdot b^{2021x} = a^{x+2021} \cdot b^{2019x}$, then $x =$

Options :

1. ✖ $\log_{\left(\frac{b}{a}\right)} b$

2. ✖ $\log_{\left(\frac{a}{b}\right)} b$

3. ✔ $\log_{\left(\frac{b}{a}\right)} a$

4. ✖ $\log_{\left(\frac{a}{b}\right)} a$

Question Number : 8 Question Id : 80089419253 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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If $\tan\theta = \frac{p}{q}$ then $\frac{p\sin\theta - q\cos\theta}{p\sin\theta + q\cos\theta} =$

Options :

1. ✖ $\frac{p-q}{p+q}$

2. ✖ $\frac{p^2-q}{p+q^2}$

3. ✔ $\frac{p^2-q^2}{p^2+q^2}$

4. ✖ $\frac{2p}{p+q}$

Question Number : 9 Question Id : 80089419254 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the area of a triangle is 75 sq.cm and two of its sides are 20 cm and 15 cm, then the included angle between the sides is

Options :

1. ✖ 60^0 or 120^0

2. ✔ 30^0 or 150^0

3. ✖ 45^0 or 135^0

4. ✖ 90^0 or 135^0

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Question Number : 10 Question Id : 80089419255 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $\cosh 2x = 99$, then $\coth x =$

Options :

1. ✖ $\frac{5}{7\sqrt{2}}$

2. ✔ $\frac{10}{7\sqrt{2}}$

3. ✖ $\frac{10}{2\sqrt{7}}$

4. ✖ $\frac{5}{2\sqrt{7}}$

Question Number : 11 Question Id : 80089419256 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A complex number 'z 'having least modulus value and satisfying $|z - 2 + 2i| = 1$ is

Options :

1. ✖ $\left(2 - \frac{1}{\sqrt{2}}\right)(1 + i)$

2. ✖ $\left(2 + \frac{1}{\sqrt{2}}\right)(1 + i)$

3. ✔ $\left(2 - \frac{1}{\sqrt{2}}\right)(1 - i)$

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4. ✖ $\left(2+\frac{1}{\sqrt{2}}\right)(1-i)$

Question Number : 12 Question Id : 80089419257 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If $\frac{(1+i)x-2i}{3+i}+\frac{(2-3i)y+i}{3-i}=1$, then $x+y=$

Options :

1. ✖ $\frac{75}{67}$

2. ✖ $\frac{18}{37}$

3. ✖ $\frac{57}{35}$

4. ✔ $\frac{66}{23}$

Question Number : 13 Question Id : 80089419258 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

$\left(\frac{\sqrt{3}+i}{2}\right)^6+\left(\frac{\sqrt{3}-i}{2}\right)^6=$

Options :

1. ✔ -2

2. ✖ -4

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3. ✖ -6

4. ✖ -8

Question Number : 14 Question Id : 80089419259 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the equation of the straight line $x + y + 1 = 0$ is changed into the form $x\cos\alpha + y\sin\alpha = p$, $(p > 0)$, then α =

Options :

1. ✖ $\frac{\pi}{4}$

2. ✖ $\frac{3\pi}{4}$

3. ✔ $\frac{5\pi}{4}$

4. ✖ $\frac{7\pi}{4}$

Question Number : 15 Question Id : 80089419260 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

GCD of p, q, r is 1. If the line $px + qy + r = 0$ is passing through the point (4,3) the sum of the intercepts made by the line on the coordinate axes is 14, then a value of $p + q + r$ =

Options :

1. ✖ -25

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2. ✖ -23

3. ✔ -17

4. ✖ 31

Question Number : 16 Question Id : 80089419261 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The distance between the parallel lines $3x-4y+20=0, 3x-4y+5=0$ is

Options :

1. ✖ 15 units

2. ✖ 20 units

3. ✔ 3 units

4. ✖ 5 units

Question Number : 17 Question Id : 80089419262 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The distance between the centers of the two circles touching the coordinate axes and the line $3x+4y=12$ in the first quadrant is

Options :

1. ✖ $5\sqrt{3}$

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2. ✖ $2\sqrt{5}$

3. ✖ $3\sqrt{5}$

4. ✔ $5\sqrt{2}$

Question Number : 18 Question Id : 80089419263 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The equation of a tangent to the circle $x^2 + y^2 - 2x + 8y - 23 = 0$ having slope 3 is

Options :

1. ✖ $6x - 2y + 25 = 0$

2. ✖ $3x - y + 27 = 0$

3. ✖ $3x - y + 23 = 0$

4. ✔ $3x - y + 13 = 0$

Question Number : 19 Question Id : 80089419264 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The interval in which the value of λ lies, if the line $3x - 4y = \lambda$ cuts the circle $x^2 + y^2 - 4x - 8y = 5$ at two points is

Options :

1. ✖ $(15, 35)$

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2. ✖ (35, 15)

3. ✔ (-35, 15)

4. ✖ (-15, 35)

Question Number : 20 Question Id : 80089419265 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

For $A \neq 0$ $\lim_{n\to\infty}\left(\frac{A+e^{nx}}{x+Ae^{nx}}\right) =$

Options :

1. ✖ $1,$ when $x > 0$

2. ✔ $\frac{A}{x}$, when $x < 0$

3. ✖ $\frac{A}{x}$, when $x > 0$

4. ✖ $0,$ when $x \in \mathbb{R}$

Question Number : 21 Question Id : 80089419266 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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Let f be a differentiable function such that $f(x+y) = f(x) \cdot f(y), \forall\, x, y \in \mathbb{R}$. If $f'(0) = -3$ and $f(5) = 9$,

then $f'(5) =$

Options :

1. ✔ -27

2. ✖ 6

3. ✖ $-\frac{1}{3}$

4. ✖ -3

Question Number : 22 Question Id : 80089419267 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If $y = x^{-x}$ then $\frac{x}{y}\frac{d^2y}{dx^2} + 1 =$

Options :

1. ✖ x

2. ✖ y^2

3. ✔ $y(1 + \log_e x)^2$

4. ✖ $(1 + \log_e x)$

Question Number : 23 Question Id : 80089419268 Question Type : MCQ Option Shuffling : Yes

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Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The angle of intersection between the curves $x^2 + y^2 = 36\sqrt{2}$ and $x^2 - y^2 = 36$, is

Options :

1. ✖ $\frac{\pi}{6}$

2. ✔ $\frac{\pi}{4}$

3. ✖ $\frac{\pi}{3}$

4. ✖ $\frac{\pi}{12}$

Question Number : 24 Question Id : 80089419269 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If m is the slope of a tangent to the curve $e^y = 1 + x^2$, then

Options :

1. ✖ $|m| > 1$

2. ✖ $m > 1$

3. ✖ $m > -1$

4. ✔ $|m| \leq 1$

Question Number : 25 Question Id : 80089419270 Question Type : MCQ Option Shuffling : Yes

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Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The maximum and minimum values of the function $f(x) = x^3 - 18x^2 + 96x + 4$ are M and

m respectively, then M-m=

Options :

1. ✔ 32

2. ✖ 22

3. ✖ 42

4. ✖ 52

Question Number : 26 Question Id : 80089419271 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $u = log\left(\frac{x^3+y^3}{x^5+y^5}\right)$, then $\left(x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y}\right) =$

Options :

1. ✖ e^u

2. ✔ -2

3. ✖ log(u)

4. ✖ 1

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Question Number : 27 Question Id : 80089419272 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $f(t) = 1 + t^2 + t^4 + t^6$, then $\int f(\tan x)dx =$

Options :

1. ✖ $x + \frac{(\tan x)^3}{3} + \frac{(\tan x)^5}{5} + \frac{(\tan x)^7}{7} + c$

2. ✔ $\tan x + \frac{(\tan x)^5}{5} + c$

3. ✖ $(\tan x)^2 + \frac{(\tan x)^5}{5} + c$

4. ✖ $\tan x + \frac{(\tan x)^3}{3} + \frac{(\tan x)^5}{5} + \frac{(\tan x)^7}{7} + c$

Question Number : 28 Question Id : 80089419273 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $\int\big((1+x)\sin x + (1-x)\cos x\big)\,dx = A(\sin x - \cos x) + f(x)(\sin x + \cos x) + C$, then $A\,f(x) =$

Options :

1. ✖ $3x$

2. ✖ $3\sin x$

3. ✔ $-2x$

4. ✖ $2x + \sin x$

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Question Number : 29 Question Id : 80089419274 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $\int x^5 e^{x^2} dx = \frac{1}{2} e^{x^2} f(x) + c$ then $f(2) =$

Options :

1. ✖ 8

2. ✖ 9

3. ✔ 10

4. ✖ 12

Question Number : 30 Question Id : 80089419275 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

$\lim_{n\to\infty} \frac{1}{n}\left(\sin\left(\frac{1}{n}\right) + \sin\left(\frac{2}{n}\right) + \sin\left(\frac{3}{n}\right) + \ldots\ldots \sin(1)\right) =$

Options :

1. ✖ $\cos(1)$

2. ✖ Cos (½)

3. ✔ $2\sin^2\left(\frac{1}{2}\right)$

4. ✖ log2

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Question Number : 31 Question Id : 80089419276 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The area bounded by the curve $y = (x-1)(x-2)(x-3)$ and x-axis lying between $x = 1$ and $x = 3$ is

Options :

1. ✖ $\frac{5}{2}$

2. ✖ $\frac{11}{2}$

3. ✔ $\frac{1}{2}$

4. ✖ $\frac{7}{4}$

Question Number : 32 Question Id : 80089419277 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The area of the region bounded by the curves $y = \sin x$ and $y = \cos x$, x-axis, $x=0$ and $x=\frac{\pi}{2}$ is

Options :

1. ✖ twice the area between $y = (\sin x - \cos x)$, x-axis, $x=0$ and $x=\frac{\pi}{4}$

2. ✖ equal to the area between $y = \sin x$, x-axis, $x=0$ and $x=\frac{\pi}{4}$

3. ✖

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equal to the area between $y = (\sin x + \cos x)$, x-axis, $x=0$ and $x=\frac{\pi}{2}$

4. ✔ twice the area between $y = \sin x$, x-axis, $x=0$ and $x=\frac{\pi}{4}$

Question Number : 33 Question Id : 80089419278 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The value of a function f at different points are given in the following table

x	0	1	2	3	4	5	6
f(x)	0	1	1.414	1.732	2	2.236	2.449

The approximate value of $\int_0^6 f(x)\,dx =$

Options :

1. ✖ 8.516

2. ✔ 9.716

3. ✖ 9.125

4. ✖ 9.203

Question Number : 34 Question Id : 80089419279 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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If p and q respectively are order and degree of the differential equation $y^2\left(\frac{d^2y}{dx^2}\right)+3x\left(\frac{dy}{dx}\right)^{\frac{1}{3}}=\sin x-x^2y^2$, then pq =

Options :

1. ✗ 2

2. ✓ 6

3. ✗ 15

4. ✗ 12

Question Number : 35 Question Id : 80089419280 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The equation of the curve passing through the origin and satisfying the differential equation $\frac{dy}{dx}=\frac{x-y}{x+y}$ is

Options :

1. ✓ $x^2-y^2-2xy=0$

2. ✗ $x^2-y^2+2xy=0$

3. ✗ $x^2+y^2-2xy=0$

4. ✗ $x^2+y^2+2xy=0$

Question Number : 36 Question Id : 80089419281 Question Type : MCQ Option Shuffling : Yes

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Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The solution of the differential equation $\frac{dy}{dx} - ky = 0, y(0) = 1$, approach zero as $x \to \infty$, when

Options :

1. ✖ $k = 0$

2. ✖ $k > 0$

3. ✔ $k < 0$

4. ✖ k is any real number

Question Number : 37 Question Id : 80089419282 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $x\frac{dy}{dx} + y = x^3y^6$ is

Options :

1. ✖ $(5x^3 - cx^5)y^5 = 2$

2. ✖ $(5x^5 - cx^3)y^5 = 2$

3. ✖ $(5x^5 + cx^3)y^5 = 2$

4. ✔ $(5x^3 + cx^5)y^5 = 2$

Question Number : 38 Question Id : 80089419283 Question Type : MCQ Option Shuffling : Yes

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Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the particular integral of $\frac{d^2y}{dx^2} - 6\frac{dy}{dx} + 13y = 8e^{3x}\sin 2x$ is equal to f(x) times the particular integral of $\frac{d^2y}{dx^2} + 4y = \sin 2x$, then f(x) =

Options :

1. ✖ e^{2x}

2. ✔ $8e^{3x}$

3. ✖ $8\sin 2x$

4. ✖ $8e^{3x}\sin 2x$

Question Number : 39 Question Id : 80089419284 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The particular integral of $\frac{d^2y}{dx^2} + 4y = -4\cos 2x$ is

Options :

1. ✔ $-x\sin 2x$

2. ✖ $\frac{-x\sin 2x}{2}$

3. ✖ $\frac{-x\cos 2x}{2}$

4. ✖ $-x\cos 2x$

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Question Number : 40 Question Id : 80089419285 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Laplace transform of the function $f(t) = |t-1| + |t+1|, t \geq 0$ is

Options :

1. ✖ $\frac{2}{s}(s + e^{-s})$

2. ✔ $\frac{2}{s^2}(s + e^{-s})$

3. ✖ $\frac{2}{s^2}(s - e^{-s})$

4. ✖ $\frac{2}{s}(s - e^{-s})$

Question Number : 41 Question Id : 80089419286 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $L\{F(t)\} = \frac{2s+5}{s^2+2s-3}$ then $L\{F(2t)\} =$

Options :

1. ✔ $\frac{2s+10}{s^2+4s-12}$

2. ✖ $\frac{2s+10}{s^2+4s+12}$

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3. ✖ $\frac{2s+10}{s^2+6s-12}$

4. ✖ $\frac{s+5}{s^2+4s-12}$

Question Number : 42 Question Id : 80089419287 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $f(t)= \sin t + (\sin 2t - \sin t)u(t-\pi) + (\sin 3t - \sin 2t)u(t-2\pi)$ where u(t - a) is a unit step

function , then f(t) when $\pi \le t \le 2\pi$ is

Options :

1. ✖ Sint

2. ✔ sin 2t

3. ✖ sin 3t

4. ✖ sint + sin2t

Question Number : 43 Question Id : 80089419288 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The Laplace transform of $f(t) = \begin{cases} 0, 0 < t \le 1 \\ (t-1), 1 < t < 2 \\ 1, \ t \ge 2 \end{cases}$

Options :

1. ✖

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$\frac{e^{-s}+e^{-2s}}{s^2}$

2. ✖ $\frac{e^{-s}-e^{-2s}}{s}$

3. ✔ $\frac{e^{-s}-e^{-2s}}{s^2}$

4. ✖ $\frac{e^{-2s}-e^{-s}}{s^2}$

Question Number : 44 Question Id : 80089419289 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

$L^{-1}\left\{\frac{3s+1}{(s+1)^4}\right\}=e^{-t}F(t)$ then $F(1)=$

Options :

1. ✖ $\frac{1}{6}$

2. ✖ $\frac{1}{3}$

3. ✔ $\frac{7}{6}$

4. ✖ $\frac{5}{6}$

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Question Number : 45 Question Id : 80089419290 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $L(f(t)) = \left\{\frac{1}{(s+4)^{5/2}}\right\}$, than f(t) is

Options :

1. ✔ $\frac{4}{3\sqrt{\pi}} e^{-4t} t^{3/2}$

2. ✖ $\frac{4}{3\sqrt{\pi}} t^{3/2}$

3. ✖ $\frac{4}{3\sqrt{\pi}} e^{4t} t^{3/2}$

4. ✖ $\frac{4}{3\sqrt{\pi}} e^{-4t} t^{5/2}$

Question Number : 46 Question Id : 80089419291 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $y = y(t)$ satisfies the differential equation $y''' + 2y'' - y' - 2y = 0$ together with the conditions

$y(0) = y'(0) = 0, y''(0) = 3$, then the Laplace transform of $y(t)$ is equal to

Options :

1. ✖ $\frac{3}{(s^2-1)(s-2)}$

2. ✔ $\frac{3}{(s^2-1)(s+2)}$

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3. ✖ $\frac{3}{(s^2+1)(s+2)}$

4. ✖ $\frac{3}{(s^2+1)(s-2)}$

Question Number : 47 Question Id : 80089419292 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Let $f(x)=e^{2x}$ in $(-\pi,\pi)$ and $f(x+2\pi)=f(x),\forall x$. If the Fourier series expansion of the function is

$$f(x)=\sum_{n=0}^{\infty}(a_n\cos nx+b_n\sin nx)$$ then a_0 =

Options :

1. ✖ $\frac{\sinh 2\pi}{8\pi}$

2. ✖ $\frac{\sinh 2\pi}{\pi}$

3. ✖ $\frac{\sinh 2\pi}{4\pi}$

4. ✔ $\frac{\sinh 2\pi}{2\pi}$

Question Number : 48 Question Id : 80089419293 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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If $f(x)=\begin{cases}0, \text{if} -\pi \le x \le 0 \\ \sin x, \text{if} 0 \le x \le \pi\end{cases}$. $f(x+2\pi)=f(x), \forall x$ and $f(x)=\sum_{n=0}^{\infty}(a_n \cos nx + b_n \sin nx)$, then

$b_1+b_2+b_3=$

Options :

1. ✖ 0

2. ✖ -1

3. ✔ $\frac{1}{2}$

4. ✖ $\frac{1}{4}$

Question Number : 49 Question Id : 80089419294 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If f(x) is periodic function defined on $-p \le x \le p$, then the coefficient of $\cos \frac{n\pi x}{p}$ in the Fourier series expansion of f(x) is

Options :

1. ✖ $\frac{1}{p}\int_{-p}^{p} f(x) \cos nx dx$

2. ✖ $\frac{1}{2p}\int_{-p}^{p} f(x) \cos \frac{nx}{p} dx$

3. ✖ $\frac{2}{p}\int_{0}^{p} f(x) \cos \frac{n\pi x}{p} dx$

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4. ✔ $\frac{1}{p}\int_{-p}^{p} f(x)\cos\frac{n\pi x}{p}dx$

Question Number : 50 Question Id : 80089419295 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If $f(x) = |\cos x|, x \in (-\pi, \pi)$ and $f(x) = \sum_{n=0}^{\infty}(a_n \cos nx + b_n \sin nx)$, then $a_0 + b_1 =$

Options :

1. ✖ $\frac{-4}{\pi^2}$

2. ✔ $\frac{2}{\pi}$

3. ✖ $\frac{4}{\pi}$

4. ✖ $\frac{-2}{\pi^2}$

Physics

Section Id :	800894377
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	Yes

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Clear Response :

Sub-Section Number : 1

Sub-Section Id : 800894431

Question Shuffling Allowed : Yes

Question Number : 51 Question Id : 80089419296 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The dimensional formulae of the following pair of physical quantities are same

Options :

1. ✖ Heat and Temperature

2. ✖ Work and Power

3. ✔ Work and Energy

4. ✖ Power and Energy

Question Number : 52 Question Id : 80089419297 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the phenomenon of photo electric effect, the number of photo electrons emitted is proportional to

Options :

1. ✔ The intensity of radiation

2. ✖ The frequency of radiation

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3. ✖ The velocity of incident radiation

4. ✖ The work-function of cathode material

Question Number : 53 Question Id : 80089419298 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The superconducting state is perfectly _____ in nature

Options :

1. ✔ Diamagnetic

2. ✖ Paramagnetic

3. ✖ Ferromagnetic

4. ✖ Non-magnetic

Question Number : 54 Question Id : 80089419299 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An ideal gas at temperature T is compressed through an isochoric process until its pressure is doubled
What is the final temperature

Options :

1. ✔ 2T

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2. ✖ T/2

3. ✖ T

4. ✖ 3T

Question Number : 55 Question Id : 80089419300 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Match the following lists

List-I	List-II
A. Isochoric process	i. Pressure remains constant
B. Isobaric process	ii. Temperature remains constant
C. Isothermal process	iii. Heat remains constant
D. Adiabatic process	iv. Volume remains constant

Options :

1. ✖ A-i, B-ii, C-iii, D-iv

2. ✖ A-iv, B-ii, C-iii, D-i

3. ✖ A-iv, B-iii, C-ii, D-i

4. ✔ A-iv, B-i, C-ii, D-iii

Question Number : 56 Question Id : 80089419301 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The difference between two specific heats, C_p and C_v for a gas represents

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Options :

1. ✖ Increase in kinetic energy of gas molecules

2. ✖ Increase in potential energy of gas molecules

3. ✔ External work done

4. ✖ Internal work done

Question Number : 57 Question Id : 80089419302 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Two vectors of equal magnitude R make an angle 60 degrees with each other. What is the magnitude of their resultant?

Options :

1. ✖ $R/\sqrt{2}$

2. ✖ $2\sqrt{2}\,R$

3. ✖ $\sqrt{2}\,R$

4. ✔ $\sqrt{3}\,R$

Question Number : 58 Question Id : 80089419303 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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If **i** and **j** represent unit vectors in East and North directions, then the vector **i** – **j** is in the direction of

Options :

1. ✖ North-East

2. ✖ North-West

3. ✔ South-East

4. ✖ South-West

Question Number : 59 Question Id : 80089419304 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If θ is the angle between two vectors $\vec{a}$ and $\vec{b}$, then $|\vec{a}.\vec{b}| = |\vec{a} \times \vec{b}|$, when θ is equal to

Options :

1. ✖ 0

2. ✔ $\frac{\pi}{4}$

3. ✖ $\frac{\pi}{2}$

4. ✖ π

Question Number : 60 Question Id : 80089419305 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

A stone of mass 10 gm is horizontally thrown from a cliff of height 500 m with an initial velocity 100 m/s. Time taken to reach the ground. [Take g = 10 m/s^2 , and neglect air resistance].

Options :

1. ✖ $\sqrt{80}$ s

2. ✖ 40 s

3. ✖ 20 s

4. ✔ 10 s

Question Number : 61 Question Id : 80089419306 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The maximum height a football reaches if it is kicked with a velocity 40 m/s at an angle 30 degrees with the horizontal. (Take g = 10 m/s^2)

Options :

1. ✖ 60 m

2. ✖ 40 m

3. ✔ 20 m

4. ✖ 10 m

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Question Number : 62 Question Id : 80089419307 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following produces least friction?

Options :

1. ✖ Sliding friction

2. ✖ Composite friction

3. ✔ Rollingfriction

4. ✖ Static friction

Question Number : 63 Question Id : 80089419308 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Two cars of unequal masses, having similar tyres, are moving on horizontal surface with the same initial speed. The minimum stopping distance is

Options :

1. ✖ smaller for lighter car

2. ✖ smaller for heavier car

3. ✖ depends on the volume of the car

4. ✔ same for both the cars

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Question Number : 64 Question Id : 80089419309 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What is the work done by an engine which lifts a mass of 100 kg through a height of 10 cm

[Take $g = 10\ m/s^2$]

Options :

1. ✔ 100 J

2. ✖ 1000J

3. ✖ 10,000 J

4. ✖ 1 J

Question Number : 65 Question Id : 80089419310 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

If a light body and a heavy body have equal momentum, then

Options :

1. ✔ The lighter body has greater energy than the heavier body

2. ✖ The lighter body has lesser kinetic energy than the heavier body

3. ✖ The kinetic energy of the lighter body is equal to the kinetic energy of the heavier body

4. ✖ The kinetic energy of both the bodies are independent of momentum

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Question Number : 66 Question Id : 80089419311 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In simple harmonic motion, the restoring force must be proportional to

Options :

1. ✖ Amplitude

2. ✖ Frequency

3. ✖ Velocity

4. ✔ Displacement

Question Number : 67 Question Id : 80089419312 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The time period of the particle executing simple harmonic motion as per the equation

$x = (25\ m) \sin [\ (2\ \pi\ s^{-1})\ t + \ \pi / 2\ ].$

Options :

1. ✔ 1 s

2. ✖ 2 s

3. ✖ 3 s

4. ✖ 4 s

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Question Number : 68 Question Id : 80089419313 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the length of a simple pendulum that has a period of 10 s ?

Options :

1. ✖ 24.84 cm

2. ✖ 2.484 cm

3. ✖ 2.484 m

4. ✔ 24.84 m

Question Number : 69 Question Id : 80089419314 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The intensity of sound is measured in the units of

Options :

1. ✖ Joule

2. ✖ Ampere

3. ✔ Decibel

4. ✖ Volt

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Question Number : 70 Question Id : 80089419315 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

According to Sabine the reverberation time is

Options :

1. ✔ Proportional to the volume of the hall and inversely proportional to the total absorption

2. ✖ Proportional to the total absorption and inversely proportional to the volume of the hall

3. ✖ Proportional to both volume of the hall and total absorption

4. ✖ Independent of volume of the hall and total absorption

Question Number : 71 Question Id : 80089419316 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

When the deforming forces are removed, if a body remains in the deformed state and does not even partially regain its original shape it is called

Options :

1. ✖ Elastic body

2. ✖ Perfectly elastic body

3. ✔ Inelastic body

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4. ✔ Plastic body

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 72 Question Id : 80089419317 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The viscosity of a gas_____

Options :

1. ✖ Decreases with increase in temperature

2. ✔ Increases with increase in temperature

3. ✖ Is independent of temperature

4. ✖ is independent of pressure for very high pressure intensities

Question Number : 73 Question Id : 80089419318 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Ohm's law is not applicable to _____

Options :

1. ✖ DC circuits

2. ✖ High currents

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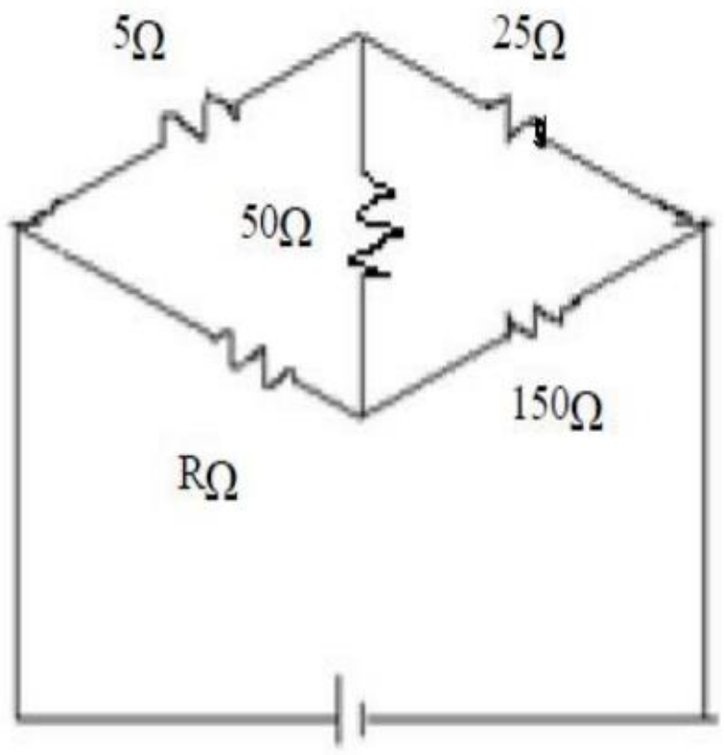
3. ✖ Small resistors

4. ✔ Semiconductors

Question Number : 74 Question Id : 80089419319 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Assume that the current through resistor 50Ω in the given circuit is zero, the value of R is



Options :

1. ✔ $30\ \Omega$

2. ✖ $40\ \Omega$

3. ✖ $50\ \Omega$

4. ✖ $100\ \Omega$

Question Number : 75 Question Id : 80089419320 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

The force of attraction between the magnetic poles of strength m_1 and m_2 separated by a distance 'd' in free space is given by

Options :

1. ✖ $$F = \frac{\mu}{4\pi}\frac{m_1 m_2}{d^2}$$

2. ✔ $$F = \frac{\mu_0}{4\pi}\frac{m_1 m_2}{d^2}$$

3. ✖ $$F = \frac{\mu_0}{2\pi}\frac{m_1 m_2}{d^2}$$

4. ✖ $$F = \frac{\mu_0}{4\pi}\frac{d^2}{m_1 m_2}$$

Chemistry

Section Id :	800894378
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
Sub-Section Number :	1
Sub-Section Id :	800894432

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Question Shuffling Allowed : Yes

Question Number : 76 Question Id : 80089419321 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

According to Paulis exclusion principle, two electrons in the same orbital contains

Options :

1. ✖ Vertical spins

2. ✖ Angular spins

3. ✖ Same spins

4. ✔ Opposite spins

Question Number : 77 Question Id : 80089419322 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the formation of nitrogen molecule, the number of electron pairs shared between the two nitrogen atoms is

Options :

1. ✖ Two

2. ✔ Three

3. ✖ One

4. ✖ Four

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Question Number : 78 Question Id : 80089419323 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In the redox reaction of hypo and Iodine, the oxidation number of sulphur atom changes from

Options :

1. ✔ + 2 to + 2.5

2. ✖ + 2.5 to + 2.0

3. ✖ + 2.0 to + 3.0

4. ✖ + 1.0 to + 2.0

Question Number : 79 Question Id : 80089419324 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

When the Phenol and water mixed together, the formed solution is called

Options :

1. ✖ Homogeneous

2. ✔ Heterogeneous

3. ✖ Colloidal

4. ✖ Azeotropic

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Question Number : 80 Question Id : 80089419325 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many grams of anhydrous oxalic acid is required to prepare one liter of 0.1 N oxalic acid solution?

Options :

1. ✖ 45 grams

2. ✖ 9.0 grams

3. ✔ 4.5 grams

4. ✖ 0.9 grams

Question Number : 81 Question Id : 80089419326 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

If the sulphate ion concentration in a solution of $Al_2(SO_4)_3$ is 0.25 M, the concentration of $Al_2(SO_4)_3$ in the solution is

Options :

1. ✖ 0.250 M

2. ✖ 0.0625 M

3. ✔ 0.0833 M

4. ✖ 0.125M

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Question Number : 82 Question Id : 80089419327 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following pair of species represent as conjugate Acid base?

Options :

1. ✖ HCl, H_2O

2. ✖ H_3PO_4, H_3O^+

3. ✔ HSO_3^-, SO_3^{2-}

4. ✖ H_2CO_3, CO_2

Question Number : 83 Question Id : 80089419328 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

From the following, choose the correct $[H^+]$ of a NaOH solution in M, if its pOH is 11.3

Options :

1. ✔ 2×10^{-3}

2. ✖ 2.7×10^{-3}

3. ✖ 2.7×10^{-12}

4. ✖ 6.2×10^{-8}

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Question Number : 84 Question Id : 80089419329 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Hydrochloric acid is a strong acid. This means that _____.

Options :

1. ✔ HCl dissociates completely in to $H^+(aq)$ and $Cl^-(aq)$ when it dissolves in water

2. ✖ HCl does not dissociate at all when it is dissolved in water

3. ✖ HCl produces a gaseous product when it is neutralized

4. ✖ HCl cannot be neutralized by a weak base

Question Number : 85 Question Id : 80089419330 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The impurities associated with mineral used in metallurgy are called

Options :

1. ✖ Flux

2. ✔ Gangue

3. ✖ Slag

4. ✖ Ore

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Question Number : 86 Question Id : 80089419331 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

German silver is an alloy of

Options :

1. ✖ Ag, Cu, Zn

2. ✖ Ag, Cu, Au

3. ✔ Cu, Zn, Ni

4. ✖ Cu, Zn, Fe

Question Number : 87 Question Id : 80089419332 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The degree of dissociation of weak electrolytes is

Options :

1. ✖ 100 %

2. ✖ $\geq 30\ \%$

3. ✖ $\leq 10\ \%$

4. ✔ $< 3\ \%$

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Question Number : 88 Question Id : 80089419333 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

With reference to Faraday's second law, the weights of different substances deposited by the passage of the same quantity of electricity, are proportional to their _____

Options :

1. ✔ Chemical equivalent weights

2. ✖ Current supply

3. ✖ Chemical equivalent density

4. ✖ Molecular Weights

Question Number : 89 Question Id : 80089419334 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A zinc rod is placed in 0.1M solution of zinc sulphate at 25°C. Assuming that the salt is dissociated to the extent of 95% at this dilution. The potential of the electrode at this temperature is ($E^{\circ}_{Zn^{2+}/Zn}$ = - 0.76 V and log 0.095 = -1.0223).

Options :

1. ✖ $-0.76\ \mathrm{V}$

2. ✖ $+0.76\ \mathrm{V}$

3. ✔ $-0.79\ \mathrm{V}$

4. ✖ $+0.79\ \mathrm{V}$

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Question Number : 90 Question Id : 80089419335 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following does not corrode when exposed to air?

Options :

1. ✖ Cu

2. ✔ Al

3. ✔ Ag

4. ✖ Fe

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 91 Question Id : 80089419336 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which metals from the following can provide cathodic protection to Iron?

Options :

1. ✖ Zn and Cu

2. ✖ Al and Cu

3. ✖ Al and Ni

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4. ✔ Al and Zn

Question Number : 92 Question Id : 80089419337 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The hardness of water is caused by

Options :

1. ✖ Undissolved salts of Ca^{+2} and Mg^{+2}

2. ✖ Undissolved salts of Cu^{+2} and Mg^{+2}

3. ✔ Dissolved salts of Ca^{+2} and Mg^{+2}

4. ✖ Undissolved $CaCO_3$

Question Number : 93 Question Id : 80089419338 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

A water sample contains 204 mg of $CaSO_4$ per Litre. Its hardness in terms of $CaCO_3$ equivalent is

Options :

1. ✔ 150 ppm

2. ✖ 136 ppm

3. ✖ 204 ppm

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4. ✖ 100 ppm

Question Number : 94 Question Id : 80089419339 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Hard water can block radiators due to the formation of?

Options :

1. ✔ insoluble calcium and magnesium salts

2. ✖ insoluble sodium salts

3. ✖ insoluble phosphate salts

4. ✖ insoluble potassium salts

Question Number : 95 Question Id : 80089419340 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Choose the incorrect statement from the following options.

Options :

1. ✖ The molecular weight of the polymer steadily rises throughout the reaction, in condensation polymerisation

2. ✖ In addition polymerisation, growth of chain is at one active centre.

3. ✖ No by product will be formed in the addition polymerisation

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The molecular weight of the polymer steadily increases throughout the reaction,

4. ✔ in addition polymerisation

Question Number : 96 Question Id : 80089419341 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is a thermoplastic?

Options :

1. ✔ Teflon

2. ✖ Natural rubber

3. ✖ Neoprene

4. ✖ Buna-S

Question Number : 97 Question Id : 80089419342 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following a characteristic feature is of a good fuel?

Options :

1. ✖ High moisture content

2. ✖ Should undergo spontaneous combustion

3. ✖ Low calorific value

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4. ✔ High calorific value

Question Number : 98 Question Id : 80089419343 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Producer gas is primarily a mixture of

Options :

1. ✔ $CO + N_2$

2. ✖ $CO + H_2$

3. ✖ $CO + CH_4$

4. ✖ $N_2 + H_2$

Question Number : 99 Question Id : 80089419344 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The measurement of dissolved oxygen used by microorganisms during the biochemical oxidation of organic matter in 5 days at 20°C is said to be

Options :

1. ✔ Biological Oxygen Demand

2. ✖ Chemical Oxygen Demand

3. ✖ Biological Dissolved Oxygen

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4. ✖ Threshold Oxygen Demand

Question Number : 100 Question Id : 80089419345 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following is a green house gas?

Options :

1. ✖ H_2

2. ✖ N_2

3. ✖ CO

4. ✔ CO_2

Computer Science and Engineering

Section Id :	800894379
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
Sub-Section Number :	1

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Sub-Section Id : 800894433

Question Shuffling Allowed : Yes

Question Number : 101 Question Id : 80089419346 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which gate's output is equal to 1 if the input variables have an odd number of 1's?

Options :

1. ✖ NOR

2. ✖ NAND

3. ✔ XOR

4. ✖ XNOR

Question Number : 102 Question Id : 80089419347 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following gate acts as a controlled inverter?

Options :

1. ✖ NAND

2. ✔ EX-OR

3. ✖ NOR

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4. ✖ EX-NOR

Question Number : 103 Question Id : 80089419348 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which Multiplexer IC is used for implementing a full adder or a full subtractor?

i) SN74151 ii) SN74153 iii) 74LS151 iv) 74LS153

Options :

1. ✖ (i) only

2. ✖ (i) &(iii)

3. ✖ (ii) only

4. ✔ (ii) & (iv)

Question Number : 104 Question Id : 80089419349 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The simplified form of the following Boolean function

$F(w,x,y,z)=\sum(0,1,2,4,5,6,8,9,12,13,14)$ is _____.

Options :

1. ✔ y'+w'z'+xz'

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2. ✖ w’+w’x’+yz’

3. ✖ x’+w’z’+yz

4. ✖ y+wz+x’z

Question Number : 105 Question Id : 80089419350 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Race around problem in a JK Flip flop is

Options :

1. ✖ $Q=1 \ \& \bar{Q}=1$

2. ✖ $Q=0 \ \& \bar{Q}=0$

3. ✔ Toggling more than once during a clock cycle

4. ✖ Q is neither a 0 nor 1

Question Number : 106 Question Id : 80089419351 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Logic gates with a set of inputs and outputs is arrangement of

Options :

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1. ✔ Combinational circuit

2. ✖ Logic circuit

3. ✖ Design circuits

4. ✖ Register

Question Number : 107 Question Id : 80089419352 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In which circuit, chain of flipflops is connected in cascade to receive a common clock pulse?

Options :

1. ✖ demultiplexer

2. ✖ register

3. ✖ counter

4. ✔ shift register

Question Number : 108 Question Id : 80089419353 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many address lines does 80386 processor have?

Options :

1. ✖ 16 bits

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2. ✔ 20 bits

3. ✖ 24 bits

4. ✖ 32 bits

Question Number : 109 Question Id : 80089419354 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which segment register of 8086 is used to store the contents of the CPU registers which will be required at a later

stage?

Options :

1. ✖ Code segment register

2. ✖ Data segment register

3. ✖ Extra segment register

4. ✔ Stack segment register

Question Number : 110 Question Id : 80089419355 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which flag is used to indicate the signed arithmetic over flow condition?

Options :

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1. ✖ CF

2. ✖ AC

3. ✖ DF

4. ✔ OF

Question Number : 111 Question Id : 80089419356 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the interrupt vector address of NMI in the 8086 Interrupt Vector Table ?

Options :

1. ✔ 0008h

2. ✖ 0004h

3. ✖ 0002h

4. ✖ 000Ch

Question Number : 112 Question Id : 80089419357 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

$(4021.2)_5=(\_\_\_\_\_)_{10}$

Options :

1. ✖

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511.1

2. ✔ 511.4

3. ✖ 536.1

4. ✖ 536.4

Question Number : 113 Question Id : 80089419358 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

An interface that provides a method for transferring binary information between internal storage and external devices is called

Options :

1. ✔ I/O interface

2. ✖ Input interface

3. ✖ Output interface

4. ✖ I/O bus

Question Number : 114 Question Id : 80089419359 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The idea of cache memory is based

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Options :

1. ✔ on the property of locality of reference

2. ✖ on the heuristic 90-10 rule

3. ✖ on the fact that references generally tend to cluster

4. ✖ on the availability of slowest memories

Question Number : 115 Question Id : 80089419360 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

MIMD stands for

Options :

1. ✔ Multiple Instruction Multiple Data

2. ✖ Multiple Instruction Memory Data

3. ✖ Memory Instruction Multiple Data

4. ✖ Multiple Information Memory Data

Question Number : 116 Question Id : 80089419361 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is concerned with the transfer of information between main memory and CPU?

Options :

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1. ✖ I/O Processor

2. ✖ Control register

3. ✔ Cache organization

4. ✖ Stack organization

Question Number : 117 Question Id : 80089419362 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Choose the **incorrect** statement about associative memory.

Options :

1. ✖ It is a memory unit accessed by its content

2. ✖ It is uniquely suited to do parallel searches by data association

3. ✖ It locates all words which match specified content and marks them for reading

4. ✔ It is inexpensive than random access memory.

Question Number : 118 Question Id : 80089419363 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A Stack-organised Computer uses instruction of

Options :

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1. ✖ Indirect addressing

2. ✖ Two-addressing

3. ✔ Zero addressing

4. ✖ Index addressing

Question Number : 119 Question Id : 80089419364 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is ***not*** a token of C language

Options :

1. ✖ Keyword

2. ✖ Identifier

3. ✖ Operator

4. ✔ Comment

Question Number : 120 Question Id : 80089419365 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In C, to assign an octal number to a variable, we need to begin the number with

Options :

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1. ✖ -1

2. ✖ 1

3. ✔ 0

4. ✖ 00

Question Number : 121 Question Id : 80089419366 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The output of the following code is:

```
#include <stdio.h>

int main()
{
        int mark=35;
        puts(mark >= 40 ? "Passed" : "Failed");
        return 0;
}
```

Options :

1. ✖ Passed

2. ✔ Failed

3. ✖ Returns Error

4. ✖ Conditional Termination

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Question Number : 122 Question Id : 80089419367 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

A program pauses to take input when it encounters the _____ function.

Options :

1. ✖ printf()

2. ✔ scanf()

3. ✖ return()

4. ✖ exit()

Question Number : 123 Question Id : 80089419368 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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What is the output of the program given?

```
#include <stdio.h>

 int main ()

   {

    int a=25;

    printf("%d",(a<<1>>2<<2>>3));

    return 0;

  }
```

Options :

1. ✖ 25

2. ✔ 6

3. ✖ 22

4. ✖ 50

Question Number : 124 Question Id : 80089419369 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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What is the output of the program given?

```
#include <stdio.h>

int main()

  {

    int array[] = {10, 20, 30};

printf("%d",-2[array]);

    return 0;

  }
```

Options :

1. ✖ 10

2. ✖ -20

3. ✔ -30

4. ✖ 30

Question Number : 125 Question Id : 80089419370 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following directive places the contents of the header file in the program?

Options :

1. ✖ #define

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2. ✖ #ifdef

3. ✔ #include

4. ✖ #pragma

Question Number : 126 Question Id : 80089419371 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many values a function can return at a time?

Options :

1. ✖ depends on the system

2. ✖ infinite values

3. ✔ only one

4. ✖ two

Question Number : 127 Question Id : 80089419372 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

How many double pointers are created for the given statement:

int a[5], b[2][5];

Options :

1. ✔ One

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2. ✖ Five

3. ✖ Seven

4. ✖ Twelve

Question Number : 128 Question Id : 80089419373 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Consider the following pseudo code:

```
Algorithm Display (n)
if n=0
    print "I admire honesty more than any other trait"
    return
else
    for i= 1 to n
        print "I admire honesty more than any other trait"
    Display(n-1)
```

If 50 is provided as input to the Display() algorithm then number of times "*I admire honesty more than any other trait*" is printed is _____

Options :

1. ✖ 1225

2. ✔ 1276

3. ✖ 1275

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4. ✖ 51

Question Number : 129 Question Id : 80089419374 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

An organization of data in a computer's memory is called _____.

Options :

1. ✖ an algorithm

2. ✖ a computer program

3. ✔ a data structure

4. ✖ a data type

Question Number : 130 Question Id : 80089419375 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The data structure used to evaluate a postfix expression is

Options :

1. ✖ Tree

2. ✖ Linked list

3. ✔ Stack

4. ✖ Queue

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Question Number : 131 Question Id : 80089419376 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the final output of the following series of operations carried out on an empty queue?

enqueue(3), enqueue(7), dequeue(), enqueue(5), enqueue(6), dequeue(), dequeue(), enqueue(4), enqueue(9), dequeue(), enqueue(7), dequeue(), dequeue(), enqueue(1), dequeue().

Options :

1. ✔ 1

2. ✖ 4

3. ✖ 7

4. ✖ 9

Question Number : 132 Question Id : 80089419377 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one of the following sorting algorithms has the lowest worst-case execution time?

Options :

1. ✖ Insertion sort

2. ✖ Selection sort

3. ✔ Merge sort

4. ✖ Quick sort

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Question Number : 133 Question Id : 80089419378 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following sorting method is best suited for an almost sorted list of elements?

Options :

1. ✖ Selection sort

2. ✔ Insertion sort

3. ✖ Merge sort

4. ✖ Quick sort

Question Number : 134 Question Id : 80089419379 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one of the following describes the worst-case execution time of bubble sort to sort an array of *n* distinct

elements?

Options :

1. ✖ $\theta(n)$

2. ✖ $\theta\ (n \log_2 n)$

3. ✖ $\theta(n^{1.5})$

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4. ✔ $\theta(n^2)$

Question Number : 135 Question Id : 80089419380 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one of the following sorted pairs is efficiently merged?

Options :

1. ✖ (10,20,30,40) and (15,25,35,45)

2. ✔ (10,15,20,25) and (30,35,40,45)

3. ✖ (10,20,30,35) and (15,25,40,45)

4. ✖ (10,15,20,45) and (25,30,35,40)

Question Number : 136 Question Id : 80089419381 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Consider an array with 5 elements, int a[4]={14, 33, 27, 35, 10}. What is the output of the array after

2^{nd} pass if Bubble sort is used?

Options :

1. ✖ 14, 27, 33, 10, 35

2. ✔ 14, 27, 10, 33, 35

3. ✖ 10, 14, 27, 33, 35

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4. ✖ 14, 10, 27, 33, 35

Question Number : 137 Question Id : 80089419382 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which one of the following describes the best-case execution time of binary search algorithm?

Options :

1. ✖ $\theta(n)$

2. ✖ $\theta\ (n \log_2 n)$

3. ✔ $\theta(1)$

4. ✖ $\theta\ (n^2)$

Question Number : 138 Question Id : 80089419383 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Binary search algorithm is more efficient than sequential search algorithm as it takes the advantage of data that has been_____.

Options :

1. ✖ random

2. ✔ sorted

3. ✖ unsorted

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4. ✖ indexed

Question Number : 139 Question Id : 80089419384 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

ROM contains BIOS. In addition to booting the machine, BIOS contains routine for _____.

Options :

1. ✔ Power On Self-Test

2. ✖ CPU bus

3. ✖ Internal clock

4. ✖ Interrupt Service

Question Number : 140 Question Id : 80089419385 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which topology provides security, is robust and eliminates the traffic factor?

Options :

1. ✔ Mesh

2. ✖ Ring

3. ✖ Star

4. ✖ Bus

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Question Number : 141 Question Id : 80089419386 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The purpose of network mask is mainly

Options :

1. ✖ To extract the network address from the source address of a packet by the router

2. ✖ To extract the destination address from the network address of a packet by the router

3. ✔ To extract the network address from the destination address of a packet by the router

4. ✖ To extract the source address from the network address of a packet by the router

Question Number : 142 Question Id : 80089419387 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the network mask; prefix; and suffix of the IP address 12.23.24.78/8

Options :

1. ✔ 255.0.0.0; 8; 24

2. ✖ 255.0.0.0; 24; 8

3. ✖ 255.255.0.0; 24 ; 8

4. ✖ 255.255.0.0 ; 8 ;24

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Question Number : 143 Question Id : 80089419388 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which color model is used by the toner of a color laser printer?

Options :

1. ✖ RGB

2. ✖ RGBY

3. ✖ CMY

4. ✔ CMYK

Question Number : 144 Question Id : 80089419389 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Find the odd man out with respect to the benefits of Computer Networks?

Options :

1. ✖ Resource sharing

2. ✖ Powerful communication medium

3. ✔ Low reliability

4. ✖ Higher flexibility

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Question Number : 145 Question Id : 80089419390 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the key characteristic of switched networks?

Options :

1. ✖ Network Topology is regular.

2. ✖ Uses SDM for node-to-node communication.

3. ✔ There exist multiple paths between a source-destination pair for better network reliability.

4. ✖ The switching nodes are concerned with the contents of data.

Question Number : 146 Question Id : 80089419391 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Twisted pair media's bandwidth depends on

Options :

1. ✔ Thickness of the wire and the distance travelled

2. ✖ Type of transmission

3. ✖ Insulating copper

4. ✖ Format of the data packet

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Question Number : 147 Question Id : 80089419392 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following are needed by twisted pair for longer distances?

Options :

1. ✔ Repeaters

2. ✖ Amplifiers

3. ✖ Multipliers

4. ✖ Routers

Question Number : 148 Question Id : 80089419393 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Given the IPv4 protocol and the hardware being Ethernet, what would be size of an ARP Packet?

Options :

1. ✖ 4 bytes

2. ✖ 8 bytes

3. ✖ 16 bytes

4. ✔ 28 bytes

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Question Number : 149 Question Id : 80089419394 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

In OSI model which of the following protocol is supported by data link layer?

Options :

1. ✖ FTP

2. ✖ TCP

3. ✖ UDP

4. ✔ PPP

Question Number : 150 Question Id : 80089419395 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is the key design issue of the network layer?

Options :

1. ✖ Error control

2. ✖ Error detection

3. ✔ Routing

4. ✖ Dialogue control

Question Number : 151 Question Id : 80089419396 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

Which of the following is the error detecting code of data link layer?

Options :

1. ✖ Parity bit

2. ✖ Hamming code

3. ✖ Gray code

4. ✔ Cyclic redundancy code

Question Number : 152 Question Id : 80089419397 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which is not a component of Motherboard?

Options :

1. ✖ The processor chip

2. ✖ BIOS

3. ✖ Memory chips

4. ✔ External Modem

Question Number : 153 Question Id : 80089419398 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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Which device converts physical documents into machine readable text?

Options :

1. ✔ Optical Character Reader

2. ✖ Scanner

3. ✖ Plotter

4. ✖ Smart Digital Pen

Question Number : 154 Question Id : 80089419399 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

What is a supervisor call?

Options :

1. ✖ Call made by the admin of the system

2. ✖ Call with control function

3. ✖ Call made by users working in the root directory

4. ✔ Call used to perform resource management functions

Question Number : 155 Question Id : 80089419400 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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Which of the following is true in the context of threads?

Options :

1. ✔ More number of user level threads than kernel level threads can be supported

2. ✖ Context switching time between kernel threads is less than that of user level threads

3. ✖ OS support is not required for the implementation of kernel threads

4. ✖ OS support is required for scheduling user level threads

Question Number : 156 Question Id : 80089419401 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which type of system call includes SetTime()?

Options :

1. ✖ Process

2. ✔ Information Maintenance

3. ✖ File Manipulation

4. ✖ Device Manipulation

Question Number : 157 Question Id : 80089419402 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

Suppose a process is in blocked state waiting for some I/O service and when the service is completed,

it enters into _____ state.

Options :

1. ✖ running

2. ✔ ready

3. ✖ wait

4. ✖ suspended

Question Number : 158 Question Id : 80089419403 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Semaphores are used to solve the problem of _____.

Options :

1. ✖ race condition

2. ✖ critical section

3. ✖ hardware failure

4. ✔ process synchronization

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Question Number : 159 Question Id : 80089419404 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

In a paged memory, the page hit ratio is 0.35. The time required to access a page in secondary memory is equal to 100ns. The time required to access a page in primary memory is 10ns. The average time required to access a page is _____.

Options :

1. ✗ 3.0ns

2. ✗ 68.0ns

3. ✓ 68.5ns

4. ✗ 65ns

Question Number : 160 Question Id : 80089419405 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

When second chance algorithm is used for page replacement, if all of the pages are referenced, then it is equivalent to _____

Options :

1. ✗ LRU algorithm

2. ✗ Optimal algorithm

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3. ✖ MRU algorithm

FIFO algorithm

4. ✔

Question Number : 161 Question Id : 80089419406 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which disk scheduling algorithm performs better for the systems that place a heavy load on

the Disk?

Options :

1. ✖ FCFS

LOOK

2. ✖

3. ✔ C-SCAN

4. ✖ SSTF

Question Number : 162 Question Id : 80089419407 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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

root directory?

Options :

1. ✖

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Single-level directory

2. ✖ Two-level directory

3. ✖ Tree-structured directory

4. ✔ Acyclic graph directory

Question Number : 163 Question Id : 80089419408 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Disk requests come to a disk driver for the cylinders in the order 10, 30, 60, 50, 70 at a time when the disk drive is reading from cylinder 20. The seek time is 5ms per cylinder. The total seek time, if the disk arm scheduling algorithm is FCFS is _____.

Options :

1. ✔ 450

2. ✖ 500

3. ✖ 400

4. ✖ 540

Question Number : 164 Question Id : 80089419409 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

What is the fastest way of accessing a row in a table?

Options :

1. ✔ ROWID

2. ✖ INDEX

3. ✖ JOIN

4. ✖ SELECT

Question Number : 165 Question Id : 80089419410 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following key can have NULL value?

Options :

1. ✖ Primary key

2. ✔ Candidate key

3. ✖ Domain key

4. ✖ Clustering key

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Question Number : 166 Question Id : 80089419411 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The overall structure of the databases is maintained in a _____.

Options :

1. ✖ Redolog file

2. ✖ Data file

3. ✔ Control file

4. ✖ Structure file

Question Number : 167 Question Id : 80089419412 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Relations produced from an ER model will always be in _____.

Options :

1. ✖ 4NF

2. ✔ 3NF

3. ✖ 2 NF

4. ✖ 1 NF

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Question Number : 168 Question Id : 80089419413 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

_____ value can be divided into subparts.

Options :

1. ✖ Single attribute

2. ✔ Composite attribute

3. ✖ Multivalued attribute

4. ✖ Derived attribute

Question Number : 169 Question Id : 80089419414 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which SQL data type is used to store images, audio files and video clips?

Options :

1. ✔ Binary Large Object

2. ✖ Text Area

3. ✖ Multimedia Object

4. ✖ VideoStructure

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Question Number : 170 Question Id : 80089419415 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which SQL operator is used to perform pattern matching?

Options :

1. ✖ GREP

2. ✖ REGEXP

3. ✔ LIKE

4. ✖ BLOB

Question Number : 171 Question Id : 80089419416 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

_____ is pointer to a private SQL area that stores information for processing.

Options :

1. ✖ Relation

2. ✖ Trigger

3. ✖ Object

4. ✔ Explicit cursor

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Question Number : 172 Question Id : 80089419417 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which trigger captures and processes the information when a user inserts, updates or deletes one or more rows in a table?

Options :

1. ✖ Row-level trigger

2. ✖ Column-level trigger

3. ✔ Statement-level trigger

4. ✖ Compound-level trigger

Question Number : 173 Question Id : 80089419418 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

What will be the output of the following SQL query?

```
Select S.sname
From Sailor S, Reserves R1, Reserves R2
Where S.sid = R1.sid and R1.sid = R2.sid and R1.bid<>R2.bid
```

On tables Sailor(sid, sname, age, rating)

Reserves(Sid, bid, day)

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Options :

1. ✖ Sailors' names who have reserved a boat

2. ✖ Sailors' names who have reserved all boats

3. ✔ Sailors' names who have reserved atleast two boats

4. ✖ Sailors' names who have reserved utmost three boats

Question Number : 174 Question Id : 80089419419 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Data hiding concept is supported by which of the following language?

Options :

1. ✖ BASIC

2. ✖ C

3. ✔ C++

4. ✖ FORTRAN

Question Number : 175 Question Id : 80089419420 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

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Which of the following is false about virtual function in C++?

Options :

1. ✖ Virtual function must be member of some class.

2. ✖ They are accessed through object pointers.

3. ✖ A virtual function must be defined in the base class, even though it is not used.

4. ✔ Virtual functions can be static members.

Question Number : 176 Question Id : 80089419421 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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```
#include<iostream>
using namespace std;
class first{
public:
int fun() {
        static int x=6;
        x--;
        return x;
}
void calculate(int &a, int &b) {
        for(fun();fun();fun())
                a = fun();
}
void calculate(int &a, int &b, int &c) {
        c = fun();
}
};
int main() {
first f;
int a = 10, b=20, c=30;
f.calculate(a,b);
f.calculate(a,b,c);
cout<<a<<" "<<b<<" "<<c;
return 0;
}
```

What is the output of above program?

Options :

1. ✖ Compilation error

2. ✖ 1 20 0

3. ✔

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2 20 -1

4. ✖ 1 20 -1

Question Number : 177 Question Id : 80089419422 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Function overloading means_____.

Options :

1. ✖ different functions with different names and different arguments

2. ✖ function names are same and same number of arguments

3. ✖ function names are different but same number of arguments

4. ✔ function names are same but different number of arguments

Question Number : 178 Question Id : 80089419423 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is not correct about friend function in C++?

Options :

1. ✖ friend function can be declared either in private or public part.

2. ✖ it cannot access the member variables directly and has to use the object name and dot membership operator.

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3. ✔ It can be called using the objects like how we call normal methods/functions.

4. ✖ A friend function can access private members of class where that function is declared.

Question Number : 179 Question Id : 80089419424 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Inheritance in C++ have default access specifier as _____.

Options :

1. ✖ package

2. ✔ private

3. ✖ protected

4. ✖ public

Question Number : 180 Question Id : 80089419425 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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```
#include<iostream>
using namespace std;
class parent {
public:
        virtual void process()=0;
};
class child: public parent {
public:
        int i;
        void process() {
                char x = 'F';
                for(i=0;i<5;i++)
                        i += (x-'A');
                cout<<i;
        }
};
int main(void) {
        parent *p = new child();
        p->process();
        return 0;
}
```

What is the output of above program?

Options :

1. ✔ 6

2. ✖ 5

3. ✖ 25

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4. ✖ Compile time error

Question Number : 181 Question Id : 80089419426 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The template class is also called as _____.

Options :

1. ✖ base class

2. ✖ container class

3. ✔ generic class

4. ✖ virtual class

Question Number : 182 Question Id : 80089419427 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following statement is not applicable to operator overloading in C++?

Options :

1. ✖ We can overload only existing operator, but the new operators cannot be overloaded.

2. ✔ We can change precedence of operators using operator overloading.

3. ✖ Some operators are by default overloaded.

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4. ✖ When unary operators are overloaded through a member function, it takes no explicit arguments but, if they are overloaded by a friend function, it takes one argument.

Question Number : 183 Question Id : 80089419428 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Dynamic binding is done using the keyword_____.

Options :

1. ✖ dynamic

2. ✖ static

3. ✔ virtual

4. ✖ void

Question Number : 184 Question Id : 80089419429 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following statement is true?

Options :

1. ✖ In java, an abstract class should contain at least two abstract methods inside it.

2. ✖ We can instantiate abstract classes also inside java.

3. ✔

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In java, if any class say child, is inheriting an abstract class say parent, then whatever abstract methods declared in abstract class (parent) should have to implement inside derived class child.

4. ✖ Abstract classes cannot implement any interface in java.

Question Number : 185 Question Id : 80089419430 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The smallest integer data type in JAVA is _____.

Options :

1. ✖ short

2. ✖ int

3. ✔ byte

4. ✖ float

Question Number : 186 Question Id : 80089419431 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

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```
import java.util.Scanner;
class program{
        public static void main(String args[])
        {
                int[] arr = new int[10];
                Scanner sc = new Scanner(System.in);
                for(int i=0;i<arr.length;i++)
                        arr[i] = sc.nextInt();
                int result=0;
                for(int i=0;i<arr.length;i++)
                        result = result^arr[i];
                System.out.println(result);
}
}
```

What is the output of above java code, if the array elements are {9,8,7,6,5,4,3,2,1,11}?

Options :

1. ✖ 15

2. ✖ 12

3. ✖ 0

4. ✔ 10

Question Number : 187 Question Id : 80089419432 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

```
class demo {

demo() { }

demo(demo d) { d1 = d; }

demo d1;

public static void main(String[] args) {

demo d2 = new demo();

demo d3 = new demo(d2);

d3.run();

demo d4 = d3.d1;

d4.run();

demo d5 = d2.d1; d5.run(); }

void run()  {

        System.out.print("Hi"+" ");

} }
```

What is the output of above code?

Options :

1. ✖ Hi

2. ✖ Hi HiHi

3. ✔ Hi Hi followed by exception

4. ✖ Hi Hi

Question Number : 188 Question Id : 80089419433 Question Type : MCQ Option Shuffling : Yes

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Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The range of the byte integer type is _____

Options :

1. ✖ -128 to -127

2. ✖ 128 to -127

3. ✖ 128 to 127

4. ✔ - 128 to 127

Question Number : 189 Question Id : 80089419434 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which keyword is used to access the packages in JAVA?

Options :

1. ✖ export

2. ✖ extend

3. ✔ import

4. ✖ package

Question Number : 190 Question Id : 80089419435 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

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Correct Marks : 1 Wrong Marks : 0

```
class Threadexample extends Thread {
Threadexample() {
System.out.print("JAVA");
}
public void run() { System.out.print(" OOPS"); }
public void run(String s) { System.out.print(" EXAMINATION"); }
}
public class Threadprogram {
public static void main (String [] args) {
Threadexample t = new Threadexample() {
public void run() { System.out.print(" RESULT"); }
};
t.start();
} }
```

What is the output of above java program?

Options :

1. ✖ OOPS RESULT

2. ✖ EXAMINATION RESULT

3. ✔ JAVA RESULT

4. ✖ RESULT OOPS

Question Number : 191 Question Id : 80089419436 Question Type : MCQ Option Shuffling : Yes

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Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

```
class testprogram {
 public static void main(String args[]) {
     String s=null;
     System.out.println(s.length());
  }
}
```

What is the output of above code?

Options :

1. ✖ 4

2. ✖ 1

3. ✖ Results in Compile error

4. ✔ Results in NullPointerException

Question Number : 192 Question Id : 80089419437 Question Type : MCQ Option Shuffling : Yes

Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which keyword when applied on a method indicates that only one thread should execute the method

at a time?

Options :

1. ✖ volatile

2. ✖ native

3. ✔ synchronized

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4. ✖ static

Question Number : 193 Question Id : 80089419438 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The _____converts JDBC calls directly into the vendor-specific database protocol.

Options :

1. ✖ JDBC-ODBC bridge driver

2. ✖ Native-API driver

3. ✖ Network Protocol driver

4. ✔ Thin driver

Question Number : 194 Question Id : 80089419439 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The _____filter applies transparency effects dynamically without using a graphics editor to hard-code transparency into the image.

Options :

1. ✖ flip

2. ✖ blur

3. ✖ shadow

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4. ✔ chroma

Question Number : 195 Question Id : 80089419440 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following adds a plain color to the background of a web page?

Options :

1. ✖ <body color="#FF0000">

2. ✖ <body color="3,454">

3. ✔ <body bgcolor="#FF0000">

4. ✖ <body bgcolor="36,24,35">

Question Number : 196 Question Id : 80089419441 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

The following HTML attribute is used to apply inline CSS to the current element.

Options :

1. ✖ css

2. ✖ title

3. ✔ style

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4. ✖ class

Question Number : 197 Question Id : 80089419442 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical Correct Marks : 1 Wrong Marks : 0

Which of the following control loop statement is not provided by Javascript?

Options :

1. ✖ for

2. ✔ for..at

3. ✖ for..in

4. ✖ for..of

Question Number : 198 Question Id : 80089419443 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

The array_pop() function can be used to _____

Options :

1. ✔ Remove the last element of an array

2. ✖ Remove the first element of an array

3. ✖ Remove all elements of an array

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4. ✖ Remove the middle element of an array

Question Number : 199 Question Id : 80089419444 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

Which of the following is invalid open modes for the fopen() function in PHP?

Options :

1. ✖ r+

2. ✖ a+

3. ✖ w+

4. ✔ u+

Question Number : 200 Question Id : 80089419445 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Option Orientation : Vertical

Correct Marks : 1 Wrong Marks : 0

PHP stands for _____.

Options :

1. ✖ Preprocessor Hyper Programming

2. ✖ Hypertext Programming

3. ✔ Hypertext Preprocessor

4. ✖

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Pre Hypertext Processing

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