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 06th May 2024 Shift1
Subject Name :	Computer Science and Engineering
Creation Date :	2024-05-06 19:15:11
Duration :	180
Total Marks :	200
Display Marks:	No
Share Answer Key With Delivery Engine :	Yes
Actual Answer Key :	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No

Help Button :	No
Show Reports :	No
Show Progress Bar :	No

COMPUTER SCIENCE AND ENGINEERING

Group Number :	1
Group Id :	7614467
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	200
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Mathematics

Section Id :	76144623
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	50
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0

Sub-Section Number : 1

Sub-Section Id : 76144637

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 1 Question Id : 7614461211 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $A=\begin{pmatrix} k & 1 \\ 1 & k \end{pmatrix}$ and $\left|A^3\right|=27$,then $k=$

Options :

7614464801. ✖ ± 1

7614464802. ✔ ± 2

7614464803. ✖ ± 4

7614464804. ✖ ± 5

Question Number : 2 Question Id : 7614461212 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $A=\begin{pmatrix} 1 & -1 \\ 2 & 1 \end{pmatrix}$ satisfies $aA^2+bA+cI=0$,then $b+2c=$

Options :

7614464805. ✔ 4

7614464806. ✖ 2

7614464807. ✖ -4

7614464808. ✖ 3

Question Number : 3 Question Id : 7614461213 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let (x, y, z) be the solution of the system of equations $x+3y+z=3$, $x+4y+2z=3, -x-2y+3z=-6$ .Then $x^2+y^2+z^2=$

Options :

7614464809. ✖ 12

7614464810. ✖ 9

7614464811. ✖ 6

7614464812. ✔ 3

Question Number : 4 Question Id : 7614461214 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $A=\begin{pmatrix}2 & x+9\\ 1 & 2x\end{pmatrix}$ is invertible,then $x\neq$

Options :

7614464813. ✖ 4

7614464814. ✖ 1

7614464815. ✔ 3

7614464816. ✖ 5

Question Number : 5 Question Id : 7614461215 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The value of x satisfying $3^{\log_5(x-5)}=\log_5(125)$ is

Options :

7614464817. ✔ 10

7614464818. ✖ 5

7614464819. ✖ 9

7614464820. ✖ 3

Question Number : 6 Question Id : 7614461216 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $\frac{4x^2+1}{x^3-1}=\frac{A}{x-1}+\frac{Bx+C}{x^2+x+1}$, then $A-B+C=$

Options :

7614464821. ✖ -3

7614464822. ✔ 0

7614464823. ✖ 2

7614464824. ✖ 1

Question Number : 7 Question Id : 7614461217 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The diameter of the circle $(x-1)^2+(y+3)^2=3$ is

Options :

7614464825. ✖ $\sqrt{3}$

7614464826. ✖ $4\sqrt{3}$

7614464827. ✔ $2\sqrt{3}$

7614464828. ✖ 3

Question Number : 8 Question Id : 7614461218 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the circle $x^2 + y^2 - 3x - 2y + c = 0$ passes through origin, then $c =$

Options :

7614464829. ✖ -1

7614464830. ✖ 1

7614464831. ✔ 0

7614464832. ✖ ∞

Question Number : 9 Question Id : 7614461219 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The latus rectum of parabola $x^2 = 4y$ is

Options :

7614464833. ✔ 4

7614464834. ✖ 8

7614464835. ✖ 12

7614464836. ✖ 2

Question Number : 10 Question Id : 7614461220 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The centre of the circle $45x^2+45y^2-60x+36y+19=0$ is

Options :

7614464837. ✖ $(0,0)$

7614464838. ✖ $(60,36)$

7614464839. ✖ $(-60,36)$

7614464840. ✔ $(\frac{2}{3},-\frac{2}{5})$

Question Number : 11 Question Id : 7614461221 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Homogeneous second degree equation $a x^2 + 2hxy + by^2 = 0$ represents two real and distinct lines through origin if

Options :

7614464841. ✔ $h^2 > ab$

7614464842. ✖ $h^2 = ab$

7614464843. ✖ $h^2 < ab$

7614464844. ✖ $h^2 = a + b$

Question Number : 12 Question Id : 7614461222 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The equation of the circle with extremities (1,3) and (5, 7) of the diameter is

Options :

7614464845. ✖ $x^2 + y^2 + 6x + 10y + 26 = 0$

7614464846. ✔ $x^2 + y^2 - 6x - 10y + 26 = 0$

7614464847. ✖ $x^2 + y^2 - 6x + 10y + 26 = 0$

7614464848. ✖ $x^2 + y^2 - 6x - 10y - 26 = 0$

Question Number : 13 Question Id : 7614461223 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the line passing through the points (a,6a) and (5,6) is perpendicular to the line $3x+4y+5 = 0$, then $7a =$

Options :

7614464849. ✖ -5

7614464850. ✖ -3

7614464851. ✔ -1

7614464852. ✖ -2

Question Number : 14 Question Id : 7614461224 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If (0, k), (1,3) and (82,30) are collinear ,then k =

Options :

7614464853. ✔ $\frac{8}{3}$

7614464854. ✖ $\frac{9}{4}$

7614464855. ✖ $\frac{10}{7}$

7614464856. ✖ $\frac{11}{6}$

Question Number : 15 Question Id : 7614461225 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the two parallel sides of a square are $2x+y+7 = 0, 2x+y+5=0$, then the area of that square is (in square units is)

Options :

7614464857. ✖ $\frac{3}{5}$

7614464858. ✔ $\frac{4}{5}$

7614464859. ✖ $\frac{6}{5}$

7614464860. ✖ $\frac{7}{5}$

Question Number : 16 Question Id : 7614461226 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The point at two circles $x^2+y^2-4x-2y-4=0, x^2+y^2-12x-8y-12=0$ touches is

Options :

7614464861. ✔ $\left(\frac{-2}{5},\frac{-4}{5}\right)$

7614464862. ✖ $\left(\frac{2}{5},\frac{4}{5}\right)$

7614464863. ✖ $\left(\frac{2}{5},\frac{-4}{5}\right)$

7614464864. ✖ $\left(\frac{-2}{5},\frac{4}{5}\right)$

Question Number : 17 Question Id : 7614461227 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $x+y=k$ is a normal to the parabola $y^2=12x$,then k =

Options :

7614464865. ✖ 5

7614464866. ✔ 9

7614464867. ✖ 7

7614464868. ✖ 3

Question Number : 18 Question Id : 7614461228 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The set of all points where the function $f(x) = x|x|$ is differentiable is

Options :

7614464869. ✖ $(0, \infty)$

7614464870. ✔ $(-\infty, \infty)$

7614464871. ✖ $(-\infty, 0) \cup (0, \infty)$

7614464872. ✖ $(-\infty, 0)$

Question Number : 19 Question Id : 7614461229 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\lim_{x \to 1} \frac{1 + x + x^2 + \ldots + x^{n-1} - n}{x - 1} =$$

Options :

7614464873. ✖ $n^2 + n$

7614464874. ✖ $\frac{n^2+n}{2}$

7614464875. ✔ $\frac{n^2-n}{2}$

7614464876. ✖ n^2-n

Question Number : 20 Question Id : 7614461230 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $x=2\cos t, y=2\sin t$,then $\frac{d^2y}{dx^2}$ at $t=\frac{\pi}{4}$ is

Options :

7614464877. ✖ $\frac{1}{\sqrt{2}}$

7614464878. ✔ $-\sqrt{2}$

7614464879. ✖ $\sqrt{3}$

7614464880. ✖ $-\frac{1}{\sqrt{3}}$

Question Number : 21 Question Id : 7614461231 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The equation of the tangent to the curve $y = x^3 - 3x + 2$ at the point $(2, 4)$ is

Options :

7614464881. ✔ $9x - y - 14 = 0$

7614464882. ✖ $9x + y - 14 = 0$

7614464883. ✖ $9x - y + 14 = 0$

7614464884. ✖ $9x + y = 0$

Question Number : 22 Question Id : 7614461232 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $y = a\log x + bx^2 + x$ has its extreme values at $x = -1$ and $x = 2$, then the values of a and b are respectively are

Options :

7614464885. ✖ $-2, 2$

7614464886. ✖ $-4, 4$

7614464887. ✖

$-\frac{1}{3}, 4$

7614464888. ✔ $-\frac{1}{2}, 2$

Question Number : 23 Question Id : 7614461233 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If the curves $y^2 = 2x$ and $2xy = k$ cut at right angle,then $k^2 =$

Options :

7614464889. ✖ 4

7614464890. ✔ 8

7614464891. ✖ 16

7614464892. ✖ 9

Question Number : 24 Question Id : 7614461234 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $x^y y^x = 1$,then $\frac{dy}{dx} =$

Options :

7614464893. ✖ $-\frac{y}{x}\left(\frac{x+y\log x}{y+x\log y}\right)$

7614464894. ✖ $\frac{y}{x}\left(\frac{x-\log x}{y+\log y}\right)$

7614464895. ✖ $\frac{y}{x}\left(\frac{y-x\log y}{x+y\log x}\right)$

7614464896. ✔ $-\frac{y}{x}\left(\frac{y+x\log y}{x+y\log x}\right)$

Question Number : 25 Question Id : 7614461235 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $u=\tan^{-1}\left(\frac{x^3+y^3}{x-y}\right), x\neq y$ and if $x\frac{\partial u}{\partial x}+y\frac{\partial u}{\partial y}-\sin ku=0$,then $k=$

Options :

7614464897. ✖ 3

7614464898. ✖ 4

7614464899. ✔ 2

7614464900. ✖ 5

Question Number : 26 Question Id : 7614461236 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The slope of the tangent to the curve xy=1 at (1,1) is

Options :

7614464901. ✖ -2

7614464902. ✔ -1

7614464903. ✖ 1

7614464904. ✖ 2

Question Number : 27 Question Id : 7614461237 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The function $f(x) = xe^{-x}$ $(x \in R)$ attains a maximum value at $x =$

Options :

7614464905. ✖ 2

7614464906. ✖ 1/e

7614464907. ✔ 1

7614464908. ✖ 3

Question Number : 28 Question Id : 7614461238 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The integral value of $\int \frac{Cos2x}{sin^2x\,Cos^2x}dx =$

Options :

7614464909. ✖ $Cosec^2x - Sec^2x + c$

7614464910. ✖ $Cotx + Tanx + c$

7614464911. ✔ $-Cotx - tanx + c$

7614464912. ✖ $Cosecx - Secx + c$

Question Number : 29 Question Id : 7614461239 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$\int e^{xCosecx}\,Cosecx(1 - x\,Cotx)dx =$

Options :

7614464913. ✖ $e^{xCotx} + c$

7614464914. ✔ $e^{xCosecx} + c$

7614464915. ✖ $e^{-xCotx} + c$

7614464916. ✖ $e^{-xCos\ ecx} + c$

Question Number : 30 Question Id : 7614461240 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The integral value of $\int_0^{\pi} x\ Sinx\ Cos^4x\ dx$ is

Options :

7614464917. ✖ $\frac{\pi}{10}$

7614464918. ✔ $\frac{\pi}{5}$

7614464919. ✖ $-\frac{\pi}{5}$

7614464920. ✖ $-\frac{\pi}{10}$

Question Number : 31 Question Id : 7614461241 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The area enclosed between the curves $y^2 = x$ and $y = |x|$ is

Options :

7614464921. ✖ $1/3$

7614464922. ✖ 1

7614464923. ✖ $2/3$

7614464924. ✔ $1/6$

Question Number : 32 Question Id : 7614461242 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The differential equation of the family of curves $xy = c_1e^x + c_2e^{-x}$ is

Options :

7614464925. ✖ $\frac{d^2y}{dx^2} - 2\frac{dy}{dx} - y = 0$

7614464926. ✔ $x\frac{d^2y}{dx^2} + 2\frac{dy}{dx} - xy = 0$

7614464927. ✖ $x\frac{d^2y}{dx^2} - 2\frac{dy}{dx} - y = 0$

7614464928. ✖ $x^2\frac{d^2y}{dx^2}+2\frac{dy}{dx}-y=0$

Question Number : 33 Question Id : 7614461243 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $\frac{dy}{dx}-x\tan(y-x)=1$ is

Options :

7614464929. ✔ $\sin(y-x)=ce^{\frac{x^2}{2}}$

7614464930. ✖ $\cos(y-x)=ce^{\frac{-x^2}{2}}$

7614464931. ✖ $\sin(y+x)=ce^{\frac{-x^2}{2}}$

7614464932. ✖ $\tan(y-x)=ce^{\frac{x^2}{2}}$

Question Number : 34 Question Id : 7614461244 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $xy\frac{dy}{dx}=\frac{1+y^2}{1+x^2}$ is

Options :

7614464933. ✖ $(1+x)(1+y)=cx^2y^2$

7614464934. ✔ $(1+x^2)(1+y^2)=cx^2$

7614464935. ✖ $(1+x^2)(1+y^2)=cy$

7614464936. ✖ $(1+x^2)(1+y^2)=cxy$

Question Number : 35 Question Id : 7614461245 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $\frac{dy}{dx}-\frac{2}{x}y=2x^3+x$ is

Options :

7614464937. ✔ $y=x^4+x^2\log x+cx^2$

7614464938. ✖ $y=x^3+x^2\log x+cx^2$

7614464939. ✖ $y=x^3+x\log x+cx^2$

7614464940. ✖ $y=x^2+x\log x+cx^3$

Question Number : 36 Question Id : 7614461246 Question Type : MCQ Option Shuffling : Yes

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

Correct Marks : 1 Wrong Marks : 0

The general solution of the differential equation $\sec^2 y\frac{dy}{dx}+x\tan y=x^3$ is

Options :

7614464941. ✖ $\sin y=x^2+2+ce^{\frac{-x^2}{2}}$

7614464942. ✖ $\cos y=2x^2-1+ce^{\frac{-x^2}{2}}$

7614464943. ✖ $\cot y=x^2-2+ce^{\frac{-x^2}{2}}$

7614464944. ✔ $\tan y=x^2-2+ce^{\frac{-x^2}{2}}$

Question Number : 37 Question Id : 7614461247 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The particular integral of the differential equation $\frac{d^2y}{dx^2}+16y=e^{-3x}+\cos 4x$ is

Options :

7614464945. ✖ $\frac{1}{7}e^{-3x}+\frac{x}{8}\cos 4x$

7614464946. ✖ $\frac{1}{23}e^{-3x}+\frac{x}{8}\cos 4x$

7614464947. ✔ $\frac{1}{25}e^{-3x}+\frac{x}{8}\sin 4x$

7614464948. ✖ $\frac{1}{36}e^{-3x}+\frac{x}{9}\sin 4x$

Question Number : 38 Question Id : 7614461248 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A particular integral of the differential equation $\frac{d^2y}{dx^2}+\frac{dy}{dx}+y=x^2$ is

Options :

7614464949. ✖ x^2+4x

7614464950. ✖ $2x^2-x$

7614464951. ✖ x^2-8x

7614464952. ✔ x^2-2x

Question Number : 39 Question Id : 7614461249 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The solution of the differential equation $\frac{d^2y}{dx^2}-2\frac{dy}{dx}-15y=0$ subject to the conditions $y'(0)=0, y''(0)=2$ is

Options :

7614464953. ✖ $y=\frac{1}{20}e^{3x}+\frac{1}{12}e^{5x}$

7614464954. ✔ $y=\frac{1}{20}e^{5x}+\frac{1}{12}e^{-3x}$

7614464955. ✖ $y=\frac{1}{12}e^{5x}+\frac{1}{20}e^{-3x}$

7614464956. ✖ $y=\frac{1}{20}e^{-5x}+\frac{1}{12}e^{-3x}$

Question Number : 40 Question Id : 7614461250 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$L\left\{\int_0^t e^{-u}\sin u\,du\right\}=$$

Options :

7614464957. ✖ $\frac{1}{s^2+2s+2}$

7614464958. ✖

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

7614464959. ✔ $\frac{1}{s\left(s^2+2s+2\right)}$

7614464960. ✖ $\frac{1}{s\left(s^2+2\right)}$

Question Number : 41 Question Id : 7614461251 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $L\{f(t)\}=\log\left(\frac{s-1}{s}\right)$,then $f(1)=$

Options :

7614464961. ✔ $1-e$

7614464962. ✖ $e-1$

7614464963. ✖ e

7614464964. ✖ $e+1$

Question Number : 42 Question Id : 7614461252 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\int_0^{\infty} \frac{\sin 2t}{t} dt =$$

Options :

7614464965. ✖ π

7614464966. ✖ 0

7614464967. ✖ 2π

7614464968. ✔ $\frac{\pi}{2}$

Question Number : 43 Question Id : 7614461253 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$$\text{If } L\{t\sinh kt\} = \frac{4s}{\left(s^2-4\right)^2}, \text{then } k =$$

Options :

7614464969. ✖ 1

7614464970. ✖ 4

7614464971. ✔ 2

7614464972.

✖ $\frac{1}{2}$

Question Number : 44 Question Id : 7614461254 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let $L^{-1}\left\{\frac{e^{-s}}{s^2+4s+5}\right\}=f(t)$. If $t>1$,then $f(t)=$

Options :

7614464973. ✖ $e^{-2t}\sin t$

7614464974. ✔ $e^{-2(t-1)}\sin(t-1)$

7614464975. ✖ $e^{-2(t+1)}\sin(t+1)$

7614464976. ✖ $e^{2t}\sin t$

Question Number : 45 Question Id : 7614461255 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $L\{f(t)\}=\frac{2s-1}{(s+1)(s-2)}$, then $L\{f(4t)\}=$

Options :

7614464977. ✖ $\frac{2(s+2)}{(s-4)(s+8)}$

7614464978. ✖ $\frac{2(s-1)}{(4s+1)(4s-2)}$

7614464979. ✖ $\frac{s-2}{(s-4)(s+8)}$

7614464980. ✔ $\frac{2(s-2)}{(s+4)(s-8)}$

Question Number : 46 Question Id : 7614461256 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $Y(s)$ is the Laplace transform of the solution $y(t)$ of $y''+y=\sin 3t$, $y(0)=0, y'(0)=0$, then $Y(0)=$

Options :

7614464981. ✖ 0

7614464982. ✖ 3

7614464983. ✔ $\frac{1}{3}$

7614464984. ✖ $\frac{1}{9}$

Question Number : 47 Question Id : 7614461257 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The value of the Fourier coefficient a_n in the series expansion of $f(x) = |x|$ in $(-\pi, \pi)$ when n is odd is

Options :

7614464985. ✖ $\frac{4}{\pi n^2}$

7614464986. ✔ $\frac{-4}{\pi n^2}$

7614464987. ✖ $\frac{2}{\pi n^2}$

7614464988. ✖ 0

Question Number : 48 Question Id : 7614461258 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The value of the Fourier coefficient b_0 in the series expansion of $f(x) = |x\ Sinx|$ in $(-\pi, \pi)$ is

Options :

7614464989. ✔ 0

7614464990. ✖ -2

7614464991. ✖ 2

7614464992. ✖ -1

Question Number : 49 Question Id : 7614461259 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If $f(x) = Sinx$ is expressed as Fourier Cosine series in the interval $(0, \pi)$, then the value of a_0 is

Options :

7614464993. ✖ $\frac{2}{\pi}$

7614464994. ✖ $\frac{1}{\pi}$

7614464995. ✔ $\frac{4}{\pi}$

7614464996. ✖ $\frac{-2}{\pi}$

Question Number : 50 Question Id : 7614461260 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

$\int_0^{\pi} sin6x\ sin4x\ dx =$

Options :

7614464997. ✖ $\frac{\pi}{2}$

7614464998. ✖ π

7614464999. ✖ 1

7614465000. ✔ 0

Physics

Section Id :	76144624
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	25
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0

Sub-Section Number : 1

Sub-Section Id : 76144638

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 51 Question Id : 7614461261 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which one of the following equation is dimensionally incorrect for the expression representing displacement 'y' and amplitude 'A' of a particle executing Simple Harmonic Motion with time period 'T'?

Options :

7614465001. ✖ $y = \frac{A}{\sqrt{2}}(\text{Sin}\omega t + \text{Cos}\omega t)$

7614465002. ✖ $y = A\ \text{Sin}\omega t$

7614465003. ✔ $y = \frac{A}{T}\ \text{Sin}(\frac{t}{A})$

7614465004. ✖ $y = A\ \text{Sin}(\frac{4\pi t}{T})$

Question Number : 52 Question Id : 7614461262 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The resultant of two equal forces acting at right angles to each other is 1224 N. Then the magnitude of each force in Newtons.

Options :

7614465005. ✖ 612, 612

7614465006. ✖ 1224, 1224

7614465007. ✔ 865, 865

7614465008. ✖ 432, 432

Question Number : 53 Question Id : 7614461263 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The magnitude of three vectors $\vec{A}, \vec{B}$ & $\vec{C}$ are in order 12,5,13 units and $\vec{A} + \vec{B} = \vec{C}$, then what will be the angle between the vectors $\vec{A}$ & $\vec{B}$

Options :

7614465009. ✔ 90^0

7614465010. ✖ 60^0

7614465011. ✖ 30^0

7614465012. ✖ 45^0

Question Number : 54 Question Id : 7614461264 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A boy pulls a body of mass 50 kg resting on a flat horizontal surface. Calculate the frictional force if the coefficient of friction is 0.2

Options :

7614465013. ✔ $98.1\ kg.m.s^{-2}$

7614465014. ✖ 15 kg

7614465015. ✖ $98.1 \times 10^3\ g.cm.s^{-2}$

7614465016. ✖ 1500 g

Question Number : 55 Question Id : 7614461265 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If a projectile is thrown with a velocity u at an angle of θ with the horizontal, then the velocity at maximum height during the projectile motion will be:

Options :

7614465017. ✖ $2u \sin\theta$

7614465018. ✖ $u \sin\theta$

7614465019. ✖ $2u \cos\theta$

7614465020. ✔ u cosθ

Question Number : 56 Question Id : 7614461266 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A child of mass 5 kg is going round a merry-go-round that makes 1 rotation in 3.14 seconds. If the radius of the merry-go-round is 2 m then the centrifugal force on the child will be

Options :

7614465021. ✖ 10 Newton

7614465022. ✖ 20 Newton

7614465023. ✖ 30 Newton

7614465024. ✔ 40 Newton

Question Number : 57 Question Id : 7614461267 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A metal plate of area 100 cm^2 is placed on the surface of a liquid and a force of $1\mu N$ is required to move the plate so as to produce a velocity change 1 cms^{-1} between two successive layers separated by 1 cm. The coefficient of viscosity of the liquid is

Options :

7614465025. ✔ $10^{-4}\ Pa\ s$

7614465026. ✖ $10^{-3}\ Pa\ s$

7614465027. ✖ $10^{-1}\ Pa\ s$

7614465028. ✖ $10\ Pa\ s$

Question Number : 58 Question Id : 7614461268 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Water rises to a height 'h' in a capillary tube of radius 'r' when immersed in water. The mass of the water in the capillary tube is 'm'. The mass of water that will rise in another capillary tube of radius $\frac{r}{2}$ when immersed in water is

Options :

7614465029. ✖ m

7614465030. ✖ 2m

7614465031. ✔ $\frac{m}{2}$

7614465032. ✖ 4m

Question Number : 59 Question Id : 7614461269 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The continuity equation for compressible fluid is (the quantities carry their usual meaning)

Options :

7614465033. ✖ $\rho_2 A_1 v_1 = \rho_1 A_2 v_2$

7614465034. ✖ $A_1 v_1 = A_2 v_2$

7614465035. ✖ $\rho_1 v_1 = \rho_2 v_2$

7614465036. ✔ $\rho_1 A_1 v_1 = \rho_2 A_2 v_2$

Question Number : 60 Question Id : 7614461270 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A block of mass 'm' is moving on frictionless horizontal surface with velocity 5m/sec, compresses an ideal spring by 2m and comes to rest. The ratio of mass 'm' of the block to spring constant 'k' is.

Options :

7614465037. ✖ 25: 4

7614465038. ✔ 4 : 25

7614465039. ✖ 1: 25

7614465040. ✖ 4 : 1

Question Number : 61 Question Id : 7614461271 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Match the following:

a) Adiabatic Process	i) no volume change takes place.
b) Isochoric Process	ii) no pressure change takes place.
c) Isobaric Process	iii) no temperature change takes place.
d) Isothermal Process	iv) no heat transfer takes place.

Options :

7614465041. ✖ a-iv, b-iii, c-ii, d-i

7614465042. ✖ a-i, b-iv, c-ii, d-iii

7614465043. ✔ a-iv, b-i, c-ii, d-iii

7614465044. ✖ a-i, b-ii, c-iii, d-iv

Question Number : 62 Question Id : 7614461272 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

First law of thermodynamics represents conservation of

Options :

7614465045. ✖ Pressure

7614465046. ✖ Momentum

7614465047. ✖ Entropy

7614465048. ✔ Energy

Question Number : 63 Question Id : 7614461273 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The displacement of a particle executing Simple Harmonic Motion is given by $x = a\,Cos\frac{\pi t}{2}$ where 'x' and 'a' are in metre. The distance covered by it in the time interval between t = 0 sec to t = 4 sec in metre is

Options :

7614465049. ✖ 0

7614465050. ✖ 2a

7614465051. ✔ 4a

7614465052. ✖ 3a

Question Number : 64 Question Id : 7614461274 Question Type : MCQ Option Shuffling : Yes

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

Correct Marks : 1 Wrong Marks : 0

A simple pendulum 80 cm long oscillates with amplitude of 0.02 m. The acceleration at the ends of its path is (take g = 10 ms^{-2})

Options :

7614465053. ✖ 0 ms^{-2}

7614465054. ✔ 0.25 ms^{-2}

7614465055. ✖ 2.5 ms^{-2}

7614465056. ✖ 10 ms^{-2}

Question Number : 65 Question Id : 7614461275 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A particle undergoing Simple Harmonic Motion passes through the mean position with a velocity of 2 ms^{-1}. The velocity of the particle at the point where its displacement is half the amplitude is

Options :

7614465057. ✖ $2\sqrt{3}\,ms^{-1}$

7614465058. ✖ $4\sqrt{3}\,ms^{-1}$

7614465059. ✖ $0\,ms^{-1}$

7614465060. ✔ $\sqrt{3}\ ms^{-1}$

Question Number : 66 Question Id : 7614461276 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A boy standing between two parallel walls fires a gun. He hears the first echo after 4 sec and next after 6 sec. The distance between the two walls is (take velocity of sound in air as 340 m/s)

Options :

7614465061. ✖ 680 m

7614465062. ✖ 1020 m

7614465063. ✔ 1700 m

7614465064. ✖ 340 m

Question Number : 67 Question Id : 7614461277 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a good acoustic hall the distribution of sound should be

Options :

7614465065. ✖ Gradually increasing

7614465066. ✖ Exponentially increasing

7614465067. ✖ Randomly change

7614465068. ✔ Uniform

Question Number : 68 Question Id : 7614461278 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Two magnetic poles placed 5cm apart in air attract each other with a force of 100 dyne. How far from each other should they be placed to get the force of attraction 25 dyne?

Options :

7614465069. ✔ 10 cm

7614465070. ✖ 4 cm

7614465071. ✖ 2 cm

7614465072. ✖ 6 cm

Question Number : 69 Question Id : 7614461279 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a Wheatstone bridge, the four arms have each a resistance of 50 ohm. The galvanometer current is:

Options :

7614465073. ✖ 0.05 A

7614465074. ✖ 0.5 A

7614465075. ✔ 0 A

7614465076. ✖ 5 A

Question Number : 70 Question Id : 7614461280 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In a transformer, the number of turns in secondary and primary coils are 50 and 200 respectively. If 4 A of current is flowing through the primary, the current flowing through the secondary coil is

Options :

7614465077. ✔ 1 A

7614465078. ✖ 2 A

7614465079. ✖ 3 A

7614465080. ✖ 4 A

Question Number : 71 Question Id : 7614461281 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Electrons are ejected when a photosensitive material is illuminated by violet light but not by blue light. Would electrons come out from the same material when it is illuminated by red light?

Options :

7614465081. ✖ Yes

7614465082. ✔ No

7614465083. ✖ Yes, if intensity of incident light is increased

7614465084. ✖ Yes, if material is illuminated for a long time

Question Number : 72 Question Id : 7614461282 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Optical fibres are electrically

Options :

7614465085. ✖ Conductors

7614465086. ✖ Superconductors

7614465087. ✖ Semiconductors

7614465088. ✔ Insulators

Question Number : 73 Question Id : 7614461283 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In superconducting state the material behaves as

Options :

7614465089. ✔ Perfect diamagnetic

7614465090. ✖ Weak diamagnetic

7614465091. ✖ Perfect ferromagnetic

7614465092. ✖ Weak paramagnetic

Question Number : 74 Question Id : 7614461284 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In semiconductors at room temperature

Options :

7614465093. ✖ The conduction band is completely empty

7614465094. ✔ The valence band is partially empty and the conduction band is partially filled

The valence band is completely filled and the conduction band is partially filled

7614465095. ✖

7614465096. ✖ The valence band is completely filled

Question Number : 75 Question Id : 7614461285 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Semiconductors are doped

Options :

7614465097. ✖ To increase the resistivity

7614465098. ✔ To get the desired level of conductivity

7614465099. ✖ To reduce the conductivity

7614465100. ✖ To get the positive temperature coefficient of resistance

Chemistry

Section Id :	76144625
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	25
Number of Questions to be attempted :	25
Section Marks :	25
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	76144639
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 76 Question Id : 7614461286 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Number of neutrons present in an element with atomic number 19 and mass number 39.

Options :

7614465101. ✖ 19

7614465102. ✖ 58

7614465103. ✖ 39

7614465104. ✔ 20

Question Number : 77 Question Id : 7614461287 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The dative bond is present in

Options :

7614465105. ✖ Ammonia

7614465106. ✔ Ammonium ion

7614465107. ✖ Urea

7614465108. ✖ Nitrogen

Question Number : 78 Question Id : 7614461288 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following molecules contains coordinate covalent bond?

Options :

7614465109. ✖ NH_2^-

7614465110. ✖ N_2H_4

7614465111. ✔ H_3O^+

7614465112. ✖ H_2O_2

Question Number : 79 Question Id : 7614461289 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Concentrated hydrochloric acid contains 37% (by mass) HCl. The density of its solution is 1.18 g/mL. The molarity of HCl is

Options :

7614465113. ✔ 12.0

7614465114. ✖ 16.03

7614465115. ✖ 6.0

7614465116. ✖ 1.20

Question Number : 80 Question Id : 7614461290 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A colloidal solution can be purified by the method of

Options :

7614465117. ✖ Peptization

7614465118. ✔ Dialysis

7614465119. ✖ Mechanical Dispersion

7614465120. ✖ Oxidation

Question Number : 81 Question Id : 7614461291 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The compound that does not act as a Lewis acid.

Options :

7614465121. ✔ $BaCl_2$

7614465122. ✖ $AlCl_3$

7614465123. ✖ BF_3

7614465124. ✖ $BeCl_2$

Question Number : 82 Question Id : 7614461292 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The pH value of 0.001 M NaOH solution is

Options :

7614465125. ✖ 3

7614465126. ✖ 9

7614465127. ✖ 7

7614465128. ✔ 11

Question Number : 83 Question Id : 7614461293 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The solvent not used for green synthesis is

Options :

7614465129. ✔ Aniline

7614465130. ✖ Room temperature ionic liquids

7614465131. ✖ Bio solvents

7614465132. ✖ Supercritical fluids

Question Number : 84 Question Id : 7614461294 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of these days is celebrated in the form of World Environment Day all around the world?

Options :

7614465133. ✖ July 5th

7614465134. ✖ June 10th

7614465135. ✖ October 20th

7614465136. ✔ June 5th

Question Number : 85 Question Id : 7614461295 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Extra pure water can be obtained by using

Options :

7614465137. ✖ Lime – Soda process

7614465138. ✖ Permutit process

7614465139. ✖ Ion-exchange process

7614465140. ✔ Electrodialysis process

Question Number : 86 Question Id : 7614461296 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Sterilization of water can be done by using

Options :

7614465141. ✔ Ozone

7614465142. ✖ Oxygen

7614465143. ✖ Caustic Potash

7614465144. ✖ Hydrogen peroxide

Question Number : 87 Question Id : 7614461297 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The product formed at cathode when Pt electrodes are used in the electrolysis of Fused NaCl.

Options :

7614465145. ✖ Cl_2

7614465146. ✖ NaOH

7614465147. ✖ HCl

7614465148. ✔ Na

Question Number : 88 Question Id : 7614461298 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the electrochemical equivalent (z) of copper, when 0.3950 g of copper is deposited by a current of 0.5 amperes in 40 minutes.

Options :

7614465149. ✔ 0.0003292 g

7614465150. ✖ 0.003950 g

7614465151. ✖ 0.0001646 g

7614465152. ✖ 0.00164 g

Question Number : 89 Question Id : 7614461299 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Extraction of zinc from zinc blende is achieved by

Options :

7614465153. ✖ Electrolytic reduction

7614465154. ✔ Roasting followed by reduction with carbon

7614465155. ✖ Roasting followed by reduction with another metal

7614465156. ✖ Roasting followed by self-reduction

Question Number : 90 Question Id : 7614461300 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In blast furnace iron oxide is reduced by

Options :

7614465157. ✖ Silica

7614465158. ✔ Carbon monoxide

7614465159. ✖ Carbon

7614465160. ✖ Limestone

Question Number : 91 Question Id : 7614461301 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

During electrochemical corrosion in acidic environment

Options :

7614465161. ✖ Oxygen evolution occurs

7614465162. ✔ Hydrogen evolution takes place

7614465163. ✖ Oxygen absorption occurs

7614465164. ✖ Hydrogen absorption takes place

Question Number : 92 Question Id : 7614461302 Question Type : MCQ Option Shuffling : Yes

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

Correct Marks : 1 Wrong Marks : 0

The process of cementation of iron with zinc powder is known as

Options :

7614465165. ✔ Sheradising

7614465166. ✖ Galvanizing

7614465167. ✖ Zincing

7614465168. ✖ Tinning

Question Number : 93 Question Id : 7614461303 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Bakelite is manufactured by the reaction between

Options :

7614465169. ✖ Urea and formaldehyde

7614465170. ✖ Phthalic acid and ethylene glycol

7614465171. ✖ Ethylene glycol and formaldehyde

7614465172. ✔ Phenol and formaldehyde

Question Number : 94 Question Id : 7614461304 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is an elastomer

Options :

7614465173. ✖ Polystyrene

7614465174. ✔ Buna-S rubber

7614465175. ✖ Melamine

7614465176. ✖ Dacron

Question Number : 95 Question Id : 7614461305 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A good fuel has

Options :

7614465177. ✔ Moderate ignition temperature and high calorific value

7614465178. ✖ High ignition temperature and high calorific value

7614465179. ✖ Low ignition temperature and low calorific value

7614465180. ✖ Low ignition temperature and high calorific value

Question Number : 96 Question Id : 7614461306 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The best example of splash lubrication is

Options :

7614465181. ✖ Wick feed lubricator

7614465182. ✔ Ring lubricator

7614465183. ✖ Grease Gun

7614465184. ✖ Pump lubricator

Question Number : 97 Question Id : 7614461307 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Saturated calomel electrode standard reduction potential value in Volts is

Options :

7614465185. ✖ 0

7614465186. ✖ 0.6990

7614465187. ✖ − 0. 242

7614465188. ✔ + 0.242

Question Number : 98 Question Id : 7614461308 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

For the following cell reaction, E° for the cell is

$$Zn_{(s)} + 2Fe^{3+}_{(aq)} \rightleftharpoons 2Fe^{2+}_{(aq)} + Zn^{2+}_{(aq)}$$

(Standard Reduction potentials of Zn and Fe electrodes are – 0.76V and + 0.77V respectively)

Options :

7614465189. ✔ 1.53 V

7614465190. ✖ 0.01 V

7614465191. ✖ − 1.53 V

7614465192. ✖ 0.78 V

Question Number : 99 Question Id : 7614461309 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The gas that is responsible for Bhopal gas tragedy is

Options :

7614465193. ✔ Methyl isocyanate

7614465194. ✖ Methyl chloroformate

7614465195. ✖ Methyl isopropyl ether

7614465196. ✖ Methyl isobutyrate

Question Number : 100 Question Id : 7614461310 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following gases is largely responsible for acid – rain?

Options :

7614465197. ✖ CO and CO_2

7614465198. ✖ NO and NO_2

7614465199. ✔ SO_2 and NO_2

7614465200. ✖ N_2 and O_2

COMPUTER SCIENCE AND ENGINEERING

Section Id : 76144626

Section Number : 4

Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	100
Number of Questions to be attempted :	100
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	76144640
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 101 Question Id : 7614461311 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The decimal equivalent of octal number $(128.24)_8$ is ____

Options :

7614465201. ✖ 80.3125

7614465202. ✔ 88.3125

7614465203. ✖ 40.15625

7614465204. ✖ 88.20

Question Number : 102 Question Id : 7614461312 Question Type : MCQ Option Shuffling : Yes

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

Correct Marks : 1 Wrong Marks : 0

The binary equivalent of a BCD number 00101001.01110101 is

Options :

7614465205. ✔ 11101.11

7614465206. ✖ 11010.11

7614465207. ✖ 11101.10100

7614465208. ✖ 11010.10100

Question Number : 103 Question Id : 7614461313 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The logical gate that gives an output of logic level "1" whenever two inputs are equal is

Options :

7614465209. ✖ AND

7614465210. ✖ OR

7614465211. ✖ Ex-OR

7614465212. ✔ Ex-NOR

Question Number : 104 Question Id : 7614461314 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Convert A.B + $\bar{A}.\bar{B}$ into equivalent Product of Sums expression

Options :

7614465213. ✖ (A+B) . ($\bar{A}$ +$\bar{B}$)

7614465214. ✖ ($\bar{A}$ +$\bar{B}$). ($\bar{A}$ +B)

7614465215. ✔ (A +$\bar{B}$) .($\bar{A}$ +B)

7614465216. ✖ (A+B) . (A+$\bar{B}$)

Question Number : 105 Question Id : 7614461315 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A digital circuit whose output depends not only on the present input but also on sequence of past inputs is a

Options :

7614465217. ✖ Decoder

7614465218. ✖ Multiplexer

7614465219. ✖ Sequential Circuit

7614465220. ✔ Combinational Circuit

Question Number : 106 Question Id : 7614461316 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The number of distinct Boolean expressions for 4 variables is

Options :

7614465221. ✖ 16

7614465222. ✖ 256

7614465223. ✖ 1024

7614465224. ✔ 65536

Question Number : 107 Question Id : 7614461317 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

An SR flip flop is converted to _____ flip flop by inserting an inverter between S&R by assigning a single input

Options :

7614465225. ✖ Master Slave

7614465226. ✖ T

7614465227. ✖ JK

7614465228. ✔ D

Question Number : 108 Question Id : 7614461318 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A Combinational circuit that converts the binary information from 2^n inputs to n outputs is

Options :

7614465229. ✖ Decoder

7614465230. ✖ Multiplexer

7614465231. ✖ Half Adder

7614465232. ✔ Encoder

Question Number : 109 Question Id : 7614461319 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The address lines required 16 kilobyte memory chip is

Options :

7614465233. ✖ 4

7614465234. ✖ 16

7614465235. ✔ 14

7614465236. ✖ 13

Question Number : 110 Question Id : 7614461320 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If A, B, C, D, E, F represents variables of a Boolean expression and m_i is the i^{th} min term, then the value of m_{47} is

Options :

7614465237. ✔ $A.\bar{B}.C.D.E.F$

7614465238. ✖ $A+\bar{B}+C+D+E+F$

7614465239. ✖ $\bar{A}.B.\bar{C}.\bar{D}.\bar{E}.\bar{F}$

7614465240. ✖ $\bar{A} + B + \bar{C} + \bar{D} + \bar{E} + \bar{F}$

Question Number : 111 Question Id : 7614461321 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A RAM chip has a capacity of 1024 words of 16 bits each (1K × 16). The number of 2 × 4 decoders with enable line needed to construct a 16K × 16RAM from 1K × 16 RAM is

Options :

7614465241. ✖ 4

7614465242. ✔ 5

7614465243. ✖ 3

7614465244. ✖ 6

Question Number : 112 Question Id : 7614461322 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The amount of ROM needed to implement a 4 bit multiplier is

Options :

7614465245. ✔ 2K bits

7614465246. ✖ 4K bits

7614465247. ✖ 8K bits

7614465248. ✖ 1K bits

Question Number : 113 Question Id : 7614461323 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A computer has 128 KB 8-way set associative write back data cache with block size of 32 bytes. The processor sends 32 bit addresses to the cache controller. The number of bits in the tag field of an address is:

Options :

7614465249. ✖ 16

7614465250. ✖ 20

7614465251. ✔ 18

7614465252. ✖ 14

Question Number : 114 Question Id : 7614461324 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider a hypothetical processor with an instruction of type LW R1, 20(R2). This operation reads from a memory location and writes it into register R1. The effective address of the memory location of the operand is obtained by addition of constant 20 to address contained in register R2. Which of the following best reflects the addressing mode of this instruction?

Options :

7614465253. ✖ Register Addressing

7614465254. ✖ Immediate Addressing

7614465255. ✔ Base Indexed Addressing

7614465256. ✖ Register Indirect Scaled Addressing

Question Number : 115 Question Id : 7614461325 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the expression (a-(b+f))+(e-(c+d)) where a, b, c, d, e are data items stored in memory locations. Consider a machine with load-store architecture in which memory can be accessed only through load and store instructions. The binary operations in this expression can be evaluated by the machine only when the operands are in registers. The instructions produce the result only in a register. If no immediate results can be stored in memory, what is the minimum number of registers needed to evaluate this expression.

Options :

7614465257. ✖ 5

7614465258. ✖ 2

7614465259. ✖ 8

7614465260. ✔ 3

Question Number : 116 Question Id : 7614461326 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

According to Flynn's classification, which architecture is of only theoretical interest and no practical system has been developed based on it?

Options :

7614465261. ✖ SSID

7614465262. ✖ SIMD

7614465263. ✔ MISD

7614465264. ✖ MIMD

Question Number : 117 Question Id : 7614461327 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following data transfer mode takes relatively more time

Options :

7614465265. ✖ DMA

7614465266. ✖ Interrupt initiated I / O

7614465267. ✔ Programmed I / O

7614465268. ✖ DMA and Interrupt initiated I / O

Question Number : 118 Question Id : 7614461328 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A processor has 100 different instructions and 32 general purpose registers. A 32-bit instruction word has an op-code, two register operands and an immediate operand. The number of bits available for immediate operand is

Options :

7614465269. ✔ 15

7614465270. ✖ 14

7614465271. ✖ 16

7614465272. ✖ 17

Question Number : 119 Question Id : 7614461329 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which speed up could be achieved according to Amdahl's law for infinite number of processes, if 85% of the program is parallel.

Options :

7614465273. ✔ 20/3

7614465274. ✖ 10/3

7614465275. ✖ 3/10

7614465276. ✖ 3/20

Question Number : 120 Question Id : 7614461330 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is false statement

Options :

7614465277. ✔ In synchronous serial transfer of data the two units operate with different clock

7614465278. ✖ The isolated I/O method isolates memory and I/O addresses so that memory address range is not affected by interface address assignment

7614465279. ✖ In memory-mapped I/O the CPU can manipulate I/O data residing in interface registers that are not used to manipulate memory words

7614465280. ✖ In synchronous serial transfer of data the two units operate with the same clock

Question Number : 121 Question Id : 7614461331 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is NOT a unary operator in C language.

Options :

7614465281. ✖ ++

7614465282. ✖ --

7614465283. ✖ sizeof

7614465284. ✔ /

Question Number : 122 Question Id : 7614461332 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The result of the expression (10/3) * 3 +5 % 3

Options :

7614465285. ✔ 11

7614465286. ✖ 10

7614465287. ✖ 8

7614465288. ✖ 1

Question Number : 123 Question Id : 7614461333 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The 'union' holds

Options :

7614465289. ✔ One object at a time

7614465290. ✖ Multiple objects at a time

7614465291. ✖ Static values

7614465292. ✖ Similar to Structure

Question Number : 124 Question Id : 7614461334 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

This program prints 31, what is the statement to be written at the '**MISSING PART**' part of the program.

```
#include<stdio.h>
int main()
{
   int a=15,b=16,c;
    int *p1,*p2,*p3,***p4;
   p1=&a;
   p2=&b;
   p3=&c;
   MISSING PART
   printf("%d",c);
      return 0;
}
```

Options :

7614465293. ✖ *p3=p1+p2;

7614465294. ✔ *p3=*p1+*p2;

7614465295. ✖ p3=*p1+*p2;

7614465296. ✖ p3=p1+p2;

Question Number : 125 Question Id : 7614461335 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the output of the following program

```
#include<stdio.h>
int main()
{
 int a=100;
   if(a>10)
       printf("NIT Delhi ");
   else
       printf("NIT Warangal");
   if(a>20)
       printf("NIT Trichy ");
   else
      printf("IIT Hyderabad ");
 return 0;
}
```

Options :

7614465297. ✔ NIT Delhi NIT Trichy

7614465298. ✖ IIT Hyderabad

7614465299. ✖ NIT Delhi

7614465300. ✖ NIT Trichy IIT Hyderabad

Question Number : 126 Question Id : 7614461336 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the looping is known as exit controlled loop

Options :

7614465301. ✖ for

7614465302. ✖ while

7614465303. ✔ do-while

7614465304. ✖ if

Question Number : 127 Question Id : 7614461337 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the following pseudo code:

```
Algorithm Display (n)
if n=1
   print "Data Structures"
   print "Data Structures"
   print "Data Structures"
   return
else
      print "Data Structures"
      Display(n-1)
```

If 200 is provided as input to the Dispaly() algorithm then *Data Structures* is printed _____ times.

Options :

7614465305. ✖ 199

7614465306. ✖ 200

7614465307. ✖ 201

7614465308. ✔ 202

Question Number : 128 Question Id : 7614461338 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the following statements

I. Stack is used to perform recursion.

II. If insertion and deletion operations are performed at the front of linked list then the linked list acts as a stack.

III. If T is a rooted binary tree with no right subtree of root i.e., root has only left subtree. Then Pre-order traversal of T is same as its in-order traversal.

Number of correct statements among the three statements given above is

Options :

7614465309. ✖ 0

7614465310. ✖ 1

7614465311. ✔ 2

7614465312. ✖ 3

Question Number : 129 Question Id : 7614461339 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which one of the following sorted pairs can be efficiently merged using merge sort?

Options :

7614465313. ✖ (10,20,30,40,50,60,70,80) and (16,26,36,46,56,66,76,86)

7614465314. ✖ (10,30,36,40,46,50,56,60) and (16,20,26,66,70,76,80,86)

7614465315. ✖ (10,16,20,26,30,36,40,60) and (46,50,56,66,70,76,80,86)

7614465316. ✔ (10,16,20,26,30,36,40,46) and (50,56,60,66,70,76,80,86)

Question Number : 130 Question Id : 7614461340 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let A be an array with n distinct elements arranged in decreasing order.
Which one of the following statements is FALSE?

Options :

7614465317. ✖ Merge sort sorts A in ascending order more efficiently than insertion sort

7614465318. ✖ Merge sort sorts A in ascending order more efficiently than selection sort

7614465319. ✔ Insertion sort sorts A in ascending order more efficiently than selection sort

7614465320. ✖ Merge sort sorts A in ascending order more efficiently than quick sort

Question Number : 131 Question Id : 7614461341 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let S be an empty stack. If the following operations
PUSH(S,10); PUSH(S,20);PUSH(S,30);POP(S);PUSH(S,15);PUSH(S,25)
and POP(S) are performed in sequence on S then the sum of top two
elements of S is

Options :

7614465321. ✖ 50

7614465322. ✔ 35

7614465323. ✖ 45

7614465324. ✖ 40

Question Number : 132 Question Id : 7614461342 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Let A [1..15]=(10,15,20,25,30,35,40,45,50,55,60,65,70,75,80). Which one of
the following statements is FALSE about searching in array A?

Options :

7614465325. ✖ Linear search requires three comparisons to find element 20

7614465326. ✖ Binary search requires less comparisons than linear search to find 45

7614465327. ✔ Binary search requires two comparisons to find element 15

7614465328. ✖ Binary search requires less comparisons than linear search to find 80

Question Number : 133 Question Id : 7614461343 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In C++, what does "this" pointer represent within a class member function

Options :

7614465329. ✖ It points to the base class object.

7614465330. ✖ It points to the derived class object.

7614465331. ✔ It points to the current object instance within the member function.

7614465332. ✖ It points to the static class members.

Question Number : 134 Question Id : 7614461344 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which inheritance types in C++ allow a class to inherit from more than one base class?

Options :

7614465333. ✖ Single Inheritance

7614465334. ✔ Multiple Inheritance

7614465335. ✖ Multilevel Inheritance

7614465336. ✖ Hierarchical Inheritance

Question Number : 135 Question Id : 7614461345 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In C++, what is the primary purpose of a destructor within a class?

Options :

7614465337. ✖ To initialize an object.

7614465338. ✖ To allocate memory for an object.

7614465339. ✔ To perform cleanup tasks before an object is destroyed.

7614465340. ✖ To overload operators for a class.

Question Number : 136 Question Id : 7614461346 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The concept of function overloading in C++ is that

Options :

7614465341. ✖ It involves redefining the behavior of built-in functions.

7614465342. ✔ It allows providing multiple definitions of a function with the same name but different parameters.

7614465343. ✖ It restricts access to certain member functions.

7614465344. ✖ It facilitates access to private members of a class

Question Number : 137 Question Id : 7614461347 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What does the friend keyword indicate in C++?

Options :

7614465345. ✔ It indicates a function or class that can access private and protected members of another class.

7614465346. ✖ It indicates a function or class that cannot access private and protected members of another class.

7614465347. ✖ It indicates a virtual function.

7614465348. ✖ It indicates an inline function.

Question Number : 138 Question Id : 7614461348 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What role do virtual functions play in C++?

Options :

7614465349. ✖ They provide multiple definitions of a function with the same name but different parameters.

7614465350. ✖ They prevent the inheritance of a class.

7614465351. ✔ They enable runtime polymorphism and dynamic binding.

7614465352. ✖ They access static members of a class

Question Number : 139 Question Id : 7614461349 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the purpose of inline functions in C++.

Options :

7614465353. ✔ They reduce code duplication and improve performance by inserting function code directly at the call site.

7614465354. ✖ They provide multiple definitions of a function with the same name but different parameters.

7614465355. ✖ They restrict access to certain member functions.

7614465356. ✖ They enable runtime polymorphism.

Question Number : 140 Question Id : 7614461350 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How do templates contribute to C++ programming?

Options :

7614465357. ✔ They provide a mechanism for code reuse by defining generic functions or classes that can work with any data type.

7614465358. ✖ They provide multiple definitions of a function with the same name but different parameters.

7614465359. ✖ They restrict access to certain member functions.

7614465360. ✖ They enable runtime polymorphism.

Question Number : 141 Question Id : 7614461351 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which inheritance type involves creating a class hierarchy where each derived class inherits from only one base class?

Options :

7614465361. ✔ Single Inheritance

7614465362. ✖ Multiple Inheritance

7614465363. ✖ Multilevel Inheritance

7614465364. ✖ Hierarchical Inheritance

Question Number : 142 Question Id : 7614461352 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What purpose do class templates serve in C++?

Options :

7614465365. ✔ They provide a mechanism for code reuse by defining generic classes that can work with any data type.

7614465366. ✖ They provide multiple definitions of a function with the same name but different parameters.

7614465367. ✖ They enable runtime polymorphism.

7614465368. ✖ They restrict access to certain member functions.

Question Number : 143 Question Id : 7614461353 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

One of the following statement is false regarding data dictionary

Options :

7614465369. ✖ Data dictionary is a file that contains meta data

7614465370. ✖ Data dictionary is normally maintained by the database administrator

7614465371. ✖ The characteristics of the data is stored in data dictionary

7614465372. ✔ Data elements in the database can be modified by changing the data dictionary

Question Number : 144 Question Id : 7614461354 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider two tables: A & B, the mapping cardinality from A to B is "1-to- many".
In which table should the corresponding foreign key be placed?

Options :

7614465373. ✖ Foreign key is needed only in table-A

7614465374. ✔ Foreign key is needed only in table-B

7614465375. ✖ Foreign key is needed in both the tables

7614465376. ✖ Foreign key is not needed in any table.

Question Number : 145 Question Id : 7614461355 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

It two relations R & S are joined, then the non-matching tuples of both R& S are ignored in

Options :

7614465377. ✖ Left outer join

7614465378. ✖ Right outer join

7614465379. ✖ Full outer join

7614465380. ✔ Inner join

Question Number : 146 Question Id : 7614461356 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The normalization of 1NF relation to 2NF involves

Options :

7614465381. ✔ Removal of partial dependencies

7614465382. ✖ Removal of full dependencies

7614465383. ✖ Removal of transitive dependencies

7614465384. ✖ Removal of multi-valued dependencies

Question Number : 147 Question Id : 7614461357 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Once a transaction commits, its results have to be preserved irrespective of subsequent failures. This refers to one of the following properties of a transaction

Options :

7614465385. ✖ Atomicity

7614465386. ✖ Consistency

7614465387. ✖ Isolation

7614465388. ✔ Durability

Question Number : 148 Question Id : 7614461358 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

For a weak entity set to be meaningful, it must be associated with another entity set called

Options :

7614465389. ✔ Identifying set

7614465390. ✖ Owner set

7614465391. ✖ Neighbor set

7614465392. ✖ Strong entity set

Question Number : 149 Question Id : 7614461359 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following constructs will undo all statements up to commit

Options :

7614465393. ✖ Commit

7614465394. ✖ Flashback

7614465395. ✖ Abort

7614465396. ✔ Rollback

Question Number : 150 Question Id : 7614461360 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The constraint that specifies the number of entities to which another entity can be associated via a relationship set in E-R model is referred as

Options :

7614465397. ✔ Mapping cardinality

7614465398. ✖ Entity integrity

7614465399. ✖ Assertion

7614465400. ✖ Domain integrity

Question Number : 151 Question Id : 7614461361 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The ability to modify scheme definition at one level without affecting schema of that definition in the next higher level's is called

Options :

7614465401. ✖ Normalization

7614465402. ✖ Atomicity

7614465403. ✖ Data Manipulation

7614465404. ✔ Data independence

Question Number : 152 Question Id : 7614461362 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The block of statements that are executed automatically whenever an event occurs is a

Options :

7614465405. ✖ Function

7614465406. ✖ Procedure

7614465407. ✖ Cursor

7614465408. ✔ Trigger

Question Number : 153 Question Id : 7614461363 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

IP Protocols transport the data in

Options :

7614465409. ✖ Frames

7614465410. ✖ Packets

7614465411. ✔ Datagrams

7614465412. ✖ Protocol Data Units (PDU)

Question Number : 154 Question Id : 7614461364 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which address is necessary for universal communications of independent physical networks?

Options :

7614465413. ✖ Physical Address

7614465414. ✖ Application Address

7614465415. ✖ Port Address

7614465416. ✔ Logical Address

Question Number : 155 Question Id : 7614461365 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Suppose, An Ethernet frame has a minimum length of 512 bits or 64 bytes and it also has a header and a trailer length of 18 bytes (6 bytes of source address, 6 bytes of destination address, 2 bytes of length or type, and 4 bytes of CRC), What is the minimum length of data required by the upper layer (Network Layer)

Options :

7614465417. ✖ 64 Bytes

7614465418. ✔ 46 Bytes

7614465419. ✖ 18 Bytes

7614465420. ✖ 24 Bytes

Question Number : 156 Question Id : 7614461366 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Define which type of address: 4A: 30:10:21: 10:1A

Options :

7614465421. ✔ Unicast

7614465422. ✖ Multicast

7614465423. ✖ Broadcast

7614465424. ✖ Anycast

Question Number : 157 Question Id : 7614461367 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Devices are connected through a central device

Options :

7614465425. ✖ Mesh Topology

7614465426. ✔ Star Topology

7614465427. ✖ Tree Topology

7614465428. ✖ Ring Topology

Question Number : 158 Question Id : 7614461368 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following connecting devices that has access to station addresses and can forward or filter a packet in a network

Options :

7614465429. ✖ Hub

7614465430. ✖ Repeater

7614465431. ✖ Switch

7614465432. ✔ Bridge

Question Number : 159 Question Id : 7614461369 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In the standard Ethernet with 10-Mbps data rate and maximum propagation time of 25.6 μs, what is the minimum size of the frame?

Options :

7614465433. ✖ 32 Bytes

7614465434. ✔ 64 Bytes

7614465435. ✖ 16 Bytes

7614465436. ✖ 128 Bytes

Question Number : 160 Question Id : 7614461370 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

An IPv4 protocol, that defines addresses has an address space. What is the address space required to accommodate the total number of addresses if a protocol uses *'b' bits* to define an address,

Options :

7614465437. ✖ 2b

7614465438. ✔ 2^b

7614465439. ✖ b/2

7614465440. ✖ b

Question Number : 161 Question Id : 7614461371 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the error in the IPv4 addresses 75.45.301.14

Options :

7614465441. ✖ There should be no leading zeroes in dotted-decimal notation

7614465442. ✖ It is not having more than 4 bytes in an IPv4 address

7614465443. ✔ It is outside of the range

7614465444. ✖ A mixture of binary notation and dotted-decimal notation is not allowed

Question Number : 162 Question Id : 7614461372 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which class the given IPv4 address: 11000001 10000011 00011011 11111111

Options :

7614465445. ✖ Class A Address

7614465446. ✖ Class B Address

7614465447. ✔ Class C Address

7614465448. ✖ Class E Address

Question Number : 163 Question Id : 7614461373 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

A Process Control Block (PCB) does not contain the following

Options :

7614465449. ✖ Code

7614465450. ✖ Stack

7614465451. ✔ Bootstrap Program

7614465452. ✖ Data

Question Number : 164 Question Id : 7614461374 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

An IPC facility provides the following two basic operations

Options :

7614465453. ✖ Write and delete message

7614465454. ✖ Delete and receive message

7614465455. ✖ Send and delete message

7614465456. ✔ Receive and send message

Question Number : 165 Question Id : 7614461375 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The Remote Method Invocation (RMI) allows

Options :

7614465457. ✖ Process to invoke memory on remote object

7614465458. ✔ Thread to invoke a method on remote object

7614465459. ✖ Thread to invoke a memory on remote object

7614465460. ✖ Process to invoke a method on remote object

Question Number : 166 Question Id : 7614461376 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Round robin scheduling algorithm in a time shared system

Options :

7614465461. ✖ Uses very large time slices & converts it into first come first serve scheduling algorithm

7614465462. ✔ Uses small time slices & converts it into first come first serve scheduling algorithm

7614465463. ✖ Uses extremely small time slices to increase the performance

7614465464. ✖ Uses very small time slices & converts it into shortest job first algorithm.

Question Number : 167 Question Id : 7614461377 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Orders are processed in the sequence they arrive if _____ rule sequences the jobs

Options :

7614465465. ✖ Earliest due date

7614465466. ✖ Slack time remaining

7614465467. ✔ First come first served

7614465468. ✖ Critical ratio

Question Number : 168 Question Id : 7614461378 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the ready state of a process?

Options :

7614465469. ✔ When the process is scheduled to run after some execution

7614465470. ✖ When the process is unable to run until some task has been completed

7614465471. ✖ When the process is using the CPU

7614465472. ✖ When the process completes its execution

Question Number : 169 Question Id : 7614461379 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In time sharing operating systems, when the time slot given to a process is completed, then the process goes from running state to

Options :

7614465473. ✖ Blocked state

7614465474. ✔ Ready state

7614465475. ✖ Suspended state

7614465476. ✖ Terminated state

Question Number : 170 Question Id : 7614461380 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

If a process is executing in its critical section, then no other processes can be executing in the critical section. This condition is called

Options :

7614465477. ✔ Mutual Exclusion

7614465478. ✖ Critical Exclusion

7614465479. ✖ Synchronous Exclusion

7614465480. ✖ Asynchronous Exclusion

Question Number : 171 Question Id : 7614461381 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Memory management technique in which the system stores and retrieves data from secondary storage for use in main memory is called

Options :

7614465481. ✖ Fragmentation

7614465482. ✔ Paging

7614465483. ✖ Mapping

7614465484. ✖ Scaling

Question Number : 172 Question Id : 7614461382 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Compaction is a technique to overcome

Options :

7614465485. ✖ Internal fragmentation

7614465486. ✔ External fragmentation

7614465487. ✖ Fatal error

7614465488. ✖ Deadlock

Question Number : 173 Question Id : 7614461383 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

One of the following is not a feature of java

Options :

7614465489. ✖ Object-oriented

7614465490. ✖ Platform independent

7614465491. ✖ Architecure neutral

7614465492. ✔ Use of pointers

Question Number : 174 Question Id : 7614461384 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Evaluate the following Java expression if a=3, b=5 and c=10
++c + b – b + c + a++

Options :

7614465493. ✔ 25

7614465494. ✖ 19

7614465495. ✖ 23

7614465496. ✖ 24

Question Number : 175 Question Id : 7614461385 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

_____ method in Java is used to specify actions that must be performed before an object is destroyed

Options :

7614465497. ✖ finalizer()

7614465498. ✖ fianlized()

7614465499. ✖ finalizing()

7614465500. ✔ finalize()

Question Number : 176 Question Id : 7614461386 Question Type : MCQ Option Shuffling : Yes

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

Correct Marks : 1 Wrong Marks : 0

In Java, a _____ class variable can reference a_____ class object

Options :

7614465501. ✖ Sub, Super

7614465502. ✔ Super, Sub

7614465503. ✖ Super, Super

7614465504. ✖ Sub, Sub

Question Number : 177 Question Id : 7614461387 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The keyword that is used to prevent overriding in Java is

Options :

7614465505. ✖ super

7614465506. ✖ abstract

7614465507. ✔ final

7614465508. ✖ sub

Question Number : 178 Question Id : 7614461388 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The exception that is used in Java if assignment to an array element is of incompatible type

Options :

7614465509. ✖ Arithmetic

7614465510. ✖ Illegal Array

7614465511. ✖ ArrayIndex Out Of Bounds

7614465512. ✔ ArrayStore

Question Number : 179 Question Id : 7614461389 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

_____ method in multithreading returns True if the thread upon which it is called is still running. Otherwise returns false

Options :

7614465513. ✔ isAlive()

7614465514. ✖ join()

7614465515. ✖ sleep()

7614465516. ✖ stop()

Question Number : 180 Question Id : 7614461390 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following statements is true about Applets?

Options :

7614465517. ✖ Applets need main() method

7614465518. ✔ Applets must run on under a java-compatible browser

7614465519. ✖ Applets will not run under a applet viewer

7614465520. ✖ Applets does not use the interface provided by the AWT or Swing

Question Number : 181 Question Id : 7614461391 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

_____ is superclass of all events

Options :

7614465521. ✖ ActionEvent

7614465522. ✖ AWTEvent

7614465523. ✔ EventObject

7614465524. ✖ AdjustmentEvent

Question Number : 182 Question Id : 7614461392 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

One of the methods is not central to the life cycle of a servlet

Options :

7614465525. ✖ init()

7614465526. ✖ service()

7614465527. ✖ destroy()

7614465528. ✔ delete()

Question Number : 183 Question Id : 7614461393 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In Python, the operator '//' is used for

Options :

7614465529. ✖ Line comments

7614465530. ✖ Block comment

7614465531. ✔ Floor division

7614465532. ✖ Ceil division

Question Number : 184 Question Id : 7614461394 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the operator is considered as bit wise XOR operator

Options :

7614465533. ✖ >>

7614465534. ✖ <<

7614465535. ✖ &

^

7614465536. ✔

Question Number : 185 Question Id : 7614461395 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In Python, which of the following is not a container data type.

Options :

7614465537. ✖ List

7614465538. ✖ Tuples

7614465539. ✔ Directories

7614465540. ✖ Dictionaries

Question Number : 186 Question Id : 7614461396 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In Python, Functions that are anonymous un-named function are known as---

Options :

7614465541. ✖ User-defined functions

7614465542. ✖ Built-in functions

7614465543. ✔ Lambda functions

7614465544. ✖ Recursion functions

Question Number : 187 Question Id : 7614461397 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following is not considered as a token in Python

Options :

7614465545. ✖ Identifiers

7614465546. ✖ Keywords

7614465547. ✖ Operators

7614465548. ✔ Comments

Question Number : 188 Question Id : 7614461398 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In Python, What is the minimum number of arguments required to draw a rectangle on canvas

Options :

7614465549. ✔ 4

7614465550. ✖ 6

7614465551. ✖ 5

7614465552. ✖ 2

Question Number : 189 Question Id : 7614461399 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In python, while using regular expression the '?' symbol is used to represent----

Options :

7614465553. ✔ Zero or one occurrences

7614465554. ✖ Starts with

7614465555. ✖ Ends with

7614465556. ✖ Zero or more occurrences

Question Number : 190 Question Id : 7614461400 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

In Python, what is the name of the function which acts as a constructor

Options :

7614465557. ✔ - - init - - ( )

7614465558. ✖ const

7614465559. ✖ construct

7614465560. ✖ constructor

Question Number : 191 Question Id : 7614461401 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following command is used to remove all rows from the table

Options :

7614465561. ✖ Kill

7614465562. ✖ Truncate

7614465563. ✖ Delete

7614465564. ✔ Drop

Question Number : 192 Question Id : 7614461402 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What is the use of 'a' mode in file handling in Python

Options :

7614465565. ✖ Read

7614465566. ✖ Write

7614465567. ✔ Append

7614465568. ✖ Alias

Question Number : 193 Question Id : 7614461403 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

```
<?php  $user = array("Web", "Programming", "Subject");
   for ($x=0; $x < count($user); $x++)
   { if ($user[$x] == "HTML") continue;
  printf ($user[$x]); printf(" "); }  ?>
```

Options :

7614465569.

✖ Web Programming

7614465570. ✖ Web Programming Subject

7614465571. ✔ Web Programming Subject HTML

7614465572. ✖ Web HTML

Question Number : 194 Question Id : 7614461404 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following attribute of the font tag is used to choose the type of font in HTML?

Options :

7614465573. ✖ FONT

7614465574. ✖ TYPE

7614465575. ✖ TEXT

7614465576. ✔ FACE

Question Number : 195 Question Id : 7614461405 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time

: N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

How many number parameters does the *mysqli()* function accept to connect to the database from the PHP?

Options :

7614465577. ✔ Four

7614465578. ✖ Three

7614465579. ✖ Two

7614465580. ✖ One

Question Number : 196 Question Id : 7614461406 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What will be the output of the following PHP code?
<?php $a = 2; $b = 2; echo ($a === $b); ?>

Options :

7614465581. ✖ 2==2

7614465582. ✔ 1

7614465583. ✖ a==b

7614465584. ✖ ERROR

Question Number : 197 Question Id : 7614461407 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following function is used to start the session in PHP?

Options :

7614465585. ✖ begin_session()

7614465586. ✔ session_start()

7614465587. ✖ session_begin()

7614465588. ✖ start_session()

Question Number : 198 Question Id : 7614461408 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The XML documents must contain one____ element that is the parent of all other elements

Options :

7614465589. ✖ head

7614465590. ✖ body

7614465591. ✖ main

7614465592. ✔ root

Question Number : 199 Question Id : 7614461409 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

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

Options :

7614465593. ✖ <body color="#FF0000">

7614465594. ✖ <body bgcolor="#12345678">

7614465595. ✖ <body color="#000,000">

7614465596. ✔ <body bgcolor="#FF0000">

Question Number : 200 Question Id : 7614461410 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following method is the method of the window object in JavaScript?

Options :

7614465597. ✔ setTimeout()

7614465598. ✖ setTimein()

7614465599. ✖ setTime()

7614465600. ✖ setTimeoutForWindow()