

Question Paper Preview

Notations :

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

Question Paper Name:	Mathematics and Statistics
Subject Name:	Mathematics and Statistics
Creation Date:	2017-10-13 18:49:22
Duration:	150
Total Marks:	150
Display Marks:	No
Calculator:	Scientific
Magnifying Glass Required?:	No
Ruler Required?:	No
Eraser Required?:	No
Scratch Pad Required?:	No
Rough Sketch/Notepad Required?:	No
Protractor Required?:	No

Mathematics and Statistics

Group Number :	1
Group Id :	798407214
Group Maximum Duration :	0
Group Minimum Duration :	150
Revisit allowed for view? :	No
Revisit allowed for edit? :	No
Break time:	0
Group Marks:	150

Mathematics

Section Id :	798407222
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	75
Number of Questions to be attempted:	75
Section Marks:	75
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	798407277
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 79840732006 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of cyclic groups of order 6 is

Options :

1. ✘ 2

2. ✘ 4

3. ✘ 6

4. ✔ ∞

Question Number : 1 Question Id : 79840732006 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

తరగతి 6 గా గల చక్రీయ సమూహాల సంఖ్య

Options :

1. ✘ 2

2. ✘ 4

3. ✘ 6

4. ✔ ∞

Question Number : 2 Question Id : 79840732007 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If $a = (1, 5, 4, 3)$ and $b = (3, 4, 2)$, then $aba^{-1} =$

Options :

1. ✘ (4, 5, 2)

2. ✘ (1, 2, 3)

3. ✔ (1, 3, 2)

4. ✘ (4, 2, 5)

Question Number : 2 Question Id : 79840732007 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$a = (1, 5, 4, 3)$ మరియు $b = (3, 4, 2)$ అయితే $aba^{-1} =$

Options :

1. ✘ (4, 5, 2)

2. ✘ (1, 2, 3)

3. ✔ (1, 3, 2)

4. ✘ (4, 2, 5)

Question Number : 3 Question Id : 79840732008 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of generators of an infinite cyclic group is

Options :

1. ✔ 2

2. ✘ 4

3. ✘ 5

4. ✘ ∞

Question Number : 3 Question Id : 79840732008 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక అనంత చక్రియ సమూహములోని ఉత్పాదనల సంఖ్య

Options :

1. ✔ 2

2. ✘ 4

3. ✘ 5

4. ✘ ∞

Question Number : 4 Question Id : 79840732009 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The name of the theorem with statement "Every group is isomorphic to a sub group of $A(S)$

(the group of all bijections from the set S onto itself) for some appropriate S " is

Options :

1. ✘ Lagrange's theorem

2. ✘ First sylow theorem

3. ✘ Cauchy's theorem

4. ✔ Cayley's theorem

Question Number : 4 Question Id : 79840732009 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ప్రతి సమూహము, $A(S)$ యొక్క ఉపసమూహానికి (సమితి S నుండి దానితో సహా అన్ని ద్విగుణాల సమూహం) (ఒక తగిన S కు) తుల్యరూపత అవుతుంది" అనేది ప్రవచనంగా గల సిద్ధాంతం పేరు

Options :

1. ✘ లెగ్రాంజి సిద్ధాంతం

2. ✘ మొదటి సైల్ సిద్ధాంతం

3. ✘ కోషి సిద్ధాంతం

4. ✔ కాలే సిద్ధాంతం

Question Number : 5 Question Id : 79840732010 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of r -cycles in the symmetric group S_n , of degree n is

Options :

1. ✘ $\frac{n!}{(n-r)!}$

2. ✘ $\frac{n!}{r!(n-r)!}$

3. ✘ $\frac{n!}{(r-1)!(n-r)!}$

4. ✔ $\frac{n!}{r(n-r)!}$

Question Number : 5 Question Id : 79840732010 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

n పరిమాణం గల సౌష్ఠ్య సమూహం S_n లోని r - చక్రీయాల సంఖ్య

Options :

1. ✘ $\frac{n!}{(n-r)!}$

2. ✘ $\frac{n!}{r!(n-r)!}$

3. ✘ $\frac{n!}{(r-1)!(n-r)!}$

4. ✔ $\frac{n!}{r(n-r)!}$

Question Number : 6 Question Id : 79840732011 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The multiplicative identity in the sub ring $S = \{0, 2, 4, 6, 8\}$ of the ring $(Z_{10}, \oplus_{10}, \otimes_{10})$ of integers modulo 10 is

Options :

1. ✘ 2

2. ✘ 4

3. ✔ 6

4. ✘ does not exist

Question Number : 6 Question Id : 79840732011 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మాపము 10 గా గల పూర్ణాంకాల వలయము $(Z_{10}, \oplus_{10}, \otimes_{10})$ యొక్క ఉపసమూహం $S = \{0, 2, 4, 6, 8\}$ లో గుణకార తత్వము

Options :

1. ✘ 2

2. ✘ 4

3. ✓ 6

4. ✘ వ్యవస్థితం కాదు

Question Number : 7 Question Id : 79840732012 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of elements in the group U_9 (of all positive integers less than 9 and relatively prime to 9) with respect to multiplicative modulo 9 satisfying $a^4 = 1$, the identity element is

Options :

1. ✘ 4

2. ✘ 3

3. ✘ 2

4. ✓ 1

Question Number : 7 Question Id : 79840732012 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$a^4 = 1$ (తత్వమ మూలకం) అనే సమీకరణాన్ని తృప్తిపరుస్తూ గుణన మాపము 9 దృష్ట్యా U_9 (9 కి సాపేక్ష ప్రధానము అయి 9 కంటే తక్కువ గల అన్ని దన పూర్ణాంకాలు) అనే సమూహములోని మూలకాల సంఖ్య

Options :

1. ✘ 4

2. ✘ 3

3. ✘ 2

4. ✓ 1

Question Number : 8 Question Id : 79840732013 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If (G, \cdot) is a group of order n and if $a \in G$, then $a^{\phi(n)+3} =$

Options :

1. ✘ a

2. ✘ a^2

3. ✓ a^3

4. ✗ e , the identity element in G

Question Number : 8 Question Id : 79840732013 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

(G) అనేది n పరిమాణం గల సమూహము అయి $a \in G$, అయితే $a^{\phi(n)+3} =$

Options :

1. ✗ a

2. ✗ a^2

3. ✓ a^3

4. ✗ G లో తల్పమ మూలకమైన e

Question Number : 9 Question Id : 79840732014 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of non real roots of the equation $x^7 - 10x^5 + 15x + 5 = 0$ is

Options :

1. ✓ 2

2. ✗ 3

3. ✗ 4

4. ✗ 6

Question Number : 9 Question Id : 79840732014 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$x^7 - 10x^5 + 15x + 5 = 0$ అనే సమీకరణంలోని అవాస్తవ మూలాల సంఖ్య

Options :

1. ✓ 2

2. ✗ 3

3. ✖ 4

4. ✖ 6

Question Number : 10 Question Id : 79840732015 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Which of the following is true?

Options :

1. ✖ Every ring is commutative
2. ✖ Every is commutative ring is an integral domain
3. ✖ Every integral domain is a field
4. ✔ Every field is an integral domain

Question Number : 10 Question Id : 79840732015 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

క్రిందివానిలో ఏది సరైనది ?

Options :

1. ✖ ప్రతి వలయము వినిమయము
2. ✖ ప్రతి వినిమయ వలయము ఒక పూర్ణాంక ప్రదేశం
3. ✖ ప్రతి పూర్ణాంక ప్రదేశము ఒక క్షేత్రం
4. ✔ ప్రతి క్షేత్రం ఒక పూర్ణాంక ప్రదేశం

Question Number : 11 Question Id : 79840732016 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Exactly one of the following is not a root of the equation $x^6 + 1 = 0$

Options :

1. ✖ $e^{\frac{\pi i}{6}}$

2. ✘ $e^{\frac{5\pi i}{6}}$

3. ✘ $e^{\frac{7\pi i}{6}}$

4. ✔ $e^{\frac{8\pi i}{6}}$

Question Number : 11 Question Id : 79840732016 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

క్రిందివానిలో ఏది $x^6 + 1 = 0$ అనే సమీకరణానికి కచ్చిత మూలం కాదు

Options :

1. ✘ $e^{\frac{\pi i}{6}}$

2. ✘ $e^{\frac{5\pi i}{6}}$

3. ✘ $e^{\frac{7\pi i}{6}}$

4. ✔ $e^{\frac{8\pi i}{6}}$

Question Number : 12 Question Id : 79840732017 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The linear transformation $T: \mathbb{R}^3 \rightarrow \mathbb{R}^3$ defined by

$$T(a, b, c) = (2a - b + 3c, -a + b + 2c, -2a + 2b + c) \text{ is}$$

Options :

1. ✔ non singular

2. ✘ singular

3. ✘ one-one but not onto

4. ✘ onto but not one-one

Question Number : 12 Question Id : 79840732017 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$T(a,b,c) = (2a + b - 3c, a+7b-c, 2a-3b-3c)$ గా నిర్వచించబడిన $T: \mathbb{R}^3 \rightarrow \mathbb{R}^3$ యొక్క

ఋజుపరివర్తన

Options :

1. ✓ సాధారణము
2. ✗ అసాధారణము
3. ✗ అన్వేకము కానీ సంగ్రస్తము కాదు
4. ✗ సంగ్రస్తము కానీ అన్వేకము కాదు

Question Number : 13 Question Id : 79840732018 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A basis for \mathbb{R}^3 over \mathbb{R} is

Options :

1. ✗ $\{(1, -1, 2), (0, -3, 6), (4, 1, -2)\}$
2. ✗ $\{(1, -1, 2), (-1, 2, 2), (0, 1, 4)\}$
3. ✗ $\{(1, -1, 2), (-1, 2, 2), (2, -3, 0)\}$
4. ✓ $\{(1, -1, 2), (-1, 2, 2), (4, 1, -2)\}$

Question Number : 13 Question Id : 79840732018 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

\mathbb{R} మీద \mathbb{R}^3 కు ఆధారము

Options :

1. ✗ $\{(1, -1, 2), (0, -3, 6), (4, 1, -2)\}$
2. ✗ $\{(1, -1, 2), (-1, 2, 2), (0, 1, 4)\}$
3. ✗ $\{(1, -1, 2), (-1, 2, 2), (2, -3, 0)\}$

4. ✓ $\{(1, -1, 2), (-1, 2, 2), (4, 1, -2)\}$

Question Number : 14 Question Id : 79840732019 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The matrix of the linear operator T on \mathbb{R}^3 defined by

$$T(a, b, c) = (2a + b - 3c, a + 7b - c, 2a - 3b - 3c)$$

with respect to the standard basis of \mathbb{R}^3 is

Options :

1. ✗ $\begin{bmatrix} 2 & 1 & -3 \\ 1 & 7 & -1 \\ 2 & 3 & -3 \end{bmatrix}$

2. ✗ $\begin{bmatrix} 2 & -1 & -3 \\ 1 & 7 & -1 \\ 2 & -3 & -3 \end{bmatrix}$

3. ✓ $\begin{bmatrix} 2 & 1 & -3 \\ 1 & 7 & -1 \\ 2 & -3 & -3 \end{bmatrix}$

4. ✗ $\begin{bmatrix} 2 & 1 & -3 \\ 1 & -7 & -1 \\ 2 & -3 & -3 \end{bmatrix}$

Question Number : 14 Question Id : 79840732019 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

\mathbb{R}^3 మీద $T(a,b,c) = (2a + b - 3c, a+7b-c, 2a -3b -3c)$ గా నిర్వచించబడి \mathbb{R}^3 యొక్క ప్రామాణిక

ఆధారము దృష్ట్యా ఋజు పరిక్రమ యొక్క మాత్రిక

Options :

1. ✗ $\begin{bmatrix} 2 & 1 & -3 \\ 1 & 7 & -1 \\ 2 & 3 & -3 \end{bmatrix}$

2. ✘
$$\begin{bmatrix} 2 & -1 & -3 \\ 1 & 7 & -1 \\ 2 & -3 & -3 \end{bmatrix}$$

3. ✔
$$\begin{bmatrix} 2 & 1 & -3 \\ 1 & 7 & -1 \\ 2 & -3 & -3 \end{bmatrix}$$

4. ✘
$$\begin{bmatrix} 2 & 1 & -3 \\ 1 & -7 & -1 \\ 2 & -3 & -3 \end{bmatrix}$$

Question Number : 15 Question Id : 79840732020 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The rank of the linear transformation $T: \mathbb{R}^4 \rightarrow \mathbb{R}^3$ defined by

$$T(a, b, c, d) = (2a + b, -3b + c, -c + d)$$
 is

Options :

1. ✘ 4

2. ✔ 3

3. ✘ 2

4. ✘ 1

Question Number : 15 Question Id : 79840732020 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$T: \mathbb{R}^4 \rightarrow \mathbb{R}^4$ మీద $T(a, b, c, d) = (2a + b, -3b + c, -c + d)$ గా నిర్వచించబడిన ఋజుపరివర్తన

యొక్క కోటి

Options :

1. ✘ 4

2. ✔ 3

3. ✘ 2

4. ✘ 1

Question Number : 16 Question Id : 79840732021 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Let T be a linear operator on a vector space V of dimension n . Exactly one of the following differs from the other three.

Options :

1. ✘ T is one-one
2. ✘ T is onto
3. ✘ T is a bijection
4. ✔ rank of T is $\leq n$

Question Number : 16 Question Id : 79840732021 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మితి n గా గల సదిశా అలం V మీద T ఒక ఋజుపరిక్షియ అనుకొనుము. దిగువన ఇవ్వబడిన వాటిలో ఏది మిగిలిన మూడింటితో విభేదిస్తుంది ?

Options :

1. ✘ T అన్వేకము
2. ✘ T సంగ్రస్తము
3. ✘ T ద్విగుణము
4. ✔ T యొక్క కోటి $\leq n$

Question Number : 17 Question Id : 79840732022 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If the matrix of the linear transformation $T: \mathbb{R}^3 \rightarrow \mathbb{R}^4$ with respect to the standard bases of \mathbb{R}^3 and \mathbb{R}^4 is

$$\begin{bmatrix} -1 & 2 & 1 \\ 2 & 1 & 2 \\ -1 & -1 & 2 \\ 3 & 2 & 4 \end{bmatrix}, \text{ then } T(2a, 3b, -2c) =$$

Options :

1. ✘ $(-2a + 6b - 2c, 4a + 3b - 4c, 2a - 3b - 4c, 6a + 6b - 8c)$
2. ✘ $(-2a + 6b - 2c, 4a + 3b - 4c, -2a + 3b - 4c, 6a + 6b - 8c)$
3. ✔ $(-2a + 6b - 2c, 4a + 3b - 4c, -2a - 3b - 4c, 6a + 6b - 8c)$
4. ✘ $(-2a + 6b - 2c, 4a + 3b - 4c, -2a - 3b - 4c, 6a + 6b + 8c)$

Question Number : 17 Question Id : 79840732022 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

\mathbb{R}^3 మరియు \mathbb{R}^4 యొక్క ప్రామాణిక ఆధారం ద్వారా $T: \mathbb{R}^3 \rightarrow \mathbb{R}^4$ యొక్క ఋజుపరివర్తన మాత్రిక

$$\begin{bmatrix} -1 & 2 & 1 \\ 2 & 1 & 2 \\ -1 & -1 & 2 \\ 3 & 2 & 4 \end{bmatrix} \text{ అయితే } T(2a, 3b, -2c) =$$

Options :

1. ✘ $(-2a + 6b - 2c, 4a + 3b - 4c, 2a - 3b - 4c, 6a + 6b - 8c)$
2. ✘ $(-2a + 6b - 2c, 4a + 3b - 4c, -2a + 3b - 4c, 6a + 6b - 8c)$
3. ✔ $(-2a + 6b - 2c, 4a + 3b - 4c, -2a - 3b - 4c, 6a + 6b - 8c)$
4. ✘ $(-2a + 6b - 2c, 4a + 3b - 4c, -2a - 3b - 4c, 6a + 6b + 8c)$

Question Number : 18 Question Id : 79840732023 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If A is an $m \times n$ matrix with rank r , then the dimension of solution space of $XA = 0$ is

Options :

1. ✓ $m - r$

2. ✗ $n - r$

3. ✗ r

4. ✗ minimum of $\{m, n\}$

Question Number : 18 Question Id : 79840732023 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A అనే $m \times n$ తరగతి మాత్రిక యొక్క కోటి r అయితే $XA = 0$ అనే సమీకరణ సాధన తలం యొక్క మితి

Options :

1. ✓ $m - r$

2. ✗ $n - r$

3. ✗ r

4. ✗ $\{m, n\}$ యొక్క కనిష్టము

Question Number : 19 Question Id : 79840732024 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If V and W are finite dimensional sub spaces of a vector space, then

$$\dim(V + W) - \dim(V \cap W) =$$

Options :

1. ✗ $\dim V - \dim W - 2\dim(V \cap W)$

2. ✗ $\dim V + \dim W - 3\dim(V \cap W)$

3. ✗ $\dim V + \dim W - \dim(V \cap W)$

4. ✓ $\dim V + \dim W - 2\dim(V \cap W)$

Question Number : 19 Question Id : 79840732024 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక సదిశాతలం పరిమిత మితీయ ఉపతలాలు V, W అయితే $\dim(V+W) - \dim(V \cap W) =$

Options :

1. ✘ $\dim V - \dim W - 2\dim(V \cap W)$
2. ✘ $\dim V + \dim W - 3\dim(V \cap W)$
3. ✘ $\dim V + \dim W - \dim(V \cap W)$
4. ✔ $\dim V + \dim W - 2\dim(V \cap W)$

Question Number : 20 Question Id : 79840732025 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The matrix $\begin{bmatrix} x-2 & 1 & 2 \\ 3 & 1-x & 1 \\ 2 & x & 1 \end{bmatrix}$ is non singular if

Options :

1. ✘ $x = 7$
2. ✘ $x = \frac{1}{2}$
3. ✘ $x = 7$ or $x = \frac{1}{2}$
4. ✔ $x \notin \mathbb{R} - \left\{7, \frac{1}{2}\right\}$

Question Number : 20 Question Id : 79840732025 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$\begin{bmatrix} x-2 & 1 & 2 \\ 3 & 1-x & 1 \\ 2 & x & 1 \end{bmatrix}$ అనేది ఒక సాధారణ మాత్రిక కావాలంటే

Options :

1. ✘ $x = 7$

2. ✘ $x = \frac{1}{2}$

3. ✘ $x = 7$ or $x = \frac{1}{2}$

4. ✔ $x \notin \mathbb{R} - \left\{7, \frac{1}{2}\right\}$

Question Number : 21 Question Id : 79840732026 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

The inverse of the matrix $\begin{bmatrix} 1 & -1 & 1 \\ 2 & 1 & -2 \\ -2 & 1 & -1 \end{bmatrix}$ is

Options :

1. ✘ $\begin{bmatrix} -1 & 0 & -1 \\ -6 & -1 & -4 \\ -4 & 1 & -3 \end{bmatrix}$

2. ✘ $\begin{bmatrix} -1 & 0 & -1 \\ 6 & -1 & -4 \\ -4 & -1 & -3 \end{bmatrix}$

3. ✘ $\begin{bmatrix} 1 & 0 & -1 \\ -6 & -1 & -4 \\ -4 & -1 & -3 \end{bmatrix}$

4. ✔ $\begin{bmatrix} -1 & 0 & -1 \\ -6 & -1 & -4 \\ -4 & -1 & -3 \end{bmatrix}$

Question Number : 21 Question Id : 79840732026 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

$$\begin{bmatrix} 1 & -1 & 1 \\ 2 & 1 & -2 \\ -2 & 1 & -1 \end{bmatrix} \text{ యొక్క విలోమ మాత్రిక}$$

Options :

1. ✘ $\begin{bmatrix} -1 & 0 & -1 \\ -6 & -1 & -4 \\ -4 & 1 & -3 \end{bmatrix}$

2. ✘ $\begin{bmatrix} -1 & 0 & -1 \\ 6 & -1 & -4 \\ -4 & -1 & -3 \end{bmatrix}$

3. ✘ $\begin{bmatrix} 1 & 0 & -1 \\ -6 & -1 & -4 \\ -4 & -1 & -3 \end{bmatrix}$

4. ✔ $\begin{bmatrix} -1 & 0 & -1 \\ -6 & -1 & -4 \\ -4 & -1 & -3 \end{bmatrix}$

Question Number : 22 Question Id : 79840732027 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\begin{vmatrix} 2 & 5 & -2 & 1 \\ -1 & 3 & 4 & 2 \\ 5 & 7 & -8 & 0 \\ 0 & 11 & 6 & 5 \end{vmatrix} =$$

Options :

1. ✘ -1

2. ✔ 0

3. ✘ 1

4. ✘ 5

Question Number : 22 Question Id : 79840732027 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\begin{vmatrix} 2 & 5 & -2 & 1 \\ -1 & 3 & 4 & 2 \\ 5 & 7 & -8 & 0 \\ 0 & 11 & 6 & 5 \end{vmatrix} =$$

Options :

1. ✘ -1

2. ✔ 0

3. ✘ 1

4. ✘ 5

Question Number : 23 Question Id : 79840732028 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The area (in square units) of the figure formed by lines represented by the equations

$$2x^2 + 5xy + 2y^2 - 3y - 2 = 0 \text{ and } 2x^2 + 5xy + 2y^2 = 0 \text{ is}$$

Options :

1. ✔ $\frac{2}{3}$

2. ✘ $\frac{2}{5}$

3. ✘ $\frac{1}{3}$

4. ✘ $\frac{1}{5}$

Question Number : 23 Question Id : 79840732028 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$2x^2 + 5xy + 2y^2 - 3y - 2 = 0 \text{ మరియు } 2x^2 + 5xy + 2y^2 = 0 \text{ అనే సమీకరణాలతో}$$

నిర్దేశించబడిన రేఖలతో ఏర్పడే పటం యొక్క వైశాల్యం (చదరపు యూనిట్లలో)

Options :

1. ✓ $\frac{2}{3}$

2. ✗ $\frac{2}{5}$

3. ✗ $\frac{1}{3}$

4. ✗ $\frac{1}{5}$

Question Number : 24 Question Id : 79840732029 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of tangents drawn to the ellipse $\frac{x^2}{9} + \frac{y^2}{4} = 1$ from the point (1, 1) is

Options :

1. ✓ 0

2. ✗ 1

3. ✗ 2

4. ✗ 3

Question Number : 24 Question Id : 79840732029 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

(1,1) బిందువు నుండి $\frac{x^2}{9} + \frac{y^2}{4} = 1$ అనే దీర్ఘవృత్తానికి గీచిన స్పర్శ రేఖల సంఖ్య

Options :

1. ✓ 0

2. ✗ 1

3. ✗ 2

4. ✗ 3

Question Number : 25 Question Id : 79840732030 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The locus of the poles of the tangents to the hyperbola $x^2 - y^2 = a^2$ with respect to the

Parabola $y^2 = 4ax$ is

Options :

1. ✘ $x^2 + y^2 = 4a^2$

2. ✔ $4x^2 + y^2 = 4a^2$

3. ✘ $x^2 + 4y^2 = 4a^2$

4. ✘ $x^2 + y^2 = a^2$

Question Number : 25 Question Id : 79840732030 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$y^2 = 4ax$ పరావలయం దృష్ట్యా $x^2 - y^2 = a^2$ అనే అతిపరావలయం యొక్క స్పర్శరేఖల దృవాల బిందు పథం

Options :

1. ✘ $x^2 + y^2 = 4a^2$

2. ✔ $4x^2 + y^2 = 4a^2$

3. ✘ $x^2 + 4y^2 = 4a^2$

4. ✘ $x^2 + y^2 = a^2$

Question Number : 26 Question Id : 79840732031 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The eccentricity of the conic given by “locus of the point which moves so that the

sum of its distances from the fixed points (1, 3) and (-2, -1) is always 8 units” is

Options :

1. ✘ $\frac{3}{8}$

2. ✘ $\frac{4}{8}$

3. ✓ $\frac{5}{8}$

4. ✗ $\frac{6}{8}$

Question Number : 26 Question Id : 79840732031 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

(1,3) మరియు (-2, -1) అనే స్థిర బిందువుల నుండి దూరాల మొత్తం 8 యూనిట్లు అయ్యేట్లు ఉండే బిందువు యొక్క బిందుపథంలో ఏర్పడే శంకువు యొక్క ఉత్కేంద్రత

Options :

1. ✗ $\frac{3}{8}$

2. ✗ $\frac{4}{8}$

3. ✓ $\frac{5}{8}$

4. ✗ $\frac{6}{8}$

Question Number : 27 Question Id : 79840732032 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The equation of the plane containing the line $\frac{x-1}{2} = \frac{y+1}{3} = \frac{z-3}{-1}$ through the point

(2, 3, 1) is

Options :

1. ✗ $3x - 3y - 5z + 8 = 0$

2. ✓ $2x - 3y - 5z + 10 = 0$

3. ✗ $2x + 2y - 5z + 15 = 0$

4. ✗ $6x - 2y - 3z + 10 = 0$

Question Number : 27 Question Id : 79840732032 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

(2,3,1) బిందువు గుండా పోతూ $\frac{x-1}{2} = \frac{y+1}{3} = \frac{z-3}{-1}$ అనే రేఖను కలిగిఉండే తల సమీకరణము

Options :

1. ✘ $3x - 3y - 5z + 8 = 0$

2. ✔ $2x - 3y - 5z + 10 = 0$

3. ✘ $2x + 2y - 5z + 15 = 0$

4. ✘ $6x - 2y - 3z + 10 = 0$

Question Number : 28 Question Id : 79840732033 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The angle between the plane $2x - y + z + 2 = 0$ and the line $\frac{x-1}{1} = \frac{y-1}{2} = \frac{z-1}{1}$ is

Options :

1. ✘ $\cos^{-1}\left(\frac{1}{6}\right)$

2. ✔ $\frac{\pi}{2} - \cos^{-1}\left(\frac{1}{6}\right)$

3. ✘ $\pi - \cos^{-1}\left(\frac{1}{6}\right)$

4. ✘ $2\pi - \cos^{-1}\left(\frac{1}{6}\right)$

Question Number : 28 Question Id : 79840732033 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$2x - y + z + 2 = 0$ అనే తలానికి, $\frac{x-1}{1} = \frac{y-1}{2} = \frac{z-1}{1}$ అనే సరళ రేఖకు మధ్య కోణము

Options :

1. ✘ $\cos^{-1}\left(\frac{1}{6}\right)$

2. ✔ $\frac{\pi}{2} - \cos^{-1}\left(\frac{1}{6}\right)$

3. ✘ $\pi - \cos^{-1}\left(\frac{1}{6}\right)$

4. ✘ $2\pi - \cos^{-1}\left(\frac{1}{6}\right)$

Question Number : 29 Question Id : 79840732034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

The center of the sphere with the circle $x^2 + y^2 + z^2 - 4x - 4y + 4z - 13 = 0$,

$2x + y + 2z + 10 = 0$, as great circle is

Options :

1. ✘ $\left(\frac{2}{3}, \frac{2}{3}, -\frac{14}{3}\right)$

2. ✘ $\left(-\frac{2}{3}, -\frac{2}{3}, -\frac{14}{3}\right)$

3. ✔ $\left(-\frac{2}{3}, \frac{2}{3}, -\frac{14}{3}\right)$

4. ✘ $\left(-\frac{2}{3}, \frac{2}{3}, \frac{14}{3}\right)$

Question Number : 29 Question Id : 79840732034 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

$x^2 + y^2 + z^2 - 4x - 4y + 4z - 13 = 0$ అనే వృత్తం $2x + y + 2z + 10 = 0$ కలిసి బృహత్

వృత్తంగా ఏర్పడే గోళం యొక్క కేంద్రం

Options :

1. ✘ $(\frac{2}{3}, \frac{2}{3}, -\frac{14}{3})$

2. ✘ $(-\frac{2}{3}, -\frac{2}{3}, -\frac{14}{3})$

3. ✔ $(-\frac{2}{3}, \frac{2}{3}, -\frac{14}{3})$

4. ✘ $(-\frac{2}{3}, \frac{2}{3}, \frac{14}{3})$

Question Number : 30 Question Id : 79840732035 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If the plane $ax + by + cz = 0$ meets the cone $xy + yz + zx = 0$ in two perpendicular lines,

then

Options :

1. ✘ $a + b + c = 0$

2. ✔ $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 0$

3. ✘ $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 1$

4. ✘ $\frac{1}{a^2} + \frac{1}{b^2} + \frac{1}{c^2} = 1$

Question Number : 30 Question Id : 79840732035 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$ax + by + cz = 0$ అనే తలం $xy + yz + zx = 0$ అనే శంకువును రెండు లంబ రేఖలలో స్పృశిస్తే

Options :

1. ✘ $a + b + c = 0$

2. ✓ $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 0$

3. ✗ $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 1$

4. ✗ $\frac{1}{a^2} + \frac{1}{b^2} + \frac{1}{c^2} = 1$

Question Number : 31 Question Id : 79840732036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The equation to the right circular cylinder with guiding curve as the circle through the points $(a, 0, 0)$, $(0, a, 0)$, $(0, 0, a)$ is

Options :

1. ✗ $x^2 + y^2 + z^2 + xy + yz - xz - a^2 = 0$

2. ✓ $x^2 + y^2 + z^2 - xy - yz - xz - a^2 = 0$

3. ✗ $x^2 + y^2 + z^2 + xy - yz + xz - a^2 = 0$

4. ✗ $x^2 + y^2 + z^2 - xy + yz + xz - a^2 = 0$

Question Number : 31 Question Id : 79840732036 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$(a,0,0)$, $(0,a,0)$, $(0,0,a)$ బిందువుల గుండా పోయే వృత్తం యొక్క దిశావక్రము గల లంబ వృత్తీయ స్థూపము యొక్క సమీకరణము

Options :

1. ✗ $x^2 + y^2 + z^2 + xy + yz - xz - a^2 = 0$

2. ✓ $x^2 + y^2 + z^2 - xy - yz - xz - a^2 = 0$

3. ✗ $x^2 + y^2 + z^2 + xy - yz + xz - a^2 = 0$

4. ✘ $x^2 + y^2 + z^2 - xy + yz + xz - a^2 = 0$

Question Number : 32 Question Id : 79840732037 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The shortest distance between the skew lines $\vec{r} = \vec{a} + s\vec{b}$ and $\vec{r} = \vec{c} + t\vec{d}$ is

Options :

1. ✘ $\frac{|\vec{a} \cdot \vec{b} \cdot \vec{d} - \vec{c} \cdot \vec{b} \cdot \vec{a}|}{|\vec{b} \times \vec{d}|}$

2. ✘ $\frac{|\vec{a} \cdot \vec{c} \cdot \vec{d} - \vec{c} \cdot \vec{b} \cdot \vec{d}|}{|\vec{b} \times \vec{d}|}$

3. ✔ $\frac{|\vec{a} \cdot \vec{b} \cdot \vec{d} - \vec{c} \cdot \vec{b} \cdot \vec{d}|}{|\vec{b} \times \vec{d}|}$

4. ✘ 0

Question Number : 32 Question Id : 79840732037 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$\vec{r} = \vec{a} + s\vec{b}$ మరియు $\vec{r} = \vec{c} + t\vec{d}$ అనే అసౌష్ఠ్య రేఖల మధ్య అల్పతమ దూరము

Options :

1. ✘ $\frac{|\vec{a} \cdot \vec{b} \cdot \vec{d} - \vec{c} \cdot \vec{b} \cdot \vec{a}|}{|\vec{b} \times \vec{d}|}$

2. ✘ $\frac{|\vec{a} \cdot \vec{c} \cdot \vec{d} - \vec{c} \cdot \vec{b} \cdot \vec{d}|}{|\vec{b} \times \vec{d}|}$

3. ✔ $\frac{|\vec{a} \cdot \vec{b} \cdot \vec{d} - \vec{c} \cdot \vec{b} \cdot \vec{d}|}{|\vec{b} \times \vec{d}|}$

4. ✖ 0

Question Number : 33 Question Id : 79840732038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The vector equation of the line through the point whose position vector is \vec{a} and parallel to the non collinear vectors \vec{b} and \vec{c} is

Options :

1. ✖ $[\vec{r} \vec{a} \vec{c}] = [\vec{a} \vec{b} \vec{c}]$

2. ✔ $[\vec{r} \vec{b} \vec{c}] = [\vec{a} \vec{b} \vec{c}]$

3. ✖ $[\vec{r} \vec{b} \vec{c}] = [\vec{a} \vec{c} \vec{b}]$

4. ✖ $[\vec{r} \vec{b} \vec{a}] = [\vec{a} \vec{b} \vec{c}]$

Question Number : 33 Question Id : 79840732038 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

\vec{a} స్థాన సదిశగా గల బిందువు గుండా పోతూ \vec{b} మరియు \vec{c} అనే సరేఖియాలుకాని సదిశాలకు

సమాంతరంగా ఉండే సరళరేఖ యొక్క సదిశా సమీకరణం

Options :

1. ✖ $[\vec{r} \vec{a} \vec{c}] = [\vec{a} \vec{b} \vec{c}]$

2. ✔ $[\vec{r} \vec{b} \vec{c}] = [\vec{a} \vec{b} \vec{c}]$

3. ✖ $[\vec{r} \vec{b} \vec{c}] = [\vec{a} \vec{c} \vec{b}]$

4. ✖ $[\vec{r} \vec{b} \vec{a}] = [\vec{a} \vec{b} \vec{c}]$

Question Number : 34 Question Id : 79840732039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The derivative of $\sin^3 x$ with respect to $(\log x)^2$ is

Options :

1. ✘ $\frac{3\sin^2 x \cos x}{2\log x}$

2. ✘ $\frac{x\sin^2 x \cos x}{2\log x}$

3. ✔ $\frac{3x\sin^2 x \cos x}{2\log x}$

4. ✘ $\frac{3\sin^2 x \cos x}{\log x}$

Question Number : 34 Question Id : 79840732039 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$(\log x)^2$ ದೃಷ್ಟಾಂತ $\sin^3 x$ ಯುಕ್ತ ಅವಕಲನಿ

Options :

1. ✘ $\frac{3\sin^2 x \cos x}{2\log x}$

2. ✘ $\frac{x\sin^2 x \cos x}{2\log x}$

3. ✔ $\frac{3x\sin^2 x \cos x}{2\log x}$

4. ✘ $\frac{3\sin^2 x \cos x}{\log x}$

Question Number : 35 Question Id : 79840732040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If $x > 0$ and y is real, then, $\lim_{n \rightarrow \infty} \frac{n^y}{(1+x)^n} =$

Options :

1. ✔ 0

2. ✘ x

3. ✘ y

4. ✘ 1

Question Number : 35 Question Id : 79840732040 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

x > 0 అయి y వాస్తవమైతే $\lim_{n \rightarrow \infty} \frac{n^y}{(1+x)^n} =$

Options :

1. ✔ 0

2. ✘ x

3. ✘ y

4. ✘ 1

Question Number : 36 Question Id : 79840732041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The radius of convergence of the series $\sum_{n=0}^{\infty} \frac{n^3}{2^n} z^n$ is

Options :

1. ✘ 3

2. ✘ $\frac{1}{3}$

3. ✔ 2

4. ✘ $\frac{1}{2}$

Question Number : 36 Question Id : 79840732041 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\sum_{n=0}^{\infty} \frac{n^3}{2^n} z^n$$

అనే అభిసరణ శ్రేణి యొక్క వ్యాసార్థం

Options :

1. ✘ 3

2. ✘ $\frac{1}{3}$

3. ✔ 2

4. ✘ $\frac{1}{2}$

Question Number : 37 Question Id : 79840732042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The function $f: \mathbb{R} \rightarrow \mathbb{R}$ (Where \mathbb{R} is the set of real numbers) defined by

$f(x) = 1$ (if x is rational) and $f(x) = 0$ (if x is irrational) is continuous

Options :

1. ✘ at every point of \mathbb{R}

2. ✘ at every rational point of \mathbb{R}

3. ✘ at every irrational point of \mathbb{R}

4. ✔ at no point of \mathbb{R}

Question Number : 37 Question Id : 79840732042 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

\mathbb{R} అనేది ఒక వాస్తవ సంఖ్యా సమితి అయినప్పుడు $f: \mathbb{R} \rightarrow \mathbb{R}$ అనే ప్రమేయం $f(x) = 1$ (x కరణి)

మరియు $f(x) = 0$ (x అకరణి) గా నిర్వచించబడిన ప్రమేయం క్రిందివానిలో ఎక్కడ అవిచ్ఛిన్నము

Options :

1. ✘ \mathbb{R} లోని ప్రతి బిందువు వద్ద

2. ✘ IR లోని ప్రతి కరణీయ బిందువు వద్ద

3. ✘ IRలోని ప్రతి అకరణీయ బిందువు వద్ద

4. ✔ IRలో ఏ బిందువు వద్ద కాదు

Question Number : 38 Question Id : 79840732043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If the curves $x = y^2$ and $xy = k$ cut at right angles then, a value of k is

Options :

1. ✘ $\frac{1}{\sqrt{2}}$

2. ✘ $-\frac{1}{2}$

3. ✘ $2\sqrt{2}$

4. ✔ $\frac{1}{2\sqrt{2}}$

Question Number : 38 Question Id : 79840732043 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$x = y^2$ మరియు $xy = K$ అనే వక్రాలు లంబంగా ఖండించుకుంటే K విలువ

Options :

1. ✘ $\frac{1}{\sqrt{2}}$

2. ✘ $-\frac{1}{2}$

3. ✘ $2\sqrt{2}$

4. ✓ $\frac{1}{2\sqrt{2}}$

Question Number : 39 Question Id : 79840732044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The maximum value of $\frac{\log x}{x} (x > 0)$ is

Options :

1. ✗ e

2. ✓ $\frac{1}{e}$

3. ✗ e^2

4. ✗ $\frac{1}{e^2}$

Question Number : 39 Question Id : 79840732044 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$\frac{\log x}{x} (x > 0)$ యొక్క గరిష్ట విలువ

Options :

1. ✗ e

2. ✓ $\frac{1}{e}$

3. ✗ e^2

4. ✗ $\frac{1}{e^2}$

Question Number : 40 Question Id : 79840732045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If there is an error of 0.001% in measuring the radius r of a sphere, then the percentage

error in measuring its volume V (given by $V = \frac{4}{3}\pi r^3$) is

Options :

1. ✘ 0.001
2. ✘ 0.002
3. ✔ 0.003
4. ✘ 0.004

Question Number : 40 Question Id : 79840732045 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక గోళం యొక్క వ్యాసార్థం 'r' ను కొలవడంలో 0.001% దోషం ఉంటే ఆ గోళం యొక్క ఘనపరిమాణం 'V'

ని ($V = \frac{4}{3}\pi r^3$) గణించడంలోని దోష శాతం

Options :

1. ✘ 0.001
2. ✘ 0.002
3. ✔ 0.003
4. ✘ 0.004

Question Number : 41 Question Id : 79840732046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\int_{-2}^2 [x] x^3 dx =$$

Options :

1. ✘ $\frac{93}{4}$
2. ✔ $\frac{94}{4}$

3. ✘ $\frac{95}{4}$

4. ✘ 24

Question Number : 41 Question Id : 79840732046 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\int_{-2}^2 [x]x^3 dx =$$

Options :

1. ✘ $\frac{93}{4}$

2. ✔ $\frac{94}{4}$

3. ✘ $\frac{95}{4}$

4. ✘ 24

Question Number : 42 Question Id : 79840732047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The volume of the solid obtained on revolving about y – axis, the part of the parabola

$$y^2 = 4ax \text{ cut off by the latus rectum is}$$

Options :

1. ✘ $\frac{4}{5}\pi a^5$

2. ✘ $\frac{2}{5}\pi a^4$

3. ✔ $\frac{4}{5}\pi a^3$

4. ✘ $\frac{2}{3}\pi a^3$

Question Number : 42 Question Id : 79840732047 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$y^2 = 4ax$ అనే పరావలయాన్ని దాని నాభి లంబము ఖండిస్తే ఏర్పడే భాగమును y - అక్షం వెంబడి

భ్రమణము చెందిస్తే ఏర్పడే ఘనాకృతి యొక్క ఘన పరిమాణము

Options :

1. ✘ $\frac{4}{5}\pi a^5$

2. ✘ $\frac{2}{5}\pi a^4$

3. ✔ $\frac{4}{5}\pi a^3$

4. ✘ $\frac{2}{3}\pi a^3$

Question Number : 43 Question Id : 79840732048 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The surface area of the solid obtained by the revolution of the curve

$x = a \cos^3 t, y = a \sin^3 t$ is

Options :

1. ✔ $\frac{12}{5}\pi a^2$

2. ✘ $\frac{6}{5}\pi a^2$

3. ✘ $\frac{3}{5}\pi a^2$

4. ✘ $\frac{1}{5}\pi a^2$

Question Number : 43 Question Id : 79840732048 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$x = a \cos^3 t$, $y = a \sin^3 t$ వక్రాన్ని భ్రమణం చెందించినప్పుడు ఏర్పడే ఘనాకృతి యొక్క ఉపరితల

వైశాల్యం

Options :

1. ✓ $\frac{12}{5} \pi a^2$

2. ✗ $\frac{6}{5} \pi a^2$

3. ✗ $\frac{3}{5} \pi a^2$

4. ✗ $\frac{1}{5} \pi a^2$

Question Number : 44 Question Id : 79840732049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The length of the curve $r = a(1 + \cos\theta)$ ($0 \leq \theta \leq \pi$) is

Options :

1. ✓ $4a$

2. ✗ $3a$

3. ✗ $2a$

4. ✗ a

Question Number : 44 Question Id : 79840732049 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$r = a(1 + \cos\theta)$ ($0 \leq \theta \leq \pi$) అనే వక్రం యొక్క పొడవు

Options :

1. ✓ $4a$

2. ✗ $3a$

3. ✗ $2a$

4. ✘ a

Question Number : 45 Question Id : 79840732050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The degree and order of the differential equation $\left(\frac{d^3 y}{dx^3}\right)^{\frac{5}{2}} + \frac{dy}{dx} + y = 1$ respectively are

Options :

1. ✘ 3, 3

2. ✘ 5, 5

3. ✘ 3, 5

4. ✔ 5, 3

Question Number : 45 Question Id : 79840732050 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$\left(\frac{d^3 y}{dx^3}\right)^{\frac{5}{2}} + \frac{dy}{dx} + y = 1$ అనే అవకలన సమీకరణం యొక్క ఆరగతి మరియు పరిమాణాలు వరుసగా

Options :

1. ✘ 3, 3

2. ✘ 5, 5

3. ✘ 3, 5

4. ✔ 5, 3

Question Number : 46 Question Id : 79840732051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The differential equation obtained from $y = a e^{-x}(a \cos 2x + b \sin 2x)$ on eliminating the arbitrary constants a, b is

Options :

1. ✘ $y'' - 2y' + 5y = 0$

2. ✘ $y'' + 2y' - 5y = 0$

3. ✔ $y'' + 2y' + 5y = 0$

4. ✘ $y'' - 2y' - 5y = 0$

Question Number : 46 Question Id : 79840732051 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$y = a e^{-x}(a \cos 2x + b \sin 2x)$ అనే సమీకరణము నుండి యాదృచ్ఛిక స్థిరరాశులు a, b లను తొలగిస్తే

ఏర్పడే అవకలన సమీకరణం

Options :

1. ✘ $y'' - 2y' + 5y = 0$

2. ✘ $y'' + 2y' - 5y = 0$

3. ✔ $y'' + 2y' + 5y = 0$

4. ✘ $y'' - 2y' - 5y = 0$

Question Number : 47 Question Id : 79840732052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If $f(x)$ is a solution of the differential equation $y' + iy = x$ and $f(0) = 2$, then $f(3\pi) =$

Options :

1. ✘ $2\pi i$

2. ✘ $-2\pi i$

3. ✘ $3\pi i$

4. ✔ $-3\pi i$

Question Number : 47 Question Id : 79840732052 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$y' + iy = x$ మరియు $f(0) = 2$ అనే అవకలన సమీకరణము యొక్క సాధన $f(x)$ అయితే $f(3\pi) =$

Options :

1. ✘ $2\pi i$

2. ✘ $-2\pi i$

3. ✘ $3\pi i$

4. ✔ $-3\pi i$

Question Number : 48 Question Id : 79840732053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The substitution $x = X + h, y = Y + k$ converts the differential equation $\frac{dy}{dx} = \frac{2x+3y+13}{5x+y+13}$,

Then, the values of k, h respectively are

Options :

1. ✘ $3, 2$

2. ✘ $-3, 2$

3. ✔ $-3, -2$

4. ✘ $3, -2$

Question Number : 48 Question Id : 79840732053 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$x = X + h, y = Y + k$ అనే ప్రతిక్షేపణ $\frac{dy}{dx} = \frac{2x+3y+13}{5x+y+13}$ అనే అవకలన సమీకరణాన్ని మార్చగలిగితే k, h

ల యొక్క విలువలు వరుసగా

Options :

1. ✘ $3, 2$

2. ✘ $-3, 2$

3. ✔ $-3, -2$

4. ✘ $3, -2$

Question Number : 49 Question Id : 79840732054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The differential equation $M(x, y)dx + (2ye^x + y^2 e^{3x})dy = 0$ is exact if and only if $M(x, y) =$

Options :

1. ✘ $y^2 e^x + y^3 e^{3x} + \phi$, where ϕ is a function of x and y
2. ✔ $y^2 e^x + y^3 e^{3x} + \phi$, where ϕ is a function of x alone
3. ✘ $y^2 e^x + y^3 e^{3x} + \phi$, where ϕ is a function of y alone
4. ✘ None of the given answers is correct

Question Number : 49 Question Id : 79840732054 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$M(x, y) dx + (2ye^x + y^2 e^{3x}) dy = 0$ అనేది కచ్చిత అవకలన సమీకరణం కావడానికి అవశ్యక పర్యాప్త

నియమం $M(x, y) =$

Options :

1. ✘ $y^2 e^x + y^3 e^{3x} + \phi$, ఇక్కడ ϕ అనేది x, y లలో ప్రమేయం
2. ✔ $y^2 e^x + y^3 e^{3x} + \phi$, ఇక్కడ ϕ అనేది x లో మాత్రమే ప్రమేయం
3. ✘ $y^2 e^x + y^3 e^{3x} + \phi$, ఇక్కడ ϕ అనేది y లో మాత్రమే ప్రమేయం
4. ✘ ఇచ్చిన జవాబులు ఏవీ సరైనవి కావు

Question Number : 50 Question Id : 79840732055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

An Integrating Factor of the differential equation $(y + xy^2 + y^2)dx + (2xy + 1)dy = 0$ is

Options :

1. ✘ e^{-2x}
2. ✘ e^{-x}
3. ✔ e^x

4. ✘ e^{2x}

Question Number : 50 Question Id : 79840732055 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$(y + xy^2 + y^2)dx + (2xy + 1)dy = 0$ అనే అవకలన సమీకరణం యొక్క సమాకలన

Options :

1. ✘ e^{-2x}

2. ✘ e^{-x}

3. ✔ e^x

4. ✘ e^{2x}

Question Number : 51 Question Id : 79840732056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Particular Integral of the differential equation $y'' + 2y' + 4y = 5xe^{-2x}$ is

Options :

1. ✘ $\frac{5}{8}e^{-2x}(x + 2)$

2. ✘ $\frac{5}{8}e^{-2x}(2x + 3)$

3. ✔ $\frac{5}{8}e^{-2x}(2x + 1)$

4. ✘ $\frac{1}{8}e^{-2x}(x + 3)$

Question Number : 51 Question Id : 79840732056 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$y'' + 2y' + 4y = 5xe^{-2x}$ అనే అవకలన సమీకరణం యొక్క ప్రత్యేక సమాకలని

Options :

1. ✘ $\frac{5}{8}e^{-2x}(x+2)$

2. ✘ $\frac{5}{8}e^{-2x}(2x+3)$

3. ✔ $\frac{5}{8}e^{-2x}(2x+1)$

4. ✘ $\frac{1}{8}e^{-2x}(x+3)$

Question Number : 52 Question Id : 79840732057 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If $f(x)$ is a solution of the I. V. P.: $y'' + y' - 6y = 0$, $f(0) = 1$, $f'(0) = 0$, then $f(x) =$

Options :

1. ✘ $\frac{3}{5}e^{2x} - \frac{2}{5}e^{-3x}$

2. ✔ $\frac{3}{5}e^{2x} + \frac{2}{5}e^{-3x}$

3. ✘ $\frac{3}{5}e^{-2x} + \frac{2}{5}e^{-3x}$

4. ✘ $\frac{3}{5}e^{2x} - \frac{2}{5}e^{3x}$

Question Number : 52 Question Id : 79840732057 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$y'' + y' - 6y = 0$, $f(0) = 1$, $f'(0) = 0$ అనే అవకలన సమీకరణం యొక్క సాధన $f(x)$ అయితే $f(x) =$

Options :

1. ✘ $\frac{3}{5}e^{2x} - \frac{2}{5}e^{-3x}$

2. ✓ $\frac{3}{5}e^{2x} + \frac{2}{5}e^{-3x}$

3. ✗ $\frac{3}{5}e^{-2x} + \frac{2}{5}e^{-3x}$

4. ✗ $\frac{3}{5}e^{2x} - \frac{2}{5}e^{3x}$

Question Number : 53 Question Id : 79840732058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The functions $\cos 3x$ and $\sin 3x$ are dependent in

Options :

1. ✗ $[0, 1]$

2. ✗ $[2, 5]$

3. ✗ $[2, 6]$

4. ✓ no where in IR

Question Number : 53 Question Id : 79840732058 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$\cos 3x$ మరియు $\sin 3x$ అనే ప్రమేయాలు ఏ అంతరంలో ఆధార ప్రమేయాలు ?

Options :

1. ✗ $[0, 1]$

2. ✗ $[2, 5]$

3. ✗ $[2, 6]$

4. ✓ IR లో ఎక్కడా కాదు

Question Number : 54 Question Id : 79840732059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A singular solution of the differential equation $3y = 2px - \frac{2p^2}{x}$ (where $p = \frac{dy}{dx}$) is

Options :

1. ✘ $6x^3 - y = 0$

2. ✘ $x^3 + 6y = 0$

3. ✔ $x^3 - 6y = 0$

4. ✘ $6x^3 + y = 0$

Question Number : 54 Question Id : 79840732059 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$3y = 2px - \frac{2p^2}{x}$ (where $p = \frac{dy}{dx}$) అనే అవకలన సమీకరణానికి అసాధారణ సాధన

Options :

1. ✘ $6x^3 - y = 0$

2. ✘ $x^3 + 6y = 0$

3. ✔ $x^3 - 6y = 0$

4. ✘ $6x^3 + y = 0$

Question Number : 55 Question Id : 79840732060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A solution of the differential equation $4py - 4p^2x - 1 = 0$ (where $p = \frac{dy}{dx}$) is

Options :

1. ✘ $4cy - c^2x - 2 = 0$

2. ✔ $4cy - 4c^2x - 1 = 0$

3. ✘ $4cy - 4c^2x + 1 = 0$

4. ✘ $4cy - c^2x + 1 = 0$

Question Number : 55 Question Id : 79840732060 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$4py - 4p^2x - 1 = 0$ (where $p = \frac{dy}{dx}$) అనే అవకలన సమీకరణానికి ఒక సాధన

Options :

1. ✘ $4cy - c^2x - 2 = 0$

2. ✔ $4cy - 4c^2x - 1 = 0$

3. ✘ $4cy - 4c^2x + 1 = 0$

4. ✘ $4cy - c^2x + 1 = 0$

Question Number : 56 Question Id : 79840732061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If a particle is moving so that the displacement s at time t is given by

$s = \frac{1}{3}t^3 + 5t^2 - 4t + 1$, then the acceleration and velocity at time $t = 2$ respectively are

Options :

1. ✔ 14, 20

2. ✘ 14, 10

3. ✘ 20, 10

4. ✘ 20, 12

Question Number : 56 Question Id : 79840732061 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

t సమయంలో ఒక చలిత కణం యొక్క స్థానభ్రంశాన్ని $s = \frac{1}{3}t^3 + 5t^2 - 4t + 1$ అనే సమీకరణం సూచిస్తే,

$t = 2$ అయినప్పుడు త్వరణము, వేగములు వరుసగా

Options :

1. ✓ 14, 20

2. ✗ 14, 10

3. ✗ 20, 10

4. ✗ 20, 12

Question Number : 57 Question Id : 79840732062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Let OA and OB be two perpendicular lines. If 12, 5 are velocities of the point O in the directions OA and OB respectively, then the resultant velocity is

Options :

1. ✗ 5

2. ✗ 12

3. ✓ 13

4. ✗ 15

Question Number : 57 Question Id : 79840732062 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

OA మరియు OB లు రెండు లంబరేఖలు. 'O' అనే బిందువుకు OA మరియు OB దిశలలో 12, 5 లు వేగాలు
అయితే ఫలిత వేగం

Options :

1. ✗ 5

2. ✗ 12

3. ✓ 13

4. ✗ 15

Question Number : 58 Question Id : 79840732063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If the forces 10 and 16 are acting at a point O in the directions OA and OB respectively

(where $\angle AOB = \frac{\pi}{3}$), then the angle ($\theta < \pi$) between the first force and the resultant force is

Options :

1. ✘ $\sqrt{114}$

2. ✔ $\sqrt{516}$

3. ✘ $\sqrt{156}$

4. ✘ $\sqrt{258}$

Question Number : 58 Question Id : 79840732063 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

'O' అనే బిందువు వద్ద OA మరియు OB దిశలలో 10 మరియు 16 బలాలు పనిచేస్తుంటే

(ఇక్కడ $\angle AOB = \frac{\pi}{3}$). మొదటి బలానికి, ఫలిత బలానికి మధ్య కోణం ($\theta < \pi$)

Options :

1. ✘ $\sqrt{114}$

2. ✔ $\sqrt{516}$

3. ✘ $\sqrt{156}$

4. ✘ $\sqrt{258}$

Question Number : 59 Question Id : 79840732064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If g is the acceleration due to gravity and if an object is dropped from a height of 200

meters, then, the velocity (in $m \cdot s^{-1}$) with which it touches the ground is

Options :

1. ✘ $5\sqrt{g}$

2. ✘ $10\sqrt{g}$

3. ✘ $15\sqrt{g}$

4. ✔ $20\sqrt{g}$

Question Number : 59 Question Id : 79840732064 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

గ్ర అనే గురుత్వ త్వరణంతో ఒక వస్తువును 200 మీటర్ల ఎత్తు నుండి జారవిడిస్తే భూమిని తాకే సమయంలో దాని వేగం (m. s⁻¹ లో)

Options :

1. ✘ $5\sqrt{g}$

2. ✘ $10\sqrt{g}$

3. ✘ $15\sqrt{g}$

4. ✔ $20\sqrt{g}$

Question Number : 60 Question Id : 79840732065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A constant force F is acting on a body of mass 3.0 Kg. changes its speed from 2.0 ms⁻¹ to 3.5 ms⁻¹ in 25 seconds. Then the magnitude of F (in N i.e. newtons) is

Options :

1. ✘ 0.03

2. ✘ 0.05

3. ✘ 0.09

4. ✔ 0.18

Question Number : 60 Question Id : 79840732065 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

3.0 కిలోల ద్రవ్యరాశి గల వస్తువుపై F అనే ఒక స్థిరబలం పనిచేస్తున్నప్పుడు దాని వేగం 25 సెకనులలో 2.0 ms^{-1} నుండి 3.5 ms^{-1} కు మారింది. అయితే F యొక్క పరిమాణం

Options :

1. ✘ 0.03

2. ✘ 0.05

3. ✘ 0.09

4. ✔ 0.18

Question Number : 61 Question Id : 79840732066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Moment of a force \vec{F} acting at a point A about a point P is

Options :

1. ✘ $|\vec{F} + \vec{AP}|$

2. ✘ $|\vec{F} - \vec{AP}|$

3. ✔ $|\vec{F} \times \vec{AP}|$

4. ✘ $|\vec{F} \cdot \vec{AP}|$

Question Number : 61 Question Id : 79840732066 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

p అనే బిందువు దృష్ట్యా A అనే బిందువు వద్ద పనిచేసే బలభ్రమకము F యొక్క విలువ

Options :

1. ✘ $|\vec{F} + \vec{AP}|$

2. ✘ $|\vec{F} - \vec{AP}|$

3. ✓ $\left| \overrightarrow{F} \times \overrightarrow{AP} \right|$

4. ✗ $\left| \overrightarrow{F} \cdot \overrightarrow{AP} \right|$

Question Number : 62 Question Id : 79840732067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The resultant of the forces $\overrightarrow{F_1}, \overrightarrow{F_2}, \overrightarrow{F_3}$ acting at a point O is

Options :

1. ✗ $\overrightarrow{F_1} + \overrightarrow{F_2} - \overrightarrow{F_3}$

2. ✓ $\overrightarrow{F_1} + \overrightarrow{F_2} + \overrightarrow{F_3}$

3. ✗ $\overrightarrow{F_1} - \overrightarrow{F_2} - \overrightarrow{F_3}$

4. ✗ $\overrightarrow{F_1} - \overrightarrow{F_2} + \overrightarrow{F_3}$

Question Number : 62 Question Id : 79840732067 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

O అనే బిందువు వద్ద పనిచేసే $\overrightarrow{F_1}, \overrightarrow{F_2}, \overrightarrow{F_3}$ అనే బలాల ఫలిత బలం

Options :

1. ✗ $\overrightarrow{F_1} + \overrightarrow{F_2} - \overrightarrow{F_3}$

2. ✓ $\overrightarrow{F_1} + \overrightarrow{F_2} + \overrightarrow{F_3}$

3. ✗ $\overrightarrow{F_1} - \overrightarrow{F_2} - \overrightarrow{F_3}$

4. ✗ $\overrightarrow{F_1} - \overrightarrow{F_2} + \overrightarrow{F_3}$

Question Number : 63 Question Id : 79840732068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A constant retarding force 100 N is applied to a body of mass 40 Kgs, moving initially with a velocity of 7 m. s^{-1} , the time (in seconds) for the body to stop is

Options :

1. ✓ 2.8
2. ✗ 1.4
3. ✗ 0.7
4. ✗ 1

Question Number : 63 Question Id : 79840732068 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

7 ms^{-1} తొలివేగంతో కదిలే 40 కిలోల ద్రవ్యరాశి గల వస్తువుకు 100 న్యూటన్ల స్థిర రుణత్వరణాన్ని అనువర్తించేసినప్పుడు ఆ వస్తువు ఆగిపోవడానికి పట్టే సమయం (సెకన్లలో)

Options :

1. ✓ 2.8
2. ✗ 1.4
3. ✗ 0.7
4. ✗ 1

Question Number : 64 Question Id : 79840732069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A stone is thrown at a velocity of $v \text{ m.s}^{-1}$ making an angle α with the horizontal, the range on the horizontal is

Options :

1. ✗ $\frac{v}{2g} \sin(2\alpha)$
2. ✗ $\frac{v}{g^2} \sin(2\alpha)$
3. ✗ $\frac{v^2}{g} \sin(2\alpha)$

4. ✓ $\frac{v^2}{2g} \sin(2\alpha)$

Question Number : 64 Question Id : 79840732069 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

క్షితిజ సమాంతరంలో α కోణం చేస్తూ 'v' ms⁻¹ వేగంలో విసరబడిన ఒక రాయికి క్షితిజ సమాంతరంపై దాని వ్యాప్తి

Options :

1. ✗ $\frac{v}{2g} \sin(2\alpha)$

2. ✗ $\frac{v}{g^2} \sin(2\alpha)$

3. ✗ $\frac{v^2}{g} \sin(2\alpha)$

4. ✓ $\frac{v^2}{2g} \sin(2\alpha)$

Question Number : 65 Question Id : 79840732070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The maximum acceleration (in m. s⁻²) of the train in which a box lying on its floor will remain stationary is (given that the static friction between the box and the train is 0.15 and g m.s⁻² is the acceleration due to gravity)

Options :

1. ✓ 0.15

2. ✗ 0.30

3. ✗ 0.45

4. ✗ 0.60

Question Number : 65 Question Id : 79840732070 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

రైలుబండిలోని రైలు పెట్టె యొక్క నేలపై ఒక చిన్న పెట్టె ఉంచబడినది. రైలుకు, చిన్న పెట్టెకు మధ్య స్థితి
ఘర్షణ 0.15 అయి గురుత్వా త్వరణం 'g' ms^{-2} అయినప్పుడు చిన్న పెట్టె స్థిరంగా ఉండాలంటే రైలుబండి యొక్క
గరిష్ట త్వరణము ms^{-2} లో

Options :

1. ✓ 0.15
2. ✗ 0.30
3. ✗ 0.45
4. ✗ 0.60

Question Number : 66 Question Id : 79840732071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$(33820)_8 =$

Options :

1. ✗ 120034
2. ✗ 100234
3. ✗ 123004
4. ✓ None of the given answers is correct

Question Number : 66 Question Id : 79840732071 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$(33820)_8 =$

Options :

1. ✗ 120034
2. ✗ 100234
3. ✗ 123004
4. ✓ ఇచ్చిన జవాబులు ఏవీ సరైనవి కావు

Question Number : 67 Question Id : 79840732072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If $(x)_{16} = A2C$, then $(x)_8 =$

Options :

1. ✘ 4505

2. ✘ 4055

3. ✘ 5504

4. ✔ 5054

Question Number : 67 Question Id : 79840732072 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$(x)_{16} = A2C$, అయితే $(x)_8 =$

Options :

1. ✘ 4505

2. ✘ 4055

3. ✘ 5504

4. ✔ 5054

Question Number : 68 Question Id : 79840732073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of octal words of length at most 4 (four) is

Options :

1. ✘ 1170

2. ✘ 2340

3. ✔ 4680

4. ✘ 9360

Question Number : 68 Question Id : 79840732073 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

గరిష్టంగా 4 (నాలుగు) పొడవుగల అష్టపదుల సంఖ్య

Options :

1. ✘ 1170
2. ✘ 2340
3. ✔ 4680
4. ✘ 9360

Question Number : 69 Question Id : 79840732074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

The operation $x * y = \bar{x}y + x\bar{y}$ represents the operation

Options :

1. ✘ AND
2. ✘ OR
3. ✘ NOR
4. ✔ XOR

Question Number : 69 Question Id : 79840732074 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

$x * y = \bar{x}y + x\bar{y}$ అనే పరిక్రియ క్రిందివానిలో దేనిని సూచిస్తుంది

Options :

1. ✘ AND
2. ✘ OR
3. ✘ NOR
4. ✔ XOR

Question Number : 70 Question Id : 79840732075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

The sum of the numbers represented by the binary words 111, 10111000 and 11101 in the binary word form is

Options :

1. ✘ 11111010
2. ✘ 11011110
3. ✘ 101111110
4. ✔ 11011100

Question Number : 70 Question Id : 79840732075 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct : 1 Wrong : 0.33

ద్విపద రూపంలో 111, 10111000 మరియు 11101 సూచించే ద్విపదుల అంకెల మొత్తం

Options :

1. ✘ 11111010
2. ✘ 11011110
3. ✘ 101111110
4. ✔ 11011100

Question Number : 71 Question Id : 79840732076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct : 1 Wrong : 0.33

The number of binary words of length 8, each consisting of even number of 1s (ones) is

Options :

1. ✘ 126
2. ✘ 127
3. ✔ 128
4. ✘ 256

Question Number : 71 Question Id : 79840732076 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical Correct : 1 Wrong : 0.33

ప్రతి దానిలో సరి సంఖ్యలో ఒకట్లు (1 లు) కలిగి, 8 పొడవు కలిగిన ద్విపదుల సంఖ్య

Options :

1. ✘ 126
2. ✘ 127
3. ✔ 128
4. ✘ 256

Question Number : 72 Question Id : 79840732077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\bar{x}\bar{y}z + x\bar{y}\bar{z} + x\bar{y}z =$$

Options :

1. ✘ $z\bar{x} + \bar{x}z$
2. ✔ $x\bar{y} + \bar{y}z$
3. ✘ $x\bar{z} + \bar{z}x$
4. ✘ $\bar{x}\bar{y} + \bar{y}\bar{z} + \bar{z}\bar{x}$

Question Number : 72 Question Id : 79840732077 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$$\bar{x}\bar{y}z + x\bar{y}\bar{z} + x\bar{y}z =$$

Options :

1. ✘ $z\bar{x} + \bar{x}z$
2. ✔ $x\bar{y} + \bar{y}z$
3. ✘ $x\bar{z} + \bar{z}x$
4. ✘ $\bar{x}\bar{y} + \bar{y}\bar{z} + \bar{z}\bar{x}$

Question Number : 73 Question Id : 79840732078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of zeros in the binary word generated on applying the XOR operation on

A = 11000101 and B = 10110011 is

Options :

1. ✘ 1

2. ✔ 3

3. ✘ 5

4. ✘ 7

Question Number : 73 Question Id : 79840732078 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A = 11000101 మరియు B = 101 10011 లపై XOR పరిక్రియను అనువర్తించచేసినప్పుడు

ఉత్పన్నమయ్యే ద్విపదిలోని నున్నాల సంఖ్య

Options :

1. ✘ 1

2. ✔ 3

3. ✘ 5

4. ✘ 7

Question Number : 74 Question Id : 79840732079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The number of distinct "Sums of Products" obtained from the fundamental products for

n – variables is

Options :

1. ✘ n^{n^n}

2. ✔ 2^{n^2}

3. ✘ 2^{2^n}

4. ✘ 2^{n^n}

Question Number : 74 Question Id : 79840732079 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

n - చలరాశులకు ప్రాథమిక లబ్ధాల నుండి లభించిన విభిన్న లబ్ధాల మొత్తాల సంఖ్య

Options :

1. ✘ n^{n^n}

2. ✔ 2^{n^2}

3. ✘ 2^{2^n}

4. ✘ 2^{n^n}

Question Number : 75 Question Id : 79840732080 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The truth table

x	y	z	f
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

is corresponding the Boolean expression

Options :

1. ✘ $(\bar{x} + y + z)(\bar{x} + \bar{y} + \bar{z})$

2. ✘ $(x + \bar{y} + z)(\bar{x} + \bar{y} + \bar{z})$

3. ✔ $(x + y + z)(\bar{x} + \bar{y} + \bar{z})$

4. ✘ $(x + y + \bar{z})(\bar{x} + \bar{y} + \bar{z})$

Correct : 1 Wrong : 0.33

ఈ క్రింది సత్యపట్టిక క్రిందివానిలో ఏ బూలియన్ సమాసానికి అనుగుణంగా ఉంటుంది

x	y	z	f
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	1

Options :

1. ✘ $(\bar{x} + y + z)(\bar{x} + \bar{y} + \bar{z})$
2. ✘ $(x + \bar{y} + z)(\bar{x} + \bar{y} + \bar{z})$
3. ✔ $(x + y + z)(\bar{x} + \bar{y} + \bar{z})$
4. ✘ $(x + y + \bar{z})(\bar{x} + \bar{y} + \bar{z})$

Statistics

Section Id :	798407223
Section Number :	2
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	75
Number of Questions to be attempted:	75
Section Marks:	75
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	798407278
Question Shuffling Allowed :	Yes

Correct : 1 Wrong : 0.33

The suitable average of Central Tendency Measure is

Options :

1. ✘ Median
2. ✔ Mean
3. ✘ Mode
4. ✘ Geometric Mean

Question Number : 76 Question Id : 79840732081 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కేంద్రీయ కొలతల వైఖరి లో స్థిరమైన సగటు

Options :

1. ✘ మధ్యగతము
2. ✔ అంక మధ్యమము
3. ✘ బాహుళకము
4. ✘ గుణాత్మక మధ్యమము

Question Number : 77 Question Id : 79840732082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

What is the suitable average to be used if the data is Qualitative?

Options :

1. ✘ Mean
2. ✘ Mode
3. ✔ Median
4. ✘ Harmonic Mean

Question Number : 77 Question Id : 79840732082 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

దత్తాంశము గుణాత్మకముగా ఉన్నప్పుడు, ఉపయోగించే సరియైన సగటు ఏమిటి

Options :

1. ✘ అంక మధ్యమము
2. ✘ బాహుళకము
3. ✔ మధ్యగతము
4. ✘ హారాత్మక మధ్యమము

Question Number : 78 Question Id : 79840732083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If Arithmetic Mean is 18 and Harmonic Mean is 8 then Geometric Mean is

Options :

1. ✔ 12
2. ✘ 121
3. ✘ 11
4. ✘ 144

Question Number : 78 Question Id : 79840732083 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

అంక మధ్యమము 18 , మరియు హారాత్మక మధ్యమము 8 అయిన, గుణాత్మక

మధ్యమము ఎంత

Options :

1. ✔ 12
2. ✘ 121
3. ✘ 11
4. ✘ 144

Question Number : 79 Question Id : 79840732084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The Arithmetic Mean and Geometric Mean for two observations are 5 and 4 respectively. Find the two observations?

Options :

1. ✘ (4, 4)

2. ✘ (3, 8)

3. ✘ (4, 8)

4. ✔ (8, 2)

Question Number : 79 Question Id : 79840732084 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

రెండు పరిశీలనల యొక్క అంక మధ్యమము మరియు గుణ మధ్యమము వరుసగా 5 మరియు 4. ఆ రెండు పరిశీలనలను కనుగొనుము

Options :

1. ✘ (4, 4)

2. ✘ (3, 8)

3. ✘ (4, 8)

4. ✔ (8, 2)

Question Number : 80 Question Id : 79840732085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The Mean and Variance of 5 observations is 4.4 and 8.24 respectively. Three of the five observations are 1, 6 and 2. Find the other two?

Options :

1. ✘ (8, 5)

2. ✔ (9, 4)

3. ✘ (10, 3)

4. ✘ (6, 7)

Question Number : 80 Question Id : 79840732085 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

5 పరిశీలనల యొక్క మధ్యమము మరియు విస్తృతి వరుసగా 4.4 మరియు 8.24. ఆ ఐదు

పరిశీలనలలో, మూడు పరిశీలనలు 1, 6 మరియు 2. మిగిలిన రెండు పరిశీలనలు

కనుగొనుము

Options :

1. ✘ (8, 5)

2. ✔ (9, 4)

3. ✘ (10, 3)

4. ✘ (6, 7)

Question Number : 81 Question Id : 79840732086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The Mean of 100 observations is 50. What will be the new Mean if 5 is added and each observation is multiplied by 3?

Options :

1. ✘ 160

2. ✔ 165

3. ✘ 120

4. ✘ 170

Question Number : 81 Question Id : 79840732086 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

100 పరిశీలనల అంక మధ్యమము 50. ప్రతి పరిశీలనకు 5 కలిపి 3 చే గుణించినపుడు
కొత్త అంక మధ్యమము ఎంత

Options :

1. ✘ 160
2. ✔ 165
3. ✘ 120
4. ✘ 170

Question Number : 82 Question Id : 79840732087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The average mark of boys in particular subject was 80 and that of girls was 65.

The average mark of all the students was 74. The ratio of boy to girl is

Options :

1. ✘ 2:3
2. ✘ 1:3
3. ✘ 3:1
4. ✔ 3:2

Question Number : 82 Question Id : 79840732087 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక విషయములో బాలుర సగటు మార్కులు 80, మరియు బాలికల సగటు మార్కులు 65.

మొత్తము విద్యార్థుల సగటు మార్కులు 74. బాలుర మరియు బాలికల నిష్పత్తి

Options :

1. ✘ 2:3
2. ✘ 1:3
3. ✘ 3:1
4. ✔ 3:2

Question Number : 83 Question Id : 79840732088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The point of intersection of the less than and the more than Ogive corresponds to the

Options :

1. ✓ Median
2. ✗ Decile
3. ✗ Quartile
4. ✗ mode

Question Number : 83 Question Id : 79840732088 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఆరోహణ మరియు అవరోహణ ఓజివ్ లు ఖండించుకునే బిందువునకు సంబంధించినది

Options :

1. ✓ మధ్యగతం
2. ✗ దశాంశము
3. ✗ చతుర్థాంశము
4. ✗ బాహుళకము

Question Number : 84 Question Id : 79840732089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The breadth of the rectangle is equal to the length of the class interval in

Options :

1. ✗ Freaquency polygon
2. ✓ Area Diagram
3. ✗ Ogive

4. ✖ Pictogram

Question Number : 84 Question Id : 79840732089 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

దీనిలో దీర్ఘ చతురశ్రము యొక్క వెడల్పు తరగతి అంతరము యొక్క పొడవుతో సమానము

Options :

1. ✖ పౌనః పుణ్య క్రమ భుజి

2. ✔ వైశాల్య పటము

3. ✖ ఓజివ్

4. ✖ చిత్రపటం

Question Number : 85 Question Id : 79840732090 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

Frequency density is used in the construction of

Options :

1. ✖ Bar diagram

2. ✖ Freaquency Polygon

3. ✔ Histogram

4. ✖ Ogive

Question Number : 85 Question Id : 79840732090 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

దీని నిర్మాణములో పౌనః పున్య సాంద్రత ను ఉపయోగిస్తారు

Options :

1. ✖ బార్ పటము

2. ✖ పౌనః పున్య బహుభుజి

3. ✓ పోపాన చిత్రము

4. ✘ ఓజివ్

Question Number : 86 Question Id : 79840732091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

H.A Struges formula for determining class-intervals, the number of classes is

Options :

1. ✘ $K = 3.332 \log_{10} N$

2. ✘ $K = 3.323 \log_{10} N$

3. ✘ $K = 3.222 \log_{10} N$

4. ✓ $K = 3.322 \log_{10} N$

Question Number : 86 Question Id : 79840732091 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

తరగతి అంతరమును మరియు తరగతుల సంఖ్యను నిర్ణయించుటకు H.A. స్ట్రుజాస్ యొక్క

సూత్రము

Options :

1. ✘ $K = 3.332 \log_{10} N$

2. ✘ $K = 3.323 \log_{10} N$

3. ✘ $K = 3.222 \log_{10} N$

4. ✓ $K = 3.322 \log_{10} N$

Question Number : 87 Question Id : 79840732092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Probability is a measure, it measures

Options :

1. ✓ Uncertainty

2. ✗ Chaos

3. ✗ Length

4. ✗ Liquids

Question Number : 87 Question Id : 79840732092 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సంభావ్యత అనునది ఒక కోలమానము, ఇది కోలుచునది

Options :

1. ✓ అనిశ్చితను

2. ✗ పూర్తి అస్థవ్యస్థ పరిస్థితులను

3. ✗ పొడవును

4. ✗ ద్రవములను

Question Number : 88 Question Id : 79840732093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Relative Frequency always lies between

Options :

1. ✗ $[-1, 1]$

2. ✓ $[0, 1]$

3. ✗ $(0, 1)$

4. ✗ $[-3, 3]$

Question Number : 88 Question Id : 79840732093 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సాపేక్ష పౌనః పున్యము ఎల్లప్పుడు వీటి మధ్యలో ఉండును

Options :

1. ✘ $[-1, 1]$
2. ✔ $[0, 1]$
3. ✘ $(0, 1)$
4. ✘ $[-3, 3]$

Question Number : 89 Question Id : 79840732094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The definition of Emperical Probability was given by

Options :

1. ✘ James Bernoulli
2. ✘ A.N. Kolmogorou
3. ✔ Von Mises
4. ✘ Jacob Bernoulli

Question Number : 89 Question Id : 79840732094 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

అనుభవ సహిత సంభావ్యత నిర్వచనమును ఇచ్చిన వారు

Options :

1. ✘ జేమ్స్ బెర్నోలి
2. ✘ A.N. కోల్మోగోరో
3. ✔ వాన్ మైసెన్
4. ✘ జాకబ్ బెర్నోలి

Question Number : 90 Question Id : 79840732095 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The first person to obtain a Quantitative measure of uncertainty is?

Options :

1. ✓ James Bernoulli
2. ✗ Jacob Bernoulli
3. ✗ Pascal
4. ✗ James Boole

Question Number : 90 Question Id : 79840732095 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

అనిశ్చిత స్థితికి పరిమాణాత్మక కొలతను రాబట్టిన మొదటి వ్యక్తి

Options :

1. ✓ జేమ్స్ బెర్నౌలి
2. ✗ జాకబ్ బెర్నౌలి
3. ✗ పాస్కల్
4. ✗ జేమ్స్ బూలె

Question Number : 91 Question Id : 79840732096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A is an event. If $P(A) = 1$, then A is called

Options :

1. ✗ Null Event
2. ✗ Compound Event
3. ✓ Sure Event

4. ✘ Independent Event

Question Number : 91 Question Id : 79840732096 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A అనునది ఒక ఘటన . $P(A) = 1$ అయినచో A ను ఇలా అంటారు

Options :

1. ✘ శూన్య ఘటన
2. ✘ సంయుక్త ఘటన
3. ✔ నిశ్చిత ఘటన
4. ✘ స్వతంత్ర ఘటన

Question Number : 92 Question Id : 79840732097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Find the missing frequency from the following data, given that the Median mark is 23.

Mark:	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
No. of students:	5	8	?	6	3

Options :

1. ✘ 10.5
2. ✔ 10
3. ✘ 20
4. ✘ 24

Question Number : 92 Question Id : 79840732097 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మధ్యగతము మార్కు 23 గా ఇవ్వబడినపుడు, ఈ క్రింది దత్తాంశము నుండి లోపించిన పానః

పున్యమును కనుగొనుము

మార్కులు :	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
విద్యార్థుల సంఖ్య :	5	8	?	6	3

Options :

1. ✘ 10.5

2. ✔ 10

3. ✘ 20

4. ✘ 24

Question Number : 93 Question Id : 79840732098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If σ is the standard deviation of $x_1 x_2 x_3 \dots \dots x_n$, then the standard deviation of $k - x_1 k - x_2 k - x_3 \dots \dots k - x_n$, is

Options :

1. ✔ σ

2. ✘ $k\sigma$

3. ✘ $k - \sigma$

4. ✘ $\sigma + k$

Question Number : 93 Question Id : 79840732098 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$x_1 x_2 x_3 \dots \dots x_n$ ల క్రమవిచలనము σ అయినచో $k - x_1 k - x_2 k - x_3 \dots \dots k - x_n$

ల క్రమ విచలనము

Options :

1. ✔ σ

2. ✘ $k\sigma$

3. ✘ $k - \sigma$

4. ✘ $\sigma + k$

Question Number : 94 Question Id : 79840732099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If m is the Arithmetic Mean of x_1, x_2, \dots, x_n then the Arithmetic Mean of $5x_1, 5x_2, \dots, 5x_n$

Options :

1. ✘ m

2. ✘ $5 + m$

3. ✘ $5 - m$

4. ✔ $5m$

Question Number : 94 Question Id : 79840732099 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

m అనేది x_1, x_2, \dots, x_n ల అంక మధ్యమము అయినచో $5x_1, 5x_2, \dots, 5x_n$ ల అంక మధ్యమము

Options :

1. ✘ m

2. ✘ $5 + m$

3. ✘ $5 - m$

4. ✔ $5m$

Question Number : 95 Question Id : 79840732100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The main drawback of arithmetic mean is

Options :

1. ✘ It is affected by small values

2. ✘ It is not useful for further mathematical analysis

3. ✔ It is very much affected by extreme values

4. ✘ It is not based on all observations

Question Number : 95 Question Id : 79840732100 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

అంక మధ్యమము యొక్క ముఖ్యమైన లోపము

Options :

1. ✘ ఇది చిన్న విలువల వల్ల ప్రభావితం అవుతుంది

2. ✘ ఇతరత్రా గణిత విశ్లేషణకు ఇది ఉపయోగపడదు

3. ✔ ఇది మిక్కిలి చివరి విలువలతో చాలా ప్రభావితం అవుతుంది

4. ✘ ఇది అన్ని పరిశీలన మీద ఆధారపడి ఉండదు

Question Number : 96 Question Id : 79840732101 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Standard deviation is not independent of change of the

Options :

1. ✘ Origin

2. ✔ Scale

3. ✘ Mean

4. ✘ None of the given options is correct

Question Number : 96 Question Id : 79840732101 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

దేనిని మార్చినపుడు క్రమ విచలనము స్వతంత్రము కాదు

Options :

1. ✘ మూలబిందువు

2. ✔ స్కేల్

3. ✘ మధ్యమము

4. ✘ ఇచ్చిన సమాధానాలలో ఏదీ సరైనది కాదు

Question Number : 97 Question Id : 79840732102 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The width of each of nine classes in a frequency distribution is 3.5 and the lower class boundary of the lowest class is 12. Which one of the following is the upper class boundary of the 9th class?

Options :

1. ✔ 43.5

2. ✘ 40.5

3. ✘ 47.5

4. ✘ 37.5

Question Number : 97 Question Id : 79840732102 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

9 తరగతులు గల పౌనః పున్య విభజనములో ప్రతి తరగతి యొక్క వెడల్పు 3.5 మరియు కనిష్ట తరగతియొక్క దిగువ హద్దు 12. ఈ క్రింది వానిలో 9 వ తరగతి యొక్క ఎగువ హద్దు ఏది

Options :

1. ✔ 43.5

2. ✘ 40.5

3. ✘ 47.5

4. ✘ 37.5

Question Number : 98 Question Id : 79840732103 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The data collected in population census are termed as

Options :

1. ✘ Secondary data
2. ✘ Tertiary data
3. ✔ Primary Data
4. ✘ Qualitative data

Question Number : 98 Question Id : 79840732103 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

జనాభా లెక్కల లో సేకరించిన దత్తాంశాన్ని ఈ పదముతో పిలుస్తారు

Options :

1. ✘ ద్వితీయ దత్తాంశము
2. ✘ తృతీయ దత్తాంశము
3. ✔ ప్రాథమిక దత్తాంశము
4. ✘ గుణాత్మక దత్తాంశము

Question Number : 99 Question Id : 79840732104 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The following is used in collection of population census data

Options :

1. ✘ Questionnaire
2. ✔ Schedules
3. ✘ Data from journals

4. ✘ None of the given options is correct

Question Number : 99 Question Id : 79840732104 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

జనాభా లెక్కల దత్తాంశ సేకరణలో ఈ క్రింది దానిని ఉపయోగిస్తారు

Options :

1. ✘ ప్రశ్నావళి

2. ✔ పెడ్యూల్

3. ✘ పత్రికల నుండి దత్తాంశము

4. ✘ ఇచ్చిన సమాధానాలలో ఏదీ సరైనది కాదు

Question Number : 100 Question Id : 79840732105 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

For comparison of magnitudes of three variables we use

Options :

1. ✘ Simple bar diagram

2. ✘ frequency curves

3. ✘ Histogram

4. ✔ Multiple bar diagram

Question Number : 100 Question Id : 79840732105 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మూడు చల రాశుల యొక్క పరిమాణములను సరిపోల్చుటకు మనము దీనిని

ఉపయోగిస్తాము

Options :

1. ✘ సామాన్య బార్ పటము

2. ✘ పౌనః పున్య వక్రము

3. ✘ నోపాన పటము

4. ✔ బహుళ బార్ పటము

Question Number : 101 Question Id : 79840732106 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Sum of the deviations of a set of values from their arithmetic mean is equal to

Options :

1. ✔ zero

2. ✘ Minimum

3. ✘ Maximum

4. ✘ Mean

Question Number : 101 Question Id : 79840732106 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక సమితి లోని విలువలకు వాటి అంకమధ్యమమునుండి విచలనాలను తీసుకొనిన ఆ

విచలనాల మొత్తము దీనికి సమానము

Options :

1. ✔ సున్న

2. ✘ కనిష్ఠము

3. ✘ గరిష్ఠము

4. ✘ అంక మధ్యమము

Question Number : 102 Question Id : 79840732107 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

In a sample survey, _____ errors may also arise due to defective frame and faulty selection of sampling units.

Options :

1. ✘ Sampling
2. ✔ Non-sampling
3. ✘ Response
4. ✘ Non-response

Question Number : 102 Question Id : 79840732107 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక ప్రతిరూప సర్వే లో దోషపూరితమైన చట్రం మరియు ప్రతిరూప గ్రహణ యూనిట్లను తప్పుగా ఎన్నుకోవటం ద్వారా వచ్చే దోషాలను _____ అంటారు

Options :

1. ✘ ప్రతిరూప గ్రహణ
2. ✔ ప్రతిరూప గ్రహణము కానటువంటి
3. ✘ ప్రతిస్పందన
4. ✘ ప్రతిస్పందన లేకపోవుట

Question Number : 103 Question Id : 79840732108 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The complete list of sampling units which covers the population is known as

Options :

1. ✘ Sampling fraction
2. ✘ Census survey
3. ✘ Sample survey

4. ✓ Sampling frame

Question Number : 103 Question Id : 79840732108 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

లోకము మొత్తాన్ని ఆవరించే టట్లుగా తీసుకున్న ప్రతిరూప గ్రహణ పూర్తి జాబితాని ఇలా

అంటారు

Options :

1. ✗ ప్రతి రూప గ్రహణ భిన్నము
2. ✗ జనాభా లెక్కల సర్వే
3. ✗ ప్రతిరూప సర్వే
4. ✓ ప్రతిరూప గ్రహణ చట్టం

Question Number : 104 Question Id : 79840732109 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A measure of central value which depends on first 50% of observations is

Options :

1. ✗ Mean
2. ✗ Geometric Mean
3. ✓ Median
4. ✗ Mode

Question Number : 104 Question Id : 79840732109 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మొదటి 50% పరిశీలన పై ఆధారపడి ఉండే ఒక కేంద్ర స్థాన కొలత

Options :

1. ✗ అంక మధ్యమము

2. ✘ గుణ మధ్యమము

3. ✔ మధ్యగతము

4. ✘ బాహుళకము

Question Number : 105 Question Id : 79840732110 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

Consider the following statements:

1. Quadratic Mean is always greater than the Arithmetic Mean.
2. Quartiles are not equidistant from Median in Symmetrical distributions.
3. Mode is the average to be used to find the ideal size foot wear

Which of the above statements is/are correct?

Options :

1. ✘ 2 and 3 only

2. ✔ 2 only

3. ✘ 3 only

4. ✘ 1 and 3 only

Question Number : 105 Question Id : 79840732110 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0.33

ఈ క్రింది ప్రవచనములను పరిశీలించుము

1. పరిశీలనల వర్గముల మధ్యమము ఎల్లప్పుడూ అంక మధ్యమము కంటే ఎక్కువ
2. సౌష్ఠవ విభాజనములలో చతుర్థాంశకములు, మధ్య గతము నుండి సమాన దూరములో ఉండవు
3. పాదరక్షల కొలతకు ఉపయోగించే సగటు బాహుళకము

పైన ఇచ్చిన ఏ ప్రవచనము / ప్రవచనములు సరియైనవి

Options :

1. ✘ 2 మరియు 3 మాత్రమే
2. ✔ 2 మాత్రమే
3. ✘ 3 మాత్రమే
4. ✘ 1 మరియు 3 మాత్రమే

Question Number : 106 Question Id : 79840732111 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

What are the measures which express the spread of observations in terms of distance between the values of selected observations?

Options :

1. ✘ Quartile Deviation and Standard Deviation
2. ✔ Range and Quartile deviation
3. ✘ Mean Deviation and Standard Deviation
4. ✘ Range and Mean deviation

Question Number : 106 Question Id : 79840732111 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఎంచుకోన్న పరిశీలనల మధ్య దూరము ఆధారముగా పరిశీలనల విస్తరణ తెలియచేసే
కొలబద్ధలు ఏవి?

Options :

1. ✘ చతుర్థాంశ విచలనము మరియు క్రమ విచలనము
2. ✔ వ్యాప్తి మరియు చతుర్థాంశ విచలనము
3. ✘ అంక మధ్యమ విచలనం మరియు క్రమ విచలనము

వ్యాప్తి మరియు అంక మధ్యమ విచలనము

4. ✘

Question Number : 107 Question Id : 79840732112 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

For any two numbers a and b, Standard Deviation is

Options :

1. ✘ $\frac{|a+b|}{2}$

2. ✘ $\frac{a-b}{2}$

3. ✔ $\frac{a+b}{2}$

4. ✘ $\frac{|a-b|}{2}$

Question Number : 107 Question Id : 79840732112 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఏవేని రెండు a మరియు b , సంఖ్యలకు క్రమవిచలనము

Options :

1. ✘ $\frac{|a+b|}{2}$

2. ✘ $\frac{a-b}{2}$

3. ✔ $\frac{a+b}{2}$

4. ✘ $\frac{|a-b|}{2}$

Question Number : 108 Question Id : 79840732113 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If Mean < Median or Mean < Mode then the distribution is

Options :

1. ✘ Positively Skewed
2. ✔ Negatively Skewed
3. ✘ Symmetric
4. ✘ None of the given options is correct

Question Number : 108 Question Id : 79840732113 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మధ్యమము < మధ్యగతము లేదా మధ్యమము < బాహుళకము అయినప్పుడు

విభాజనము

Options :

1. ✘ దనాత్మక అసౌష్ఠత
2. ✔ ఋణాత్మక అసౌష్ఠత
3. ✘ సౌష్ఠవము
4. ✘ ఇచ్చిన జవాబులు ఏవీ సరైనవి కావు

Question Number : 109 Question Id : 79840732114 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Limits of karl Pearsons' Coefficient of skewness s_k are

Options :

1. ✔ $|s_k| \leq 3$
2. ✘ $|s_k| \leq 2$
3. ✘ $|s_k| \leq 1$
4. ✘ $|s_k| \geq 1$

Question Number : 109 Question Id : 79840732114 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కార్ల పీయర్ సన్ యొక్క అసౌష్ఠతా గుణకము s_k యొక్క అవధులు

Options :

1. ✓ $|s_k| \leq 3$

2. ✗ $|s_k| \leq 2$

3. ✗ $|s_k| \leq 1$

4. ✗ $|s_k| \geq 1$

Question Number : 110 Question Id : 79840732115 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Given $Q_1 = 18, Q_3 = 25, \text{Mode} = 21$ and $\text{Mean} = 18$. Find the coefficient of Skewness.

Options :

1. ✗ 0.812

2. ✗ -0.714

3. ✗ -0.812

4. ✓ 0.714

Question Number : 110 Question Id : 79840732115 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

$Q_1 = 18, Q_3 = 25$ బాహుళకము 21 మరియు మధ్యమము 18 ఇచ్చినపుడు అసౌష్ఠతా

గుణకమును కనుగొనుము

Options :

1. ✗ 0.812

2. ✗ -0.714

3. ✗ -0.812

4. ✓ 0.714

Question Number : 111 Question Id : 79840732116 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If mean and Geometric mean of 10 observations are 12 and 9 respectively, then variance is

Options :

1. ✗ 8

2. ✓ 63

3. ✗ 64

4. ✗ 72

Question Number : 111 Question Id : 79840732116 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

10 పరిశీలన యొక్క మధ్యమము మరియు గుణ మధ్యమము వరుసగా 12 మరియు 9

అయినచో, విస్తృతి

Options :

1. ✗ 8

2. ✓ 63

3. ✗ 64

4. ✗ 72

Question Number : 112 Question Id : 79840732117 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Pearson Coefficient of Skewness for a distribution is 0.4 and Coefficient of Variation is 30%. Its Mode is 88. Find the Mean and Median.

Options :

1. ✗ 10 and 96

2. ✗ 96 and 100

3. ✘ 96 and 86

4. ✔ 86 and 96

Question Number : 112 Question Id : 79840732117 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక విభాజనకు పీయర్ సన్ అసౌష్ఠతా గుణకము 0.4 మరియు విచలనాంకము 30%. దీని
బాహుళకము 88. విభాజనము యొక్క మధ్యమము మరియు మధ్యగతమును
కనుగొనుము

Options :

1. ✘ 10 మరియు 96

2. ✘ 96 మరియు 100

3. ✘ 96 మరియు 86

4. ✔ 86 మరియు 96

Question Number : 113 Question Id : 79840732118 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The empirical relation between Mean deviation (MD) and Standard Deviation (SD)
is

Options :

1. ✔ $5MD = 4SD$

2. ✘ $4MD = 5SD$

3. ✘ $6MD = 5SD$

4. ✘ $3MD = 2SD$

Question Number : 113 Question Id : 79840732118 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మధ్యమ విచలనము(MD) మరియు క్రమ విచలనము (SD) ల మధ్య అనుభావిక

సంబంధము

Options :

1. ✓ $5MD = 4SD$
2. ✗ $4MD = 5SD$
3. ✗ $6MD = 5SD$
4. ✗ $3MD = 2SD$

Question Number : 114 Question Id : 79840732119 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A Measure of dispersion which does not depend on the unit of measurement of data

Options :

1. ✗ Mean Deviation
2. ✗ Standard Deviation
3. ✓ Coefficient of variation
4. ✗ Range

Question Number : 114 Question Id : 79840732119 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

దత్తాంశము యొక్క కొలతల యూనిట్ల పై ఆధార పడని విచరణ కొలత

Options :

1. ✗ మధ్యమ విచలనము
2. ✗ క్రమ విచలనము
3. ✓ విచలనాంకము

4. ✘ వ్యాప్తి

Question Number : 115 Question Id : 79840732120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Kurtosis of Normal distribution in terms of β_2 coefficient is

Options :

1. ✘ $\beta_2 > 3$

2. ✔ $\beta_2 < 3$

3. ✘ $\beta_2 = 0$

4. ✘ $\beta_2 = 3$

Question Number : 115 Question Id : 79840732120 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సామాన్య విభాజన యొక్క కకుదత్వము , β_2 గుణకము పదములలో

Options :

1. ✘ $\beta_2 > 3$

2. ✔ $\beta_2 < 3$

3. ✘ $\beta_2 = 0$

4. ✘ $\beta_2 = 3$

Question Number : 116 Question Id : 79840732121 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Coefficient of determination lies between the limits

Options :

1. ✔ $[0,1]$

2. ✘ $(0,1)$

3. ✘ $(-1,1)$

4. ✘ $[-1,1]$

Question Number : 116 Question Id : 79840732121 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

దృఢ నిర్ధారణ గుణకం ఈ అవధుల మధ్య ఉండును

Options :

1. ✔ $[0,1]$

2. ✘ $(0,1)$

3. ✘ $(-1,1)$

4. ✘ $[-1,1]$

Question Number : 117 Question Id : 79840732122 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The correlation between Intelligence and Demand is

Options :

1. ✘ Negative

2. ✘ Positive

3. ✔ Non-Sense

4. ✘ Either positive or negative

Question Number : 117 Question Id : 79840732122 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

తెలివి తెటలు మరియు గిరాకీ మధ్య సహసంబంధము

Options :

1. ✘ ఋణాత్మకము

2. ✘ ధనాత్మకము

3. ✔ అర్ధ రాహిత్యము

4. ✘ ధనాత్మకము లేదా ఋణాత్మకము

Question Number : 118 Question Id : 79840732123 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The limits of Rank correlation coefficient are

Options :

1. ✘ $[0,1]$

2. ✘ $[-1,0]$

3. ✔ $[-1,1]$

4. ✘ $[0.5,0]$

Question Number : 118 Question Id : 79840732123 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కోటి సహ సంబంధ గుణకమునకు అవధులు

Options :

1. ✘ $[0,1]$

2. ✘ $[-1,0]$

3. ✔ $[-1,1]$

4. ✘ $[0.5,0]$

Question Number : 119 Question Id : 79840732124 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

For a group of 8 students, the sum of squares of differences in ranks for Telugu and English marks was found to be 50. What is the value of rank correlation coefficient?

Options :

1. ✘ 0.37

2. ✘ -0.40

3. ✘ -0.37

4. ✔ 0.40

Question Number : 119 Question Id : 79840732124 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక సమూహము లోని 8 మంది విద్యార్థుల తెలుగు మరియు ఆంగ్లము మార్కుల కోటిల

మధ్య విచరణ వర్గాల మొత్తము 50 గా కనుగొనబడినది. కోటి సహసంబంధ గుణకము

యొక్క విలువ ఎంత

Options :

1. ✘ 0.37

2. ✘ -0.40

3. ✘ -0.37

4. ✔ 0.40

Question Number : 120 Question Id : 79840732125 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

For 20 pairs (x_i, y_i) of observations the correlation coefficient $\gamma(x, y) = 0.4$ and $\bar{X} = 12, \bar{Y} = 15, \sigma_x^2 = 9, \sigma_y^2 = 16$. Later it was found that the pair $(x=20, y=15)$ was wrongly taken as $(x=15, y=20)$. Find the correct value of the correlation coefficient ?

Options :

1. ✘ -0.31

2. ✘ 0.61

3. ✔ 0.31

4. ✘ -0.61

Question Number : 120 Question Id : 79840732125 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

20 జతల (x_i, y_i) పరిశీలనల సహ సంబంధ గుణకము $\gamma(x, y) = 0.4$ మరియు $\bar{X} = 12$,
 $\bar{Y} = 15$, $\sigma_x^2 = 9$, $\sigma_y^2 = 16$. తదుపరి ఒక జత $(x=20, y=15)$ బదులు తప్పుగా $(x=15, y=20)$
తీసుకొనబడినది అని తెలియవచ్చినది. సరియైన సహసంబంధ గుణకము కనుగొనుము

Options :

1. ✘ -0.31

2. ✘ 0.61

3. ✔ 0.31

4. ✘ -0.61

Question Number : 121 Question Id : 79840732126 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If the correlation Coefficient r is more than 6 times the probable error, then
correlation is

Options :

1. ✔ Significant

2. ✘ Positive

3. ✘ Negative

4. ✘ Not significant

Question Number : 121 Question Id : 79840732126 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సహసంబంధ గుణకము , సంభావ్యతా దోషము కన్న 6 రెట్లు ఎక్కువ ఉన్నచో

సహసంబంధము

Options :

1. ✓ సార్థకమైనది
2. ✗ ధనాత్మకము
3. ✗ ఋణాత్మకము
4. ✗ సార్థకము కాలేదు

Question Number : 122 Question Id : 79840732127 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

If the correlation coefficient r is 0.917 and its Probable Error is 0.034. What would be the value of n ?

Options :

1. ✗ 10
2. ✓ 8
3. ✗ 12
4. ✗ 9

Question Number : 122 Question Id : 79840732127 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సహ సంబంధ గుణకము r 0.917 మరియు దాని సంభావ్యతా దోషము 0.034 అయినచో

n విలువ ఎంత

Options :

1. ✗ 10
2. ✓ 8
3. ✗ 12

4. ✘ 9

Question Number : 123 Question Id : 79840732128 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The coefficient of rank correlation of the marks obtained by 10 students in statistics and accountancy was found to be 0.2. It was later discovered that the difference in ranks in the two subjects obtained by one of the students was wrongly taken as 9 instead of 7. Find the correction coefficient of rank correlation?

Options :

1. ✘ 0.394

2. ✘ 0.390

3. ✘ 0.392

4. ✔ 0.391

Question Number : 123 Question Id : 79840732128 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

10 మంది విద్యార్థులకు సాంఖ్యిక శాస్త్రము మరియు గణన శాస్త్రంలో వచ్చిన మార్కుల మధ్య కోట సహ సంబంధము గుణకము 0.2 గా కనుగొనబడినది. తరువాత ఒక విద్యార్థికి రెండు విషయములలో వచ్చిన మార్కుల యొక్క కోటీలలోని భేదము 7 బదులు తప్పగా 9 అని తీసుకొనబడినది. సరియైన కోటీ సహసంబంధ గుణకమును కనుగొనుము .

Options :

1. ✘ 0.394

2. ✘ 0.390

3. ✘ 0.392

4. ✔ 0.391

Question Number : 124 Question Id : 79840732129 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The Logarithmic Straight Line is used as an expression for

Options :

1. ✘ Absolute movement
2. ✘ Random movement
3. ✔ Secular movement
4. ✘ Irregular movement

Question Number : 124 Question Id : 79840732129 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సంవర్గమాన సరళ రేఖను దేనిని వివరించడానికి ఉపయోగింతురు

Options :

1. ✘ పరమ చలనము
2. ✘ యాదృచ్ఛిక చలనము
3. ✔ దీర్ఘకాలిక చలనము
4. ✘ క్రమరహిత చలనము

Question Number : 125 Question Id : 79840732130 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Which average is used for Smoothing a Time Series?

Options :

1. ✘ Pooled average
2. ✔ Moving average
3. ✘ Weighted average
4. ✘ Simple average

Question Number : 125 Question Id : 79840732130 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కాల శ్రేణిని మృదువు చేయుటకు ఏ మధ్యమమును ఉపయోగింతురు

Options :

1. ✘ సంయుక్త మధ్యమము
2. ✔ చల మధ్యమము
3. ✘ భార మధ్యమములు
4. ✘ సరళ మధ్యమము

Question Number : 126 Question Id : 79840732131 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

In time series , deseasonalisation is needed for the study of

Options :

1. ✔ Cyclic Component
2. ✘ Trend Component
3. ✘ Random Component
4. ✘ None of the given options is correct

Question Number : 126 Question Id : 79840732131 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కాలశ్రేణి ని ఋతు దాంచల్య రహితము చేయుట _____ అధ్యయనము చేయుటకు

అవసరము

Options :

1. ✔ చక్రియ అంశము
2. ✘ ప్రవృత్తి అంశము
3. ✘ యాదృచ్ఛిక అంశము

4. ✘ ఇచ్చిన బహుళలో ఏదీ సరైనది కాదు

Question Number : 127 Question Id : 79840732132 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The Oscillation movements in a time series with period of Oscillation more than one year are termed on

Options :

1. ✘ Trend
2. ✘ Seasonal Variation
3. ✔ Cyclic Variation
4. ✘ Irregular variations

Question Number : 127 Question Id : 79840732132 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కాలశ్రేణిలో డోలాయమాన ఆవర్తనము ఒక సంవత్సరము కంటే ఎక్కువ ఉన్నప్పుడు,

డోలాయమాన చలనములను ఈ పదముతో అంటారు

Options :

1. ✘ ప్రవృత్తి
2. ✘ ఋతు చాంచల్యాలు
3. ✔ చక్రీయ చాంచల్యాలు
4. ✘ క్రమరహిత చాంచల్యాలు

Question Number : 128 Question Id : 79840732133 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Number of equations required to fit Second Degree Parabola Curve?

Options :

1. ✘ 4

2. ✔ 3

3. ✘ 2

4. ✘ 1

Question Number : 128 Question Id : 79840732133 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

రెండో తరగతి పరావలయమును సంధించుటకు కావలసిన సమీకరణముల సంఖ్య

Options :

1. ✘ 4

2. ✔ 3

3. ✘ 2

4. ✘ 1

Question Number : 129 Question Id : 79840732134 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Paasche's price index is based on

Options :

1. ✘ Base year quantities

2. ✘ Average of base and current year quantities

3. ✘ Geometric mean of base and current year quantities

4. ✔ Current year quantities

Question Number : 129 Question Id : 79840732134 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

షాపీ ధరల సూచిక దీనిపై ఆధారపడి ఉన్నది

Options :

1. ✘ ఆధార సంవత్సర పరిమాణములు

2. ✘ ఆధార మరియు వర్తమాన సంవత్సర పరిమాణముల అంక మధ్యమము

3. ✘ ఆధార మరియు వర్తమాన సంవత్సర పరిమాణముల గుణ మధ్యమము

4. ✔ వర్తమాన సంవత్సర పరిమాణములు

Question Number : 130 Question Id : 79840732135 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The prices of a commodity in the year 1985 and 1990 were 25 and 30 respectively taking 1985 as base year the average relative price is:

Options :

1. ✘ 113.25

2. ✘ 110.25

3. ✘ 108.79

4. ✔ 109.54

Question Number : 130 Question Id : 79840732135 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

1985 మరియు 1990 సంవత్సరములలో ఒక వస్తువు యొక్క ధరలు వరుసగా 25

మరియు 30. 1985 ను ఆధార సంవత్సరముగా తీసుకొనిన సాపేక్ష ధరల మధ్యమము

Options :

1. ✘ 113.25

2. ✘ 110.25

3. ✘ 108.79

4. ✔ 109.54

Question Number : 131 Question Id : 79840732136 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Real wages are defined as

Options :

1. ✘ $\frac{\text{Cost of living index}}{\text{Money wages}} \times 100$

2. ✘ $\frac{\text{Money wage}}{\text{Purchasing power}}$

3. ✔ $\frac{\text{Money wages}}{\text{Cost of living index}} \times 100$

4. ✘ $\text{Money wages} \times \text{Price index}$

Question Number : 131 Question Id : 79840732136 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

వాస్తవ వేతనము ఇలా నిర్వచించబడినది

Options :

1. ✘ $\frac{\text{జీవన ప్రమాణ సూచిక}}{\text{ద్రవ్య వేతనము}} \times 100$

2. ✘ $\frac{\text{ద్రవ్య వేతనము}}{\text{కొనుగోలు శక్తి}}$

3. ✔ $\frac{\text{ద్రవ్య వేతనము}}{\text{జీవన ప్రమాణ సూచిక}} \times 100$

4. ✘ $\text{ద్రవ్య వేతనము} \times \text{ధరల సూచిక}$

Question Number : 132 Question Id : 79840732137 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The most appropriate average used in the construction of Index numbers is

Options :

1. ✘ Arithmetic mean

2. ✔ Geometric Mean

3. ✘ Medium

4. ✘ Harmonic mean

Question Number : 132 Question Id : 79840732137 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సూచి సంఖ్యల నిర్మాణములో ఉపయోగించు అత్యంత సముచితమైన మధ్యమము

Options :

1. ✘ అంక మధ్యమము

2. ✔ గుణమధ్యమము

3. ✘ మధ్యగతము

4. ✘ హారమధ్యమము

Question Number : 133 Question Id : 79840732138 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Laspeyre's Quantity Index Formula with usual notation is

Options :

1. ✔ $\frac{\sum q_{ij}p_{oj}}{\sum q_{oj}p_{oj}} \times 100$

2. ✘ $\frac{\sum q_{ij}p_{oj}}{\sum q_{ij}p_{ij}} \times 100$

3. ✘ $\frac{\sum q_{ij}p_{ij}}{\sum q_{oj}p_{ij}} \times 100$

4. ✘ $\frac{\sum q_{ij}p_{oj}}{\sum q_{oj}p_{ij}} \times 100$

Question Number : 133 Question Id : 79840732138 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

సాధారణ సంకేతాలలో లాస్పియర్ యొక్క పరిమాణ సూచిక సూత్రము

Options :

1. ✓ $\frac{\sum q_{ij}p_{oj}}{\sum q_{oj}p_{oj}} \times 100$

2. ✗ $\frac{\sum q_{ij}p_{oj}}{\sum q_{ij}p_{ij}} \times 100$

3. ✗ $\frac{\sum q_{ij}p_{ij}}{\sum q_{oj}p_{ij}} \times 100$

4. ✗ $\frac{\sum q_{ij}p_{oj}}{\sum q_{oj}p_{ij}} \times 100$

Question Number : 134 Question Id : 79840732139 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Marshall-Edge worth Price Index does not obey

Options :

1. ✗ Time reversal test

2. ✗ Unit test

3. ✓ Factor reversal test

4. ✗ None of the given options is correct

Question Number : 134 Question Id : 79840732139 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మార్షల్ ఎడ్జ్ వర్త్ ధరల సూచిక ఈ పరీక్షను పాటించదు

Options :

1. ✗ కాలతిరోగమన పరీక్ష

2. ✗ యూనిట్ పరీక్ష

3. ✓ కారణాంత తిరోవర్తన పరీక్ష

4. ✘ ఇచ్చిన జవాబులలో ఏదీ సరైనది కాదు

Question Number : 135 Question Id : 79840732140 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Consumer Price index is same as

Options :

1. ✘ Marshal – Edg worth index

2. ✔ Laspeyre's Index

3. ✘ Paasche index

4. ✘ Fisher Index

Question Number : 135 Question Id : 79840732140 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

వినియోగదారుల ధరల సూచి దీనితో సమానము

Options :

1. ✘ మార్షల్ ఎడ్జ్ వర్త్ సూచిక

2. ✔ లాస్పెయర్ సూచిక

3. ✘ పాషి సూచిక

4. ✘ ఫిషర్ సూచిక

Question Number : 136 Question Id : 79840732141 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Fisher's Index Number is the only formula among all other formula which satisfies

Options :

1. ✘ Time Reversal Test

2. ✔ Factor Reversal Test

3. ✘ Circular Test

4. ✘ Unit Test

Question Number : 136 Question Id : 79840732141 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

అన్ని సూచి సంఖ్యలలో ఫిషర్ సూచి సంఖ్య మాత్రమే ఈ పరీక్షను సంతృప్తి పరచును

Options :

1. ✘ కాలతిరోగమన పరీక్ష

2. ✔ కారణాంత తిరోవర్తన పరీక్ష

3. ✘ చక్రీయ పరీక్ష

4. ✘ యూనిట్ పరీక్ష

Question Number : 137 Question Id : 79840732142 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The most suitable average to determine the Cost of Living Index for family budget method is

Options :

1. ✘ Arithmetic Mean

2. ✘ Geometric Mean

3. ✔ Weighted Arithmetic Mean

4. ✘ Median

Question Number : 137 Question Id : 79840732142 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కుటుంబ ఆదాయ వ్యయ పద్ధతిలో, జీవన ప్రమాణ సూచి సంఖ్యల నిర్మాణానికి ఉపయోగించే

అత్యంత సమంజసమైన మధ్యమము

Options :

1. ✘ అంక మధ్యమము

2. ✘ గుణ మధ్యమము

3. ✔ భారిత అంక మధ్యమము

4. ✘ మధ్యగతము

Question Number : 138 Question Id : 79840732143 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Fisher's index number is the _____ between laspeyres' and paasche's index numbers

Options :

1. ✔ Geometric mean

2. ✘ Harmonic Mean

3. ✘ Arithmetic Mean

4. ✘ Median

Question Number : 138 Question Id : 79840732143 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఫిషర్ సూచి సంఖ్య అనేది లాస్పెయర్ మరియు పాషీ సూచి సంఖ్యల

Options :

1. ✔ గుణ మధ్యమము

2. ✘ హారమధ్యమము

3. ✘ అంక మధ్యమము

4. ✘ మధ్యగతము

Question Number : 139 Question Id : 79840732144 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Marshal Edgeworth index number lies between

Options :

1. ✘ Fisher index and laspeyre's index numbers
2. ✘ Fisher index and paasche's index numbers
3. ✘ Laspeyres and Drobish-Bouley index numbers
4. ✔ Laspeyres and paashe's index numbers

Question Number : 139 Question Id : 79840732144 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

మార్షల్ ఎడ్జ్ వర్త్ సూచి సంఖ్య వీటి మధ్యలో ఉండును

Options :

1. ✘ ఫిషర్ సూచి మరియు లాస్పియర్ సూచి సంఖ్య
2. ✘ ఫిషర్ సూచి మరియు పాషీ సూచి సంఖ్య
3. ✘ లాస్పియర్ సూచి మరియు డ్రీబీష్ -బౌలీ సూచి సంఖ్య
4. ✔ లాస్పియర్ సూచి మరియు పాషీ సూచి సంఖ్య

Question Number : 140 Question Id : 79840732145 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

A bag contains 6 white and 3 black balls which are identical in shape. One ball is drawn at random, what is the probability it is white?

Options :

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

4. ✘ 1

Question Number : 140 Question Id : 79840732145 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఒక సంచిలో ఒకే ఆకారముగల 6 తెల్లని మరియు 3 నల్లని బంతులు కలవు. ఒక బంతి
యాదృచ్ఛికముగా తీసుకొనబడినది. ఈ బంతి తెల్లని బంతి అగుటకు సంభావ్యత ఎంత

Options :

1. ✘ $\frac{1}{2}$

2. ✔ $\frac{2}{3}$

3. ✘ $\frac{1}{3}$

4. ✘ 1

Question Number : 141 Question Id : 79840732146 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

_____ index number satisfies circular test

Options :

1. ✘ Laspeyre's

2. ✘ Paasche's

3. ✘ Fisher's

4. ✔ Kelly's

Question Number : 141 Question Id : 79840732146 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

_____ సూచి సంఖ్య చక్రీయ పరీక్షను తృప్తి పరచును

Options :

1. ✘ లాస్పెయర్స్

2. ✘ పాపీ

3. ✘ ఫిషర్

4. ✔ కెల్లీ

Question Number : 142 Question Id : 79840732147 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The following data relate to the price of rice per kilogram in different years

year	1998	1999	2000	2001	2002	2003	2004
Price(Rs):	6	7	7	8	10	14	12

Find the link relative value for the year 2002

Options :

1. ✘ 100

2. ✘ 114.29

3. ✔ 125

4. ✘ 140

Question Number : 142 Question Id : 79840732147 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఈ క్రింది దత్తాంశమునకు వివిధ సంవత్సరముల⁶ ఒక కిలో⁶ బియ్యము ధరకు సంబంధించినది

సంవత్సరము	1998	1999	2000	2001	2002	2003	2004
ధర :	6	7	7	8	10	14	12

2002 సంవత్సరమునకు లింక్ సాపేక్ష విలువను కనుగొనుము

Options :

1. ✘ 100

2. ✘ 114.29

3. ✔ 125

4. ✘ 140

Question Number : 143 Question Id : 79840732148 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Chain index is defined as

Options :

1. ✓
$$\frac{\text{current year link relative} \times \text{preceding year chain index}}{100}$$

2. ✗
$$\frac{\text{preceding year link relative}}{100}$$

3. ✗
$$\frac{\text{previous year fixed base index}}{\text{current year link relative}} \times 100$$

4. ✗ None of the given options is correct

Question Number : 143 Question Id : 79840732148 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

గోలుసు సూచిక ఈ విధముగా నిర్వచించబడినది

Options :

1. ✓
$$\frac{\text{ప్రస్తుత సంవత్సరపు లింక్ సాపేక్షము} \times \text{క్రితం సంవత్సరపు గోలుసు సూచిక}}{100}$$

2. ✗
$$\frac{\text{క్రితం సంవత్సరపు లింక్ సాపేక్షము}}{100}$$

3. ✗
$$\frac{\text{క్రితం సంవత్సరపు స్థిర ఆధార సూచిక}}{\text{ప్రస్తుత సంవత్సరపు లింక్ సాపేక్షము}} \times 100$$

4. ✗ ఇచ్చిన జవాబులలో ఏదీ సరైనది కాదు

Question Number : 144 Question Id : 79840732149 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Real income is also known as

Options :

1. ✓ Deflated income

2. ✘ Increased income

3. ✘ Decreased income

4. ✘ Price index

Question Number : 144 Question Id : 79840732149 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

వాస్తవ ఆదాయమును ఇలా కూడా అనుకోవచ్చు

Options :

1. ✔ ప్రత్యేక ఆదాయం

2. ✘ పెరిగిన ఆదాయము

3. ✘ తగ్గిన ఆదాయము

4. ✘ ధరల సూచిక

Question Number : 145 Question Id : 79840732150 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Most widely used model in time series analysis is

Options :

1. ✘ Additive model

2. ✔ Multiplicative Model

3. ✘ Linear Model

4. ✘ Mixed Model

Question Number : 145 Question Id : 79840732150 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes

Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కాలశ్రేణి విశ్లేషణలో చాలా ఎక్కువగా ఉపయోగించే నమూనా

Options :

1. ✘ సంకలన నమూనా

2. ✔ గుణకార నమూనా

3. ✘ ఏకఘాత నమూనా

4. ✘ మిశ్రమ నమూనా

Question Number : 146 Question Id : 79840732151 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The graph of the time series is also called

Options :

1. ✘ Histogram

2. ✘ Frequency curve

3. ✔ Historigram

4. ✘ None of the given options is correct

Question Number : 146 Question Id : 79840732151 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

కాలశ్రేణి యొక్క రేఖా చిత్రమును ఇలా కూడా అంటారు

Options :

1. ✘ సోపాన చిత్రము

2. ✘ పానః పుణ్య వక్రము

3. ✔ కాలిక చిత్రము

4. ✘ ఇచ్చిన జవాబులలో ఏదీ సరైనది కాదు

Question Number : 147 Question Id : 79840732152 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

The correction factor used in the computation of rank correlation when tied observations are present in the data is?

('m' is the number of times an observation is repeated)

Options :

1. ✓ $\frac{m(m^2-1)}{12}$

2. ✗ $\frac{m^2(m-1)}{12}$

3. ✗ $\frac{m(m-1)}{12}$

4. ✗ $\frac{m^2-1}{2m}$

Question Number : 147 Question Id : 79840732152 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

దత్తాంశములో సమాన (tied) పరిశీలనలు ఉన్నప్పుడు, కోటి సహ సంబంధమును

గణన చేయుటలో ఉపయోగించే పరిష్కార కారకము ఏది?

('m' అనేది ఒక పరిశీలన ఎన్నిసార్లు పునరావృత్తి అవుతుందనే సంఖ్య)

Options :

1. ✓ $\frac{m(m^2-1)}{12}$

2. ✗ $\frac{m^2(m-1)}{12}$

3. ✗ $\frac{m(m-1)}{12}$

4. ✗ $\frac{m^2-1}{2m}$

Question Number : 148 Question Id : 79840732153 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

In a scatter diagram if all points appear to form a straight line going down ward from left to right, then the correlation is know as

Options :

1. ✘ perfect positive correlation
2. ✔ simple positive correlation
3. ✘ No Correction
4. ✘ Perfect negative correlation

Question Number : 148 Question Id : 79840732153 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

వ్యాపక పటములో అన్ని బిందువులు సరళ రేఖా రూపం లో ఎడమ వైపు నుండి క్రిందికి కుడివైపుకు పడుతున్నట్లయినపుడు సహసంబంధమును ఇలా అనుకుంటారు

Options :

1. ✘ సంపూర్ణ ధనాత్మక సహ సంబంధము
2. ✔ సామాన్య ధనాత్మక సహసంబంధము
3. ✘ సహ సంబంధము లేదు
4. ✘ సంపూర్ణ ఋణాత్మక సహ సంబంధము

Question Number : 149 Question Id : 79840732154 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

To compare the variability in two series we use

Options :

1. ✘ Standard deviation
2. ✔ Coefficient of variation
3. ✘ Mean Deviation

4. ✘ Scatter diagram

Question Number : 149 Question Id : 79840732154 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

రెండు శ్రేణుల లోని విస్తరణను సరిపోల్చుటకు దీనిని ఉపయోగిస్తాయి

Options :

1. ✘ క్రమవిచలనము

2. ✔ విచలనాంకము

3. ✘ మధ్యమ విచలనము

4. ✘ వ్యాపక పటము

Question Number : 150 Question Id : 79840732155 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

Geometric mean of five observations 2,5,8,0,12 is

Options :

1. ✔ 0

2. ✘ 3.9487

3. ✘ 5.5663

4. ✘ 9.8648

Question Number : 150 Question Id : 79840732155 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0.33

ఐదు పరిశీలనలు 2,5,8,0, 12 ల యొక్క గుణమధ్యమము

Options :

1. ✔ 0

2. ✘ 3.9487

3. ✘ 5.5663

4. ✖ 9.8648