Andhra Pradesh State Council of Higher Education

Notations :

1.Options shown in green color and with ✔ icon are correct.

2.Options shown in red color and with ✖ icon are incorrect.

Question Paper Name :	MATHEMATICS 21st Sep 2021 S1
Duration :	120
Total Marks :	150
Display Marks:	No
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console? (SA type of questions will be always auto saved) :	Yes
Is this Group for Examiner? :	No

General English

Section Id :	152536301

Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	21
Section Marks :	25
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Question Id : 1525369085 Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (1 to 5)

Directions (Q.No. 1 to 5) : Read the following passage and answer the questions that follow.

Even when the government realises the importance of a plentiful supply of trees, it is difficult for it to persuade the villager to see this. He wants wood to cook his food with; and he can earn money by making charcoal or selling wood to the townsman. He is usually too lazy or too careless to plant and look after new trees. So, unless the government has a good system of control, or can educate the people, the forests slowly disappear.

Sub questions

Question Number : 1 Question Id : 1525369086 Display Question Number : Yes Is Question Mandatory : No

The government finds it difficult to make the villager realise _____

Options :

1. ✖ The importance of food being cooked.

2. ✔ The value of trees

3. ✖ The difficulty of cutting the forest

4. ✖ The needs of the town dwellers

Question Number : 2 Question Id : 1525369087 Display Question Number : Yes Is Question Mandatory : No

The villager makes charcoal

Options :

1. ✖ to brush the teeth

2. ✖ to help his neighbours

3. ✔ to earn money

4. ✖ to pass the time lavishly

Question Number : 3 Question Id : 1525369088 Display Question Number : Yes Is Question Mandatory : No

The villager pays no heed to

Options :

1. ✔ trees

2. ✖ charcoal

3. ✖ proper cooking

4. ✖ neighbours

Question Number : 4 Question Id : 1525369089 Display Question Number : Yes Is Question Mandatory : No

According to the passage the government should _____

Options :

1. ✖ ban making charcoal

2. ✖ punish the villager

3. ✖ helps the townsmen

4. ✔ regulate cutting down of trees

Question Number : 5 Question Id : 1525369090 Display Question Number : Yes Is Question Mandatory : No

The synonym of the word 'lazy' is _____

Options :

1. ✖ Careful

2. ✔ Derelict

3. ✖ Attentive

4. ✖ Conscientious

Question Number : 6 Question Id : 1525369091 Display Question Number : Yes Is Question

Mandatory : No

The idiom 'to fight tooth and nail' means

Options :

1. ✔ making every possible effort to win

2. ✖ to fight a loosing battle

3. ✖ to fight cowardly

4. ✖ to fight with a woman

Question Number : 7 Question Id : 1525369092 Display Question Number : Yes Is Question Mandatory : No

I saw a boy _____ red hair. Fill in the blank with correct preposition.

Options :

1. ✖ on

2. ✖ of

3. ✔ with

4. ✖ in

Question Number : 8 Question Id : 1525369093 Display Question Number : Yes Is Question

Mandatory : No

An example for the Interrogative sentence is _____

Options :

1. ✖ He is a bad listener

2. ✖ What a surprise!

3. ✔ When did you see him

4. ✖ Shunt the door

Question Number : 9 Question Id : 1525369094 Display Question Number : Yes Is Question Mandatory : No

Pick out the most suitable word to complete the sentence.
_____is a person who walks is sleep.

Options :

1. ✖ Omniscient

2. ✖ Orientalist

3. ✖ Parasite

4. ✔ Somnambulist

Question Number : 10 Question Id : 1525369095 Display Question Number : Yes Is Question Mandatory : No

Fill in the blank with appropriate verb form.
I _____ a letter a few minutes ago.

Options :

1. ✖ have received

2. ✔ received

3. ✖ receive

4. ✖ will receive

Question Number : 11 Question Id : 1525369096 Display Question Number : Yes Is Question Mandatory : No

Ramesh is an ingenious writer.
The meaning of the underlined word is _____

Options :

1. ✖ poor

2. ✖ mechanical

3. ✖ foolish

4. ✔ skillful

Question Number : 12 Question Id : 1525369097 Display Question Number : Yes Is Question Mandatory : No

"When did you see him?" The sentence is

Options :

1. ✔ Interrogative

2. ✖ Imperative

3. ✖ Assertive

4. ✖ Exclamatory

Question Number : 13 Question Id : 1525369098 Display Question Number : Yes Is Question Mandatory : No

'Open the door". The passive voice of the sentence is

Options :

1. ✖ The door be opened

2. ✔ Let the door be opened

3. ✖ The door was opened

4. ✖ The door is opened by someone

Question Number : 14 Question Id : 1525369099 Display Question Number : Yes Is Question Mandatory : No

My mother always _____ food for us.

Options :

1. ✖ Cook

2. ✖ is cooked

3. ✖ Cooking

4. ✔ Cooks

Question Number : 15 Question Id : 1525369100 Display Question Number : Yes Is Question Mandatory : No

The teacher said, "What is you name?". The reported speech of the sentence is

Options :

1. ✖ The teacher said that what my name is

2. ✖ The teacher asked me to tell my name

3. ✔ The teacher asked me what my name was

4. ✖ The teacher enquired my name

Question Number : 16 Question Id : 1525369101 Display Question Number : Yes Is Question Mandatory : No

If I _____ you, I would not have committed this blunder.

Options :

1. ✖ was

2. ✖ are

3. ✔ were

4. ✖ is

Question Number : 17 Question Id : 1525369102 Display Question Number : Yes Is Question Mandatory : No

If it rains, the game will be _____

Options :

1. ✖ Cancelling

2. ✔ Cancelled

3. ✖ Cancels

4. ✖ Cancel

Question Number : 18 Question Id : 1525369103 Display Question Number : Yes Is Question Mandatory : No

What are you talking _____? Fill in the blank.

Options :

1. ✖ on

2. ✖ in

3. ✔ about

4. ✖ upon

Question Number : 19 Question Id : 1525369104 Display Question Number : Yes Is Question Mandatory : No

He drove the car at sixty kilometers _____ hour.

Options :

1. ✖ a

2. ✔ an

3. ✖ for

4. ✖ by

Question Number : 20 Question Id : 1525369105 Display Question Number : Yes Is Question

Mandatory : No

Rama is cleverer than all other boys in the class. The positive degree statement of the sentence is

Options :

1. ✔ No other boy in the class is as clever as Rama

2. ✖ Rama is the cleverest boy in the class

3. ✖ All other boys in the class are cleverer as Rama

4. ✖ No other boy in the class is cleverer than Rama

Question Number : 21 Question Id : 1525369106 Display Question Number : Yes Is Question Mandatory : No

Identify the grammatically correct sentence.

Options :

1. ✔ One must love one's parents

2. ✖ One must love his parents

3. ✖ Priya is more taller than her sister

4. ✖ She is my cousin sister

Question Number : 22 Question Id : 1525369107 Display Question Number : Yes Is Question Mandatory : No

My mother goes to the Cinema Once in a blue moon. The underlined idiom means.

Options :

1. ✖ on a full moon day

2. ✔ an event that happens infrequently

3. ✖ on the day of ellipse

4. ✖ once in a fortnight

Question Number : 23 Question Id : 1525369108 Display Question Number : Yes Is Question Mandatory : No

The weather has been abominable all week.

Options :

1. ✖ Pleasant

2. ✖ Cold

3. ✖ Hot

4. ✔ Unpleasant

Question Number : 24 Question Id : 1525369109 Display Question Number : Yes Is Question Mandatory : No

My son was disobedient and so I punished him.
The simple sentence for this sentence is

Options :

1. ✖ I punished my son as he is very disobedient

2. ✖ My son received punishment and I found him disobedient

3. ✔ I punished my son for his disobedience

4. ✖ My son's punishment by me was due to his disobedient nature.

Question Number : 25 Question Id : 1525369110 Display Question Number : Yes Is Question Mandatory : No

She met an accident, while she _____ the rod. Fill in the blank.

Options :

1. ✖ had crossed

2. ✖ is crossing

3. ✔ was crossing

4. ✖ crossed

General Knowledge

Section Id :	152536302
Section Number :	2
Mandatory or Optional :	Mandatory
Number of Questions :	15
Section Marks :	15
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Question Number : 26 Question Id : 1525369111 Display Question Number : Yes Is Question Mandatory : No

What is the full form of ABC as per the National Educational Policy-2020?
జాతీయ విద్యావిధానం 2020 ప్రకారం ఎ బి సి ని విస్తరింపుము?

Options :

1. ✖ Academic Basic Certificate
విద్యా విషయ మౌళిక ధృవ పత్రము

2. ✖ Annual Basic Certificate
సంవత్సరిక మౌళిక ధృవ పత్రము

3. ✖ Annual Bank Certificate
సంవత్సరిక బ్యాంక్ ధృవ పత్రము

4. ✔ Academic Bank of Credit
విద్యా విషయ బ్యాంక్ పరపతి

Question Number : 27 Question Id : 1525369112 Display Question Number : Yes Is Question Mandatory : No

The new name of ministry of Human Resources Development is

మానవ వనరుల అభివృద్ధి మంత్రిత్వ శాఖ యొక్క క్రొత్తపేరు

Options :

1. ✖ Ministry of Higher Education

ఉన్నత విద్యా మంత్రిత్వ శాఖ

2. ✖ Ministry of Human Capital

మానవ మూలధన మంత్రిత్వ శాఖ

3. ✔ Ministry of Education

విద్యా మంత్రిత్వ శాఖ

4. ✖ Ministry of Human Development

మానవ అభివృద్ధి మంత్రిత్వ శాఖ

Question Number : 28 Question Id : 1525369113 Display Question Number : Yes Is Question Mandatory : No

Who among the following transformed the Shivaji and Ganapthi festivals into national festivals?

క్రింది వారిలో ఎవరు శివాజి, గణపతి ఉత్సవాలను జాతీయ ఉత్సవాలుగా మార్చినారు?

Options :

1. ✔

Bal Gangadhar Tilak
బాల గంగాధర్ తిలక్

2. ✖ Veer Savarkar
వీర్ సావర్కర్

3. ✖ Swami Dayananda Saraswathi
స్వామి దయానంద సరస్వతి

4. ✖ M G Rande
యం జి రనడె

Question Number : 29 Question Id : 1525369114 Display Question Number : Yes Is Question Mandatory : No

'Black Fungus' is also called as
'బ్లాక్ ఫంగస్' కు మరియొక పేరు

Options :

1. ✖ Taeniasis
టీనియాసిస్

2. ✔ Mucor mycosis
మ్యూకార్ మైకోసిస్

3. ✖ Cutaneous candidiasis
క్యుటేనియస్ కేండిడయాసిస్

Blasto mycosis

బ్లాస్టో మైకోసిస్

4. ✖

Question Number : 30 Question Id : 1525369115 Display Question Number : Yes Is Question Mandatory : No

Which of the following is a Directive Principle relating to Education?

క్రిందివానిలో ఏది విద్యకు సంబంధించిన ఆదేశిక సూత్రం?

Options :

Article 40

40 వ ప్రకరణ

1. ✖

Article 42

42 వ ప్రకరణ

2. ✖

Article 45

45 వ ప్రకరణ

3. ✔

Article 48

48 వ ప్రకరణ

4. ✖

Question Number : 31 Question Id : 1525369116 Display Question Number : Yes Is Question Mandatory : No

Who is the author of 'Anomalies in Law and Justice'?

"అనామలిస్ ఇన్ లా అండ్ జస్టిస్" రచయిత ఎవరు?

Options :

1. ✖ Justice Ramana
జస్టిస్ రమణ

2. ✔ Justice Raveendran
జస్టిస్ రవీంద్రన్

3. ✖ Ravi Sankar Prasad
రవిశంకర్ ప్రసాద్

4. ✖ Justice S.K.Kaul
జస్టిస్ యస్.కె.కౌల్

Question Number : 32 Question Id : 1525369117 Display Question Number : Yes Is Question Mandatory : No

Which of the following Country is called as 'Land of Midnight Sun'?
క్రింది వానిలో ఏ దేశాన్ని "లాండ్ ఆఫ్ మిడ్‌నైట్ సన్" అని పిలుస్తారు?

Options :

1. ✖ Finland
ఫిన్‌లాండ్

2. ✔ Norway
నార్వే

3. ✖ Iceland
ఐస్‌లాండ్

Sudan
సూడాన్

4. ✖

Question Number : 33 Question Id : 1525369118 Display Question Number : Yes Is Question Mandatory : No

Which of the following state had more than 90 percent of schools online facility?
కింద తెలిపిన ఏ రాష్ట్రంలో 90 శాతము పైగా పాఠశాలల్లో అన్‌లైన్ సౌకర్యం కలదు?

Options :

Gujarat
గుజరాత్

1. ✖

Delhi
ఢిల్లీ

2. ✖

Uttar Pradesh
ఉత్తరప్రదేశ్

3. ✖

Kerala
కేరళ

4. ✔

Question Number : 34 Question Id : 1525369119 Display Question Number : Yes Is Question Mandatory : No

Joseph Robinette Biden is
జోసెఫ్ రబినెట్ట బైడెన్

Options :

1. ✖

45th President of U.S.A

45 వ యు.యస్.ఎ అధ్యక్షుడు

46th President of U.S.A

46 వ యు.యస్.ఎ అధ్యక్షుడు

2. ✔

47th President of U.S.A

47 వ యు.యస్.ఎ అధ్యక్షుడు

3. ✖

48th President of U.S.A

48 వ యు.యస్.ఎ అధ్యక్షుడు

4. ✖

Question Number : 35 Question Id : 1525369120 Display Question Number : Yes Is Question Mandatory : No

The World Population Day is celebrated on

ప్రతి సంవత్సరము ప్రపంచ జనాభా దినోత్సవము జరుపుకునే రోజు

Options :

10th July

10, జూలై

1. ✖

11th July

11, జూలై

2. ✔

3. ✖

14th July

14. జూలై

10th December

10. డిసెంబర్

4. ✖

Question Number : 36 Question Id : 1525369121 Display Question Number : Yes Is Question Mandatory : No

The Central Information Commission is a

కేంద్ర సమాచార కమిషన్

Options :

Constitutional Body

రాజ్యాంగ సమితి

1. ✖

Statutory Body

శాసన బద్ద సమితి

2. ✔

Neither Constitutional or Statutory

రాజ్యాంగ సమితి కాదు, శాసన సమితి కాదు

3. ✖

Central Bureau of Investigation Body

కేంద్ర పరిశోధన విభాగము

4. ✖

Question Number : 37 Question Id : 1525369122 Display Question Number : Yes Is Question Mandatory : No

How many 'Sustainable Development Goals' were introduced in September 2015?

సెప్టెంబర్, 2015 సం॥ లో ఎన్ని శాశ్వత అభివృద్ధి లక్ష్యాలను ప్రతిపాదించారు?

Options :

1. ✖ 08

2. ✖ 16

3. ✔ 17

4. ✖ 18

Question Number : 38 Question Id : 1525369123 Display Question Number : Yes Is Question Mandatory : No

Which of the following disease is not caused by Bacteria?

క్రింది వానిలో ఏ వ్యాధికి బ్యాక్టీరియా కారణము కాదు?

Options :

1. ✖ Tuberculosis
ట్యూబర్‌కులాసిస్

2. ✖ Tetanus
టెటానస్

3. ✔ Rabbies
రేబిస్

4. ✖

Plague
ప్లేగు

Question Number : 39 Question Id : 1525369124 Display Question Number : Yes Is Question Mandatory : No

Total number of medals won by India in Tokyo Olympics 2021
టోక్యో ఒలింపిక్స్ 2021 లో భారతదేశం గెలిచిన మొత్తం పతకాల సంఖ్య

Options :

1. ✖ 5

2. ✖ 6

3. ✔ 7

4. ✖ 8

Question Number : 40 Question Id : 1525369125 Display Question Number : Yes Is Question Mandatory : No

Presently the new name of Telugu Academy of A.P.
ఆంధ్రప్రదేశ్ రాష్ట్ర ప్రస్తుతం తెలుగు అకాడమి యొక్క క్రొత్త పేరు

Options :

1. ✖ Sanskrit Academy
సంస్కృత అకాడమి

2. ✖

Andhra Pradesh Telugu Academy
ఆంధ్రప్రదేశ్ తెలుగు అకాడమి

Telugu and Sanskrit Academy
తెలుగు మరియు సంస్కృత అకాడమి

3. ✔

Telugu and Sahitya Academy
తెలుగు మరియు సాహిత్య అకాడమి

4. ✖

Teaching Aptitude

Section Id :	152536303
Section Number :	3
Mandatory or Optional :	Mandatory
Number of Questions :	10
Section Marks :	10
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Question Number : 41 Question Id : 1525369126 Display Question Number : Yes Is Question Mandatory : No

The main aim of teaching is to
బోధన యొక్క ప్రధాన ఉద్దేశ్యమేమంటే

Options :

Give notes to the students
విద్యార్థులకు నోట్స్ ఇచ్చేందుకు

1. ✖

2. ✖ Prepare the students to pass in the examinations
విద్యార్థులను పరీక్షలలో ఉత్తీర్ణులగునట్లు తయారుచేయుట

3. ✖ Prepare the students for jobs
విద్యార్థులను ఉద్యోగాల కొరకు తయారుచేయుట

4. ✔ Develop thinking ability in the students
విద్యార్థులలో ఆలోచనాశక్తి అభివృద్ధి చేయుట

Question Number : 42 Question Id : 1525369127 Display Question Number : Yes Is Question Mandatory : No

To reduce absenteeism in the class, the teacher.
తరగతిగదిలో విద్యార్థుల గైర్హాజరును తగ్గించుటకు ఉపాధ్యాయుడు

Options :

1. ✔ Should teach effectively
సమర్థవంతంగా బోధించాలి

2. ✖ Should ignore absenteeism
గైర్హాజరును పరిగణించకపోవడం

3. ✖ Should punish students
విద్యార్థులను శిక్షించడం

4. ✖ Should inform parents
తల్లిదండ్రులకు తెలియజేయడం

Question Number : 43 Question Id : 1525369128 Display Question Number : Yes Is Question Mandatory : No

If a student is quarrelsome in the class, the teacher should
ఒక విద్యార్థి తరగతిలో కలహశీలుడైతే ఉపాధ్యాయుడు

Options :

1. ✖ Inform Police
పోలీసులకు తెలియజేయవలెను

2. ✖ Inform the head master
ప్రధానోపాధ్యాయునికి తెలియజేయవలెను

3. ✔ Gives suitable counseling
అతనికి సరియైన మంత్రణం చేయవలెను

4. ✖ Gives punishment
అతన్ని శిక్షించవలెను

Question Number : 44 Question Id : 1525369129 Display Question Number : Yes Is Question Mandatory : No

Apt learner is one who
యోగ్యుడైన అభ్యాసకుడు ఎవరంటే

Options :

1. ✖ listens interestingly to the teachings of teachers
ఉపాధ్యాయులు చెప్పే విషయాలను శ్రద్ధగా వినేవాడు

2. ✖

spends lot of time in the library
గ్రంథాలయంలో ఎక్కువ సమాయాన్ని గడిపేవాడు

3. ✔ has questioning attitude
ప్రశ్నించే ధోరణి కలవాడు

4. ✖ prepares well for the examination
పరీక్షకు బాగా సిద్ధమయ్యేవాడు

Question Number : 45 Question Id : 1525369130 Display Question Number : Yes Is Question Mandatory : No

The most appropriate meaning of learning is
అభ్యసనానికి సరియైన అర్థమేమంటే

Options :

1. ✖ Inculcation of knowledge
జ్ఞానాభివృద్ధి

2. ✔ Modification of behaviour
ప్రవర్తనలో మార్పు

3. ✖ Personal adjustment
వ్యక్తిగత సర్దుబాటు

4. ✖ Acquisition of skills
నైపుణ్యాల సముపార్జన

Question Number : 46 Question Id : 1525369131 Display Question Number : Yes Is Question Mandatory : No

For which purpose achievement tests are commonly used?
సాధన పరీక్షలను సాధారణంగా ఏ ఉద్దేశ్యంతో వాడతారు?

Options :

1. ✖ To make selections for a specific job
ప్రత్యేకమైన ఉద్యోగానికి ఎంపిక చేయడానికి

2. ✖ To select candidates for different courses
వివిధ కోర్సులకు అభ్యర్థులను ఎంపిక చేయడానికి

3. ✖ To identify strengths and weaknesses of students.
విద్యార్థుల బలాలను మరియు బలహీనతలను గుర్తించడానికి

4. ✔ To identify the amount of learning
అభ్యసనా స్థాయిని గుర్తించడానికి

Question Number : 47 Question Id : 1525369132 Display Question Number : Yes Is Question Mandatory : No

Which of the following is the highest level of cognitive ability?
ఈక్రింది వాటిలో ఏది ఉన్నతమైన మానసిక సామర్థ్యము?

Options :

1. ✖ Knowing
తెలుసుకొనుట

2. ✖ Understanding
అర్థము చేసుకొనుట

3. ✖ Analyzing
విశ్లేషించుట

4. ✔ Evaluating
మూల్యాంకనము

Question Number : 48 Question Id : 1525369133 Display Question Number : Yes Is Question Mandatory : No

A good teacher is one who
ఉన్నతమైన ఉపాధ్యాయుడు ఎవరంటే

Options :

1. ✖ gives useful information
ఉపయోగ పడే సమాచారాన్ని ఇచ్చువారు

2. ✖ explains basic concepts to students
మౌళిక భావనలను వివరించువారు

3. ✖ gives printed notes to students
విద్యార్థులకు అచ్చు అయిన నోట్సును ఇచ్చువారు

4. ✔ inspires students to learn
నేర్చుకోవడానికి విద్యార్థులను ఉత్తేజపరచువాడు

Question Number : 49 Question Id : 1525369134 Display Question Number : Yes Is Question Mandatory : No

'Operation Black Board' is concerned with

'ఆపరేషన్ బ్లాక్‌బోర్డ్' దీనికి సంబంధించినది.

Options :

1. ✖ Pre - Primary Education
పూర్వప్రాథమిక విద్య

2. ✔ Primary Education
ప్రాథమిక విద్య

3. ✖ Secondary Education
మాధ్యమిక విద్య

4. ✖ Higher Education
ఉన్నత విద్య

Question Number : 50 Question Id : 1525369135 Display Question Number : Yes Is Question Mandatory : No

If a required teaching aid is not available in your school then what you will do?

అవసరమైన బోధనోపకరణము మీ పాఠశాలలో లేకుంటే నీవేమి చేస్తావు?

Options :

1. ✖ Inform the students about the non- availability of the aid
విద్యార్థులకు బోధనోపకరణము లేదని తెలిపెదను

2. ✔

Bring the aid from nearby school
దగ్గరలో ఉన్న పాఠశాలనుండి బోధనోపకరణాన్ని తెస్తాను

Ask the headmaster to purchase the aid
బోధనోపకరణాన్ని కొనమని ప్రధానోపాధ్యాయున్ని అడుగుతాను

3. ✖

Give the oral description of the aid
బోధనోపకరణము గురించి మౌఖికంగా వివరిస్తాను

4. ✖

Mathematics

Section Id :	152536304
Section Number :	4
Mandatory or Optional :	Mandatory
Number of Questions :	100
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Question Number : 51 Question Id : 1525369136 Display Question Number : Yes Is Question Mandatory : No

An Integrating factor of the differential equation $(1+x)\frac{dy}{dx}-xy=1-x$ is _____

అవకలన సమీకరణం $(1+x)\frac{dy}{dx}-xy=1-x$ కు ఒక సమాకలన గుణకం _____

Options :

1. ✖ $(1+x)e^x$

2. ✔ $\frac{1+x}{e^x}$

3. ✖ $\frac{e^x}{1+x}$

4. ✖ $\frac{1}{e^x(1+x)}$

Question Number : 52 Question Id : 1525369137 Display Question Number : Yes Is Question Mandatory : No

Roots of the auxiliary equation of $f(D)=3D^2+16D+5$ are

$f(D)=3D^2+16D+5$ యొక్క సహాయక సమీకరణంకు మూలములు

Options :

1. ✖ $5, \frac{1}{3}$

2. ✖ $-5, \frac{1}{3}$

3. ✔ $-5, -\frac{1}{3}$

4. ✖ $-5, -3$

Question Number : 53 Question Id : 1525369138 Display Question Number : Yes Is Question Mandatory : No

The Integrating factor of $\frac{\partial N}{\partial x}-\frac{\partial M}{\partial y}=Mg(y)$ is

$\frac{\partial N}{\partial x}-\frac{\partial M}{\partial y}=Mg(y)$ యొక్క సమాకలన గుణకము

Options :

1. ✔ $\int_e g(y)\,dy$

2. ✖ $\int_e g(x)\,dx$

3. ✖ $\frac{1}{My}$

4. ✖ $\frac{1}{Nx}$

Question Number : 54 Question Id : 1525369139 Display Question Number : Yes Is Question Mandatory : No

The linear equation in u of $\frac{dy}{dx} - xy = x^2 y^3$ is

u లో $\frac{dy}{dx} - xy = x^2 y^3$ యొక్క ఏకఘాత సమీకరణం

Options :

1. ✖ $\frac{du}{dx} + xy = -y^3$

2. ✖ $\frac{du}{dy} + uy = y$

3. ✔ $\frac{du}{dy} + uy = -y^3$

4. ✖ $\frac{du}{dy} - uy = y^3$

Question Number : 55 Question Id : 1525369140 Display Question Number : Yes Is Question Mandatory : No

The solution $u = \frac{1}{y^{n-1}}$ transforms the equation $\frac{dy}{dx} + Py = Qy^n$ in to

$u = \frac{1}{y^{n-1}}$ ప్రతిక్షేపణ ద్వారా $\frac{dy}{dx} + py = Qy^n$ యొక్క రూపాంతరం

Options :

1. ✖ $\frac{du}{dx}+(n-1)Pu=(n-1)Q$

2. ✔ $\frac{du}{dx}+(1-n)Pu=(1-n)Q$

3. ✖ $\frac{du}{dx}+(n+1)Pu=(n-1)Q$

4. ✖ $\frac{du}{dy}+(1-n)Py=(1-n)Q$

Question Number : 56 Question Id : 1525369141 Display Question Number : Yes Is Question Mandatory : No

The general solution of $y=xp+p^2, p=\frac{dy}{dx}$ is

$y=xp+p^2, p=\frac{dy}{dx}$ యొక్క సాధారణ సాధన

Options :

1. ✔ $y=cx+c^2$

2. ✖ $y=cy+c^2$

3. ✖ $y=\frac{c}{(1+x)^2}$

$y = x + 1$

4. ✖

Question Number : 57 Question Id : 1525369142 Display Question Number : Yes Is Question Mandatory : No

Wronskian of the function $y_1(x) = e^{(a+ib)x}$, $y_2(x) = e^{(a-ib)x}$

$y_1(x) = e^{(a+ib)x}$, $y_2(x) = e^{(a-ib)x}$ ప్రమేయాల యొక్క రాన్స్కియన్

Options :

1. $e^{ax}(2\,ia)$ ✖

2. $e^{2ax}(2\,ib)$ ✖

3. $e^{2ax}(-2\,ib)$ ✔

4. $-2\,ib$ ✖

Question Number : 58 Question Id : 1525369143 Display Question Number : Yes Is Question Mandatory : No

In integrating factor of the differential equation $y^2dx + (x^2 - xy - y^2)\,dy = 0$

$y^2dx + (x^2 - xy - y^2)\,dy = 0$ అవకలనీయ సమీకరణం యొక్క ఒక సమాకలన గుణకము

Options :

1. ✖ $\frac{1}{y(x^2+y^2)}$

2. ✖ $\frac{y^2}{x^2-xy-y}$

3. ✖ $\frac{xy}{x^2-y^2}$

4. ✔ $\frac{1}{y(x^2-y^2)}$

Question Number : 59 Question Id : 1525369144 Display Question Number : Yes Is Question Mandatory : No

A solution of the differential equation $\frac{dy}{dx}+\frac{y}{x}=x^2y^6$ is

$\frac{dy}{dx}+\frac{y}{x}=x^2y^6$ అవకలన సమీకరణము యొక్క ఒక సాధన

Options :

1. ✔ $5x^3y^5+c_1x^5y^5=2$

2. ✖ $5x^2y^5+c_1x^3y^5=2$

3. ✖ $5x^3y^3+c_1x^2y^5=2$

4. ✖ $5xy^4 + c_1 x^5 y^2 = 2$

Question Number : 60 Question Id : 1525369145 Display Question Number : Yes Is Question Mandatory : No

$$\frac{1}{(D+2)(D-2)} x =$$

Options :

1. ✖ $\frac{x}{4}$

2. ✔ $-\frac{x}{4}$

3. ✖ $\frac{x^2}{2}$

4. ✖ $-\frac{x}{2}$

Question Number : 61 Question Id : 1525369146 Display Question Number : Yes Is Question Mandatory : No

$$\frac{1}{D^2 - D - 2} \sin 2x =$$

Options :

1. ✖

$\frac{-3}{20}\sin 2x$

2. ✖ $2\cos 4x+\sin 2x$

3. ✖ $\frac{\sin 2x}{16}-\frac{3\cos 2x}{20}$

4. ✔ $\frac{\cos 2x}{20}-\frac{3\sin 2x}{20}$

Question Number : 62 Question Id : 1525369147 Display Question Number : Yes Is Question Mandatory : No

The particular integral of $(D^3-4D^2)y=5$ is

$(D^3-4D^2)y=5$ యొక్క ప్రత్యేక సమాకలని

Options :

1. ✖ $\frac{5}{8}x$

2. ✖ $\frac{-5}{8}x$

3. ✖ $\frac{5}{8}x^2$

4. ✔ $\frac{-5}{8}x^2$

Question Number : 63 Question Id : 1525369148 Display Question Number : Yes Is Question Mandatory : No

$$\frac{1}{D^2+D+1}x^3 =$$

Options :

1. ✖ x^3+3x^2+6

2. ✔ x^3-3x^2+6

3. ✖ x^2+3x+8

4. ✖ x^3+3x+6

Question Number : 64 Question Id : 1525369149 Display Question Number : Yes Is Question Mandatory : No

Particular integral of $(D^2-3D+2)y=e^x$ is

$(D^2-3D+2)y=e^x$ యొక్క ప్రత్యేక సమాకలని

Options :

1. ✖ e^x

2. ✖ $-e^x$

3. ✖ xe^x

4. ✔ $-xe^x$

Question Number : 65 Question Id : 1525369150 Display Question Number : Yes Is Question Mandatory : No

$y = x$ is a solution of $\frac{d^2y}{dx^2} + P\frac{dy}{dx} + Qy = 0$ if

$\frac{d^2y}{dx^2} + P\frac{dy}{dx} + Qy = 0$ యొక్క సాధన $y = x$ కావాలంటే

Options :

1. ✖ $P + Q = 0$

2. ✔ $P + Qx = 0$

3. ✖ $P + Q + 1 = 0$

4. ✖ $-P - Q = 0$

Question Number : 66 Question Id : 1525369151 Display Question Number : Yes Is Question Mandatory : No

If $y=0$ and $\frac{dy}{dx}=4$ when $x=0$, then the solution of the differential equation

$\frac{d^2y}{dx^2}-2\frac{dy}{dx}+5y=0$ is

$x=0$ అయినపుడు $y=0$, $\frac{dy}{dx}=4$ అయితే, అవకలన సమీకరణం $\frac{d^2y}{dx^2}-2\frac{dy}{dx}+5y=0$ యొక్క

సాధన

Options :

1. ✔ $y=2e^x\sin 2x$

2. ✖ $y=e^{2x}\sin 2x$

3. ✖ $y=2e^{2x}\sin x$

4. ✖ $y=e^x\sin 2x$

Question Number : 67 Question Id : 1525369152 Display Question Number : Yes Is Question Mandatory : No

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

$y^2+x^2\frac{dy}{dx}=xy\frac{dy}{dx}$ అవకలన సమీకరణం యొక్క సాధారణ సాధనము

Options :

1. ✖ $e^{\frac{x}{y}}=cy$

2. ✔ $e^{\frac{y}{x}} = cy$

3. ✖ $e^{\frac{1}{x}} = cy$

4. ✖ $e^{x} = cy$

Question Number : 68 Question Id : 1525369153 Display Question Number : Yes Is Question Mandatory : No

The solution of the differential equation $\frac{d^2y}{dx^2} + 4y = 0$ satisfying

$y(0) = 1, y'(0) = -1$ is

$y(0) = 1, y'(0) = -1$ లను తృప్తిపరిచే $\frac{d^2y}{dx^2} + 4y = 0$ అవకలన సమీకరణం సాధన

Options :

1. ✖ $y = -\cos 2x + \sin 2x$

2. ✖ $y = -\cos 2x \frac{-3}{2} \sin 2x$

3. ✖ $y = -\cos 2x - \frac{1}{2} \sin 2x$

4. ✔

$$y = \cos 2x - \frac{1}{2}\sin 2x$$

Question Number : 69 Question Id : 1525369154 Display Question Number : Yes Is Question Mandatory : No

When $y(0) = -1, y'(0) = 3$, if $y = f(x)e^{3x} + Ae^{x}$ is the solution of the differential equation

$\frac{d^2y}{dx^2} - 4\frac{dy}{dx} + 3y = 4e^{3x}$, then $f(1) + A =$

$y(0) = -1, y'(0) = 3$ అయినపుడు, $y = f(x)e^{3x} + Ae^{x}$ అనేది అవకలన సమీకరణం

$\frac{d^2y}{dx^2} - 4\frac{dy}{dx} + 3y = 4e^{3x}$ కి సాధన అయితే $f(1) + A =$

Options :

1. ✖ 0

2. ✖ 3

3. ✔ 1

4. ✖ 2

Question Number : 70 Question Id : 1525369155 Display Question Number : Yes Is Question Mandatory : No

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

$y(1) = 2$ అయినపుడు, అవకలన సమీకరణం $2xy\frac{dy}{dx} = y^2 - 2x^3$ యొక్క సాధన

Options :

1. ✖ $y + x^2 = 3x$

2. ✔ $y^2 + x^3 = 5x$

3. ✖ $y^2 + x = 5x^3$

4. ✖ $y + x = 3x^2$

Question Number : 71 Question Id : 1525369156 Display Question Number : Yes Is Question Mandatory : No

The perpendicular distance of $(3, -4, 1)$ to the plane $x + y - z + 7 = 0$ is

$x + y - z + 7 = 0$ తలానికి $(3, -4, 1)$ యొక్క లంబదూరము

Options :

1. ✔ $\frac{5}{\sqrt{3}}$

2. ✖ $\frac{3}{\sqrt{5}}$

3. ✖ $\sqrt{\frac{5}{3}}$

4. ✖ $\frac{\sqrt{3}}{5}$

Question Number : 72 Question Id : 1525369157 Display Question Number : Yes Is Question Mandatory : No

If the plane $x+2y-kz+3=0$ is perpendicular to the line whose direction ratios are 2, 4, 3 then k is

$x+2y-kz+3=0$ తలము 2, 4, 3 దిశానిష్పత్తుల రేఖకు లంబంగా ఉంటే k విలువ

Options :

1. ✖ $\frac{3}{2}$

2. ✔ $-\frac{3}{2}$

3. ✖ $\frac{2}{3}$

4. ✖ $-\frac{2}{3}$

Question Number : 73 Question Id : 1525369158 Display Question Number : Yes Is Question Mandatory : No

If the equation $2x^2 - y^2 + 2z^2 - yz + 5zx + xy = 0$ represents a pair of planes, then the angle between them is

$2x^2 - y^2 + 2z^2 - yz + 5zx + xy = 0$ సమీకరణము రెండు తలాలను సూచిస్తే వాటి మధ్య కోణము

Options :

1. ✖ π

2. ✖ $\frac{\pi}{2}$

3. ✔ $\frac{\pi}{3}$

4. ✖ $\frac{\pi}{4}$

Question Number : 74 Question Id : 1525369159 Display Question Number : Yes Is Question Mandatory : No

The equation of the plane through $(2, -3, 1)$ and normal to the line joining of $(3, 4, -1)$ and $(2, -1, 5)$ is

$(2, -3, 1)$ బిందువు గుండా పోతూ $(3, 4, -1)$ మరియు $(2, -1, 5)$ లను కలుపు రేఖకు లంబముగా గల తలము యొక్క సమీకరణము

Options :

1. ✖ $x - 5y + z = 19$

2. ✖ $x+5y-6z=0$

3. ✔ $x+5y-6z=-19$

4. ✖ $x-5y-6z=-19$

Question Number : 75 Question Id : 1525369160 Display Question Number : Yes Is Question Mandatory : No

The equation of the plane through the origin and containing the line $x-3y+2z+3=3x-y+2z-5$ is

మూల బిందువు ద్వారాపోతూ $x-3y+2z+3=3x-y+2z-5$ రేఖను కలిగిన తలము యొక్క సమీకరణము

Options :

1. ✔ $7x-9y+8z=0$

2. ✖ $7x+9y-8z=0$

3. ✖ $7x+9y-8z=0$

4. ✖ $7x-9y-8z=0$

Question Number : 76 Question Id : 1525369161 Display Question Number : Yes Is Question Mandatory : No

The length of the shortest distance between the lines

$\frac{x+3}{-3}=\frac{y+7}{2}=\frac{z-6}{4}, \frac{x-3}{3}=\frac{y-8}{-1}=\frac{z-3}{1}$ is

$\frac{x+3}{-3}=\frac{y+7}{2}=\frac{z-6}{4}, \frac{x-3}{3}=\frac{y-8}{-1}=\frac{z-3}{1}$ రేఖల మధ్య అల్ప దూరము పొడవు

Options :

1. ✖ $\sqrt{30}$

2. ✖ $2\sqrt{30}$

3. ✔ $3\sqrt{30}$

4. ✖ $5\sqrt{30}$

Question Number : 77 Question Id : 1525369162 Display Question Number : Yes Is Question Mandatory : No

The shortest distance between the lines $x=-2y=z; x=y=z$ is

$x=-2y=z; x=y=z$ సరళ రేఖల మధ్య కనిష్ఠ దూరము

Options :

1. ✖ 3

2. ✖ 4

3. ✖ 1

4. ✔ 0

Question Number : 78 Question Id : 1525369163 Display Question Number : Yes Is Question Mandatory : No

Centre of the sphere $2x^2+2y^2+2z^2=x+y+z$ is

$2x^2+2y^2+2z^2=x+y+z$ గోళ కేంద్రము

Options :

1. ✖ $\left(\frac{1}{3},\frac{1}{3},\frac{1}{3}\right)$

2. ✔ $\left(\frac{1}{4},\frac{1}{4},\frac{1}{4}\right)$

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

4. ✖ $1, 1, 1$

Question Number : 79 Question Id : 1525369164 Display Question Number : Yes Is Question Mandatory : No

Equation of the sphere with centre origin and radius 2 is

మూల బిందువుల కేంద్రము మరియు వ్యాసార్ధము 2 గా గల గోళ సమీకరణము

Options :

1. ✖ $x^2+y^2+z^2+xy+yz+zx=0$

2. ✖ $x^2+y^2+z^2=0$

3. ✖ $x^2+y^2+z^2=2$

4. ✔ $x^2+y^2+z^2=4$

Question Number : 80 Question Id : 1525369165 Display Question Number : Yes Is Question Mandatory : No

General solution of the differential equation $y+xp=x^4p^2\left(p=\frac{dy}{dx}\right)$ is

అవకలన సమీకరణం $y+xp=x^4p^2\left(p=\frac{dy}{dx}\right)$ కి సాధారణ సాధన

Options :

1. ✖ $x=cx+c^2y$

2. ✖ $xy=cx+c^2$

3. ✔ $xy=c+c^2y$

4. ✖ $y = cz + c^2x^2$

Question Number : 81 Question Id : 1525369166 Display Question Number : Yes Is Question Mandatory : No

The particular solution of the differential equation

$x^2\frac{d^2y}{dx^2} - 2x\frac{dy}{dx} + 2y = x^3\cos x(x > 0)$ is $y =$ _____

అవకలన సమీకరణం $x^2\frac{d^2y}{dx^2} - 2x\frac{dy}{dx} + 2y = x^3\cos x(x > 0)$ కి ప్రత్యేక సాధన $y =$ _____

Options :

1. ✖ $x\sin x$

2. ✖ $-x\sin x$

3. ✖ $x\cos x$

4. ✔ $-x\cos x$

Question Number : 82 Question Id : 1525369167 Display Question Number : Yes Is Question Mandatory : No

The radius of the circle $x^2 + y^2 + z^2 + 2x - 2y + -4z - 19 = 0,\ x + 2y + 2z + 7 = 0$ is

వృత్తము $x^2 + y^2 + z^2 + 2x - 2y + -4z - 19 = 0,\ x + 2y + 2z + 7 = 0$ యొక్క వ్యాసార్ధము

Options :

1. ✖ 2

2. ✔ 3

3. ✖ 4

4. ✖ 5

Question Number : 83 Question Id : 1525369168 Display Question Number : Yes Is Question Mandatory : No

Every section of a right circular cone by any plane perpendicular to its axis is

కుడి వర్తుల శంఖువు యొక్క ప్రతిచ్ఛేదము ఏదేని తలము వాటి అక్షాలకు అభిలంబంగా ఉన్నప్పుడు

Options :

1. ✖ a cone
ఒక శంఖువు

2. ✖ a sphere
ఒక గోళము

3. ✔ a circle
ఒక వృత్తము

4. ✖ a plane
ఒక తలము

Question Number : 84 Question Id : 1525369169 Display Question Number : Yes Is Question Mandatory : No

The radius of the circular cylinder having for its base the circle

$x^2+y^2+z^2=9,\ x-y+z=3$

$x^2+y^2+z^2=9,\ x-y+z=3$ వృత్తము ఆధారంగా కలిగిన వర్తుల స్థూపము యొక్క వ్యాసార్ధము

Options :

1. ✖ $\sqrt{3}$

2. ✔ $\sqrt{6}$

3. ✖ $\sqrt{9}$

4. ✖ $\sqrt{7}$

Question Number : 85 Question Id : 1525369170 Display Question Number : Yes Is Question Mandatory : No

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

అవకలన సమీకరణం $\frac{dx}{z^2y}=\frac{dy}{z^2x}=\frac{dz}{y^2x}$ కి సాధన

Options :

1. ✖ $x^2+y^2=c_1,\ y^3+z^3=c_2$

2. ✖ $x^2+y^2+z^2=c_1,\ x^3+y^3+z^3=c_2$

3. ✖ $x^2-y^2-z^2=c_1,\ x^3-y^3-z^3=c_2$

4. ✔ $x^2-y^2=c_1,\ y^3-z^3=c_2$

Question Number : 86 Question Id : 1525369171 Display Question Number : Yes Is Question Mandatory : No

The equation of the plane passing through the intersection of the planes $7x+y-2z=11,\ 3x+y+2z=5$ and perpendicular to the plane $x-2y+z-1=0$ is

తలాలు $7x+y-2z=11,\ 3x+y+2z=5$ ల ఛేదనం గుండా పోతూ $x-2y+z-1=0$ తలానికి లంబంగా ఉన్న తలం సమీకరణం

Options :

1. ✖ $x+y+z=3$

2. ✖ $2x+2y+2z=3$

3. ✖ $x-z=3$

4. ✔ $2x-2z=3$

Question Number : 87 Question Id : 1525369172 Display Question Number : Yes Is Question Mandatory : No

Number of subgroups of the group $(Z_{93}, +_{93})$ is

$(Z_{93}, +_{93})$ సమూహము యొక్క ఉపసమూహముల సంఖ్య

Options :

1. ✔ 4

2. ✖ 6

3. ✖ 9

4. ✖ 10

Question Number : 88 Question Id : 1525369173 Display Question Number : Yes Is Question Mandatory : No

The generators of the group $G = \left\{ \frac{6^n}{n} : n \in Z \right\}$ are

సమూహము $G = \left\{ \frac{6^n}{n} : n \in Z \right\}$ యొక్క జనక మూలకములు

Options :

1. ✖ $1, \frac{1}{6}$

2. ✖ $3, \frac{1}{6}$

3. ✔ $6, \frac{1}{6}$

4. ✖ $4, \frac{1}{4}$

Question Number : 89 Question Id : 1525369174 Display Question Number : Yes Is Question Mandatory : No

If a group is abelian, then $\forall\ a, b$

ఒక సమూహము ఎబీలియన్ అయినప్పుడు $\forall\ a, b$

Options :

1. ✖ $(a\,b)^{\,2} = a\,b$

2. ✔ $(a\,b)^2 = a^2\,b^2$

3. ✖ $(a\,b)^2 = a^2$

4. ✖ $(a\,b)^2 = b^2$

Question Number : 90 Question Id : 1525369175 Display Question Number : Yes Is Question Mandatory : No

If G is a finite group of order n, then for $a \in G$

పరిమిత సమూహము G యొక్క క్రమము n అయినప్పుడు ప్రతి $a \in G$ కు

Options :

1. ✖ $e=1$

2. ✖ $a=e$

3. ✔ $a^n=e$

4. ✖ $a^n=1$

Question Number : 91 Question Id : 1525369176 Display Question Number : Yes Is Question Mandatory : No

Let H be a subgroup of a group G such that $0(G)=36$ and $0(H)=4$. Then $0(G/H)=$

$0(G)=36$ మరియు $0(H)=4$ అయ్యేలా సమూహము G లో H ఒక అభిలంబ ఉపసమూహము అనుకుందాము. అప్పుడు $0(G/H)=$

Options :

1. ✔ 9

2. ✖ 12

3. ✖ 24

4. ✖ 36

Question Number : 92 Question Id : 1525369177 Display Question Number : Yes Is Question Mandatory : No

$15 +_5 7 =$

Options :

1. ✖ -2

2. ✔ 2

3. ✖ -3

4. ✖ 3

Question Number : 93 Question Id : 1525369178 Display Question Number : Yes Is Question Mandatory : No

The number of automorphism of the group Z_6 is

Z_6 సమూహములోని స్వయంతుల్య రూపతల సంఖ్య

Options :

1. ✖ 0

2. ✖ 1

3. ✔ 2

4. ✖ 3

Question Number : 94 Question Id : 1525369179 Display Question Number : Yes Is Question Mandatory : No

$(G, +_6)$ is a finite abelian group of order

పరిమిత ఎబీలియన్ సమూహము $(G, +_6)$ యొక్క క్రమము

Options :

1. ✖ 2

2. ✖ 3

3. ✖ 5

4. ✔ 6

Question Number : 95 Question Id : 1525369180 Display Question Number : Yes Is Question Mandatory : No

The order of 9 in Z_{12} is

Z_{12} లోని 9 యొక్క క్రమము

Options :

1. ✖ 2

2. ✔ 4

3. ✖ 6

4. ✖ 12

Question Number : 96 Question Id : 1525369181 Display Question Number : Yes Is Question Mandatory : No

The point of intersection of the line $\frac{x-1}{1}=\frac{y-2}{-1}=\frac{z-3}{2}$ and the plane $x+2y-z=5$ is

సరళరేఖ $\frac{x-1}{1}=\frac{y-2}{-1}=\frac{z-3}{2}$ మరియు $x+2y-z=5$ తలం ల ఖండన బిందువు

Options :

1. ✖ $(1, 2, 0)$

2. ✖ $(2, 0, -3)$

3. ✖ $(2, 1, -1)$

4. ✔ $(0, 3, 1)$

Question Number : 97 Question Id : 1525369182 Display Question Number : Yes Is Question Mandatory : No

If $f=(2\ 3\ 4\ 1)$ is a permutation of degree 5, then $f^{-1}=$

$f=(2\ 3\ 4\ 1)$ ఒక 5 తరగతి ప్రస్తారము అయినప్పుడు $f^{-1}=$

Options :

1. ✖ (1 2 3 4)

2. ✔ (1 4 3 2)

3. ✖ 1 3 4 2)

4. ✖ (2 3 1 4)

Question Number : 98 Question Id : 1525369183 Display Question Number : Yes Is Question Mandatory : No

The number of generators of a cyclic group of order 8 is
8 క్రమముగా గల చక్రీయ సమూహము యొక్క జనక మూలకాల సంఖ్య

Options :

1. ✖ 2

2. ✖ 3

3. ✔ 4

4. ✖ 5

Question Number : 99 Question Id : 1525369184 Display Question Number : Yes Is Question Mandatory : No

The number of even permutations in $0(S)=4$ is

$0(S)=4$ యొక్క సరి ప్రస్తారముల సంఖ్య

Options :

1. ✔ 12

2. ✖ 10

3. ✖ 6

4. ✖ 4

Question Number : 100 Question Id : 1525369185 Display Question Number : Yes Is Question Mandatory : No

A cyclic group having only one generator is

ఒకే ఒక జనక మూలకము కలిగిన చక్రీయ సమూహము

Options :

1. ✖ Z_4

2. ✖ Z_3

3. ✔ Z_2

4. ✖ Z_6

Question Number : 101 Question Id : 1525369186 Display Question Number : Yes Is Question Mandatory : No

The radius of the great circle of the sphere $x^2+y^2+z^2-4x+10y-6z-11=0$ is

గోళం $x^2+y^2+z^2-4x+10y-6z-11=0$ యొక్క గురు వృత్త వ్యాసార్ధం

Options :

1. ✔ 7

2. ✖ 6

3. ✖ $5\sqrt{5}$

4. ✖ $3\sqrt{3}$

Question Number : 102 Question Id : 1525369187 Display Question Number : Yes Is Question Mandatory : No

For $a>0, b>0$ $\lim_{x\to 0_+}\left(\frac{b}{x}\right)\left[\frac{x}{a}\right]=$

$a>0, b>0$ లకు $\lim_{x\to 0_+}\left(\frac{b}{x}\right)\left[\frac{x}{a}\right]=$

Options :

1. ✖ 2

2. ✖ 3

3. ✖ 1

4. ✔ 0

Question Number : 103 Question Id : 1525369188 Display Question Number : Yes Is Question Mandatory : No

$$\lim_{x\to\infty}\frac{x^2+1}{x^2}=$$

Options :

1. ✖ ∞

2. ✖ 0

3. ✔ 1

4. ✖ 2

Question Number : 104 Question Id : 1525369189 Display Question Number : Yes Is Question Mandatory : No

$f(x)=\frac{1}{x-a}$ has infinite discontinuity at _____

_____ వద్ద $f(x)=\frac{1}{x-a}$ అపరిమిత విచ్ఛిన్నత కలిగి ఉంటుంది

Options :

1. ✖ $x=0$

2. ✖ $x=1$

3. ✔ $x=a$

4. ✖ $x=\infty$

Question Number : 105 Question Id : 1525369190 Display Question Number : Yes Is Question Mandatory : No

The directive of $f(x)=x^x, x>0$ is

$f(x)=x^x, x>0$ యొక్క అవకలని

Options :

1. ✖ $(1+\log x)x$

2. ✔ $(1+\log x)x^x$

3. ✖ $1+\log x$

4. ✖ $\log x$

Question Number : 106 Question Id : 1525369191 Display Question Number : Yes Is Question Mandatory : No

$\{-2^n\}$ diverges to

$\{-2^n\}$ ఎక్కడికి అపసరన చెందును

Options :

1. ✔ $-\infty$

2. ✖ ∞

3. ✖ 2

4. ✖ 0

Question Number : 107 Question Id : 1525369192 Display Question Number : Yes Is Question Mandatory : No

$$\lim_{n\to\infty}\left(1+\frac{1}{n}\right)^{nx} =$$

Options :

1. ✖ e

2. ✔ e^x

3. ✖ x

4. ✖ ∞

Question Number : 108 Question Id : 1525369193 Display Question Number : Yes Is Question Mandatory : No

If $a_n = \frac{x^n}{n}, n \geq 1, x \neq 0$, then $\lim_{n\to\infty} \frac{a_{n+1}}{a_n}$

$a_n = \frac{x^n}{n}, n \geq 1, x \neq 0$ అయినప్పుడు $\lim_{n\to\infty} \frac{a_{n+1}}{a_n}$

Options :

1. ✖ 0

2. ✖ e

3. ✖ 1

4. ✔ x

Question Number : 109 Question Id : 1525369194 Display Question Number : Yes Is Question Mandatory : No

If the particular solution of the differential equation $\frac{d^2y}{dx^2} - 8\frac{dy}{dx} + 9y = 8\sin 5x$ is $y = A\cos 5x + B\sin 5x$, then $29(2A+B) =$

అవకలన సమీకరణం $\frac{d^2y}{dx^2} - 8\frac{dy}{dx} + 9y = 8\sin 5x$ కి $y = A\cos 5x + B\sin 5x$ ప్రత్యేక సమాకలని అయితే $29(2A+B) =$

Options :

1. ✔ 8

2. ✖ 6

3. ✖ 4

4. ✖ 10

Question Number : 110 Question Id : 1525369195 Display Question Number : Yes Is Question Mandatory : No

In Taylor theorem, the Lagrange's form of remainder is
టేలర్ సిద్ధాంతములోని లెగ్రాంజ్ రూపము యొక్క శిష్టపదము

Options :

1. ✖ $\frac{a^n f^n(c)}{n}$

2. ✖ $\frac{(b-a) f^n(c)}{n}$

3. ✔ $\frac{(b-a)^n f^n(c)}{n!}$

4. ✖ $\frac{f^n(c)}{n!}$

Question Number : 111 Question Id : 1525369196 Display Question Number : Yes Is Question Mandatory : No

The value of 'c' from Cauchy's mean value theorem for $f(x)=\sqrt{x}$ and $g(x)=\frac{1}{\sqrt{x}}$ in $[a,b]\ 0<a<b$ is

$f(x)=\sqrt{x}$ మరియు $g(x)=\frac{1}{\sqrt{x}}, [a,b]\ 0<a<b, [a,b]\ 0<a<b$ లో కోషీ మధ్యమ మూల్య సిద్ధాంతము నుండి 'c' యొక్క విలువ

Options :

1. ✖ $a\ b$

2. ✔ $\sqrt{a\ b}$

3. ✖ a

4. ✖ b

Question Number : 112 Question Id : 1525369197 Display Question Number : Yes Is Question Mandatory : No

If the function $f(x)=x^2(x^2-1), 0\le x\le 1$ satisfies Rolle's theorem, then the value of 'c' is

$f(x)=x^2(x^2-1), 0\le x\le 1$ ప్రమేయము రోలె సిద్ధాంతమును తృప్తిపరిస్తే అప్పుడు 'c' యొక్క విలువ

Options :

1. ✖ $-\frac{1}{2}$

2. ✖

$\frac{1}{2}$

3. ✖ $-\frac{1}{\sqrt{2}}$

4. ✔ $\frac{1}{\sqrt{2}}$

Question Number : 113 Question Id : 1525369198 Display Question Number : Yes Is Question Mandatory : No

$\int_0^1 x\, e^x\, dx =$

Options :

1. ✖ 0

2. ✔ 1

3. ✖ 2

4. ✖ -2

Question Number : 114 Question Id : 1525369199 Display Question Number : Yes Is Question Mandatory : No

Norm of the partition P = {0, .25, .75, 1, 1.5. 1.75, 2} is

P = {0, .25, .75, 1, 1.5. 1.75, 2} విభాగము యొక్క నార్మ్

Options :

1. ✖ 0

2. ✖ .25

3. ✔ .5

4. ✖ 1

Question Number : 115 Question Id : 1525369200 Display Question Number : Yes Is Question Mandatory : No

If the spheres $x^2+y^2+z^2-2x-4y+6z-3=0$ and

$2x^2+2y^2+2z^2-4x+ky-8z-4=0$ cut each other orthogonally, then k =

గోళాలు $x^2+y^2+z^2-2x-4y+6z-3=0$ మరియు

$2x^2+2y^2+2z^2-4x+ky-8z-4=0$ పరస్పరం లంబంగా ఖండించుకొంటే, k=

Options :

1. ✖ -14

2. ✖ -15

3. ✖ -6

4. ✔ -5

Question Number : 116 Question Id : 1525369201 Display Question Number : Yes Is Question Mandatory : No

The pole of the plane $2x-3y+4z-8=0$ with respect to the sphere $x^2+y^2+z^2=16$ is

గోళం $x^2+y^2+z^2=16$ దృష్ట్యా తలం $2x-3y+4z-8=0$ యొక్క ధ్రువం

Options :

1. ✖ $(2,\ -3,\ 4)$

2. ✔ $(4,\ -6,\ 8)$

3. ✖ $(-2,\ 3,\ -4)$

4. ✖ $(-4,\ 6,\ -8)$

Question Number : 117 Question Id : 1525369202 Display Question Number : Yes Is Question Mandatory : No

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

$D^2y=\frac{d^2y}{dx^2}$ అయితే, $\frac{1}{1+D^2}(x^2-x+2)=$

Options :

1. ✖ x^3-x^2+2x

2. ✖ $x^3 - x^2$

3. ✔ $x^2 - x$

4. ✖ $x^2 + x - 2$

Question Number : 118 Question Id : 1525369203 Display Question Number : Yes Is Question Mandatory : No

Boolean ring characteristic is

బూలియన్ వలయం యొక్క లాక్షణికత

Options :

1. ✔ 2

2. ✖ 3

3. ✖ 0

4. ✖ 4

Question Number : 119 Question Id : 1525369204 Display Question Number : Yes Is Question Mandatory : No

Number of zero divisions in the ring $(Z_{12}, +, \bullet)$ is

$(Z_{12}, +, \bullet)$ వలయంలోని శూన్యభాజకాల సంఖ్య

Options :

1. ✖ 5

2. ✔ 7

3. ✖ 9

4. ✖ 11

Question Number : 120 Question Id : 1525369205 Display Question Number : Yes Is Question Mandatory : No

If R is a ring such that $a^2 = a, \forall a \in R$, then $a + a =$

R వలయంలో $a^2 = a, \forall a \in R$ అయ్యేటట్లు ఉంటే అప్పుడు $a + a =$

Options :

1. ✖ a

2. ✖ $2a$

3. ✖ 1

4. ✔ 0

Question Number : 121 Question Id : 1525369206 Display Question Number : Yes Is Question Mandatory : No

The equation of the cone with vertex at $(1, 1, 0)$ and guiding curve $x^2 + y^2 = 4,\ z = 1$ is

$(1, 1, 0)$ వద్ద శీర్షం మరియు $x^2 + y^2 = 4,\ z = 1$ అనే వక్రం నిర్దేశిత వక్రం (guiding curve) గా గల శంఖువు సమీకరణం

Options :

1. ✔ $x^2 + y^2 - 2z^2 + 2yz + 2zx - 2x - 2y - 4z + 2 = 0$

2. ✖ $x^2 + y^2 - 2z^2 + 2yz + 2zx - 4x - 4y + 4 = 0$

3. ✖ $x^2 + y^2 + 2z^2 - 2yz - 2zx + 2x - 2y + 4z - 2 = 0$

4. ✖ $x^2 + y^2 + 2z^2 + 2yz - 2zx + 4x - 4y + 4 = 0$

Question Number : 122 Question Id : 1525369207 Display Question Number : Yes Is Question Mandatory : No

Number of associates of $a + ib$ in the Gaussian integral domain is

గాసియన్ పూర్ణాంక ప్రదేశంలోని $a + ib$ యొక్క సహచరుల సంఖ్య

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 4

4. ✖ 5

Question Number : 123 Question Id : 1525369208 Display Question Number : Yes Is Question Mandatory : No

Let G be a group of order 40 and $a \in G$ such that $0(a) = 8$, then $0(a^{22}) =$

ఒక సమూహం యొక్క తరగతి 40 మరియు $a \in G$ కి $0(a) = 8$ అయితే $0(a^{22}) =$

Options :

1. ✖ 8

2. ✖ 6

3. ✔ 4

4. ✖ 2

Question Number : 124 Question Id : 1525369209 Display Question Number : Yes Is Question Mandatory : No

The units of $(Z_6, +_6, X_6)$ are

$(Z_6, +_6, X_6)$ యొక్క యూనిట్స్

Options :

1. ✖ 2, 3

2. ✖ 1, 2

3. ✖ $1, 3$

4. ✔ $1, 5$

Question Number : 125 Question Id : 1525369210 Display Question Number : Yes Is Question Mandatory : No

If a binary operation '*' is defined on the set $\mathbb{Z}$ of all integers by $m*n=m+n-5$ for all $m,n\in\mathbb{Z}$, then the inverse of '7' in the group $(\mathbb{Z},*)$ is

పూర్ణాంకాలన్నిటి సమితి $\mathbb{Z}$ పై ఒక యుగ్మ పరిక్రియ $\mathbb{Z}$ ను, ప్రతీ $m,n\in\mathbb{Z}$ కూ, $m*n=m+n-5$ గా నిర్వచిస్తే, సమూహం $(\mathbb{Z},*)$ లో '7' యొక్క విలోమం

Options :

1. ✔ 3

2. ✖ 17

3. ✖ 5

4. ✖ 12

Question Number : 126 Question Id : 1525369211 Display Question Number : Yes Is Question Mandatory : No

The characteristic of the ring $Z_{10}\times Z_{15}$ is

$Z_{10}\times Z_{15}$ వలయం యొక్క లాక్షణికత

Options :

1. ✖ 15

2. ✔ 30

3. ✖ 10

4. ✖ 5

Question Number : 127 Question Id : 1525369212 Display Question Number : Yes Is Question Mandatory : No

The equation of the right circular cylinder whose guiding curve is the circle passing through the points (1, 0, 0), (0, 1, 0) and (0, 0, 1) is

బిందువులు (1, 0, 0), (0, 1, 0) మరియు (0, 0, 1) గుండా పోయే వృత్తం నిర్దేశిత వక్రం (guiding curve) గా గల లంబ వృత్తీయ స్థూల సమీకరణం

Options :

1. ✖ $x^2+y^2+z^2+xy+yz+zx+1=0$

2. ✔ $x^2+y^2+z^2-xy-yz-zx-1=0$

3. ✖ $x^2+y^2+z^2+xy+yz+zx-1=0$

4. ✖ $x^2+y^2+z^2-xy-yz-zx+1=0$

Question Number : 128 Question Id : 1525369213 Display Question Number : Yes Is Question

Mandatory : No

If $\overline{f} = xy^2\overline{i} + 2x^2yz\,\overline{j} - 3yz^2\,\overline{k}$, then $div\,\overline{f}$ at $(1, -1, 1)$ is

$\overline{f} = xy^2\overline{i} + 2x^2yz\,\overline{j} - 3yz^2\,\overline{k}$ అయినప్పుడు $(1, -1, 1)$ వద్ద $div\,\overline{f}$ విలువ

Options :

1. ✖ 6

2. ✖ -6

3. ✖ -9

4. ✔ 9

Question Number : 129 Question Id : 1525369214 Display Question Number : Yes Is Question Mandatory : No

Let G be the group of 4^{th} roots of unity under multipication and f is the group homomorphism from the group $(\mathbb{Z}, +)$ to the group by $f(n) = (i)^n$ for all $n \in \mathbb{Z}$, then $ker\,F =$

గుణనం దృష్ట్యా 1 యొక్క 4వ మూల సమూహం G అయినప్పుడు మరియు సమూహం $(\mathbb{Z}, +)$ నుండి సమూహం $(G, \cdot)$ కు ఒక సమరూపత f ను, ప్రతీ $n \in \mathbb{Z}$, $f(n) = (i)^n$ గా నిర్వచిస్తే, $ker\,F =$

Options :

1. ✔ $4\mathbb{Z}$

2. ✖ $3\mathbb{Z}$

3. ✖

$2\mathbb{Z}$

4. ✖ $\mathbb{Z}$

Question Number : 130 Question Id : 1525369215 Display Question Number : Yes Is Question Mandatory : No

If the permutation (1 3 5) 0(1 3 7 5) 0(6 8) 0(2 3 4 5) in the group $(S_8, 0)$ can be expressed as a product of n disjoint cycles, then n =

సమూహం $(S_6, 0)$ లోని ప్రస్తారం 1 3 5) 0(1 3 7 5) 0(6 8) 0(2 3 4 5) ని n వియుక్త సైకిల్‌ల లబ్ధంగా వ్రాస్తే, n =

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 131 Question Id : 1525369216 Display Question Number : Yes Is Question Mandatory : No

The number of generators of a cyclic group of order 33 is

పరిమాణం 33 గా గల చక్రీయ సమూహానికి జనకమూలకాల సంఖ్య

Options :

1. ✔ 20

2. ✖ 24

3. ✖ 18

4. ✖ 15

Question Number : 132 Question Id : 1525369217 Display Question Number : Yes Is Question Mandatory : No

Number of elements in the alternating group $(A_6, 0)$ is

సమూహం $(A_6, 0)$ లోని మూలకాల సంఖ్య

Options :

1. ✖ 36

2. ✖ 180

3. ✔ 360

4. ✖ 720

Question Number : 133 Question Id : 1525369218 Display Question Number : Yes Is Question Mandatory : No

In the group $G = \{1, 2, 3, 4, 5, 6\}$ under multiplication (X_7) modulo $_7$, $(5\ X_7\ 6)^{-1} =$

7 మాపంగా గుణనం (X_7) దృష్ట్యా సమూహం $G = \{1, 2, 3, 4, 5, 6\}$ లో $(5\ X_7\ 6)^{-1} =$

Options :

1. ✖ 5

2. ✔ 4

3. ✖ 3

4. ✖ 2

Question Number : 134 Question Id : 1525369219 Display Question Number : Yes Is Question Mandatory : No

In R^3, if $U = L[(1,2,1),(0,1,2)]$ and $W = L[(1,0,0),(0,1,0)]$ then a basis for $U \cap W$ is

R^3 లో $U = L[(1,2,1),(0,1,2)]$ మరియు $W = L[(1,0,0),(0,1,0)]$ అయితే $U \cap W$ కి ఒక ఆధారము

Options :

1. ✖ $\{(1,3,0)\}$

2. ✔ $\{(2,3,0)\}$

3. ✖ $\{(2,1,0)\}$

4. ✖ $\{(1,0,3)\}$

Question Number : 135 Question Id : 1525369220 Display Question Number : Yes Is Question Mandatory : No

If $\alpha = (1,-2,5)$ is vector that can be expressed as s linear combination of the vectors $e_1 = (1,1,1), e_2 = (1,2,3)$ and $e_3 = (2,-1,1)$ then α is

$\alpha = (1,-2,5)$ అను సదిశను $e_1 = (1,1,1), e_2 = (1,2,3)$ మరియు $e_3 = (2,-1,1)$ సదిశల ఋజు సంయోగంగా వ్రాస్తే అప్పుడు $\alpha =$

Options :

1. ✔ $-6\,e_1 + 3\,e_2 + 2\,e_3$

2. ✖ $6\,e_1 - 3\,e_2 + 2\,e_3$

3. ✖ $6\,e_1 - 3\,e_2 - 2\,e_3$

4. ✖ $-6\,e_1 + 3\,e_2 - 2\,e_3$

Question Number : 136 Question Id : 1525369221 Display Question Number : Yes Is Question Mandatory : No

If $f(x) = x^2$ for all $x \in [0,1]$ and $p = \left|0, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}, 1\right|$ then $U(p,f) =$

ప్రతీ $x \in [0,1]$ కి $f(x) = x^2$ మరియు $p = \left|0, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}, 1\right|$ అయితే $U(p,f) =$

Options :

1. ✖ $\frac{15}{8}$

2. ✖

$\frac{15}{16}$

3. ✔ $\frac{15}{32}$

4. ✖ $\frac{15}{64}$

Question Number : 137 Question Id : 1525369222 Display Question Number : Yes Is Question Mandatory : No

The rank of the transformation $T : R^2 \to R^3$ defined by $T(x, y) = (x + y, x - y, y)$ is

$T : R^2 \to R^3$ ఋజు పరివర్తన $T(x, y) = (x + y, x - y, y)$ అని నిర్వచిస్తే T యొక్క కోటి

Options :

1. ✖ 1

2. ✔ 2

3. ✖ 0

4. ✖ 3

Question Number : 138 Question Id : 1525369223 Display Question Number : Yes Is Question Mandatory : No

If $T:R^3 \to R^3$ is a linear transformation defined by

$T(x,y,z)=(x\cos\theta - y\sin\theta, x\sin\theta + y\cos\theta, z)$, then the kernal of T is

$T:R^3 \to R^3$ ఋజుపరివర్తనను $T(x,y,z)=(x\cos\theta - y\sin\theta, x\sin\theta + y\cos\theta, z)$ గా నిర్వచించినప్పుడు T యొక్క కెర్నల్

Options :

1. ✔ $\{0\}$

2. ✖ $\{1\}$

3. ✖ 2

4. ✖ 3

Question Number : 139 Question Id : 1525369224 Display Question Number : Yes Is Question Mandatory : No

If T_1 and T_2 are linear operations on R^2 and $T_1(x,y)=(y,-x)$, $T_2(x,y)=(y,0)$ then

$(T_1T_2 - T_2T_1)(x,y)=$

T_1 మరియు T_2లు R^2 పై ఋజు పరికర్తలు అయి $T_1(x,y)=(y,-x)$, $T_2(x,y)=(y,0)$ గా ఉంటే అప్పుడు $(T_1T_2 - T_2T_1)(x,y)=$

Options :

1. ✖ (x,y)

2. ✔ $(x,-y)$

3. ✖ $(-x, y)$

4. ✖ $(-x, -y)$

Question Number : 140 Question Id : 1525369225 Display Question Number : Yes Is Question Mandatory : No

$$\lim_{n\to\infty} \sum_{r=1}^{n} \frac{4n}{r^2 n^2} =$$

Options :

1. ✖ $\frac{\pi}{4}$

2. ✖ $\frac{\pi}{2}$

3. ✔ π

4. ✖ 4π

Question Number : 141 Question Id : 1525369226 Display Question Number : Yes Is Question Mandatory : No

If $\begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix} = A$, then $A^2 - 4A =$

$A = \begin{bmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{bmatrix}$ అయిన $A^2 - 4A =$

Options :

1. ✖ 2I

2. ✖ 3I

3. ✖ 4I

4. ✔ 5I

Question Number : 142 Question Id : 1525369227 Display Question Number : Yes Is Question Mandatory : No

If $A = \begin{bmatrix} 2 & -5 & 7 \\ -5 & 11 & -8 \\ 8 & 7 & 6 \end{bmatrix}$, then the trace of A is

$A = \begin{bmatrix} 2 & -5 & 7 \\ -5 & 11 & -8 \\ 8 & 7 & 6 \end{bmatrix}$ అయినప్పుడు A యొక్క జాడ ఎంత?

Options :

1. ✖ 5

2. ✖ 13

3. ✔ 19

4. ✖ −19

Question Number : 143 Question Id : 1525369228 Display Question Number : Yes Is Question Mandatory : No

Value of the determinant $\begin{vmatrix} 0 & b & -c \\ -b & 0 & a \\ c & -a & 0 \end{vmatrix}$

$\begin{vmatrix} 0 & b & -c \\ -b & 0 & a \\ c & -a & 0 \end{vmatrix}$ నిర్ధారకము యొక్క విలువ

Options :

1. ✔ 0

2. ✖ a

3. ✖ b

4. ✖ c

Question Number : 144 Question Id : 1525369229 Display Question Number : Yes Is Question Mandatory : No

Rank of the matrix $\begin{bmatrix} -1 & 2 & 3 \\ -2 & 4 & 6 \end{bmatrix}$ is

$\begin{bmatrix} -1 & 2 & 3 \\ -2 & 4 & 6 \end{bmatrix}$ మాత్రిక యొక్క కోటి

Options :

1. ✖ 0

2. ✔ 1

3. ✖ 2

4. ✖ 3

Question Number : 145 Question Id : 1525369230 Display Question Number : Yes Is Question Mandatory : No

If $f(x) = x^{\log_e x}$, then $f'(e^2) =$

$f(x) = x^{\log_e x}$ అయితే $f'(e^2) =$

Options :

1. ✔ $4e^2$

2. ✖ $2e^2$

3. ✖ $\frac{4}{e^4}$

4. ✖ $\frac{2}{e^2}$

Question Number : 146 Question Id : 1525369231 Display Question Number : Yes Is Question Mandatory : No

If x, y are in an inner product space, then $|(x, y)| \leq$ _____

x, y లు అంతర్లబ్ధ సదిశాంతరాళములో ఉంటే అప్పుడు $|(x, y)| \leq$ _____

Options :

1. ✖ $\|x\ y\|$

2. ✖ $|x|.|y|$

3. ✔ $\|x\|\|y\|$

4. ✖ $\|y\|$

Question Number : 147 Question Id : 1525369232 Display Question Number : Yes Is Question Mandatory : No

The unit vector orthogonal to $(4, 2, 3)$ in R^3 is

R^3 లోని $(4, 2, 3)$ కు లంబకోణీయ యూనిట్ సదిశ

Options :

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

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

3. ✖ $(2, -1, -2)$

4. ✖ $\left(2, \frac{1}{3}, \frac{2}{3}\right)$

Question Number : 148 Question Id : 1525369233 Display Question Number : Yes Is Question Mandatory : No

If $\alpha = (0, -2, 3)$, $\beta = \left(\frac{7}{2}, 3, 2\right)$ are in an inner product space R^3, then $(\alpha, \beta) =$

_____

$\alpha = (0, -2, 3)$, $\beta = \left(\frac{7}{2}, 3, 2\right)$ లు అంతర్లబ్ధ సదిశాంతరాళము R^3 లో ఉంటే అప్పుడు

$(\alpha, \beta) =$ _____

Options :

1. ✖ 7

2. ✖ 5

3. ✖ 3

4. ✔ 0

Question Number : 149 Question Id : 1525369234 Display Question Number : Yes Is Question Mandatory : No

If $\alpha=(-1,0,1), \beta=(2,0,-2)$ are in an inner product space $V_3(R)$ then $\|\alpha+\beta\|=$

_____

$\alpha=(-1,0,1), \beta=(2,0,-2)$ లు అంతర్లబ్ధ సదిశాంతరాళము $V(R)$ లో ఉంటే అప్పుడు $\|\alpha+\beta\|=$

_____

Options :

1. ✖ 2

2. ✔ $\sqrt{2}$

3. ✖ 3

4. ✖ $\sqrt{3}$

Question Number : 150 Question Id : 1525369235 Display Question Number : Yes Is Question Mandatory : No

If $\alpha = \frac{\beta}{\|\beta\|}, \beta \neq 0$ and $\alpha, \beta \in V(R)$, then $\alpha, \alpha =$ _____

$\alpha = \frac{\beta}{\|\beta\|}, \beta \neq 0$ మరియు $\alpha, \beta \in V(R)$ అయిన $\alpha, \alpha =$ _____

Options :

1. ✖ β

2. ✖ β^2

3. ✔ 1

4. ✖ 0