National Testing Agency

Question Paper Name :	Computer Science and Information Technology Eng 16th June 2023 Shift 3
Subject Name :	Computer Science and Information Technology Eng
Creation Date :	2023-06-26 20:45:53
Duration :	120
Total Marks :	400
Display Marks:	Yes

Computer Science and Information Technology

Group Number :	1
Group Id :	920906268
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	400
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Part A

Section Id :	920906535
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	21
Number of Questions to be attempted :	21
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	920906868
Question Shuffling Allowed :	No
Is Section Default? :	null

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Question Id : 92090627028 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (1 to 5)

Question Label : Comprehension

All over the world the wild fauna has been whittled down steadily and remorselessly, and many lovely and interesting animals have been so reduced in numbers that, without protection and help, they can never re-establish themselves. If they cannot find sanctuary where they can live and breed undisturbed, their numbers will dwindle until they join the dodo, the quagga, and the great auk on the long list of extinct creatures.

Of course, in the last decade or so, much has been done for the protection of wild life: sanctuaries and reserves have been started, and the reintroduction of species into areas where it had become extinct is taking place. In Canada, for instance, beavers are now being reintroduced into certain areas by means of aeroplane.

But although much is being done, there is still a very great deal to do. Unfortunately, the majority of useful work in animal preservation has been done mainly for animals which are of some economic importance to man and there are many obscure species of no economic importance which, although they are protected on paper, are in actual fact being allowed to die out because nobody, except a few interested zoologists, considers them important enough to spend money on.

As mankind increases year by year, and as he spreads farther over the globe burning and destroying, it is some small comfort to know that there are certain private individuals and some institutions who consider that the work of trying to save and give sanctuary to these harried animals is of some importance. It is important for many reasons, but perhaps the best of them is this: man for all his genius, cannot create a species, nor can he recreate one he has destroyed. So until we consider animal life to be worthy of the consideration and reverence we bestow upon old books and pictures and historic monuments, there will always be the animal refugee living precarious life on the edge of extermination, dependent for existence on the charity of a few human beings.

Read the passage and answer the following questions:

Sub questions

Question Number : 1 Question Id : 92090627029 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

What attitude towards wild life does the author think most appropriate?

(1) reverence
(2) pity
(3) sympathy
(4) fear

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Options :
920906106801. 1
920906106802. 2
920906106803. 3
920906106804. 4

Question Number : 2 Question Id : 92090627030 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Which of the following animal species has been saved from extinction?

(1) dodo
(2) quagga
(3) auk
(4) beaver

Options :
920906106805. 1
920906106806. 2
920906106807. 3
920906106808. 4

Question Number : 3 Question Id : 92090627031 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Which of the following would prove most effective in preserving wild life?

(1) Sanctuaries
(2) Law against destruction of wild life
(3) More Zoos
(4) Allocation of more funds

Options :
920906106809. 1
920906106810. 2
920906106811. 3
920906106812. 4

Question Number : 4 Question Id : 92090627032 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

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Animals species should be preserved mainly because:

(1) they are lovely creatures.

(2) they are killed by cruel people.

(3) zoologist want to study them.

(4) man cannot recreate a species of animals if it be destroyed.

Options :

920906106813. 1

920906106814. 2

920906106815. 3

920906106816. 4

Question Number : 5 Question Id : 92090627033 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Certain species of wild life is about to become extinct mainly because:

(1) they are killed by people callously.

(2) sanctuaries are not maintained properly.

(3) people are ignorant.

(4) they cannot find a sanctuary where they can live and breed undisturbed.

Options :

920906106817. 1

920906106818. 2

920906106819. 3

920906106820. 4

Question Id : 92090627028 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (1 to 5)

Question Label : Comprehension

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But although much is being done, there is still a very great deal to do. Unfortunately, the majority of useful work in animal preservation has been done mainly for animals which are of some economic importance to man and there are many obscure species of no economic importance which, although they are protected on paper, are in actual fact being allowed to die out because nobody, except a few interested zoologists, considers them important enough to spend money on.

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Read the passage and answer the following questions:

Sub questions

Question Number : 1 Question Id : 92090627029 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

What attitude towards wild life does the author think most appropriate?

(1) reverence (2) pity

(3) sympathy (4) fear

Options :

920906106801. 1

920906106802. 2

920906106803. 3

920906106804. 4

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Question Number : 2 Question Id : 92090627030 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following animal species has been saved from extinction?

(1) dodo
(2) quagga
(3) auk
(4) beaver

Options :

920906106805. 1
920906106806. 2
920906106807. 3
920906106808. 4

Question Number : 3 Question Id : 92090627031 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following would prove most effective in preserving wild life?

(1) Sanctuaries
(2) Law against destruction of wild life
(3) More Zoos
(4) Allocation of more funds

Options :

920906106809. 1
920906106810. 2
920906106811. 3
920906106812. 4

Question Number : 4 Question Id : 92090627032 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Animals species should be preserved mainly because:

(1) they are lovely creatures.
(2) they are killed by cruel people.
(3) zoologist want to study them.
(4) man cannot recreate a species of animals if it be destroyed.

Options :

920906106813. 1

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920906106814. 2
920906106815. 3
920906106816. 4

Question Number : 5 Question Id : 92090627033 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Certain species of wild life is about to become extinct mainly because:

(1) they are killed by people callously.

(2) sanctuaries are not maintained properly.

(3) people are ignorant.

(4) they cannot find a sanctuary where they can live and breed undisturbed.

Options :
920906106817. 1
920906106818. 2
920906106819. 3
920906106820. 4

Sub-Section Number :	2
Sub-Section Id :	920906869
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 6 Question Id : 92090627034 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify the correct proposition from the options given to make a meaningful sentence.

The boys equally divided the chocolates_____ themselves.

(1) between

(2) among

(3) with

(4) by

Options :
920906106821. 1
920906106822. 2
920906106823. 3

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920906106824. 4

Question Number : 6 Question Id : 92090627034 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify the correct proposition from the options given to make a meaningful sentence.

The boys equally divided the chocolates_____ themselves.

(1) between
(2) among
(3) with
(4) by

Options :
920906106821. 1
920906106822. 2
920906106823. 3
920906106824. 4

Question Number : 7 Question Id : 92090627035 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify the correct form from verb to make a meaningful sentence.

Neither of the contestants _____ to win.

(1) is able
(2) was able
(3) were able
(4) has able

Options :
920906106825. 1
920906106826. 2
920906106827. 3
920906106828. 4

Question Number : 7 Question Id : 92090627035 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Identify the correct form from verb to make a meaningful sentence.

Neither of the contestants _____ to win.

(1) is able

(2) was able

(3) were able

(4) has able

Options :

920906106825. 1

920906106826. 2

920906106827. 3

920906106828. 4

Question Number : 8 Question Id : 92090627036 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Pick out the correctly spelt word:

(1) emberrass

(2) embarress

(3) embarass

(4) embarrors

Options :

920906106829. 1

920906106830. 2

920906106831. 3

920906106832. 4

Question Number : 8 Question Id : 92090627036 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Pick out the correctly spelt word:

(1) emberrass

(2) embarress

(3) embarass

(4) embarrors

Options :

920906106829. 1

920906106830. 2

920906106831. 3

920906106832. 4

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Question Number : 9 Question Id : 92090627037 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify the meaning of the underlined idiom from the options given :-

Sunita is <u>an apple of</u> her father's <u>eye</u>

(1) lovable (2) talkative

(3) uncontrollable (4) hated

Options :

920906106833. 1

920906106834. 2

920906106835. 3

920906106836. 4

Question Number : 9 Question Id : 92090627037 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify the meaning of the underlined idiom from the options given :-

Sunita is <u>an apple of</u> her father's <u>eye</u>

(1) lovable (2) talkative

(3) uncontrollable (4) hated

Options :

920906106833. 1

920906106834. 2

920906106835. 3

920906106836. 4

Question Number : 10 Question Id : 92090627038 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Identify the correct form of indirect speech of the following sentence.

He said, "I have been reading since morning."

(1) He said that he had been reading since morning.

(2) He said that he has been reading since morning.

(3) He said that he is reading since morning.

(4) He said that he was reading since morning.

Options :

920906106837. 1

920906106838. 2

920906106839. 3

920906106840. 4

Question Number : 10 Question Id : 92090627038 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify the correct form of indirect speech of the following sentence.

He said, "I have been reading since morning."

(1) He said that he had been reading since morning.

(2) He said that he has been reading since morning.

(3) He said that he is reading since morning.

(4) He said that he was reading since morning.

Options :

920906106837. 1

920906106838. 2

920906106839. 3

920906106840. 4

Question Number : 11 Question Id : 92090627039 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A triangle can have:

(1) all acute angles

(2) two obtuse angles

(3) two right angles

(4) one obtuse angle and one right angle

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Options :
920906106841. 1
920906106842. 2
920906106843. 3
920906106844. 4

Question Number : 11 Question Id : 92090627039 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A triangle can have:

(1) all acute angles
(2) two obtuse angles
(3) two right angles
(4) one obtuse angle and one right angle

Options :
920906106841. 1
920906106842. 2
920906106843. 3
920906106844. 4

Question Number : 12 Question Id : 92090627040 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If the mean of 18, 19, x, 25 and 26 is 21, then find the mean of 5, 11, 13, 19 and (3x-1):

(1) 21
(2) 20.6
(3) 19.6
(4) 18.8

Options :
920906106845. 1
920906106846. 2
920906106847. 3
920906106848. 4

Question Number : 12 Question Id : 92090627040 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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If the mean of 18, 19, x, 25 and 26 is 21, then find the mean of 5, 11, 13, 19 and (3x-1):

(1) 21 (2) 20.6

(3) 19.6 (4) 18.8

Options :

920906106845. 1

920906106846. 2

920906106847. 3

920906106848. 4

Question Number : 13 Question Id : 92090627041 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Find a single discount equivalent to successive discounts of 10%, 20% and 25%:

(1) 55% (2) 54%

(3) 46% (4) 52%

Options :

920906106849. 1

920906106850. 2

920906106851. 3

920906106852. 4

Question Number : 13 Question Id : 92090627041 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Find a single discount equivalent to successive discounts of 10%, 20% and 25%:

(1) 55% (2) 54%

(3) 46% (4) 52%

Options :

920906106849. 1

920906106850. 2

920906106851. 3

920906106852. 4

Question Number : 14 Question Id : 92090627042 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

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Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

A man is walking at a speed of 6 km/h. After every km he takes rest for 6 minutes. How much time will he take to cover a distance of 24 km.

(1) 6 h 24 min
(2) 6 h 18 min
(3) 5 h 18 min
(4) 4 h 24 min

Options :
920906106853. 1
920906106854. 2
920906106855. 3
920906106856. 4

Question Number : 14 Question Id : 92090627042 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

A man is walking at a speed of 6 km/h. After every km he takes rest for 6 minutes. How much time will he take to cover a distance of 24 km.

(1) 6 h 24 min
(2) 6 h 18 min
(3) 5 h 18 min
(4) 4 h 24 min

Options :
920906106853. 1
920906106854. 2
920906106855. 3
920906106856. 4

Question Number : 15 Question Id : 92090627043 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

If $\frac{\sin\theta+\cos\theta}{\sin\theta-\cos\theta}=\frac{17}{7}$, then find the value of $\left(\sin^4\theta-\cos^4\theta\right)$:

(1) 119
(2) $\frac{12}{5}$
(3) $\frac{119}{169}$
(4) $\frac{2}{3}$

Options :

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920906106857. 1
920906106858. 2
920906106859. 3
920906106860. 4

Question Number : 15 Question Id : 92090627043 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $\frac{\sin\theta+\cos\theta}{\sin\theta-\cos\theta}=\frac{17}{7}$, then find the value of $\left(\sin^4\theta-\cos^4\theta\right)$:

(1) 119

(2) $\frac{12}{5}$

(3) $\frac{119}{169}$

(4) $\frac{2}{3}$

Options :
920906106857. 1
920906106858. 2
920906106859. 3
920906106860. 4

Question Number : 16 Question Id : 92090627044 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify which of the given conclusions follows from the given statements:

Statement I : No perfume is a fragrance.

Some perfumes are deodorants.

All deodorants are cologne.

Statement II : I. At least some perfumes are colognes.

II. No fragrance is deodorant.

(1) only conclusion I is true

(2) only conclusion II is true

(3) Both conclusion I and II are true

(4) Neither conclusion I nor II is true

Options :

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920906106861. 1
920906106862. 2
920906106863. 3
920906106864. 4

Question Number : 16 Question Id : 92090627044 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Identify which of the given conclusions follows from the given statements:

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Some perfumes are deodorants.

All deodorants are cologne.

Statement II : I. At least some perfumes are colognes.

II. No fragrance is deodorant.

(1) only conclusion I is true
(2) only conclusion II is true
(3) Both conclusion I and II are true
(4) Neither conclusion I nor II is true

Options :
920906106861. 1
920906106862. 2
920906106863. 3
920906106864. 4

Question Number : 17 Question Id : 92090627045 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Read the following information carefully and answer the question given below:

A is the son of B. C, B's Sister, has a son D and a daughter E. F is the maternal uncle of D. How is E related to F?

(1) Sister
(2) Niece
(3) Daughter
(4) Wife

Options :
920906106865. 1

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920906106866. 2
920906106867. 3
920906106868. 4

Question Number : 17 Question Id : 92090627045 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Read the following information carefully and answer the question given below:

A is the son of B. C, B's Sister, has a son D and a daughter E. F is the maternal uncle of D. How is E related to F?

(1) Sister (2) Niece

(3) Daughter (4) Wife

Options :
920906106865. 1
920906106866. 2
920906106867. 3
920906106868. 4

Question Number : 18 Question Id : 92090627046 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Figure (x) is embedded in which one of the four alternatives:

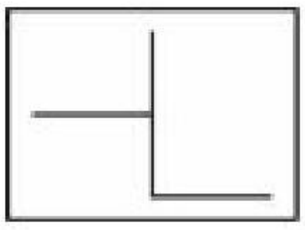
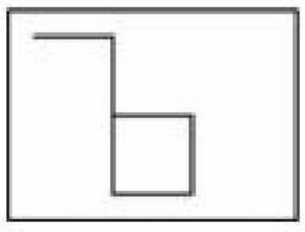
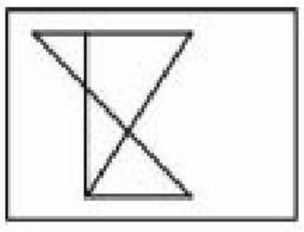
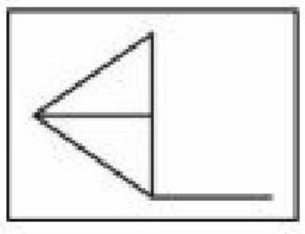
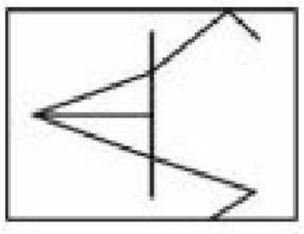


Figure (x)

(1) 

(2) 

(3) 

(4) 

Options :
920906106869. 1

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920906106870. 2
920906106871. 3
920906106872. 4

Question Number : 18 Question Id : 92090627046 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Figure (x) is embedded in which one of the four alternatives:

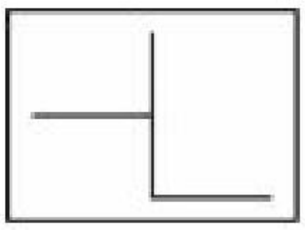
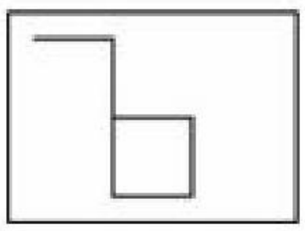
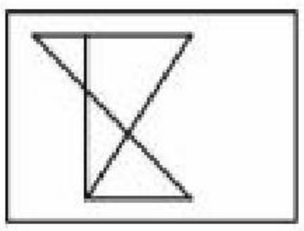
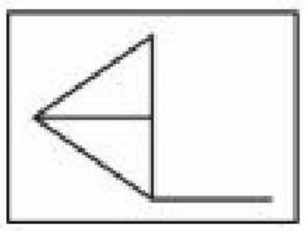
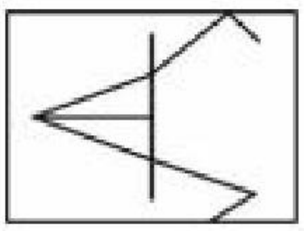


Figure (x)

(1) 

(2) 

(3) 

(4) 

Options :
920906106869. 1
920906106870. 2
920906106871. 3
920906106872. 4

Question Number : 19 Question Id : 92090627047 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Choose the group of letters which is different from others :

POCG, BUDX, ATRG, ZIKL, FQMV

(1) POCG (2) BUDX
(3) FQMV (4) ZIKL

Options :
920906106873. 1
920906106874. 2

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920906106875. 3
920906106876. 4

Question Number : 19 Question Id : 92090627047 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Choose the group of letters which is different from others :

POCG, BUDX, ATRG, ZIKL, FQMV

(1) POCG (2) BUDX

(3) FQMV (4) ZIKL

Options :
920906106873. 1
920906106874. 2
920906106875. 3
920906106876. 4

Question Number : 20 Question Id : 92090627048 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Choose the most appropriate description about these three words.

Sand stone : Limestone : Coal

(1) They are formed by metamorphic rocks

(2) They are chemical minerals

(3) They are found in river beds

(4) They are formed sedimentary rocks

Options :
920906106877. 1
920906106878. 2
920906106879. 3
920906106880. 4

Question Number : 20 Question Id : 92090627048 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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(2) They are chemical minerals
(3) They are found in river beds
(4) They are formed sedimentary rocks

Options :
920906106877. 1
920906106878. 2
920906106879. 3
920906106880. 4

Question Number : 21 Question Id : 92090627049 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The international Court of Justice was established in the year:

(1) 1946 (2) 1948
(3) 1950 (4) 1947

Options :
920906106881. 1
920906106882. 2
920906106883. 3
920906106884. 4

Question Number : 21 Question Id : 92090627049 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The international Court of Justice was established in the year:

(1) 1946 (2) 1948
(3) 1950 (4) 1947

Options :
920906106881. 1
920906106882. 2
920906106883. 3
920906106884. 4

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Question Number : 22 Question Id : 92090627050 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List I with List II :

	List I (Country)		List II (Emblem)
(A)	Australia	(I)	Lionel Capital
(B)	United States of America	(II)	Kangaroo
(C)	India	(III)	Golden rod
(D)	United Kingdom	(IV)	Rose

Choose the correct answer from the options given below:

(1) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

(2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

(3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

(4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

Options :

920906106885. 1

920906106886. 2

920906106887. 3

920906106888. 4

Question Number : 22 Question Id : 92090627050 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Match List I with List II :

	List I (Country)		List II (Emblem)
(A)	Australia	(I)	Lionel Capital
(B)	United States of America	(II)	Kangaroo
(C)	India	(III)	Golden rod
(D)	United Kingdom	(IV)	Rose

Choose the correct answer from the options given below:

(1) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
(2) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
(3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
(4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

Options :
920906106885. 1
920906106886. 2
920906106887. 3
920906106888. 4

Question Number : 23 Question Id : 92090627051 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

National Development Council was constituted on _____.

(1) August16, 1950
(2) April 01, 1951
(3) August 06, 1952
(4) August 16, 1952

Options :
920906106889. 1
920906106890. 2
920906106891. 3
920906106892. 4

Question Number : 23 Question Id : 92090627051 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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National Development Council was constituted on _____.

(1) August16, 1950
(2) April 01, 1951
(3) August 06, 1952
(4) August 16, 1952

Options :
920906106889. 1
920906106890. 2
920906106891. 3
920906106892. 4

Question Number : 24 Question Id : 92090627052 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Marathas emerged as the strongest native power in India after the decline of Mughal

Reasons (R) : Maratha were the first to have a clear concept of United Nation.

In the light of the above statements, choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
(2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)
(3) (A) is correct but (R) is not correct
(4) (A) is not correct but (R) is correct

Options :
920906106893. 1
920906106894. 2
920906106895. 3
920906106896. 4

Question Number : 24 Question Id : 92090627052 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R).

Assertion (A) : Marathas emerged as the strongest native power in India after the decline of Mughal

Reasons (R) : Maratha were the first to have a clear concept of United Nation.

In the light of the above statements, choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A)

(2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)

(3) (A) is correct but (R) is not correct

(4) (A) is not correct but (R) is correct

Options :

920906106893. 1

920906106894. 2

920906106895. 3

920906106896. 4

Question Number : 25 Question Id : 92090627053 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Deepika Kumari is associated with which of the following sports?

(1) Archery

(2) Gymnastics

(3) Badminton

(4) Athletics

Options :

920906106897. 1

920906106898. 2

920906106899. 3

920906106900. 4

Question Number : 25 Question Id : 92090627053 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Deepika Kumari is associated with which of the following sports?

(1) Archery (2) Gymnastics

(3) Badminton (4) Athletics

Options :

920906106897. 1

920906106898. 2

920906106899. 3

920906106900. 4

Part B: Computer Science and Information Technology

Section Id :	920906536
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	75
Number of Questions to be attempted :	75
Section Marks :	300
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	920906870
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 26 Question Id : 92090627054 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $a = \cos 2\alpha + i\sin 2\alpha$ and $b = \cos 2\beta + i\sin 2\beta$ then _____

(1) $\sqrt{ab} = \cos(\alpha+\beta) - i\sin(\alpha+\beta)$ (2) $\sqrt{ab} = \cos(\alpha+\beta) + i\sin(\alpha+\beta)$

(3) $\sqrt{ab} = \sin(\alpha+\beta) + i\cos(\alpha+\beta)$ (4) $\sqrt{ab} = \sin(\alpha+\beta) - i\cos(\alpha+\beta)$

Options :

920906106901. 1

920906106902. 2

920906106903. 3

920906106904. 4

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Question Number : 26 Question Id : 92090627054 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

अगर $a = \cos 2\alpha + i\sin 2\alpha$ और $b = \cos 2\beta + i\sin 2\beta$ तब _____

(1) $\sqrt{ab} = \cos(\alpha+\beta) - i\sin(\alpha+\beta)$

(2) $\sqrt{ab} = \cos(\alpha+\beta) + i\sin(\alpha+\beta)$

(3) $\sqrt{ab} = \sin(\alpha+\beta) + i\cos(\alpha+\beta)$

(4) $\sqrt{ab} = \sin(\alpha+\beta) - i\cos(\alpha+\beta)$

Options :

920906106901. 1

920906106902. 2

920906106903. 3

920906106904. 4

Question Number : 27 Question Id : 92090627055 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $y = x^3 + x^2 + x + 1$, then y _____

(1) has a local minimum

(2) has a local maximum

(3) neither has a local minimum nor local maximum

(4) both local minimum and local maximum

Options :

920906106905. 1

920906106906. 2

920906106907. 3

920906106908. 4

Question Number : 27 Question Id : 92090627055 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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यदि , $y = x^3 + x^2 + x + 1$, तब y _____

(1) का स्थानीय न्यूनतम है।

(2) का स्थानीय उच्चतम है।

(3) ना तो स्थानीय न्यूनतम है और ना ही स्थानीय उच्चतम।

(4) दोनों स्थानीय न्यूनतम और स्थानीय उच्चतम है।

Options :

920906106905. 1

920906106906. 2

920906106907. 3

920906106908. 4

Question Number : 28 Question Id : 92090627056 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The mean of 50 items is 100. At the time of calculations, two items 80 and 190 were wrongly taken as 90 and 20. What is the correct value of the mean?

(1) 102.5 (2) 103.2

(3) 103.5 (4) 104.2

Options :

920906106909. 1

920906106910. 2

920906106911. 3

920906106912. 4

Question Number : 28 Question Id : 92090627056 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

50 मदो का माध्य 100 है। गणना के समय दो मदों 80 और 190 को गलती से 90 और 20 मान लिया गया। माध्य का सही मान क्या है।

(1) 102.5 (2) 103.2

(3) 103.5 (4) 104.2

Options :

920906106909. 1

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920906106910. 2
920906106911. 3
920906106912. 4

Question Number : 29 Question Id : 92090627057 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $f : \mathbb{R} \to \mathbb{R}$ is defined by $f(x) = 3x^2 - 5$ and $g : \mathbb{R} \to \mathbb{R}$ by $g(x) = \frac{x}{x^2+1}$ then $gof(x)$ is

(1) $\frac{3x^2-5}{9x^4-30x^2+26}$

(2) $\frac{3x^2+5}{9x^4-6x^2+26}$

(3) $\frac{3x^2}{x^4+2x^2-4}$

(4) $\frac{3x^2}{9x^4+30x^2-2}$

Options :
920906106913. 1
920906106914. 2
920906106915. 3
920906106916. 4

Question Number : 29 Question Id : 92090627057 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदि $f : \mathbb{R} \to \mathbb{R}$ को $f(x) = 3x^2 - 5$ द्वारा और $g : \mathbb{R} \to \mathbb{R}$ को $g(x) = \frac{x}{x^2+1}$ द्वारा परिभाषित किया गया है तो $gof(x)$ है।

(1) $\frac{3x^2-5}{9x^4-30x^2+26}$

(2) $\frac{3x^2+5}{9x^4-6x^2+26}$

(3) $\frac{3x^2}{x^4+2x^2-4}$

(4) $\frac{3x^2}{9x^4+30x^2-2}$

Options :
920906106913. 1
920906106914. 2
920906106915. 3
920906106916. 4

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Question Number : 30 Question Id : 92090627058 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The sum of two digits no. is 10, on reversing the digits of a number the number is decrease by 36. Find the number.

(1) 73 (2) 37

(3) 28 (4) 46

Options :

920906106917. 1

920906106918. 2

920906106919. 3

920906106920. 4

Question Number : 30 Question Id : 92090627058 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

दो अंकों की संख्या का योग 10 है | संख्या के अंको को उलटने पर संख्या में 36 की कमी हो जाती है| संख्या ज्ञात कीजिए।

(1) 73 (2) 37

(3) 28 (4) 46

Options :

920906106917. 1

920906106918. 2

920906106919. 3

920906106920. 4

Question Number : 31 Question Id : 92090627059 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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The number of vectors of unit length perpendicular to vectors $\vec{a}=(1,1,0)$ and $\vec{b}=(0,1,1)$ is

(1) one
(2) two
(3) three
(4) infinite

Options :
920906106921. 1
920906106922. 2
920906106923. 3
920906106924. 4

Question Number : 31 Question Id : 92090627059 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

सदिश $\vec{a}=(1,1,0)$ और $\vec{b}=(0,1,1)$ के लंबवत इकाई लंबाई के सदिशों की संख्या है।

(1) एक
(2) दो
(3) तीन
(4) अनंत

Options :
920906106921. 1
920906106922. 2
920906106923. 3
920906106924. 4

Question Number : 32 Question Id : 92090627060 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

Let $A(3,0,-1)$, $B(2,10,6)$ and $C(1,2,1)$ be the vertices of a triangle and M be the mid-point of AC. If G divides BM in the ratio 2 : 1, then $\cos(\angle GOA)$ (O being the origin) is equal to _____.

(1) $1/\sqrt{15}$
(2) $1/2\sqrt{15}$
(3) $1/\sqrt{30}$
(4) $1/6\sqrt{10}$

Options :
920906106925. 1

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920906106926. 2
920906106927. 3
920906106928. 4

Question Number : 32 Question Id : 92090627060 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

मान लिजीए $A(3, 0, -1)$, $B(2, 10, 6)$ और $C(1, 2, 1)$ एक त्रिभुज के शीर्ष हैं और M, AC का मध्य बिंदु है। यदि G, BM को 2 : 1, के अनुपात में विभाजित करता है, तो $\cos(\angle GOA)$ (O मूलबिंदु होने के नाते। के बराबर है _____.

(1) $1/\sqrt{15}$ (2) $1/2\sqrt{15}$

(3) $1/\sqrt{30}$ (4) $1/6\sqrt{10}$

Options :
920906106925. 1
920906106926. 2
920906106927. 3
920906106928. 4

Question Number : 33 Question Id : 92090627061 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $A = 26$, SUN = 27 then CAT = ?

(1) 24 (2) 27

(3) 57 (4) 58

Options :
920906106929. 1
920906106930. 2
920906106931. 3
920906106932. 4

Question Number : 33 Question Id : 92090627061 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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यदि $A = 26$, SUN = 27 तो CAT = ?

(1) 24 (2) 27

(3) 57 (4) 58

Options :
920906106929. 1
920906106930. 2
920906106931. 3
920906106932. 4

Question Number : 34 Question Id : 92090627062 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

If $2u = 5x$, is the relation between two variables u and x, and harmonic means of x is 0.8, find the harmonic mean of u.

(1) 1.250 (2) 1.500

(3) 2 (4) 0.32

Options :
920906106933. 1
920906106934. 2
920906106935. 3
920906106936. 4

Question Number : 34 Question Id : 92090627062 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

यदि $2u = 5x$, दो चर u और x के बीच संबंध है और x का हरात्मक माध्य 0.8 है, तो u का हरात्मक माध्य ज्ञात करे

(1) 1.250 (2) 1.500

(3) 2 (4) 0.32

Options :
920906106933. 1
920906106934. 2
920906106935. 3

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920906106936. 4

Question Number : 35 Question Id : 92090627063 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The variance of a series of numbers 2, 3, 11 and x is 12.25. Find the value of x.

(1) 6 or $\frac{14}{3}$

(2) 4 or $\frac{16}{3}$

(3) 6 or $\frac{16}{3}$

(4) 4 or $\frac{14}{3}$

Options :

920906106937. 1

920906106938. 2

920906106939. 3

920906106940. 4

Question Number : 35 Question Id : 92090627063 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

संख्या 2, 3, 11 और x की श्रृंखला का प्रसरण 12.25 है | x का मान ज्ञात कीजिए

(1) 6 और $\frac{14}{3}$

(2) 4 और $\frac{16}{3}$

(3) 6 और $\frac{16}{3}$

(4) 4 और $\frac{14}{3}$

Options :

920906106937. 1

920906106938. 2

920906106939. 3

920906106940. 4

Question Number : 36 Question Id : 92090627064 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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If A, G, H be respectively, the A.M., G.M., and H.M. of three positive numbers a, b, c; then the equation whose roots are these numbers is given by

(1) $x^3 - 3Ax^2 + G^3(3x-1) = 0$ (2) $x^3 - 3Ax^2 + 3(G^3/H)x - G^3 = 0$

(3) $x^3 + 3Ax^2 + 3(G^3/H)x - G^3 = 0$ (4) $x^3 - 3Ax^2 - 3(G^3/H)x + G^3 = 0$

Options :
920906106941. 1
920906106942. 2
920906106943. 3
920906106944. 4

Question Number : 36 Question Id : 92090627064 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

यदि A, G, H क्रमशः तीन धनात्मक संख्याओं a, b, c का A.M., G.M., और H.M. हो तो वह समीकरण जिसके मूल ये संख्याएँ है, निम्न के द्वारा दिया जाता है

(1) $x^3 - 3Ax^2 + G^3(3x-1) = 0$ (2) $x^3 - 3Ax^2 + 3(G^3/H)x - G^3 = 0$

(3) $x^3 + 3Ax^2 + 3(G^3/H)x - G^3 = 0$ (4) $x^3 - 3Ax^2 - 3(G^3/H)x + G^3 = 0$

Options :
920906106941. 1
920906106942. 2
920906106943. 3
920906106944. 4

Question Number : 37 Question Id : 92090627065 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

If $\vec{a}, \vec{b}, \vec{c}$ are non-coplanar unit vectors such that $\vec{a} \times (\vec{b} \times \vec{c}) = \frac{(\vec{b} + \vec{c})}{\sqrt{2}}$ then the angle between a and b is

(1) $3\pi/4$ (2) $\pi/4$

(3) $\pi/2$ (4) π

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Options :
920906106945. 1
920906106946. 2
920906106947. 3
920906106948. 4

Question Number : 37 Question Id : 92090627065 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $\vec{a}, \vec{b}, \vec{c}$ एक गैर- समतलीय इकाई सदिश है जैसे कि $\vec{a} \times (\vec{b} \times \vec{c}) = \frac{(\vec{b} + \vec{c})}{\sqrt{2}}$ तो a और b के बीच का कोण है :

(1) $3\pi/4$ (2) $\pi/4$

(3) $\pi/2$ (4) π

Options :
920906106945. 1
920906106946. 2
920906106947. 3
920906106948. 4

Question Number : 38 Question Id : 92090627066 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The equation of the bisector of the acute angle between the lines $3x - 4y + 7 = 0$ and $12x + 5y - 2 = 0$

(1) $99x - 27y - 81 = 0$ (2) $11x - 3y + 9 = 0$

(3) $21x + 77y - 101 = 0$ (4) $21x + 77y + 101 = 0$

Options :
920906106949. 1
920906106950. 2
920906106951. 3
920906106952. 4

Question Number : 38 Question Id : 92090627066 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

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Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

रेखाएं $3x-4y+7=0$ और $12x+5y-2=0$ के बीच न्युन कोण के द्विभाजक का समीकरण है :

(1) $99x-27y-81=0$ (2) $11x-3y+9=0$

(3) $21x+77y-101=0$ (4) $21x+77y+101=0$

Options :
920906106949. 1
920906106950. 2
920906106951. 3
920906106952. 4

Question Number : 39 Question Id : 92090627067 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The tangent to the hyperbola $x^2-y^2=3$ are parallel to the straight line $2x+y+8=0$ points are

(1) (2, 2), (1, 2) (2) (2, –1), (–2, 1)

(3) (–2, –1), (1, 2) (4) (–2, –1), (–1, –2)

Options :
920906106953. 1
920906106954. 2
920906106955. 3
920906106956. 4

Question Number : 39 Question Id : 92090627067 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

अतिपरवलय $x^2-y^2=3$ की स्पर्श–रेखा सीधी रेखा $2x+y+8=0$ के बिंदुओ के समानांतर है :

(1) (2, 2), (1, 2) (2) (2, –1), (–2, 1)

(3) (–2, –1), (1, 2) (4) (–2, –1), (–1, –2)

Options :
920906106953. 1
920906106954. 2

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920906106955. 3
920906106956. 4

Question Number : 40 Question Id : 92090627068 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Function $f(x)=(x+1)^{\cot x}$ is continuous at $x=0$, then the value of $f(0)$ is

(1) $\frac{1}{e}$ (2) 0

(3) e (4) 1

Options :
920906106957. 1
920906106958. 2
920906106959. 3
920906106960. 4

Question Number : 40 Question Id : 92090627068 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

फलन $f(x)=(x+1)^{\cot x}$ $x=0$ पर सतत है, तो $f(0)$ का मान है

(1) $\frac{1}{e}$ (2) 0

(3) e (4) 1

Options :
920906106957. 1
920906106958. 2
920906106959. 3
920906106960. 4

Question Number : 41 Question Id : 92090627069 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Equation $5x - 7y + z = 11$, $6x - 8y - z = 15$ and $3x + 2y - 6z = 7$, then the system is consistent and has infinitely many solutions.

Reasons (R) : If $D = 0$ then the 3 linear equations is consistent and has infinitely many solutions if $D_1 = D_2 = D_3 = 0$.

In the light of the above Statements, choose the correct answer from the options given below :

(1) Both (A) and (R) are true and (R) is the correct explanation of (A)

(2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)

(3) (A) is true but (R) is false

(4) (A) is false but (R) is true

Options :

920906106961. 1

920906106962. 2

920906106963. 3

920906106964. 4

Question Number : 41 Question Id : 92090627069 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : समीकरण $5x-7y+z=11,\ 6x-8y-z=15$ और $3x+2y-6z=7$, तो प्रणाली संगत है और इसके अनंत रूप से कई हल है |

कारण R : यदि $D=0$ तो 3 रैखिक समीकरण संगत है और अगर $D_1=D_2=D_3=0$ है तो अनंत रूप से अनेक हल है|

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही हैनीचे दो कथन दिए गए है।

Options :

920906106961. 1

920906106962. 2

920906106963. 3

920906106964. 4

Question Number : 42 Question Id : 92090627070 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

if $\vec{a}, \vec{b}$ and $\vec{c}$ are three non-coplanar vectors, then $(\vec{a}+\vec{b}+\vec{c}).[(\vec{a}+\vec{b})\times(\vec{a}+\vec{c})]$ equal to

(1) 0

(2) $-[\vec{a}\ \vec{b}\ \vec{c}]$

(3) $3[\vec{a}\ \vec{b}\ \vec{c}]$

(4) $2[\vec{a}\ \vec{b}\ \vec{c}]$

Options :

920906106965. 1

920906106966. 2

920906106967. 3

920906106968. 4

Question Number : 42 Question Id : 92090627070 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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यदि $\vec{a}, \vec{b}$ और $\vec{c}$ तीन गैर–समतलीय सदिश हैं तो $(\vec{a}+\vec{b}+\vec{c})\cdot\left[(\vec{a}+\vec{b})\times(\vec{a}+\vec{c})\right]$ बराबर है

(1) 0

(2) $-[\vec{a}\,\vec{b}\,\vec{c}]$

(3) $3[\vec{a}\,\vec{b}\,\vec{c}]$

(4) $2[\vec{a}\,\vec{b}\,\vec{c}]$

Options :
920906106965. 1
920906106966. 2
920906106967. 3
920906106968. 4

Question Number : 43 Question Id : 92090627071 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Find the sum of two consecutive numbers in which four times are first number is 12 more than the thrice of the second number

(1) 27

(2) 31

(3) 24

(4) 25

Options :
920906106969. 1
920906106970. 2
920906106971. 3
920906106972. 4

Question Number : 43 Question Id : 92090627071 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

दो लगातार संख्याओं का योग ज्ञात करें जिसमे पहली संख्या का चार गुना दूसरी संख्या के तीन गुना से 12 अधिक है

(1) 27

(2) 31

(3) 24

(4) 25

Options :

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920906106969. 1
920906106970. 2
920906106971. 3
920906106972. 4

Question Number : 44 Question Id : 92090627072 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If α and β are the roots of a quadratic equation $x^2+\alpha x+\beta=0$ where $\beta\neq 0$, then what is the value of $\alpha+\beta$?

(1) 3 (2) 4

(3) –1 (4) –3

Options :
920906106973. 1
920906106974. 2
920906106975. 3
920906106976. 4

Question Number : 44 Question Id : 92090627072 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदि α and β द्विघात समीकरण $x^2+\alpha x+\beta=0$ का मूल हैं, जहाँ $\beta\neq 0$, तब $\alpha+\beta$ का क्या मान है ?

(1) 3 (2) 4

(3) –1 (4) –3

Options :
920906106973. 1
920906106974. 2
920906106975. 3
920906106976. 4

Question Number : 45 Question Id : 92090627073 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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The joint equation of the straight line $x+y=1$ and $x-y=4$ is

(1) $x^2-y^2=-4$ (2) $x^2-y^2=4$

(3) $(x+y-1)(x-y-4)=0$ (4) $(x+y+1)(x-y+4)=0$

Options :
920906106977. 1
920906106978. 2
920906106979. 3
920906106980. 4

Question Number : 45 Question Id : 92090627073 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

सीधी रेखाओं $x+y=1$ और $x-y=4$ का संयुकत समीकरण है

(1) $x^2-y^2=-4$ (2) $x^2-y^2=4$

(3) $(x+y-1)(x-y-4)=0$ (4) $(x+y+1)(x-y+4)=0$

Options :
920906106977. 1
920906106978. 2
920906106979. 3
920906106980. 4

Question Number : 46 Question Id : 92090627074 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

A beam is supported at its ends by supporters which are 12 meters apart. Since the load is concentrated at its centre, there is a deflection of 3 cm at the centre and the deflected beam is in the shape of a parabola. How far from the centre is the deflection 1 cm?

(1) $2\sqrt{6}$ m (2) $2\sqrt{3}$ m

(3) $2\sqrt{8}$ m (4) $2\sqrt{5}$ m

Options :
920906106981. 1
920906106982. 2

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920906106983. 3
920906106984. 4

Question Number : 46 Question Id : 92090627074 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

एक बीम अपने सिरों पर समर्थन द्वारा समर्थित है जो 12 m अलग है| चुंकि भार इसके केंद्र पर केंद्रित है इसलिए इसके केंद्र में 3 cm सेमी का विक्षेपण होता है और विक्षेपित बीम एक परवलय के आकार में होती है| केंद्र से कितनी दूरी पर विक्षेपण 1 cm है |

(1) $2\sqrt{6}$ m (2) $2\sqrt{3}$ m

(3) $2\sqrt{8}$ m (4) $2\sqrt{5}$ m

Options :
920906106981. 1
920906106982. 2
920906106983. 3
920906106984. 4

Question Number : 47 Question Id : 92090627075 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The number of common tangents that can be drawn to the circle $x^2+y^2-4x-6y-3=0$ and $x^2+y^2+2x+2y+1=0$ is

(1) One (2) Two

(3) Three (4) Four

Options :
920906106985. 1
920906106986. 2
920906106987. 3
920906106988. 4

Question Number : 47 Question Id : 92090627075 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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वृत $x^2+y^2-4x-6y-3=0$ और $x^2+y^2+2x+2y+1=0$ पर खींची जा सकने वाली उभयनिष्ठ स्पर्श रेखाओं की संख्या है

(1) एक (2) दो

(3) तीन (4) चार

Options :
920906106985. 1
920906106986. 2
920906106987. 3
920906106988. 4

Question Number : 48 Question Id : 92090627076 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The area of region bounded by the curve $y^2=x$, the y-axis and between $y = 2$ and $y = 4$ is

(1) $\frac{52}{3}$ sq. units (2) $\frac{54}{3}$ sq. units

(3) $\frac{56}{3}$ sq. units (4) $\frac{58}{3}$ sq. units

Options :
920906106989. 1
920906106990. 2
920906106991. 3
920906106992. 4

Question Number : 48 Question Id : 92090627076 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

वक्र $y^2=x$, y-अक्ष और $y = 2$ और $y = 4$ के बीच घिरे क्षेत्र का क्षेत्रफल है |

(1) $\frac{52}{3}$ वर्ग इकाई (2) $\frac{54}{3}$ वर्ग इकाई

(3) $\frac{56}{3}$ वर्ग इकाई (4) $\frac{58}{3}$ वर्ग इकाई

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Options :
920906106989. 1
920906106990. 2
920906106991. 3
920906106992. 4

Question Number : 49 Question Id : 92090627077 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The area of the region bounded by the curve $x^2 = 4y$ and the straight line $x = 4y - 2$ is

(1) $\frac{3}{8}$ sq. units (2) $\frac{5}{8}$ sq. units

(3) $\frac{7}{8}$ sq. units (4) $\frac{9}{8}$ sq. units

Options :
920906106993. 1
920906106994. 2
920906106995. 3
920906106996. 4

Question Number : 49 Question Id : 92090627077 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

वक्र $x^2 = 4y$ और सीधी रेखा $x = 4y - 2$ के बीच घिरे क्षेत्र का क्षेत्रफल है

(1) $\frac{3}{8}$ वर्ग इकाई (2) $\frac{5}{8}$ वर्ग इकाई

(3) $\frac{7}{8}$ वर्ग इकाई (4) $\frac{9}{8}$ वर्ग इकाई

Options :
920906106993. 1
920906106994. 2
920906106995. 3
920906106996. 4

Question Number : 50 Question Id : 92090627078 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

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Correct Marks : 4 Wrong Marks : 1

If $\log_3 2, \log_3(2^x - 5)$ and $\log_3(2^x - 7/2)$ are in A.P., then x is equal to

(1) 2 (2) 3

(3) 4 (4) 2, 3

Options :

920906106997. 1

920906106998. 2

920906106999. 3

920906107000. 4

Question Number : 50 Question Id : 92090627078 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदि $\log_3 2, \log_3(2^x - 5)$ और $\log_3(2^x - 7/2)$ समांतर श्रेणी में है तो x बराबर है

(1) 2 (2) 3

(3) 4 (4) 2, 3

Options :

920906106997. 1

920906106998. 2

920906106999. 3

920906107000. 4

Question Number : 51 Question Id : 92090627079 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A tower standing on a horizontal plane subtends a certain angle at a point 160 m apart from the foot of the tower. On advancing 100 m towards it, the tower is found to be subtend an angle twice as before. Find the height of the tower?

(1) 80 m (2) 100 m

(3) 160 m (4) 200 m

Options :

920906107001. 1

920906107002. 2

920906107003. 3

920906107004. 4

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Question Number : 51 Question Id : 92090627079 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

एक समतल सतह पर खडा एक टॉवर निचले सिरे से 160 मीटर दूर एक बिंदु पर कोई कोण बनाता है | इसे बिंदु की ओर 100 मीटर आगे करने पर टॉवर पहले का दोगुना कोण बनाता है | तो टॉवर की ऊँचाई ज्ञात कीजिये

(1) 80 मीटर (2) 100 मीटर

(3) 160 मीटर (4) 200 मीटर

Options :

920906107001. 1

920906107002. 2

920906107003. 3

920906107004. 4

Question Number : 52 Question Id : 92090627080 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If $\tan\alpha = 1/3$, $\tan\beta = 1/7$ and $2\alpha + \beta = m$, then $\sin 2m$ is equal.

(1) 0 (2) 1

(3) 2 (4) 3

Options :

920906107005. 1

920906107006. 2

920906107007. 3

920906107008. 4

Question Number : 52 Question Id : 92090627080 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदि $\tan\alpha = 1/3$, $\tan\beta = 1/7$ और $2\alpha + \beta = m$, तो $\sin 2m$ बराबर है.

(1) 0 (2) 1

(3) 2 (4) 3

Options :

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920906107005. 1
920906107006. 2
920906107007. 3
920906107008. 4

Question Number : 53 Question Id : 92090627081 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If an angle α is divided into two parts A and B such that $A-B=x$ and $\tan A:\tan B=k:1$, then the value of $\sin x$ is

(1) $\frac{k+1}{k-1}\sin\alpha$

(2) $\frac{k}{k+1}\sin\alpha$

(3) $\frac{k-1}{k+1}\sin\alpha$

(4) $\frac{k+1}{k}\cos\alpha$

Options :
920906107009. 1
920906107010. 2
920906107011. 3
920906107012. 4

Question Number : 53 Question Id : 92090627081 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदि एक कोण α को दो भागो A और B में इस प्रकार विभाजित किया गया है कि $A-B=x$ और $\tan A:\tan B=k:1$, तो $\sin x$ का मान है

(1) $\frac{k+1}{k-1}\sin\alpha$

(2) $\frac{k}{k+1}\sin\alpha$

(3) $\frac{k-1}{k+1}\sin\alpha$

(4) $\frac{k+1}{k}\cos\alpha$

Options :
920906107009. 1
920906107010. 2
920906107011. 3
920906107012. 4

Question Number : 54 Question Id : 92090627082 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

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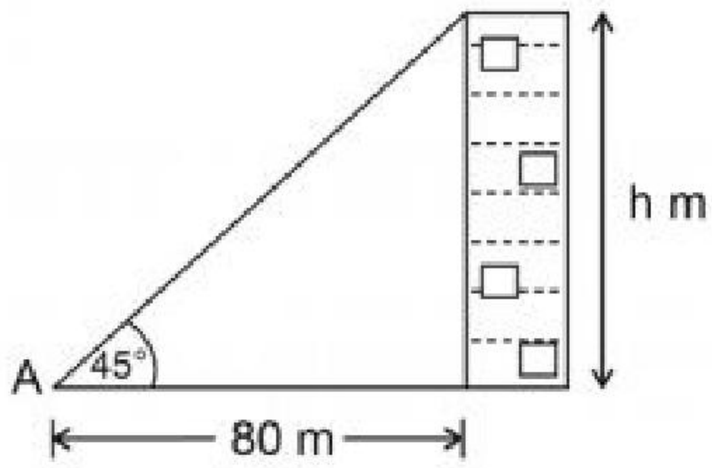
Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The base of a tower is 80m away from a point A on the ground. If the angle of elevation of the top of the tower from A is 45. Calculate the height of the tower.

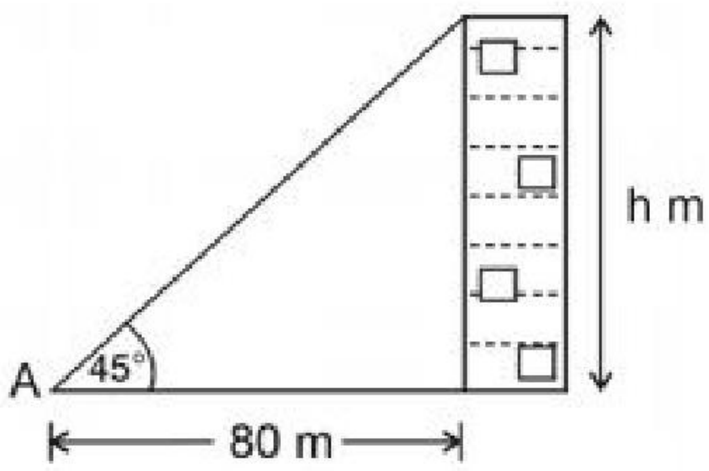


(1) 56.3 m
(2) 80.0 m
(3) 136.3m
(4) 50.3 m

Options :
920906107013. 1
920906107014. 2
920906107015. 3
920906107016. 4

Question Number : 54 Question Id : 92090627082 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

एक मीनार का आधार जमीन पर एक बिंदु A से 80 मीटर दूर है | यदि A से मीनार के शीर्ष का उन्नयन कोण 45° है तो मीनार की ऊँचाई का ऑकलन कीजिए



(1) 56.3 मीटर
(2) 80.0 मीटर
(3) 136.3 मीटर
(4) 50.3 मीटर

Options :
920906107013. 1

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920906107014. 2
920906107015. 3
920906107016. 4

Question Number : 55 Question Id : 92090627083 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

If the angle between the two lines $2x^2+5xy+3y^2+6x+7y+4=0$ is represented by $\tan^{-1}(m)$, then m is equal to

(1) $\frac{1}{5}$ (2) $\frac{2}{5}$

(3) $\frac{3}{5}$ (4) $\frac{1}{20}$

Options :
920906107017. 1
920906107018. 2
920906107019. 3
920906107020. 4

Question Number : 55 Question Id : 92090627083 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदी दो रेखाओं $2x^2+5xy+3y^2+6x+7y+4=0$ के बीच का कोण $\tan^{-1}(m)$ के द्वारा निरूपित किया जाता है तो m बराबर है

(1) $\frac{1}{5}$ (2) $\frac{2}{5}$

(3) $\frac{3}{5}$ (4) $\frac{1}{20}$

Options :
920906107017. 1
920906107018. 2
920906107019. 3
920906107020. 4

Question Number : 56 Question Id : 92090627084 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

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Correct Marks : 4 Wrong Marks : 1

The minimum number of 2-input NAND gates required to implement the function $F=(x'+y')(z+w)$ is

(1) 3 (2) 4

(3) 5 (4) 6

Options :
920906107021. 1
920906107022. 2
920906107023. 3
920906107024. 4

Question Number : 56 Question Id : 92090627084 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

फलन $F=(x'+y')(z+w)$को कार्यान्वित करने के लिए आवश्यक 2 इनपुट NAND गेट्स की न्यूनतम संख्या है

(1) 3 (2) 4

(3) 5 (4) 6

Options :
920906107021. 1
920906107022. 2
920906107023. 3
920906107024. 4

Question Number : 57 Question Id : 92090627085 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Find the sum of following hexadecimal numbers $(7CA)_{16}+(4B2)_{16}=?$

(1) B7C (2) C7C

(3) D7C (4) B6C

Options :
920906107025. 1
920906107026. 2

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920906107027. 3
920906107028. 4

Question Number : 57 Question Id : 92090627085 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित हेक्साडेसीमल संख्या का योग ज्ञात कीजिए $(7CA)_{16} + (4B2)_{16} = ?$

(1) B7C (2) C7C

(3) D7C (4) B6C

Options :
920906107025. 1
920906107026. 2
920906107027. 3
920906107028. 4

Question Number : 58 Question Id : 92090627086 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

When even parity ASCII text is transmitted asynchronously at a rate of 10 characters per sec. over a 110-bps line, what percentage of the received bits actually contain data

(1) $\frac{7}{11}$ (2) $\frac{8}{11}$

(3) $\frac{700}{11}$ (4) $\frac{80}{11}$

Options :
920906107029. 1
920906107030. 2
920906107031. 3
920906107032. 4

Question Number : 58 Question Id : 92090627086 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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जब इवन पैरीटी बिट ASCII टेक्स्ट को 110 बीपीएस लाइन पर 10 अक्षर प्रति सेंकड की दर से अतुल्यकालिक (asynchronous) रुप से प्रसारित होता है | प्राप्त बिट्स के कितने प्रतिशत में वास्तव में डेटा होता है

(1) $\frac{7}{11}$ (2) $\frac{8}{11}$

(3) $\frac{700}{11}$ (4) $\frac{80}{11}$

Options :
920906107029. 1
920906107030. 2
920906107031. 3
920906107032. 4

Question Number : 59 Question Id : 92090627087 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Consider the unsigned 8-bit fixed point binary number representation below,

$$b_7\ b_6\ b_5\ b_4\ b_3\ .\ b_2\ b_1\ b_0$$

The position of binary point is between b_2 and b_3 which of the following can be represented exactly in the above representation.

(1) 33.500 (2) 31.875

(3) 17.575 (4) 19.650

Options :
920906107033. 1
920906107034. 2
920906107035. 3
920906107036. 4

Question Number : 59 Question Id : 92090627087 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे अ–चिन्हित 8 – बिट निश्चित बिंदु बाइनरी संख्या प्रतिनिधित्व पर विचार करे,

$$b_7\ b_6\ b_5\ b_4\ b_3\ .\ b_2\ b_1\ b_0$$

बाइनरी पॉइंट की स्थिति b_3 और b_2 के बीच है, जो निम्न में से उपरोक्त प्रतिनिधित्व में बिल्कुल प्रदर्शित किया जा सकता है

(1) 33.500 (2) 31.875

(3) 17.575 (4) 19.650

Options :

920906107033. 1

920906107034. 2

920906107035. 3

920906107036. 4

Question Number : 60 Question Id : 92090627088 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

The values of x and y, if $(x\,567)_8 + (2yx5)_8 = (71yx)_8$

(1) 4, 3 (2) 4, 4

(3) 3, 4 (4) 4, 5

Options :

920906107037. 1

920906107038. 2

920906107039. 3

920906107040. 4

Question Number : 60 Question Id : 92090627088 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

यदि $(x\,567)_8 + (2yx5)_8 = (71yx)_8$ है तो x और y का मान है

(1) 4, 3 (2) 4, 4

(3) 3, 4 (4) 4, 5

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Options :
920906107037. 1
920906107038. 2
920906107039. 3
920906107040. 4

Question Number : 61 Question Id : 92090627089 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The lines $2x + y - 1 = 0$, $ax + 3y - 3 = 0$ and $3x + 2y - 2 = 0$ are concurrent for

(1) for all a
(2) $a = 4$ only
(3) $-1 \le a \le 3$
(4) $a > 0$ only

Options :
920906107041. 1
920906107042. 2
920906107043. 3
920906107044. 4

Question Number : 61 Question Id : 92090627089 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

रेखाएँ $2x + y - 1 = 0$, $ax + 3y - 3 = 0$ और $3x + 2y - 2 = 0$ समवर्ती है

(1) सभी a के लिए
(2) $a = 4$ केवल
(3) $-1 \le a \le 3$
(4) $a > 0$ केवल

Options :
920906107041. 1
920906107042. 2
920906107043. 3
920906107044. 4

Question Number : 62 Question Id : 92090627090 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

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Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : If the equation $x^2 + px + q = 0$ has rational roots and p and q are integers, then the roots are integers.

Reasons (R) : A quadratic equation has rational roots if and only if its discriminant is a perfect square of a rational number.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A)

(2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)

(3) (A) is correct but (R) is not correct

(4) (A) is not correct but (R) is correct

Options :

920906107045. 1

920906107046. 2

920906107047. 3

920906107048. 4

Question Number : 62 Question Id : 92090627090 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : यदि समीकरण $x^2 + px + q = 0$ के परिमेय मूल p और q पूर्णांक है, तो मूल पूर्णांक हैं।

कारण R : एक द्विघात समीकरण के परिमेय मूल होते हैं यदि उसका विविक्तकर परिमेय संख्या का पूर्ण वर्ग हो।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही है

Options :

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920906107045. 1
920906107046. 2
920906107047. 3
920906107048. 4

Question Number : 63 Question Id : 92090627091 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Gray code easy to use in counter.

Reasons (R) : Counter is a register, which is made of flip flops.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both (A) and (R) are correct and (R) is the correct explanation of (A)

(2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)

(3) (A) is correct but (R) is not correct

(4) (A) is not correct but (R) is correct

Options :

920906107049. 1
920906107050. 2
920906107051. 3
920906107052. 4

Question Number : 63 Question Id : 92090627091 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : ग्रे कोड काउंटर में आसानी से उपयोग होता है।

कारण R : काउंटर रजिस्टर है, जो फ्लीप फ्लॉप से बनता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही है

Options :

920906107049. 1

920906107050. 2

920906107051. 3

920906107052. 4

Question Number : 64 Question Id : 92090627092 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : RAM is a volatile memory.

Reasons (R) : The content of RAM get vanished as soon as power is off.

In the light of the above Statements, choose the correct answer from the options given below :

(1) Both (A) and (R) are true and (R) is the correct explanation of (A)

(2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)

(3) (A) is true but (R) is false

(4) (A) is false but (R) is true

Options :

920906107053. 1

920906107054. 2

920906107055. 3

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920906107056. 4

Question Number : 64 Question Id : 92090627092 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : रैम (RAM) एक वोलाटाईल मेमोरी है।

कारण R : पावर जाने के तुरंत बाद रैम (RAM) के कंटेंट विलुप्त हो जाते हैं।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही है

Options :

920906107053. 1

920906107054. 2

920906107055. 3

920906107056. 4

Question Number : 65 Question Id : 92090627093 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Interrupt service routine are generally executed by CPU to handles an interrupt.

Reasons (R) : CPU handles an interrupt by checking the interrupt register at fixed time intervals.

In the light of the above Statements, choose the correct answer from the options given below :

(1) Both (A) and (R) are true and (R) is the correct explanation of (A)

(2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)

(3) (A) is true but (R) is false

(4) (A) is false but (R) is true

Options :

920906107057. 1

920906107058. 2

920906107059. 3

920906107060. 4

Question Number : 65 Question Id : 92090627093 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : इंटरप्ट सर्विस रूटीन आमतौर पर सीपीयू द्वारा एक इंटरप्ट को संभालने (handle) के लिए निष्पादित (execute) किया जाता है।

कारण R : सीपीयू निश्चित समय अंतराल पर इंटरप्ट रजिस्टर की जाँच करके एक रुकावट को संभालता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही है

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Options :
920906107057. 1
920906107058. 2
920906107059. 3
920906107060. 4

Question Number : 66 Question Id : 92090627094 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A bag contains 10 red beads (R)and 5 black beads (B). A bead is taken out of the bag at random, its color is noted and then it is not placed back in the bag. Calculate the probability that first two beads are red.

(1) 4/7 (2) 5/7

(3) 1/3 (4) 3/7

Options :
920906107061. 1
920906107062. 2
920906107063. 3
920906107064. 4

Question Number : 66 Question Id : 92090627094 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

एक बैग में 10 लाल (R) मोती है और 5 काले मोती हैं। एक मोती यादृच्छिक रूप रैन्डम) से बैग से लिया जाता है, इसका रंग नोट किया जाता है और तब यह दोबारा बैग में नही रखा जाता है। पहले दो मोती लाल हैं, इस संभावना की गणना कीजिए।

(1) 4/7 (2) 5/7

(3) 1/3 (4) 3/7

Options :
920906107061. 1
920906107062. 2
920906107063. 3
920906107064. 4

Question Number : 67 Question Id : 92090627095 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

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Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : If $(12P)_3 = (123)_p$ then the value of p is 8.

Statement II : In 16-bit 2's complement representation, the decimal number –28 is 1111 111111100100.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are correct

(2) Both Statement I and Statement II are incorrect

(3) Statement I is correct but statement II is incorrect

(4) Statement I is incorrect but statement II is correct

Options :
920906107065. 1
920906107066. 2
920906107067. 3
920906107068. 4

Question Number : 67 Question Id : 92090627095 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : यदि $(12P)_3 = (123)_p$, तो p का मान 8 है।

कथन II : दशमलव संख्या – 28, 16 बिट 2 के पूरक निरूपण (2's) में, 1111 1111 1110 0100 है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :
920906107065. 1
920906107066. 2
920906107067. 3

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920906107068. 4

Question Number : 68 Question Id : 92090627096 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following is not true?

(A) If a, b, c are in AP and a, $2b$, c are in GP then a, $4b$, c are in HP

(B) The number 361 is not a term of the sequence $a_n = n^2 + 2n + 1$.

(C) If p, q are the roots of $(x-a)(x-b)-m=0$, then a, b are roots of $(x-p)(x-q)+m=0$.

(D) The expression $9^x - 3^x + 1$ can assume all real values for $x \in R$.

Choose the correct answer from the options given below :

(1) (A), (B) and (D) only

(2) (B) and (C) only

(3) (A) and (C) only

(4) (B) and (D) only

Options :

920906107069. 1

920906107070. 2

920906107071. 3

920906107072. 4

Question Number : 68 Question Id : 92090627096 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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निम्नलिखित में से कौन सा सत्त नहीं है।

A. यदि a, b, c AP में है और $a, 2b, c$ GP में है तो $a, 4b, c$ HP में है।

B. संख्या उन अनुक्रम $a_n = n^2 + 2n + 1$ का पद नही है।

C. यदि p, q, $(x-a)(x-b)-m=0$ के मूल हैं तो a, b $(x-p)(x-q)+m=0$ के मूल हैं।

D. $9^x - 3^x + 1$ का व्यंजक $x \in R$ के लिए सभी वास्तविक मान ग्रहण कर सकता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A, B और D

(2) केवल B और C

(3) केवल A और C

(4) केवल B और D

Options :

920906107069. 1

920906107070. 2

920906107071. 3

920906107072. 4

Question Number : 69 Question Id : 92090627097 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following is not correct?

(A) Sum of the vectors directed from the vertices to the mid-points of opposite side of a triangle is zero.

(B) Medians of a triangle are not concurrent.

(C) The diagonals of a quadrilateral bisect each other iff it is a parallelogram.

(D) Vectors having the different terminal point are called co–terminus vectors.

Choose the correct answer from the options given below :

(1) (A) and (C) only

(2) (B) and (D) only

(3) (B), (C) and (D) only

(4) (A) and (B) only

Options :

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920906107073. 1
920906107074. 2
920906107075. 3
920906107076. 4

Question Number : 69 Question Id : 92090627097 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित में से कौन सा सही नही है -

A. किसी त्रिभुज की सम्मुख भुजाओं के शीर्षों से मध्य बिन्दुओं तक निर्देशत शीर्षों का योग शून्य होता है।

B. किसी त्रिभुज की माध्यिकाएँ संगामी नही होती हैं।

C. एक चतुर्भुज के विकर्ण परस्पर समद्विभाजित करते हैं यदि यह एक समांतर चतुर्भुज है।

D. अलग-अलग टर्मिनल बिंदु वाले सदिशों को कोटर्मिनस सदिशों कहा जाता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A और C
(2) केवल B और D
(3) केवल B, C और D
(4) केवल A और B

Options :
920906107073. 1
920906107074. 2
920906107075. 3
920906107076. 4

Question Number : 70 Question Id : 92090627098 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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During the execution of an instruction in a processor

(A) Program Counter (PC) is used to hold the address of next instruction to be executed.

(B) Instruction Register (IR) hold the instruction to be executed.

(C) Memory Address Register (MAR) is used to perform address translation.

(D) Data Register (DR) is used to perform operation on the data.

(E) Clock generates necessary control signals

Choose the correct answer from the options given below :

(1) Only (A) and (B) true

(2) Only (C) and (D) true

(3) Only (A), (B) and (E) true

(4) Only (B), (C) and (D) true

Options :

920906107077. 1

920906107078. 2

920906107079. 3

920906107080. 4

Question Number : 70 Question Id : 92090627098 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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एक प्रोसेसर में एक निर्देश के एक्जीक्युशन (निष्पादन) के दौरान

A. प्रोग्राम काउंटर (PC) का उपयोग एक्जीक्युट किए जाने वाली अगले इंस्ट्रक्शन का एड्रेस रखने के लिए किया जाता है।

B. इंस्ट्रक्शन रजिस्टर एक्जीक्युट किए जाने वाले इंस्ट्रक्शन को रखता है।

C. एड्रेस ट्रांसलेशन करने के लिए मेमोरी ऐड्रेस रजिस्टर (MAR) का उपयोग किया जाता है।

D. डेटा रजिस्टर (DR) का उपयोग डेटा पर आपरेशन करने के लिए किया जाता है।

E. क्लॉक आवश्यक नियंत्रण संकेत (Control signals) उत्पन्न करती है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A और B सत्य है।

(2) केवल C और D सत्य है।

(3) केवल A, B और E सत्य है।

(4) केवल B, C और D सत्य है।

Options :

920906107077. 1

920906107078. 2

920906107079. 3

920906107080. 4

Question Number : 71 Question Id : 92090627099 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements :

Statement I : The vector equation of line passing through two points with position vector $\vec{a}$ and $\vec{b}$ is $\vec{r} = \vec{a} + \lambda(\vec{b} + \vec{a})$

Statement II : The vector equation of a straight line passing through a fixed point with position vector $\vec{a}$ and parallel to a given vector $\vec{b}$ is $\vec{r} = \vec{a} + \lambda\vec{b}$ where λ is scalar.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are correct

(2) Both Statement I and Statement II are incorrect

(3) Statement I is correct but statement II is incorrect

(4) Statement I is incorrect but statement II is correct

Options :
920906107081. 1
920906107082. 2
920906107083. 3
920906107084. 4

Question Number : 71 Question Id : 92090627099 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : स्थिति सदिश $\vec{a}$ और $\vec{b}$ के साथ दो बिंदुओं के माध्य से गुजरने वाली रेखा का सदिश समीकरण $\vec{r} = \vec{a} + \lambda(\vec{b} + \vec{a})$ है।

कथन II : स्थिति सदिश $\vec{a}$ के साथ एक निश्चित बिंदु के माध्यम से गुजरने वाली सीधी रेखा का सदिश समीकरण और दिए गए सदिश $\vec{b}$ के समानांतर $\vec{r} = \vec{a} + \lambda\vec{b}$ है जहाँ λ एक अदिश है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

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Options :
920906107081. 1
920906107082. 2
920906107083. 3
920906107084. 4

Question Number : 72 Question Id : 92090627100 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : Let $\vec{a}$, $\vec{b}$, $\vec{c}$ be three vectors. Then the scalar $\left(\vec{a}\times\vec{b}\right)\cdot\vec{c}$ is called the scalar product of $\vec{a}$, $\vec{b}$, $\vec{c}$ and is denoted by $\left[\vec{a}\ \vec{b}\ \vec{c}\right]=\vec{a}\cdot\left(\vec{b}\times\vec{c}\right)$.

Statement II : $\vec{a}\times\vec{b}$ is vector which is $\perp$ to $\vec{a}$ and $\vec{b}$ both.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are correct
(2) Both Statement I and Statement II are incorrect
(3) Statement I is correct but statement II is incorrect
(4) Statement I is incorrect but statement II is correct

Options :
920906107085. 1
920906107086. 2
920906107087. 3
920906107088. 4

Question Number : 72 Question Id : 92090627100 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे दो कथन दिए गए है:

कथन I : मान लीजिए $\vec{a}$, $\vec{b}$, $\vec{c}$ तीन सदिश है। तो अदिश $(\vec{a}\times\vec{b})\cdot\vec{c}$ का अदिश त्रिगुण कहा जाता है और इसे $[\vec{a}\ \vec{b}\ \vec{c}]=\vec{a}\cdot(\vec{b}\times\vec{c})$ द्वारा निरूपित किया जाता है।

कथन II : $\vec{a}\times\vec{b}$ एक सदिश है जो $\vec{a}$ और $\vec{b}$ दोनों के लंब है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :

920906107085. 1

920906107086. 2

920906107087. 3

920906107088. 4

Question Number : 73 Question Id : 92090627101 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : The locus of the middle points of chords of the circle $x^2+y^2=a^2$ which are parallel to the line $y=mx$ is $x-my=0$.

Statement II : The two tangents drawn from (4, 2) to $x^2+y^2=10$ are perpendicular.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are correct

(2) Both Statement I and Statement II are incorrect

(3) Statement I is correct but statement II is incorrect

(4) Statement I is incorrect but statement II is correct

Options :

920906107089. 1

920906107090. 2

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920906107091. 3
920906107092. 4

Question Number : 73 Question Id : 92090627101 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : वृत्त $x^2 + y^2 = a^2$ की उन जीवाओं के मध्य बिंदुओं का स्थान जो रेखा $y = mx$ के समांतर है, $x - my = 0$ है।

कथन II : (4, 2) से $x^2 + y^2 = 10$ तक खींची गई दो स्पर्श रेखाएँ लंबवत है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :

920906107089. 1
920906107090. 2
920906107091. 3
920906107092. 4

Question Number : 74 Question Id : 92090627102 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements :

Statement I : Three points with position vectors $\vec{a}$, $\vec{b}$, $\vec{c}$ are collinear iff there exists scalars x, y, z not all zero such that $x\vec{a} + y\vec{b} + z\vec{c} = \vec{0}$, where $x + y + z = 0$.

Statement II : Scalar product and vector product are both commutative.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are correct

(2) Both Statement I and Statement II are incorrect

(3) Statement I is correct but statement II is incorrect

(4) Statement I is incorrect but statement II is correct

Options :

920906107093. 1

920906107094. 2

920906107095. 3

920906107096. 4

Question Number : 74 Question Id : 92090627102 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : स्थिति सदिश $\vec{a}$, $\vec{b}$, $\vec{c}$ वाले तीन बिंदु समरैखीक हैं। अगर वहाँ स्केलर (अदिश) x, y, z है, सभी शून्य नही हैं जैसे कि $x + y + z = 0$ जहाँ $x\vec{a} + y\vec{b} + z\vec{c} = \vec{0}$ ।

कथन II : अदिश गुणनफल और सदिश गुणनफल दोनों क्रमविनिमेय हैं।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :

920906107093. 1

920906107094. 2

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920906107095. 3
920906107096. 4

Question Number : 75 Question Id : 92090627103 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : In order to reset carry without affecting accumulator content, one has to use ORAA.

Statement II : Octal code is minimal error code.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are correct

(2) Both Statement I and Statement II are incorrect

(3) Statement I is correct but statement II is incorrect

(4) Statement I is incorrect but statement II is correct

Options :

920906107097. 1
920906107098. 2
920906107099. 3
920906107100. 4

Question Number : 75 Question Id : 92090627103 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे दो कथन दिए गए है:

कथन I : एक्युमलेटर कंटेट को प्रभावित किए बिना कैरी को रिसेट करने के लिए किसी को ORAA का प्रयोग करना चाहिए।

कथन II : अष्टक कोड एक न्युनतम त्रुटि कोड है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :

920906107097. 1

920906107098. 2

920906107099. 3

920906107100. 4

Question Number : 76 Question Id : 92090627104 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : 011010 is 2's complement representation of –37.

Statement II : $(211)_8$ is octal representation of 137.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but statement II is false

(4) Statement I is false but statement II is true

Options :

920906107101. 1

920906107102. 2

920906107103. 3

920906107104. 4

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Question Number : 76 Question Id : 92090627104 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : 011010, –37 के 2 के पूरक को दर्शाता है।

कथन II : $(211)_8$, 137 का अष्टक (Octal) को दर्शाता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :

920906107101. 1

920906107102. 2

920906107103. 3

920906107104. 4

Question Number : 77 Question Id : 92090627105 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : Cache memory is a very high speed memory placed in between CPU and Hard Disk.

Statement II : One major advantage of virtual memory is that programs can be larger than main memory.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but statement II is false

(4) Statement I is false but statement II is true

Options :

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920906107105. 1
920906107106. 2
920906107107. 3
920906107108. 4

Question Number : 77 Question Id : 92090627105 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : कैचे (cache) मेमोरी बहुत तेज गति की मेमोरी होती है जिसे सीपीयू और हार्ड डिस्क के बीच रखा जाता है।

कथन II : वर्चउल (virtual) मेमोरी का एक बड़ा लाभ यह है कि प्रोग्राम्स मुख्य मेमोरी से बड़े हो सकते है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :

920906107105. 1
920906107106. 2
920906107107. 3
920906107108. 4

Question Number : 78 Question Id : 92090627106 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements :

Statement I : The gradient of a straight line is constant i.e. it does not change.

Statement II : The gradient of a straight line can be calculated by considering the coordinates of any two different points on the line.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but statement II is false

(4) Statement I is false but statement II is true

Options :
920906107109. 1
920906107110. 2
920906107111. 3
920906107112. 4

Question Number : 78 Question Id : 92090627106 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : एक सीधी रेखा की प्रवणता स्थिर है अर्थात यह बदलती नही है।

कथन II : एक सीधी रेखा की प्रवणता रेखा पर किन्हीं दो अलग-अलग बिंदुओं के निर्देशांक पर विचार करके की जा सकती है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तरका चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :
920906107109. 1
920906107110. 2
920906107111. 3

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920906107112. 4

Question Number : 79 Question Id : 92090627107 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Let $f(x)=x^2$ and A denote the area of the region bounded by $f(x)$ and the x-axis, when x varies from -1 to 1. Which of the following statements is/are true

(A) f is continuous in $[-1, 1]$

(B) f is not bounded in $[-1, 1]$

(C) A is non zero and finite

Choose the correct answer from the options given below :

(1) (A) and (B) only

(2) (B) and (C) only

(3) (C) only

(4) (A) and (C) only

Options :

920906107113. 1

920906107114. 2

920906107115. 3

920906107116. 4

Question Number : 79 Question Id : 92090627107 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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मान लीजिए और $f(x)=x^2$ और A, $f(x)$, x-अक्ष से घिरे हुए क्षेत्र को निरूपित करते हैं, जब x, -1 से 1 तक रहता है। निम्नलिखित में से कौन सा/से कथन सही है।

A. F, [–1, 1] के बीच में सतत है।

B. f, [–1, 1], तक घिरा नही है।

C. A गैर शून्य और परिमित है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A और B

(2) केवल B और C

(3) केवल C

(4) केवल A और C

Options :

920906107113. 1

920906107114. 2

920906107115. 3

920906107116. 4

Question Number : 80 Question Id : 92090627108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following is not correct?

(A) If A, B are two matrices such that $AB=A$ and $BA=B$, then A and B are idempotent.

(B) Every skew – symmetric matrix of odd order is invertible.

(C) If A is a non-singular matrix, then A^{-1} is skew-symmetric.

(D) The adjoint of a diagonal matrix is a diagonal matrix.

Choose the correct answer from the options given below :

(1) (A) and (D) only

(2) (A), (B) and (C) only

(3) (B), (C) and (D) only

(4) (C) and (D) only

Options :

920906107117. 1

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920906107118. 2
920906107119. 3
920906107120. 4

Question Number : 80 Question Id : 92090627108 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित में से कौन-सा/से सही नही हैं?

A. यदि A, B दो मैट्रिक्स ऐसे हैं कि AB = A और BA = B तो A और B वर्गसम है।

B. प्रत्येक विषम क्रम का तिरछ सममितं मैट्रिक्स व्युतक्रमणीय होता है।

C. यदि A एक व्युत्क्रमणिय मैट्रिक्स है तो A^{-1} तिरछ सममित है।

D. एक विकर्ण मैट्रिक्स का सहखंडज (adjoint) एक विकर्ण मैट्रिक्स है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A और D
(2) केवल A, B और C
(3) केवल B, C और D
(4) केवल C और D

Options :
920906107117. 1
920906107118. 2
920906107119. 3
920906107120. 4

Question Number : 81 Question Id : 92090627109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Which of the following binary numbers are divisible by 4?

(A) 10101010101010

(B) 1110001110001

(C) 11001010100

(D) 1111000011

(E) 10010 1100

Choose the correct answer from the options given below :

(1) (A), (C), (D) only

(2) (A), (B), (C) only

(3) (C), (D), (E) only

(4) (C), (E) only

Options :

920906107121. 1

920906107122. 2

920906107123. 3

920906107124. 4

Question Number : 81 Question Id : 92090627109 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

निम्नलिखित में से कौन सी बाइनरी संख्या 4 से विभाज्य है?

(A) 10101010101010

(B) 1110001110001

(C) 11001010100

(D) 1111000011

(E) 10010 1100

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A, C और D

(2) केवल A, B और C

(3) केवल C, D और E

(4) केवल C और E

Options :

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920906107121. 1
920906107122. 2
920906107123. 3
920906107124. 4

Question Number : 82 Question Id : 92090627110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Let $f(w,x,y,z)=\Sigma(0, 4, 5, 7, 8, 9, 13, 15)$. Which of the following expressions are NOT equivalent to f ?

(A) $x'y'z'+w'xy'+wy'z+xz$

(B) $w'y'z'+wx'y'+xz$

(C) $w'x'y'z'+wx'y'+xyz+xy'z$

(D) $x'y'z'+x'y'+w'y$

(E) $x'y'z'+wx'y'+w'y$

Choose the correct answer from the options given below :

(1) (D) and (E) only
(2) (A) and (B) only
(3) (A) and (C) only
(4) (A), (B) and (C) only

Options :
920906107125. 1
920906107126. 2
920906107127. 3
920906107128. 4

Question Number : 82 Question Id : 92090627110 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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मान लीजिए $f(w,x,y,z)=\Sigma(0,4,5,7,8,9,13,15)$ है। निम्नलिखित में से कौन सा व्यंजक f के बराबर नही है?

(A) $x'y'z'+w'xy'+wy'z+xz$

(B) $w'y'z'+wx'y'+xz$

(C) $w'x'y'z'+wx'y'+xyz+xy'z$

(D) $x'y'z'+x'y'+w'y$

(E) $x'y'z'+wx'y'+w'y$

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल D और E

(2) केवल A और B

(3) केवल A और C

(4) केवल A, B और C

Options :

920906107125. 1

920906107126. 2

920906107127. 3

920906107128. 4

Question Number : 83 Question Id : 92090627111 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

For the given Truth Table is true:

A	B	C	Y
0	1	1	?

(A) Y is 1 for A XOR B AND C

(B) Y is 1 for A NOR B NAND C

(C) Y is 0 for A AND B AND C

Choose the most appropriate answer from the options given below :

(1) (A), (B), (C) only

(2) (A), (B) only

(3) (A), (C) only

(4) (C) only

Options :

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920906107129. 1
920906107130. 2
920906107131. 3
920906107132. 4

Question Number : 83 Question Id : 92090627111 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

दी गई सत्य तालिका के लिए सत्य है :

A	B	C	Y
0	1	1	?

A. Y, A एक्सॉर (XOR) B एंड (AND) C के लिए 1 है।

B. Y, A नॉर (NOR) B नेंड (NAND) C के लिए 1 है।

C. Y, A एंड (AND) B एंड (AND) C के लिए 0 है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A, B और C

(2) केवल A और B

(3) केवल A और C

(4) केवल C

Options :

920906107129. 1
920906107130. 2
920906107131. 3
920906107132. 4

Question Number : 84 Question Id : 92090627112 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Consider the following statements:

(A) If $P = \{m, n\}$ and $Q = \{n, m\}$, then $P \times Q = \{(m,n),(n,m)\}$.

(B) If A and B are the non-empty sets, then $A \times B$ is a non empty set of ordered pairs (x, y) such that $x \in A$ and $y \in B$.

(C) If $A = \{1, 2\}$, $B = \{3, 4\}$, then $A \times (B \cap \phi) = \phi$.

Choose the most appropriate answer from the options given below :

(1) (A) and (B) only
(2) (B) and (C) only
(3) (A) and (C) only
(4) (A), (B) and (C) only

Options :
920906107133. 1
920906107134. 2
920906107135. 3
920906107136. 4

Question Number : 84 Question Id : 92090627112 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

निम्नलिखित कथनों पर विचार कीजिए।

A. यदि $P = \{m, n\}$ और $Q = \{n, m\}$ तो $P \times Q = \{(m,n),(n,m)\}$

B. यदि A और B अरिक्त समुच्य हैं तो A×B क्रमीत युग्मों (x, y) का अरिक्त समुच्चय इस प्रकार है कि $x \in A$ और $y \in B$.

C. यदि $A = \{1, 2\}$, $B = \{3, 4\}$ तो $A \times (B \cap \phi) = \phi$ (फाई)

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A और B
(2) केवल B और C
(3) केवल A और C
(4) केवल A, B और C

Options :
920906107133. 1
920906107134. 2
920906107135. 3
920906107136. 4

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Question Number : 85 Question Id : 92090627113 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Which of the following assertions are correct?

(A) Adding 7 to each entry in a list adds 7 to the mean of the list.

(B) Adding 7 to each entry in a list adds 7 to the standard deviation of the list.

(C) Doubling each entry in a list doubles the mean of the list.

(D) Doubling each entry in a list leaves the standard deviation of the list unchanged.

Choose the most appropriate answer from the options given below :

(1) (A) and (B) only

(2) (B) and (C) only

(3) (A) and (C) only

(4) (C) and (D) only

Options :

920906107137. 1

920906107138. 2

920906107139. 3

920906107140. 4

Question Number : 85 Question Id : 92090627113 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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निम्नलिखित अभिकथनों में से कौन से सही हैं?

A. सूची में प्रत्येक प्रविष्टि में 7 जोडने से सूची के माध्य में 7 जुड जाता है।

B. सूची में प्रत्येक प्रविष्टि में 7 जोडने से सूची के मानक विचलन में 7 जुड जाता है।

C. सूची में प्रत्येक प्रविष्टि को दो गुना करना सूची के माध्य को दोगुना करता है।

D. सूची में प्रत्येक प्रविष्टि को दोगुना करने से सूची का मानक विचलन अपरिवर्तित रहता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A और B

(2) केवल B और C

(3) केवल A और C

(4) केवल C और D

Options :

920906107137. 1

920906107138. 2

920906107139. 3

920906107140. 4

Question Number : 86 Question Id : 92090627114 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A is the son of B. C, B's sister, has a son D and a daughter E. F is the maternal uncle of D.

(A) A is the cousin of D

(B) E is the niece of F

(C) F has 2 Nephews

(D) C is the mother of E

Choose the correct answer from the options given below :

(1) (A), (B), (D) only

(2) (A), (C), (D) only

(3) (A), (B), (C), (D) only

(4) (A), (B) only

Options :

920906107141. 1

920906107142. 2

920906107143. 3

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920906107144. 4

Question Number : 86 Question Id : 92090627114 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

A, B का पुत्र है, C, B की बहन, का D पुत्र है और एक पुत्री E है। F, D का मामा है।

A. A, D का कज़न भाई है।

B. E, F का भतीजी है।

C. F के 2 भतीजे है।

D. C, E की माता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A, B और D

(2) केवल A, C और D

(3) A, B, C और D

(4) केवल A और B

Options :

920906107141. 1

920906107142. 2

920906107143. 3

920906107144. 4

Question Number : 87 Question Id : 92090627115 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Match List I with List II :

List I		List II	
(A)	$(123)_8$	(I)	$(0001\ 1111\ 1100)_2$
(B)	$(IFC)_{16}$	(II)	$(0011001)_2$
(C)	$(25)_{10}$	(III)	$(0001\ 0010\ 0011)_2$
(D)	$(123)_{16}$	(IV)	$(001\ 010\ 011)_2$

Choose the correct answer from the options given below:

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(2) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)

(3) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

Options :
920906107145. 1
920906107146. 2
920906107147. 3
920906107148. 4

Question Number : 87 Question Id : 92090627115 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

सूची I के साथ सूची II का मिलान कीजिए

सूची-I		सूची -II	
(A)	$(123)_8$	(I)	$(0001\ 1111\ 1100)_2$
(B)	$(IFC)_{16}$	(II)	$(0011001)_2$
(C)	$(25)_{10}$	(III)	$(0001\ 0010\ 0011)_2$
(D)	$(123)_{16}$	(IV)	$(001\ 010\ 011)_2$

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(2) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)

(3) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

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Options :
920906107145. 1
920906107146. 2
920906107147. 3
920906107148. 4

Question Number : 88 Question Id : 92090627116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List I with Liszt II :

	List I		List II
(A)	Firewire	(I)	Transmit one bit of data from single wire
(B)	Parallel Port	(II)	Common and popular external port
(C)	Serial Port	(III)	Interface for connecting 8 or more data wires
(D)	Universal Serial Bus	(IV)	Used to connect audio video multimedia devices

Choose the correct answer from the options given below:

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

(4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

Options :
920906107149. 1
920906107150. 2
920906107151. 3
920906107152. 4

Question Number : 88 Question Id : 92090627116 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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सूची I के साथ सूची II का मिलान कीजिए

	सूची-I		सूची –II
(A)	फायरवायर	(I)	एकल तार के माध्यम से एक बिट का डेटा ट्रांसमिट करता है।
(B)	समानांतर पोर्ट	(II)	आम और लोकप्रिय बाहरी (external) पोर्ट
(C)	सीरियल पोर्ट	(III)	और अधिक डेटा तारों को जोड़ने के लिए इंटरफेस
(D)	यूनिवर्सल सीरियल बस	(IV)	ऑडियों, वीडियो और मल्टीमीडिया उपकरणों को जोडने के लिए प्रयोग किया जाता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

(4) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)

Options :

920906107149. 1

920906107150. 2

920906107151. 3

920906107152. 4

Question Number : 89 Question Id : 92090627117 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Match List I with List II :

List I	List II
(A) $\lim_{x \to 0} (1+\sin x)^{2\cot x}$	(I) $e^{-1/6}$
(B) $\lim_{x \to 0} e^{x} - (1+x)/x^{2}$	(II) e
(C) $\lim_{x \to 0} \left(\frac{\sin x}{x}\right)^{1/x^2}$	(III) e^{2}
(D) $\lim_{x \to \infty} \left(\frac{x+2}{x+1}\right)^{x+3}$	(IV) $1/2$

Choose the correct answer from the options given below:

(1) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

(2) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

(3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(4) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

Options :

920906107153. 1

920906107154. 2

920906107155. 3

920906107156. 4

Question Number : 89 Question Id : 92090627117 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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सूची I के साथ सूची II का मिलान कीजिए

सूची-I	सूची -II
(A) $\lim_{x \to 0} (1+\sin x)^{2\cot x}$	(I) $e^{-1/6}$
(B) $\lim_{x \to 0} e^{x} - (1+x)/x^{2}$	(II) e
(C) $\lim_{x \to 0} \left(\frac{\sin x}{x}\right)^{1/x^2}$	(III) e^{2}
(D) $\lim_{x \to \infty} \left(\frac{x+2}{x+1}\right)^{x+3}$	(IV) $1/2$

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

(1) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

(2) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

(3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(4) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

Options :

920906107153. 1

920906107154. 2

920906107155. 3

920906107156. 4

Question Number : 90 Question Id : 92090627118 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements :

Statement I : For $n \geq 1$, we have $\frac{1}{1\cdot 2}+\frac{1}{2\cdot 3}+\frac{1}{3\cdot 4}+....+\frac{1}{n(n+1)}=\frac{n^2}{n+1}$.

Statement II : $(1+x)^n \geq (1+nx)$ for all natural number n, where $x > -1$.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but statement II is false

(4) Statement I is false but statement II is true

Options :
920906107157. 1
920906107158. 2
920906107159. 3
920906107160. 4

Question Number : 90 Question Id : 92090627118 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : जब $n \geq 1$, तो $\frac{1}{1\cdot 2}+\frac{1}{2\cdot 3}+\frac{1}{3\cdot 4}+....+\frac{1}{n(n+1)}=\frac{n^2}{n+1}$

कथन II : $(1+x)^n \geq (1+nx)$ सभी प्राकृत संख्या n के लिए, जहाँ $x > -1$ हो।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :
920906107157. 1
920906107158. 2

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920906107159. 3
920906107160. 4

Question Number : 91 Question Id : 92090627119 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List I with List II :

List I	List II
(A) ADE : FGJ :: KNO : ?	(I) CLL
(B) CAT : DDY :: BIG : ?	(II) AKB
(C) AKJ : GNM :: EMD : ?	(III) PJG
(D) HNP : PDA :: DLP: ?	(IV) PQT

Choose the correct answer from the options given below:

(1) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(4) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)

Options :

920906107161. 1
920906107162. 2
920906107163. 3
920906107164. 4

Question Number : 91 Question Id : 92090627119 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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सूची I के साथ सूची II का मिलान कीजिए

	सूची-I		सूची -II
(A)	ADE : FGJ :: KNO : ?	(I)	CLL
(B)	CAT : DDY :: BIG : ?	(II)	AKB
(C)	AKJ : GNM :: EMD : ?	(III)	PJG
(D)	HNP : PDA :: DLP: ?	(IV)	PQT

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

(1) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

(3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(4) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)

Options :

920906107161. 1

920906107162. 2

920906107163. 3

920906107164. 4

Question Number : 92 Question Id : 92090627120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Match List I with List II :

	List I		List II
(A)	Binary coded Decimal	(I)	4 bits are used to represent each digit
(B)	ASCII	(II)	Characters are represented by eight bits
(C)	EBCDIC	(III)	Character set supports Japanese and Chinese fonts
(D)	UNICODE	(IV)	Standard character codes used to store data

Choose the correct answer from the options given below:

(1) (A)-(I), (B)-(IV), (C)-(II), (D)-(III)

(2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(3) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

(4) (A)-(I), (B)-(IV), (C)-(II), (D)-(III)

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Options :
920906107165. 1
920906107166. 2
920906107167. 3
920906107168. 4

Question Number : 92 Question Id : 92090627120 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

सूची I के साथ सूची II का मिलान कीजिए

	सूची-I		सूची –II
(A)	बाइनरी कोडेड दशमलव	(I)	प्रत्येक अंक को दर्शाने के लिए 4 बिट्स का प्रयोग होता है।
(B)	ASCII	(II)	वर्ण आठ बिट्स से दर्शाये जाते हैं।
(C)	EBCDIC	(III)	वर्ण समुच्चय जापानी और चीनी मुद्रलिपि का समर्थन करता है।
(D)	UNICODE	(IV)	मानके वर्ण कोड का प्रयोग डेटा के संग्रहण के लिए किया जाता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

(1) (A)-(I), (B)-(IV), (C)-(II), (D)-(III)
(2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
(3) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
(4) (A)-(I), (B)-(IV), (C)-(II), (D)-(III)

Options :
920906107165. 1
920906107166. 2
920906107167. 3
920906107168. 4

Question Number : 93 Question Id : 92090627121 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Match List I with List II :

List I	List II
(A) Dynamic RAM	(I) Known as non-volatile memory and can be programmed
(B) PROM	(II) non-volatile and Random access digital Data storage device
(C) HDD	(III) is made up of memory cells where each cell is composed of one capacitor and one transistor
(D) Static Ram	(IV) It retains the data as long as power is provided to the memory chip.

Choose the correct answer from the options given below:

(1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

(2) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

(3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

(4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

Options :

920906107169. 1

920906107170. 2

920906107171. 3

920906107172. 4

Question Number : 93 Question Id : 92090627121 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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सूची I के साथ सूची II का मिलान कीजिए

	सूची-I		सूची –II
(A)	डायनमिक रैम	(I)	नॉन वोलेटाइल मेमोरी के रूप में जाना जाता है और इसे प्रोग्राम किया जा सकता है।
(B)	पी आर ओ एम (PROM)	(II)	नॉन वोलेटाइल और रेंडम एक्सेस डिजिटल डेटा संग्रहण उपकरण
(C)	एच डी डी (HDD)	(III)	मेमोरी सेल्स से बना होता है जहाँ प्रत्येक सेल एक कैपेसिटर और एक ट्रांजिस्टर से बना होता है।
(D)	स्टेटिक रैम	(IV)	यह डेटा को तब तक बनाए रखता है जब तब मेमोरी चिप को ऊर्जा प्रदान की जाती है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए:

(1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

(2) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

(3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

(4) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

Options :

920906107169. 1

920906107170. 2

920906107171. 3

920906107172. 4

Question Number : 94 Question Id : 92090627122 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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If a, b, c, d are in Harmonic progression then

(A) $a+d>b+c$

(B) $a+c=b+d$

(C) $ad>bc$

(D) $a^n+c^n>2b^n$

(E) $a+d<b+c$

Choose the correct answer from the options given below :

(1) (A), (C) and (E) only

(2) (A), (B) and (C) only

(3) (A), (C) and (D) only

(4) (C), (D) and (E) only

Options :
920906107173. 1
920906107174. 2
920906107175. 3
920906107176. 4

Question Number : 94 Question Id : 92090627122 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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यदि a, b, c, d हरात्मक श्रेणी (Harmonic progression) में है तो।

(A) $a+d>b+c$

(B) $a+c=b+d$

(C) $ad>bc$

(D) $a^n+c^n>2b^n$

(E) $a+d<b+c$

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

(1) केवल A, C, E

(2) केवल A, B, C

(3) केवल A, C, D

(4) केवल C, D, E

Options :
920906107173. 1
920906107174. 2
920906107175. 3
920906107176. 4

Question Number : 95 Question Id : 92090627123 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : Sum of n terms of series $1^2+3^2+5^2+...$ to n terms is $\frac{n}{3}\left(4n^2-1\right)$.

Reasons (R) : Sum of the squares of first n natural numbers $1^2, 2^2, 3^2, ..., n^2$ is $\frac{n(n+1)(2n+1)}{6}$.

In the light of the above Statements, choose the correct answer from the options given below :

(1) Both (A) and (R) are true and (R) is the correct explanation of (A)

(2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)

(3) (A) is true but (R) is false

(4) (A) is false but (R) is true

Options :

920906107177. 1

920906107178. 2

920906107179. 3

920906107180. 4

Question Number : 95 Question Id : 92090627123 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : श्रृंखला $1^2+3^2+5^2+...$ के n पदों का योग $\frac{n}{3}\left(4n^2-1\right)$ है।

कारण R : पहले n प्राकृत संख्या $1^2, 2^2, 3^2... n^2$ के वर्गों का योग $\frac{n(n+1)(2n+1)}{6}$ है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही है

Options :

920906107177. 1

920906107178. 2

920906107179. 3

920906107180. 4

Question Number : 96 Question Id : 92090627124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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Given below are two statements : One is labelled as Assertion (A) and the other is labelled as Reason (R) :

Assertion (A) : $\cos(x^2)$, is a periodic function.

Reasons (R) : If $f(x)$ is periodic function with periods T and if $a,b \in R$ such that $a > 0$ then $(ax + b)$ is periodic with period T/a.

In the light of the above Statements, choose the correct answer from the options given below :

(1) Both (A) and (R) are true and (R) is the correct explanation of (A)

(2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)

(3) (A) is true but (R) is false

(4) (A) is false but (R) is true

Options :

920906107181. 1

920906107182. 2

920906107183. 3

920906107184. 4

Question Number : 96 Question Id : 92090627124 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

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नीचे दो कथन दिए गए हैं: एक अभिकथन (Assertion A) के रूप में लिखित है तो दूसरा उसके कारण (Reason R) के रूप में;

अभिकथन A : $\cos(x^2)$ एक आवर्ती फलन है।

कारण R : यदि $f(x)$ अवधि T और $a,b \in R$ के साथ एक आवर्ती फलन है जैसे कि $a > 0$ तो $f(ax+b)$ अवधि T/a के साथ आवर्ती है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सबसे उपयुक्त उत्तर का चयन कीजिए

(1) A और R दोनों सही हैं और R, A की सही व्याख्या है

(2) A और R दोनों सही हैं, लेकिन R, A की सही व्याख्या नहीं है

(3) A सही हैं, लेकिन R सही नहीं है

(4) A सही नहीं हैं, लेकिन R सही है

Options :

920906107181. 1

920906107182. 2

920906107183. 3

920906107184. 4

Question Number : 97 Question Id : 92090627125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Given below are two statements :

Statement I : The sum of the series $2\left\{7^{-1}+3^{-1}.7^{-3}+5^{-1}.7^{-5}+...\right\}$ is $\log_e\left(\frac{4}{3}\right)$.

Statement II : The value of e always lies between 2 and 3.

In the light of the above Statements, choose the most appropriate answer from the options given below :

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but statement II is false

(4) Statement I is false but statement II is true

Options :

920906107185. 1

920906107186. 2

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920906107187. 3
920906107188. 4

Question Number : 97 Question Id : 92090627125 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

नीचे दो कथन दिए गए है:

कथन I : श्रृंखला $2\left\{7^{-1}+3^{-1}.7^{-3}+5^{-1}.7^{-5}+\ldots\right\}$ का योग $\log_e\left(\frac{4}{3}\right)$ है।

कथन II : e का मान हमेशा 2 और 3 के बीच में रहता है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए

(1) कथन I और II दोनों सत्य है

(2) कथन I और II दोनों असत्य है

(3) कथन I सत्य है, लेकिन कथन II असत्य है

(4) कथन I असत्य है, लेकिन कथन II सत्य है

Options :
920906107185. 1
920906107186. 2
920906107187. 3
920906107188. 4

Question Number : 98 Question Id : 92090627126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

In a memory mapped I/O system, which of the following will not be there?

(1) LDA (2) IN

(3) ADD (4) OUT

Options :
920906107189. 1
920906107190. 2
920906107191. 3
920906107192. 4

Question Number : 98 Question Id : 92090627126 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum

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Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

मेमोरी-मैप्ड I/O सिस्टम में निम्न में से क्या नहीं होगा?

(1) LDA (2) IN

(3) ADD (4) OUT

Options :
920906107189. 1
920906107190. 2
920906107191. 3
920906107192. 4

Question Number : 99 Question Id : 92090627127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

The mean deviation from the mean of the AP : $a, a+d, a+2d, ..., a+2nd$, is

(1) $n(n+1)d$ (2) $\frac{n(n+1)}{2n+1}d$

(3) $\frac{n(n+1)}{2n}d$ (4) $\frac{n(n-1)}{2n+1}d$

Options :
920906107193. 1
920906107194. 2
920906107195. 3
920906107196. 4

Question Number : 99 Question Id : 92090627127 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 4 Wrong Marks : 1

AP के माध्य से औसत विचलन : $a, a+d, a+2d, ..., a+2nd$ है -

(1) $n(n+1)d$ (2) $\frac{n(n+1)}{2n+1}d$

(3) $\frac{n(n+1)}{2n}d$ (4) $\frac{n(n-1)}{2n+1}d$

Options :

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920906107193. 1
920906107194. 2
920906107195. 3
920906107196. 4

Question Number : 100 Question Id : 92090627128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

Let $F:[0, \pi] \rightarrow R$ be defined as $f(x) = \sin x$, then maximum value of $f(x)$ exists at

(1) $\frac{\pi}{2}$ (2) $\frac{\pi}{3}$

(3) $\frac{\pi}{6}$ (4) $\frac{\pi}{4}$

Options :
920906107197. 1
920906107198. 2
920906107199. 3
920906107200. 4

Question Number : 100 Question Id : 92090627128 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4 Wrong Marks : 1

मान लीजिए $F:[0, \pi] \rightarrow R$ को $f(x) = \sin x$ द्वारा परिभाषित किया जाता है, तो $f(x)$ की अधिकतम मान निम्न में से किस पर होगा?

(1) $\frac{\pi}{2}$ (2) $\frac{\pi}{3}$

(3) $\frac{\pi}{6}$ (4) $\frac{\pi}{4}$

Options :
920906107197. 1
920906107198. 2
920906107199. 3
920906107200. 4

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