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Engineer

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(Mechanical)
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ne	
me	
	23/12/2023
	2:00 PM - 4:30 PM
	Mechanical Engineer

nguage

most appropriate antonym of the underlined word.

ng decade, new robotic technologies could further **aggravate** the problem.

voke

ieve

Question ID : **630680504774**
Option 1 ID : **6306801972639**
Option 2 ID : **6306801972637**
Option 3 ID : **6306801972640**
Option 4 ID : **6306801972638**
Status : **Not Answered**
Chosen Option : **--**

e most appropriate idiom for the underlined phrase.

ch was **very expensive** when I bought it.

nutshell

der the rose

der the weather

st an arm and a leg

Question ID : **630680504773**
Option 1 ID : **6306801972634**
Option 2 ID : **6306801972636**
Option 3 ID : **6306801972633**
Option 4 ID : **6306801972635**
Status : **Answered**
Chosen Option : **4**

e most appropriate word to fill in the blank.

__ make poor assumptions.

ısistently

sistent

re consist

ısist

Question ID : **630680504761**
Option 1 ID : **6306801972592**
Option 2 ID : **6306801972591**
Option 3 ID : **6306801972589**
Option 4 ID : **6306801972590**
Status : **Answered**
Chosen Option : **1**

ıe word that can substitute the given group of words.

ɔr doctrine at variance with the orthodox or accepted doctrine

resy

ırgeois

ıth

ıet

Question ID : **630680504766**
Option 1 ID : **6306801972612**
Option 2 ID : **6306801972611**
Option 3 ID : **6306801972610**
Option 4 ID : **6306801972609**
Status : **Not Answered**
Chosen Option : **--**

v consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences
paragraph.

ıat on the night before the new year, the boundary between the worlds of the living and the dead became blurred.
igins date back to the ancient Celtic festival of Samhain.
lived 2,000 years ago, mostly in the area that is now Ireland, the United Kingdom and northern France, celebrated
November 1.

d the end of summer and the harvest and the beginning of the dark, cold winter, a time of year that was often
man death.

RS

PQ

SR

SP

Question ID : **630680504764**
Option 1 ID : **6306801972604**
Option 2 ID : **6306801972602**
Option 3 ID : **6306801972603**

ıost appropriate idiom for the underlined phrase.

est to get along with her, but I guess she is **a difficult person to deal with**.

ʼild goose chase

ıard nut to crack

ıiece of cake

ears

Question ID : **630680504772**
Option 1 ID : **6306801972629**
Option 2 ID : **6306801972632**
Option 3 ID : **6306801972631**
Option 4 ID : **6306801972630**
Status : **Answered**
Chosen Option : **2**

he word that can substitute the given group of words.

ıd made by cats

ınt

ɛep

ɔow

l

Question ID : **630680504765**
Option 1 ID : **6306801972606**
Option 2 ID : **6306801972608**
Option 3 ID : **6306801972605**
Option 4 ID : **6306801972607**
Status : **Answered**
Chosen Option : **3**

v consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences
paragraph.

ɪmer's home in China's Henan Province in the summer of 2018, paleontologists Fenglu Han and Haishui Jiang
ı box of rounded lumps of rock.
collected the trove near his home in Neixiang County, which is renowned for its dinosaur eggs.
n particular caught the scientists' eyes.
nd shape of a billiard ball, the fossil was unlike any dinosaur egg they'd seen before.

ʃRS

QR

SR

ʃPS

Question ID : **630680504763**
Option 1 ID : **6306801972599**
Option 2 ID : **6306801972598**
Option 3 ID : **6306801972597**
Option 4 ID : **6306801972600**

ost appropriate synonym of the underlined word.

that has a refreshing lack of billboards and shopping malls reminds me of my home town.

n

ıntryfied

ane

ecure

Question ID : **630680504775**
Option 1 ID : **6306801972642**
Option 2 ID : **6306801972643**
Option 3 ID : **6306801972644**
Option 4 ID : **6306801972641**
Status : **Not Answered**
Chosen Option : **–**

most appropriate word to fill in the blank.

istaken if you think that you are the _____ creature in this world.

beautiful

utiful

re beautiful

st beautiful

Question ID : **630680504762**
Option 1 ID : **6306801972596**
Option 2 ID : **6306801972593**
Option 3 ID : **6306801972594**
Option 4 ID : **6306801972595**
Status : **Answered**
Chosen Option : **4**

on:

sage carefully and select the correct answer for the given blanks out of the four

etting stronger elsewhere too. Hurricane Otis recently (1)_____ the Mexican
lco, for instance. Otis developed from a regular storm into a (2)_____
ecord time, and was the first time in history that a hurricane in the Eastern
landfall and sustained itself as a the strongest “Category 5” storm. Tropical
3)_____ the Arabian Peninsula the week before with 480mm of rainfall in the
egion in Yemen – eight times the annual average.

No : 11

st appropriate option for blank _____ (2)

le

nding

ge

id

Question ID : **630680509623**
Option 1 ID : **6306801991701**

on:

sage carefully and select the correct answer for the given blanks out of the four

etting stronger elsewhere too. Hurricane Otis recently (1)_____ the Mexican lco, for instance. Otis developed from a regular storm into a (2)_____ ecord time, and was the first time in history that a hurricane in the Eastern landfall and sustained itself as a the strongest “Category 5” storm. Tropical 3)_____ the Arabian Peninsula the week before with 480mm of rainfall in the egion in Yemen – eight times the annual average.

No : 12

st appropriate option for blank _____ (3)

sticated

ed

sted

Question ID : 630680509624
Option 1 ID : 6306801991705
Option 2 ID : 6306801991708
Option 3 ID : 6306801991707
Option 4 ID : 6306801991706
Status : Not Answered
Chosen Option : –

on:

sage carefully and select the correct answer for the given blanks out of the four

etting stronger elsewhere too. Hurricane Otis recently (1)_____ the Mexican lco, for instance. Otis developed from a regular storm into a (2)_____ ecord time, and was the first time in history that a hurricane in the Eastern landfall and sustained itself as a the strongest “Category 5” storm. Tropical 3)_____ the Arabian Peninsula the week before with 480mm of rainfall in the egion in Yemen – eight times the annual average.

No : 13

st appropriate option for blank _____(1)

rastated

nifested

nonstrated

tivated

Question ID : 630680509622
Option 1 ID : 6306801991700
Option 2 ID : 6306801991697
Option 3 ID : 6306801991699
Option 4 ID : 6306801991698
Status : Not Answered
Chosen Option : –

on:

owing passage and answer the questions given below.

day balloons are cheap and colorful, children like to buy and play with them.
e first used for scientific experiments and transportation, but it wasn't long
d its way into people's hands as an instrument of fun. Michael Faraday made the
alloon in 1824, which was for use in his laboratory. Faraday achieved this by
eets of rubber one on another, then put flour in the middle to prevent them
way through and then sealed them together at the edges. Faraday found that
e balloons with hydrogen, they were able to ascend to a considerable level,
as disappointed by the fact that the hydrogen kept escaping. The following year,
ock, a British inventor and rubber manufacturer, started selling balloon making
British entrepreneurs were already selling the first balloons made of vulcanized
was tougher and was more elastic.

No : 14

n be the suitable title for the given passage?

thdays and balloons

loons for fun

ze for balloons and their history

ber industry

Question ID : **630680504768**
Option 1 ID : **6306801972613**
Option 2 ID : **6306801972616**
Option 3 ID : **6306801972615**
Option 4 ID : **6306801972614**
Status : **Not Answered**
Chosen Option : **--**

on:

owing passage and answer the questions given below.

day balloons are cheap and colorful, children like to buy and play with them.
e first used for scientific experiments and transportation, but it wasn't long
d its way into people's hands as an instrument of fun. Michael Faraday made the
alloon in 1824, which was for use in his laboratory. Faraday achieved this by
eets of rubber one on another, then put flour in the middle to prevent them
way through and then sealed them together at the edges. Faraday found that
e balloons with hydrogen, they were able to ascend to a considerable level,
as disappointed by the fact that the hydrogen kept escaping. The following year,
ock, a British inventor and rubber manufacturer, started selling balloon making
British entrepreneurs were already selling the first balloons made of vulcanized
was tougher and was more elastic.

No : 15

e following words means the same as the word 'ascend' used in the passage?

e

le

)

e

Question ID : **630680504771**
Option 1 ID : **6306801972625**
Option 2 ID : **6306801972627**
Option 3 ID : **6306801972626**

on:

owing passage and answer the questions given below.

day balloons are cheap and colorful, children like to buy and play with them.
e first used for scientific experiments and transportation, but it wasn't long
d its way into people's hands as an instrument of fun. Michael Faraday made the
alloon in 1824, which was for use in his laboratory. Faraday achieved this by
eets of rubber one on another, then put flour in the middle to prevent them
way through and then sealed them together at the edges. Faraday found that
e balloons with hydrogen, they were able to ascend to a considerable level,
as disappointed by the fact that the hydrogen kept escaping. The following year,
cock, a British inventor and rubber manufacturer, started selling balloon making
British entrepreneurs were already selling the first balloons made of vulcanized
was tougher and was more elastic.

No : 16

he following statements is NOT correct regarding Thomas Hancock?

made kits from balloons.

was a rubber manufacturer.

made the first rubber balloon.

was a British inventor.

Question ID : **630680504770**
Option 1 ID : **6306801972623**
Option 2 ID : **6306801972622**
Option 3 ID : **6306801972624**
Option 4 ID : **6306801972621**
Status : **Not Answered**
Chosen Option : **--**

on:

owing passage and answer the questions given below.

day balloons are cheap and colorful, children like to buy and play with them.
e first used for scientific experiments and transportation, but it wasn't long
d its way into people's hands as an instrument of fun. Michael Faraday made the
alloon in 1824, which was for use in his laboratory. Faraday achieved this by
eets of rubber one on another, then put flour in the middle to prevent them
way through and then sealed them together at the edges. Faraday found that
e balloons with hydrogen, they were able to ascend to a considerable level,
as disappointed by the fact that the hydrogen kept escaping. The following year,
cock, a British inventor and rubber manufacturer, started selling balloon making
British entrepreneurs were already selling the first balloons made of vulcanized
was tougher and was more elastic.

No : 17

id Michael Faraday use his first rubber balloon?

laboratory

child's school

home

neighbourhood

Question ID : **630680504769**
Option 1 ID : **6306801972618**
Option 2 ID : **6306801972620**
Option 3 ID : **6306801972619**
Option 4 ID : **6306801972617**

f bottle and lunch box are 9 : 5. The cost of bottle is Rs. 400 more than cost of lunch box. What is the cost of lunch

900

500

300

700

Question ID : **630680505113**
Option 1 ID : **6306801973981**
Option 2 ID : **6306801973984**
Option 3 ID : **6306801973982**
Option 4 ID : **6306801973983**
Status : **Answered**
Chosen Option : **2**

of the three consecutive odd numbers is 6783. What is the sum of the three numbers?

Question ID : **630680505105**
Option 1 ID : **6306801973950**
Option 2 ID : **6306801973951**
Option 3 ID : **6306801973952**
Option 4 ID : **6306801973949**
Status : **Not Answered**
Chosen Option : **–**

the value of $\sqrt{\frac{1.44\times1.44+0.26\times0.26+0.52\times1.44}{2.56\times2.56+0.06\times0.06-0.12\times2.56}}$?

8

8

8

8

Question ID : **630680505104**
Option 1 ID : **6306801973946**
Option 2 ID : **6306801973948**
Option 3 ID : **6306801973947**
Option 4 ID : **6306801973945**
Status : **Not Answered**
Chosen Option : **–**

fill a tank in 144 hours and Pipe S alone can fill the same tank in 216 hours. If both the pipes are opened on
ıe at a time and pipe S is opened for first hour, then in how much time the tank will be completely full?

ȝ hours
hours
hours
hours

Question ID : **630680505114**
Option 1 ID : **6306801973986**
Option 2 ID : **6306801973985**
Option 3 ID : **6306801973987**
Option 4 ID : **6306801973988**
Status : **Not Answered**
Chosen Option : **–**

consecutive even numbers is 133. If the next even number is also considered, then what will be the new average?

Question ID : **630680505097**
Option 1 ID : **6306801973919**
Option 2 ID : **6306801973918**
Option 3 ID : **6306801973917**
Option 4 ID : **6306801973920**
Status : **Not Answered**
Chosen Option : **–**

: the rate of 27 percent per annum on compound interest (compounded in every four months). What will be the
t of 8 months?

. 1598.85
1427.85
1450.65
1648.75

Question ID : **630680505100**
Option 1 ID : **6306801973930**
Option 2 ID : **6306801973931**
Option 3 ID : **6306801973932**
Option 4 ID : **6306801973929**
Status : **Not Answered**
Chosen Option : **–**

f the top of a rectangular table is 22 metre and its area is 30 metre ^{2}. What is the length of its diagonal?

$\bar{7}$ metres

$\bar{1}$ metres

$\bar{1}$ metres

$\bar{1}$ metres

Question ID : **630680505125**
Option 1 ID : **6306801974031**
Option 2 ID : **6306801974032**
Option 3 ID : **6306801974029**
Option 4 ID : **6306801974030**
Status : **Answered**
Chosen Option : **3**

f selling price to the cost price is 6 : 11. What is the loss percentage?

71 percent

45 percent

58 percent

58 percent

Question ID : **630680505109**
Option 1 ID : **6306801973965**
Option 2 ID : **6306801973967**
Option 3 ID : **6306801973968**
Option 4 ID : **6306801973966**
Status : **Answered**
Chosen Option : **2**

+ 2x + 7, then what is the remainder when f(x) is divided by x + 5?

Question ID : **630680505122**
Option 1 ID : **6306801974019**
Option 2 ID : **6306801974018**
Option 3 ID : **6306801974020**
Option 4 ID : **6306801974017**
Status : **Answered**
Chosen Option : **4**

ılculators at the rate of Rs. 594 per calculator. He earns a profit of 10 percent on one calculator and loses 10 percent
ator. What will be the total profit or loss in whole transaction?

10 profit

. 12 loss

18 profit

16 loss

Question ID : **630680505110**
Option 1 ID : **6306801973972**
Option 2 ID : **6306801973971**
Option 3 ID : **6306801973970**
Option 4 ID : **6306801973969**
Status : **Not Answered**
Chosen Option : **–**

= $\frac{3}{5}$, then what is the value of $\frac{1+\tan\theta}{1-\tan\theta}$?

Question ID : **630680505129**
Option 1 ID : **6306801974048**
Option 2 ID : **6306801974047**
Option 3 ID : **6306801974046**
Option 4 ID : **6306801974045**
Status : **Answered**
Chosen Option : **3**

ercent of his income to a school and deposits 45 percent of the remainder in his bank. If he has Rs. 3575 now, then
: of Rohit?

12000

13000

. 10000

11000

Question ID : **630680505108**
Option 1 ID : **6306801973963**
Option 2 ID : **6306801973964**
Option 3 ID : **6306801973961**
Option 4 ID : **6306801973962**
Status : **Answered**
Chosen Option : **3**

e speed of 68 km/hr after repairing and moves at the speed of 34 km/hr before repairing. It covers a distance of K
r repairing. How much time will it take to cover a distance of K/4 km before repairing?

ours

ours

ours

.ours

Question ID : **630680505116**
Option 1 ID : **6306801973996**
Option 2 ID : **6306801973994**
Option 3 ID : **6306801973995**
Option 4 ID : **6306801973993**
Status : **Answered**
Chosen Option : **4**

als of a rhombus are 8 cm and 10 cm. What is the area of the rhombus?

cm^2

cm^2

cm^2

cm^2

Question ID : **630680505126**
Option 1 ID : **6306801974036**
Option 2 ID : **6306801974034**
Option 3 ID : **6306801974033**
Option 4 ID : **6306801974035**
Status : **Answered**
Chosen Option : **2**

ıe can complete a work in 12 days, 18 days and 24 days respectively. They received Rs. 3024 to complete the work.
rk together but S1 leaves the work after 3 days and S3 leaves the work 7 days before the completion of the work.
the remaining work alone. What is the share of S2 from the total money?

2000

1900

1800

1500

Question ID : **630680505115**
Option 1 ID : **6306801973991**
Option 2 ID : **6306801973989**
Option 3 ID : **6306801973990**
Option 4 ID : **6306801973992**
Status : **Not Answered**
Chosen Option : **--**

00 and n = 2000, then m is how much percentage less than n?

5 percent

percent

ercent

ercent

Question ID : **630680505107**
Option 1 ID : **6306801973959**
Option 2 ID : **6306801973957**
Option 3 ID : **6306801973960**
Option 4 ID : **6306801973958**
Status : **Answered**
Chosen Option : **2**

value of 24 × 16 + 15 × 16 + 17 × 16 – 23 × 21 – 24 × 15 + 25 × 26 – 9 × 8?

l

Question ID : **630680505106**
Option 1 ID : **6306801973956**
Option 2 ID : **6306801973955**
Option 3 ID : **6306801973954**
Option 4 ID : **6306801973953**
Status : **Not Answered**
Chosen Option : **–**

ance of 35 km in 42 minutes. If its speed is decreased by 30 km/hr, then what will be the time taken by it to cover

5 minutes

minutes

minutes

minutes

Question ID : **630680505117**
Option 1 ID : **6306801973998**
Option 2 ID : **6306801974000**
Option 3 ID : **6306801973999**
Option 4 ID : **6306801973997**
Status : **Answered**
Chosen Option : **1**

cessive discounts of 10 percent and 20 percent on a pencil. If the marked price of the pencil is Rs. 9850, then what ount?

. 2758

2688

3128

2698

Question ID : **630680505111**
Option 1 ID : **6306801973973**
Option 2 ID : **6306801973974**
Option 3 ID : **6306801973975**
Option 4 ID : **6306801973976**
Status : **Answered**
Chosen Option : **1**

ound a circular table. What is the probability that 2 particular persons will always sit together?

Question ID : **630680505121**
Option 1 ID : **6306801974013**
Option 2 ID : **6306801974014**
Option 3 ID : **6306801974015**
Option 4 ID : **6306801974016**
Status : **Answered**
Chosen Option : **3**

e the roots of the cubic equation $7x^3 + 4x - 7 = 0$, then what is the value of $a^3 + b^3 + c^3$?

Question ID : **630680505123**
Option 1 ID : **6306801974024**
Option 2 ID : **6306801974023**
Option 3 ID : **6306801974022**
Option 4 ID : **6306801974021**
Status : **Not Answered**
Chosen Option : **–**

degree, then what is the value of $\frac{\tan\theta+1}{\cot\theta+1}$?

+ 1

+ 2

Question ID : **630680505130**
Option 1 ID : **6306801974049**
Option 2 ID : **6306801974051**
Option 3 ID : **6306801974052**
Option 4 ID : **6306801974050**
Status : **Answered**
Chosen Option : **4**

n below shows the marked price and value of discount of 7 articles.

larked price	**Discount**
1100	500
700	200
900	500
600	400
400	300
500	200
1000	200

= Marked price – Discount

fference between the average selling price and the average marked price of all the articles?

3.57

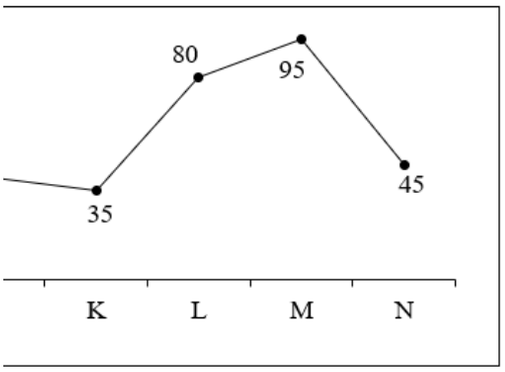
.21

.57

.85

Question ID : **630680505103**
Option 1 ID : **6306801973943**
Option 2 ID : **6306801973941**
Option 3 ID : **6306801973942**
Option 4 ID : **6306801973944**
Status : **Answered**
Chosen Option : **1**

art given below shows the number of monuments in 5 different cities.



average number of monuments in all the cities?

Question ID : **630680505102**
Option 1 ID : **6306801973940**
Option 2 ID : **6306801973939**
Option 3 ID : **6306801973938**
Option 4 ID : **6306801973937**
Status : **Answered**
Chosen Option : **4**

t of equation, x + 2y + 3z = 10, 2x + 3y + z = 13, x + y + 2z = 7, what is the solution of set?

2, y = 3, z = 1

–1, y = 2, z = 3

1, y = 2, z = 3

3, y = 2, z = 1

Question ID : **630680505118**
Option 1 ID : **6306801974001**
Option 2 ID : **6306801974002**
Option 3 ID : **6306801974004**
Option 4 ID : **6306801974003**
Status : **Answered**
Chosen Option : **4**

$\frac{}{2} = 51$, then what is the value of $\frac{x^2-1}{x}$ $(x > 0)$?

Question ID : **630680505119**
Option 1 ID : **6306801974005**
Option 2 ID : **6306801974006**
Option 3 ID : **6306801974008**
Option 4 ID : **6306801974007**
Status : **Answered**
Chosen Option : **1**

ectangular hall is 9/11 of its length. If the area of the floor is 99 metre ^{2}, then what is the difference between the
ı of the hall?

ıetres
ıetres
ıetre
ıetres

Question ID : **630680505124**
Option 1 ID : **6306801974027**
Option 2 ID : **6306801974025**
Option 3 ID : **6306801974028**
Option 4 ID : **6306801974026**
Status : **Answered**
Chosen Option : **4**

hocolates for Rs. 1200. If the average price of 30 chocolates is Rs. 30, then what is the average price of remaining

10
20
. 15
25

Question ID : **630680505098**
Option 1 ID : **6306801973921**
Option 2 ID : **6306801973923**
Option 3 ID : **6306801973922**
Option 4 ID : **6306801973924**
Status : **Answered**
Chosen Option : **3**

umbers is 5 : 2. If both numbers are increased by 6, the ratio becomes 2 : 1. What is the sum of the initial two

Question ID : **630680505112**
Option 1 ID : **6306801973978**
Option 2 ID : **6306801973979**
Option 3 ID : **6306801973980**
Option 4 ID : **6306801973977**
Status : **Answered**
Chosen Option : **1**

al triangle STU, inradius is $10\sqrt{3}$ cm. What is the length of side of this equilateral triangle?

$\sqrt{3}$ cm

$\sqrt{3}$ cm

cm

cm

Question ID : **630680505127**
Option 1 ID : **6306801974037**
Option 2 ID : **6306801974038**
Option 3 ID : **6306801974040**
Option 4 ID : **6306801974039**
Status : **Not Answered**
Chosen Option : **–**

terest (compounding half yearly) received on Rs. 20000 for 1 year is Rs. 6450 What is the rate of interest per

percent

percent

percent

percent

Question ID : **630680505101**
Option 1 ID : **6306801973935**
Option 2 ID : **6306801973934**
Option 3 ID : **6306801973936**
Option 4 ID : **6306801973933**
Status : **Answered**
Chosen Option : **3**

f money becomes thrice of itself in 15 years 4 months at simple interest, then what will be the annual rate of

28 percent

42 percent

04 percent

34 percent

Question ID : **630680505099**
Option 1 ID : **6306801973926**
Option 2 ID : **6306801973928**
Option 3 ID : **6306801973927**
Option 4 ID : **6306801973925**
Status : **Not Answered**
Chosen Option : **–**

s are 10 cm and 2 cm. Distance between their centre is 17 cm. What is the length of the Direct common tangent?

cm

cm

cm

cm

Question ID : **630680505128**
Option 1 ID : **6306801974041**
Option 2 ID : **6306801974044**
Option 3 ID : **6306801974043**
Option 4 ID : **6306801974042**
Status : **Answered**
Chosen Option : **4**

s are thrown simultaneously, then what is the probability of getting a sum of 4?

Question ID : **630680505120**
Option 1 ID : **6306801974012**
Option 2 ID : **6306801974009**
Option 3 ID : **6306801974011**
Option 4 ID : **6306801974010**
Status : **Answered**
Chosen Option : **2**

three letter words given below and the answer the questions based on it.

IKL RPN KJA (right)

are arranged in the alphabetical order from left to right. Which word will occupy the third place from right?

T

)R

A

N

Question ID : **630680504967**
Option 1 ID : **6306801973398**
Option 2 ID : **6306801973397**
Option 3 ID : **6306801973400**
Option 4 ID : **6306801973399**
Status : **Answered**
Chosen Option : **2**

'en below, relationships between different elements are shown in the statements. These statements are followed by
Give answer:

oth conclusions I and II are true

)nly conclusion I is true

nly conclusion II is true

either conclusion I nor conclusion II is true

Question ID : **630680504972**
Option 1 ID : **6306801973420**
Option 2 ID : **6306801973417**
Option 3 ID : **6306801973418**
Option 4 ID : **6306801973419**
Status : **Answered**
Chosen Option : **1**

'–', '–' means '+', '+' means '÷' and '÷' means '×', then 60 – 30 + 5 × 7 ÷ 8 = ?

Question ID : **630680504982**
Option 1 ID : **6306801973458**
Option 2 ID : **6306801973460**
Option 3 ID : **6306801973457**
Option 4 ID : **6306801973459**
Status : **Answered**

d V are seven friends sitting in a single row facing North. S is to the immediate right of R. T and P are neighbours
mediate left of R and on second place from left most end. P is at the right most end. Who is sitting on the
f S?

Question ID : **630680504955**
Option 1 ID : **6306801973352**
Option 2 ID : **6306801973350**
Option 3 ID : **6306801973351**
Option 4 ID : **6306801973349**
Status : **Answered**
Chosen Option : **4**

g pair (Fifth number : Sixth number) which is related in the same way as the first number is related to the second
number is related to fourth number. (NOTE: Operations should be performed on the whole numbers, without
numbers into its constituent digits. E.g.13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13
Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

8 :: ?

45

: 120

721

80

Question ID : **630680504988**
Option 1 ID : **6306801973482**
Option 2 ID : **6306801973484**
Option 3 ID : **6306801973481**
Option 4 ID : **6306801973483**
Status : **Answered**
Chosen Option : **2**

ahead of Ashok in the class of 39 students. If Ashok's Rank is 17th from the last, what is Ramesh's rank from the

Question ID : **630680504958**
Option 1 ID : **6306801973363**
Option 2 ID : **6306801973364**
Option 3 ID : **6306801973362**
Option 4 ID : **6306801973361**
Status : **Answered**
Chosen Option : **3**

g pair (Fifth number : Sixth number) which is related in the same way as the first number is related to the second number is related to fourth number. (NOTE: Operations should be performed on the whole numbers, without numbers into its constituent digits. E.g.13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

: 81

91

121

144

Question ID : **630680504987**
Option 1 ID : **6306801973477**
Option 2 ID : **6306801973480**
Option 3 ID : **6306801973479**
Option 4 ID : **6306801973478**
Status : **Answered**
Chosen Option : **1**

is the brother of B', 'A + B' means 'A is the father of B', 'A – B' means 'A is the sister of B' and 'A × B' means 'A f J + K + P × Z + Q – T, then how is K related to Z?

sband's mother

other's wife

sband's father

sband's sister

Question ID : **630680504962**
Option 1 ID : **6306801973379**
Option 2 ID : **6306801973380**
Option 3 ID : **6306801973377**
Option 4 ID : **6306801973378**
Status : **Not Answered**
Chosen Option : **–**

Q 2 = 28 and 9 P 6 Q 2 = 12, then 14 P 7 Q 1 = ?

Question ID : **630680504981**
Option 1 ID : **6306801973454**
Option 2 ID : **6306801973453**
Option 3 ID : **6306801973456**
Option 4 ID : **6306801973455**
Status : **Answered**
Chosen Option : **3**

'×' means '–', '–' means '÷' and '÷' means '+', then which of the following equation is NOT correct?

– 8 + 4 > 30 – 10 × 4

× 4 + 3 > 4 ÷ 10 × 3

+ 8 ÷ 20 = 9 + 11 ÷ 1

× 30 ÷ 60 = 50 × 40 ÷ 60

Question ID : **630680504983**
Option 1 ID : **6306801973461**
Option 2 ID : **6306801973463**
Option 3 ID : **6306801973462**
Option 4 ID : **6306801973464**
Status : **Answered**
Chosen Option : **2**

wing question, select the odd letter/letters from the given alternatives.

NM

DC

XW

FD

Question ID : **630680504975**
Option 1 ID : **6306801973430**
Option 2 ID : **6306801973432**
Option 3 ID : **6306801973431**
Option 4 ID : **6306801973429**
Status : **Answered**
Chosen Option : **4**

with one term missing. Select the correct alternative from the given ones that will complete the series.

MI, UKG, ?

E

M

M

Question ID : **630680504978**
Option 1 ID : **6306801973444**
Option 2 ID : **6306801973443**
Option 3 ID : **6306801973441**
Option 4 ID : **6306801973442**
Status : **Answered**
Chosen Option : **2**

towards East. He turns right and walks 4 km. He again turns right and walks 8 km. How far and in which direction
t from the finishing point?

m, East

m, South

m, North

n, South

Question ID : **630680504965**
Option 1 ID : **6306801973392**
Option 2 ID : **6306801973389**
Option 3 ID : **6306801973390**
Option 4 ID : **6306801973391**
Status : **Answered**
Chosen Option : **3**

string given below made up of letters. How many A's are immediately preceded by a B?

AAAABBBBABBABA

Question ID : **630680504969**
Option 1 ID : **6306801973408**
Option 2 ID : **6306801973407**
Option 3 ID : **6306801973405**
Option 4 ID : **6306801973406**
Status : **Answered**
Chosen Option : **2**

owed by two arguments in the given question. Choose the correct option after deciding which of the arguments is a
nd which is a 'weak' argument.

we heed every word our parents say?

never wrong.

should be followed blindly without mapping its pros and cons.

ly argument II is strong

ther I nor II argument is strong

h I and II are strong arguments

y argument I is strong

Question ID : **630680504980**
Option 1 ID : **6306801973450**
Option 2 ID : **6306801973452**
Option 3 ID : **6306801973451**
Option 4 ID : **6306801973449**
Status : **Answered**
Chosen Option : **2**

owed by a set of conclusions in the given question. Identify which conclusion follows logically from the following

ts in class A frequently bunk their Mathematics class.

s A find Mathematics class less intriguing.
s are very intelligent.

ly I follow

y II follows

ther I nor II follows

h I and II follow

Question ID : **630680504979**
Option 1 ID : **6306801973445**
Option 2 ID : **6306801973446**
Option 3 ID : **6306801973448**
Option 4 ID : **6306801973447**
Status : **Answered**
Chosen Option : **1**

uestion below are given some statements followed by some conclusions based on those statements. Taking the
be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide
conclusion logically follows the given statements.

ink.

ncil.

ncil are not ink.

pencil are paper.

nk are pencil.

y conclusion III follows

h conclusions II and III follows

h conclusions I and III follows

ly conclusion II follows

Question ID : **630680504963**
Option 1 ID : **6306801973381**
Option 2 ID : **6306801973384**
Option 3 ID : **6306801973383**
Option 4 ID : **6306801973382**
Status : **Answered**
Chosen Option : **4**

d V are seven friends sitting in a single row facing North. S is to the immediate right of R. T and P are neighbours
mediate left of R and on second place from left most end. P is at the right most end. Who is sitting second to the

Question ID : **630680504956**
Option 1 ID : **6306801973353**
Option 2 ID : **6306801973354**
Option 3 ID : **6306801973356**
Option 4 ID : **6306801973355**
Status : **Answered**
Chosen Option : **4**

uestion, four letter pairs are given. The letters on left side of (–) is related to the letters on the right side of (–) with
Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given

K – CPH
E – WJB
U – MZR
P – HJL

Question ID : **630680504976**
Option 1 ID : **6306801973435**
Option 2 ID : **6306801973436**
Option 3 ID : **6306801973434**
Option 4 ID : **6306801973433**
Status : **Answered**
Chosen Option : **4**

anguage, 'YCD' is written as '900', 'YBA' is written as '150'. What is the code for 'YFD' in that code language?

0
)0
0
0

Question ID : **630680504961**
Option 1 ID : **6306801973374**
Option 2 ID : **6306801973375**
Option 3 ID : **6306801973373**
Option 4 ID : **6306801973376**
Status : **Answered**
Chosen Option : **2**

ven below, relationships between different elements are shown in the statements. These statements are followed by
Give answer:

: R

either conclusion I nor conclusion II is true
nly conclusion II is true
oth conclusions I and II are true
nly conclusion I is true

Question ID : **630680504971**
Option 1 ID : **6306801973415**
Option 2 ID : **6306801973414**
Option 3 ID : **6306801973416**
Option 4 ID : **6306801973413**
Status : **Answered**
Chosen Option : **3**

owing question, select the related letters from the given alternatives.

S :: AEM : ?
L
B
N
U

Question ID : **630680504973**
Option 1 ID : **6306801973424**
Option 2 ID : **6306801973422**
Option 3 ID : **6306801973423**
Option 4 ID : **6306801973421**
Status : **Answered**
Chosen Option : **1**

anguage, 'MODEL' is written as '52', 'JAPAN' is written as '45'. What is the code for 'PUBLIC' in that code

Question ID : **630680504960**
Option 1 ID : **6306801973369**
Option 2 ID : **6306801973372**
Option 3 ID : **6306801973371**
Option 4 ID : **6306801973370**
Status : **Answered**

g given below made up of numbers from 0 to 9. How many odd numbers are immediately followed by another odd

8 8 4 4 6 5 2 9 4 6

Question ID : **630680504968**
Option 1 ID : **6306801973403**
Option 2 ID : **6306801973404**
Option 3 ID : **6306801973402**
Option 4 ID : **6306801973401**
Status : **Answered**
Chosen Option : **2**

e following problems has a question and two statements (I) and (II).

e prime numbers. If A + B is odd, then what is the value of A?

5

tion can be answered by using either of the statement (I) or (II) alone.

tion cannot be answered even by using both the statements together.

n be answered by using one of the statement alone but cannot be answered by using the other statement alone.

can be answered by using both the statements together but not by either statement alone.

Question ID : **630680504977**
Option 1 ID : **6306801973438**
Option 2 ID : **6306801973440**
Option 3 ID : **6306801973437**
Option 4 ID : **6306801973439**
Status : **Not Answered**
Chosen Option : **--**

ing given below made up of symbols and numbers. How many letters are immediately followed by S?

S V S S T T V S # J # #

Question ID : **630680504970**
Option 1 ID : **6306801973409**
Option 2 ID : **6306801973411**
Option 3 ID : **6306801973410**
Option 4 ID : **6306801973412**

five three digit numbers given below and the answer the questions based on it.

31 891 163 555 (right)

sum of the unit digit of the largest and the smallest numbers given?

Question ID : **630680504966**
Option 1 ID : **6306801973396**
Option 2 ID : **6306801973393**
Option 3 ID : **6306801973394**
Option 4 ID : **6306801973395**
Status : **Answered**
Chosen Option : **4**

uestion below are given some statements followed by some conclusions based on those statements. Taking the
be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide
conclusion logically follows the given statements.

d are money.

are money.

are pink.

oney are red.

nk are not red.

ly conclusion II follows

conclusion follows

y conclusion I follows

ther conclusion follows

Question ID : **630680504964**
Option 1 ID : **6306801973387**
Option 2 ID : **6306801973386**
Option 3 ID : **6306801973385**
Option 4 ID : **6306801973388**
Status : **Answered**
Chosen Option : **1**

owing question, select the missing number from the given series.

168, 141, 60, ?

73

33

50

Question ID : **630680504984**

ı pair (Third number : Fourth number) which is related in the same way as the first number is related to the second
umber is related to sixth number. (NOTE: Operations should be performed on the whole numbers, without
numbers into its constituent digits. E.g.13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13
Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

25
225
: 144
81

Question ID : **630680504986**
Option 1 ID : **6306801973474**
Option 2 ID : **6306801973473**
Option 3 ID : **6306801973475**
Option 4 ID : **6306801973476**
Status : **Answered**
Chosen Option : **3**

owing question, select the missing number from the given series.

, 6, 25, ?

Question ID : **630680504985**
Option 1 ID : **6306801973471**
Option 2 ID : **6306801973472**
Option 3 ID : **6306801973469**
Option 4 ID : **6306801973470**
Status : **Answered**
Chosen Option : **3**

1th from the top and 47th from the bottom in a class. How may student are there in the class?

Question ID : **630680504957**
Option 1 ID : **6306801973358**
Option 2 ID : **6306801973357**
Option 3 ID : **6306801973360**
Option 4 ID : **6306801973359**
Status : **Answered**
Chosen Option : **1**

ıg question, select the related letter pair from the given alternatives. OPLN : MMHI :: ?

LM : ERWJ

HV : RBDQ

ICP : JKUT

IJ : YCED

Question ID : **630680504974**
Option 1 ID : **6306801973425**
Option 2 ID : **6306801973428**
Option 3 ID : **6306801973427**
Option 4 ID : **6306801973426**
Status : **Answered**
Chosen Option : **2**

R3, R4, R5 and R6 run on 6 different days of a week starting from Monday to Saturday. No two players run on the
ıe player runs between R5 and R6. No player runs after R3. Only one player runs between R3 and R6. R5 runs
ır R1. R4 runs before R6. Who runs on Tuesday?

Question ID : **630680504959**
Option 1 ID : **6306801973365**
Option 2 ID : **6306801973366**
Option 3 ID : **6306801973367**
Option 4 ID : **6306801973368**
Status : **Not Answered**
Chosen Option : **--**

ıowledge

ı part for manufacturing using Fused Deposition Modeling (FDM), what aspect is crucial to enhance the part's
bility?

reasing the infill density of the part.

ng a larger nozzle diameter.

ecting a faster printing speed.

posing a higher nozzle temperature.

Question ID : **630680505460**
Option 1 ID : **6306801975372**
Option 2 ID : **6306801975370**
Option 3 ID : **6306801975369**
Option 4 ID : **6306801975371**
Status : **Not Answered**
Chosen Option : **--**

ent is most appropriate for measuring the surface roughness of a finely machined component?

tical profilometer

:rometer

l indicator

nier caliper

Question ID : **630680505459**
Option 1 ID : **6306801975367**
Option 2 ID : **6306801975366**
Option 3 ID : **6306801975365**
Option 4 ID : **6306801975368**
Status : **Answered**
Chosen Option : **1**

nstruction material is known for its high strength-to-weight ratio and is commonly used in innovative architectural

ck

wood

rbon Fiber

nforced Concrete

Question ID : **630680505478**
Option 1 ID : **6306801975441**
Option 2 ID : **6306801975443**
Option 3 ID : **6306801975442**
Option 4 ID : **6306801975444**
Status : **Not Answered**
Chosen Option : **--**

ient initiative in India primarily focuses on improving the technological infrastructure in education?

)EAR

)MS

A

ISA

Question ID : **630680505471**
Option 1 ID : **6306801975415**
Option 2 ID : **6306801975414**
Option 3 ID : **6306801975416**
Option 4 ID : **6306801975413**
Status : **Not Answered**
Chosen Option : **--**

the pitch of the screw is increased while keeping the length of the handle constant, what effect does it have on the age of the jack?

change in mechanical advantage

reases the mechanical advantage

creases the mechanical advantage

mechanical advantage becomes unpredictable

Question ID : **630680505406**
Option 1 ID : **6306801975156**
Option 2 ID : **6306801975153**
Option 3 ID : **6306801975154**
Option 4 ID : **6306801975155**
Status : **Not Answered**
Chosen Option : **--**

atment of a medium-carbon steel, which of the following microstructural changes is most likely to occur when the led (quenched) from the austenitizing temperature?

formation of pearlite and ferrite

retention of austenite

formation of martensite

formation of cementite and ferrite

Question ID : **630680505445**
Option 1 ID : **6306801975312**
Option 2 ID : **6306801975310**
Option 3 ID : **6306801975309**
Option 4 ID : **6306801975311**
Status : **Answered**
Chosen Option : **3**

state, steady-flow process in a control volume. If the mass flow rate entering the control volume is 5 kg/s, what is exiting the control volume?

s

/s

/s

Question ID : **630680505427**
Option 1 ID : **6306801975238**
Option 2 ID : **6306801975239**
Option 3 ID : **6306801975240**
Option 4 ID : **6306801975237**
Status : **Answered**
Chosen Option : **2**

ıtion system using damping, which of the following statements best describes the effect of increasing the damping ratio?

as no significant effect on the isolation performance.

ıe system to become underdamped, leading to increased oscillations.

ızes energy dissipation and improves isolation efficiency.

the speed of response of the system, leading to poorer isolation.

Question ID : **630680505417**
Option 1 ID : **6306801975198**
Option 2 ID : **6306801975200**
Option 3 ID : **6306801975199**
Option 4 ID : **6306801975197**
Status : **Not Answered**
Chosen Option : **--**

ıe following is a practical application of the principle of induced EMF?

minating a room with LED lighting

charging a smartphone using a wireless charger

)ling a room using an air conditioner

ıting food in a microwave oven

Question ID : **630680505473**
Option 1 ID : **6306801975423**
Option 2 ID : **6306801975421**
Option 3 ID : **6306801975422**
Option 4 ID : **6306801975424**
Status : **Not Answered**
Chosen Option : **--**

ıre of Kaplan turbines contributes to their high efficiency in low head, high flow hydroelectric power plants?

)ustable wicket gates and fixed runner blades.

ed blades and a simple runner design.

)ustable runner blades and fixed wicket gates.

th adjustable runner blades and wicket gates.

Question ID : **630680505443**
Option 1 ID : **6306801975301**
Option 2 ID : **6306801975304**
Option 3 ID : **6306801975302**
Option 4 ID : **6306801975303**
Status : **Not Answered**
Chosen Option : **--**

the significance of 'Scoping' in the EIA process?

ıvolves the actual mitigation of environmental impacts

ies the key issues and impacts to be focused on in the EIA

etermines the project's financial viability

ıl stage where the decision is made whether to approve the project or not

Question ID : **630680505469**
Option 1 ID : **6306801975407**
Option 2 ID : **6306801975405**
Option 3 ID : **6306801975406**
Option 4 ID : **6306801975408**
Status : **Answered**
Chosen Option : **2**

ıction planning, what is the primary purpose of a Gantt Chart?

e the project schedule, showing the start and finish dates of elements.

allocate budget for different phases of construction.

assess environmental impact of the construction project.

provide a detailed architectural design of the project.

Question ID : **630680505481**
Option 1 ID : **6306801975453**
Option 2 ID : **6306801975454**
Option 3 ID : **6306801975455**
Option 4 ID : **6306801975456**
Status : **Answered**
Chosen Option : **1**

le is primarily used in wind turbines to convert wind energy into electrical energy?

zoelectric effect

emical reaction

ctromagnetic induction

otovoltaic effect

Question ID : **630680505485**
Option 1 ID : **6306801975472**
Option 2 ID : **6306801975470**
Option 3 ID : **6306801975469**
Option 4 ID : **6306801975471**
Status : **Answered**
Chosen Option : **4**

consists of three different materials with thermal conductivities k_1, k_2 and k_3 & thickness d_1, d_2 and d_3
e wall is subject to steady heat conduction, which of the following expressions represents the overall heat transfer
the wall?

= $\frac{k_1+k_2+k_3}{d_1+d_2+d_3}$

= $\frac{1}{\frac{d_1}{k_1}+\frac{d_2}{k_2}+\frac{d_3}{k_3}}$

= $\frac{1}{d_1+d_2+d_3} \times (k_1+k_2+k_3)$

= $\frac{k_1 \times k_2 \times k_3}{d_1+d_2+d_3}$

Question ID : **630680505438**
Option 1 ID : **6306801975283**
Option 2 ID : **6306801975282**
Option 3 ID : **6306801975281**
Option 4 ID : **6306801975284**
Status : **Answered**
Chosen Option : **2**

ılled open section beam shaped like a 'U'. If a vertical shear force is applied at the centroid of its cross-section, how
t?

ill bend without twisting

vill bend and twist

ill neither bend nor twist

ill twist without bending

Question ID : **630680505408**
Option 1 ID : **6306801975163**
Option 2 ID : **6306801975164**
Option 3 ID : **6306801975161**
Option 4 ID : **6306801975162**
Status : **Not Answered**
Chosen Option : **--**

e, the compressibility factor (Z) of a real gas increases with an increase in temperature. This observation suggests

gas behaves more ideally at higher temperatures.

ure has no significant impact on the real gas behavior.

gas will liquefy at higher temperatures.

gas behaves less ideally at higher temperatures.

Question ID : **630680505437**
Option 1 ID : **6306801975277**
Option 2 ID : **6306801975280**
Option 3 ID : **6306801975279**
Option 4 ID : **6306801975278**
Status : **Not Answered**
Chosen Option : **--**

kg moving at 10 m/s collides with another stationary ball of mass 1 kg and comes to a complete stop. What is the ond ball post-collision? (Assume an elastic collision)

ı/s

n/s

m/s

n/s

Question ID : **630680505428**
Option 1 ID : **6306801975244**
Option 2 ID : **6306801975242**
Option 3 ID : **6306801975243**
Option 4 ID : **6306801975241**
Status : **Not Answered**
Chosen Option : **--**

em consists of two pulleys, one with a radius of 0.5 meters and the other with a radius of 0.2 meters. If the larger 0 RPM (revolutions per minute), and the tension in the belt remains constant, what is the rotational speed of the

RPM

) RPM

RPM

RPM

Question ID : **630680505404**
Option 1 ID : **6306801975146**
Option 2 ID : **6306801975148**
Option 3 ID : **6306801975147**
Option 4 ID : **6306801975145**
Status : **Answered**
Chosen Option : **2**

sity of 1000 kg/m^3 flows steadily through a horizontal pipe with a change in diameter. At a certain section, the and the pressure is 200 kPa. If the velocity at this section is 2 m/s, what is the pressure at another section where the assuming inviscid flow and using the Bernoulli equation? (May choose the nearest value)

.7 kPa

.5 kPa

.0 kPa

l.8 kPa

Question ID : **630680505424**
Option 1 ID : **6306801975226**
Option 2 ID : **6306801975225**
Option 3 ID : **6306801975227**
Option 4 ID : **6306801975228**
Status : **Answered**
Chosen Option : **4**

gating system for a sand-casting process, to minimize turbulence and facilitate smooth flow of the molten metal, should be designed such that:

ctional area of the runners is larger than the sprue and smaller than the gates.

-sectional area of the sprue, runners, and gates are all equal.

sectional area of the sprue is larger than that of the runners and gates.

sectional area of the sprue is smaller than that of the runners and gates.

Question ID : **630680505447**
Option 1 ID : **6306801975317**
Option 2 ID : **6306801975318**
Option 3 ID : **6306801975320**
Option 4 ID : **6306801975319**
Status : **Not Answered**
Chosen Option : **--**

Indian manufacturing industries, which standard is adopted for implementing an effective environmental tem (EMS), analogous to the ISO 14001?

14001:2017
14001:2015
9001:2015
15001:2016

Question ID : **630680505467**
Option 1 ID : **6306801975400**
Option 2 ID : **6306801975399**
Option 3 ID : **6306801975397**
Option 4 ID : **6306801975398**
Status : **Not Answered**
Chosen Option : **--**

al hydrogen-oxygen fuel cell, what occurs at the cathode?

tons (H^+) are converted into hydrogen gas (H_2).

$_2O$) is electrolyzed to produce oxygen and hydrogen ions.

drogen gas (H_2) is oxidized to produce electrons.

as (O_2) reacts with electrons and hydrogen ions to form water.

Question ID : **630680505486**
Option 1 ID : **6306801975473**
Option 2 ID : **6306801975475**
Option 3 ID : **6306801975476**
Option 4 ID : **6306801975474**
Status : **Not Answered**
Chosen Option : **--**

Otto cycle, how does the specific heat ratio (γ) of the working fluid affect the thermal efficiency of the cycle?

: efficiency is independent of γ.

. increase in γ increases the efficiency.

increase in γ decreases the efficiency.

ncy initially increases with γ but then decreases after a certain point.

Question ID : **630680505441**
Option 1 ID : **6306801975295**
Option 2 ID : **6306801975293**
Option 3 ID : **6306801975294**
Option 4 ID : **6306801975296**
Status : **Answered**
Chosen Option : **2**

ct does effective site management have on construction productivity?

reases productivity by optimizing resource allocation

ct, as productivity is solely dependent on worker skills

luces productivity by limiting worker autonomy

:reases productivity due to increased overhead costs

Question ID : **630680505483**
Option 1 ID : **6306801975463**
Option 2 ID : **6306801975464**
Option 3 ID : **6306801975461**
Option 4 ID : **6306801975462**
Status : **Not Answered**
Chosen Option : **--**

parallel wires carrying currents I_1 and I_2 are separated by a distance d. If the currents are flowing in opposite
s the force per unit length between the wires?

$\frac{I_2}{}$ directed towards each other

$\frac{I_2}{d}$ directed away from each other

$\frac{I_2}{d}$ directed away from each other

$\frac{I_2}{d}$ directed towards each other

Question ID : **630680505472**
Option 1 ID : **6306801975417**
Option 2 ID : **6306801975420**
Option 3 ID : **6306801975418**
Option 4 ID : **6306801975419**
Status : **Not Answered**
Chosen Option : **--**

ıent best explains why real gases deviate from the ideal gas law at high pressures?

ermolecular forces become negligible at high pressures.

tic energy of particles is proportional to temperature.

particles occupy a negligible volume.

les have finite volume and experience intermolecular attractions.

Question ID : **630680505434**
Option 1 ID : **6306801975267**
Option 2 ID : **6306801975265**
Option 3 ID : **6306801975268**
Option 4 ID : **6306801975266**
Status : **Not Answered**
Chosen Option : **–**

following is a limitation of the traditional assignment model in operations research?

an only be applied to maximize the objective function.

handle the assignment of tasks to more agents than tasks.

equires the use of non-linear programming for solution.

an only handle problems with non-integer solutions.

Question ID : **630680505465**
Option 1 ID : **6306801975391**
Option 2 ID : **6306801975389**
Option 3 ID : **6306801975390**
Option 4 ID : **6306801975392**
Status : **Not Answered**
Chosen Option : **–**

rectangular strain gauge rosette, one gauge is aligned along the x-axis (ϵ_x), the second along the y-axis (ϵ_y), and gree angle (ϵ_{45}). If the measured strains are ϵ_x = 300 microstrain, ϵ_y = 100 microstrain, and no shear strain is e strain measured by the 45-degree gauge?

) microstrain

microstrain

microstrain

) microstrain

Question ID : **630680505410**
Option 1 ID : **6306801975171**
Option 2 ID : **6306801975172**
Option 3 ID : **6306801975169**
Option 4 ID : **6306801975170**
Status : **Answered**
Chosen Option : **3**

ning processes, increasing the working temperature of a metal generally leads to:

creased yield strength and increased ductility.

creased yield strength and decreased ductility.

ficant change in yield strength but increased brittleness.

reased yield strength and decreased ductility.

Question ID : **630680505448**
Option 1 ID : **6306801975324**
Option 2 ID : **6306801975322**
Option 3 ID : **6306801975321**
Option 4 ID : **6306801975323**
Status : **Answered**
Chosen Option : **1**

commonly used in high-temperature solar thermal energy storage systems for its ability to store a large amount of

con

lten salts

nium-ion batteries

ter

Question ID : **630680505484**
Option 1 ID : **6306801975466**
Option 2 ID : **6306801975468**
Option 3 ID : **6306801975465**
Option 4 ID : **6306801975467**
Status : **Answered**
Chosen Option : **1**

lowing pollutants is primarily responsible for the depletion of the ozone layer in the Earth's atmosphere?

lorofluorocarbons

bon dioxide

thane

rous oxide

Question ID : **630680505468**
Option 1 ID : **6306801975404**
Option 2 ID : **6306801975403**
Option 3 ID : **6306801975402**
Option 4 ID : **6306801975401**
Status : **Answered**
Chosen Option : **1**

ıft is designed with a basic size of 50 mm and a tolerance of ± 0.02 mm, and the hole is designed with a basic size
ı tolerance of ± 0.02 mm, the type of fit most likely to be achieved is:

arance fit

ɾrference fit

ɔse fit

ınsition fit

Question ID : **630680505456**
Option 1 ID : **6306801975355**
Option 2 ID : **6306801975353**
Option 3 ID : **6306801975354**
Option 4 ID : **6306801975356**
Status : **Answered**
Chosen Option : **1**

ɔreheating necessary before welding high-carbon steels?

decrease the cooling rate after welding.

increase the speed of welding.

enhance the magnetic properties of the steel.

ɾeduce the electrical resistance of the steel.

Question ID : **630680505450**
Option 1 ID : **6306801975330**
Option 2 ID : **6306801975332**
Option 3 ID : **6306801975329**
Option 4 ID : **6306801975331**
Status : **Answered**
Chosen Option : **1**

ngine with all cylinders in a single plane, the primary balancing of reciprocating masses is perfect. If the mass of
part is 0.5 kg and its stroke is 100 mm, what is the total primary unbalanced force at 4000 RPM? (May choose the

.32 N

.16 N

Question ID : **630680505415**
Option 1 ID : **6306801975189**
Option 2 ID : **6306801975192**
Option 3 ID : **6306801975190**
Option 4 ID : **6306801975191**
Status : **Answered**
Chosen Option : **1**

ess where small pieces from the tool rake face material are adhered to the flowing chip and thus removed from the

hesive wear

nk wear

ıter wear

fusion wear

Question ID : **630680505453**
Option 1 ID : **6306801975344**
Option 2 ID : **6306801975342**
Option 3 ID : **6306801975341**
Option 4 ID : **6306801975343**
Status : **Not Answered**
Chosen Option : **--**

ıbjected to fluctuating tensile loads, which of the following factors does not significantly influence the fatigue life

face finish of the bolt

t material's ultimate tensile strength

e of the washer used with the bolt

gnitude of preload applied to the bolt

Question ID : **630680505423**
Option 1 ID : **6306801975221**
Option 2 ID : **6306801975224**
Option 3 ID : **6306801975223**
Option 4 ID : **6306801975222**
Status : **Answered**
Chosen Option : **4**

nic oscillator with a damping ratio of 0.5 is subjected to a sinusoidal force of frequency equal to its natural
will be the phase difference between the applied force and the displacement response of the system?

degrees

degrees

degrees

egrees

Question ID : **630680505419**
Option 1 ID : **6306801975208**
Option 2 ID : **6306801975207**
Option 3 ID : **6306801975206**
Option 4 ID : **6306801975205**
Status : **Not Answered**
Chosen Option : **--**

ge ABCD, where AB is the fixed link, BC is the coupler, and CD is the output link, if the input link AB rotates at a elocity of ω_{AB} =10 rad/s, and at the instant of interest the angle ∠ABC is 60° with |AB|=|BC|=|CD|=1 m, what is y of the output link CD (ω_{CD})?

rad/s

:ad/s

ıd/s

rad/s

Question ID : **630680505413**
Option 1 ID : **6306801975181**
Option 2 ID : **6306801975182**
Option 3 ID : **6306801975184**
Option 4 ID : **6306801975183**
Status : **Not Answered**
Chosen Option : **–**

pendulum consisting of two masses m_1 and m_2 connected by massless rods of lengths l_1 and l_2 respectively. equation, which of the following represents a part of the Lagrangian for this system?

: $m_1 g l_1 sin\theta_1 + m_2 g l_2 sin\theta_2$

= $\frac{1}{2} m_1 {l_1}^2 {\theta_1}^2 + m_2 g l_2 cos\theta_2$

: $m_1 g l_1 sin\theta_1 + m_2 g l_2 cos\theta_2$

: $\frac{1}{2} m_1 {l_1}^2 {\theta_1}^2 + \frac{1}{2} m_2 {l_2}^2 {\theta_2}^2$

Question ID : **630680505405**
Option 1 ID : **6306801975152**
Option 2 ID : **6306801975149**
Option 3 ID : **6306801975151**
Option 4 ID : **6306801975150**
Status : **Not Answered**
Chosen Option : **–**

programming (OOP), which of the following concepts allows different classes to be treated as instances of the

:apsulation

straction

lymorphism

eritance

Question ID : **630680505476**
Option 1 ID : **6306801975435**
Option 2 ID : **6306801975434**
Option 3 ID : **6306801975436**
Option 4 ID : **6306801975433**
Status : **Not Answered**
Chosen Option : **–**

xperiment, air flows over a 2 m long flat plate. If the Reynolds number at the trailing edge of the plate is 5×10^6 viscosity of air is 1.5×10^{-5} m^2/s, what is the free stream velocity of the air? (May choose the nearest value)

m/s

72 m/s

03 m/s

5 m/s

Question ID : **630680505426**
Option 1 ID : **6306801975233**
Option 2 ID : **6306801975236**
Option 3 ID : **6306801975235**
Option 4 ID : **6306801975234**
Status : **Answered**
Chosen Option : **4**

owing mechanisms primarily contributes to particle bonding during the sintering process in powder metallurgy?

emical reactions between different powders

ffusion of atoms across particle boundaries

chanical interlocking of particles

lting and solidification of the powder

Question ID : **630680505449**
Option 1 ID : **6306801975326**
Option 2 ID : **6306801975325**
Option 3 ID : **6306801975328**
Option 4 ID : **6306801975327**
Status : **Not Answered**
Chosen Option : **--**

lowing file systems is specifically designed for flash storage devices like USB flash drives and SD cards?

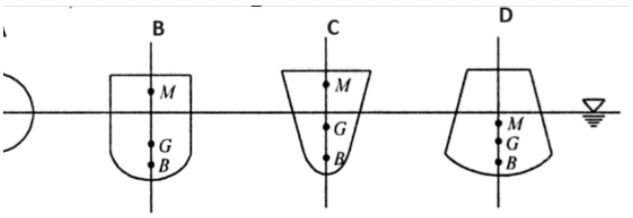
4

T32

FS

FAT

Question ID : **630680505477**
Option 1 ID : **6306801975440**
Option 2 ID : **6306801975438**
Option 3 ID : **6306801975439**
Option 4 ID : **6306801975437**
Status : **Not Answered**
Chosen Option : **--**



rrect pair for the given figure depicting the stability of different forms of floating vessel?

ability, B=poor stability, C=Better stability, D=Negative stability

ability, B=Better stability, C=Good stability, D=Doubtful stability

ul stability, B=Good stability, C=Better stability, D=Zero stability

ability, B=Good stability, C=Better stability, D=Doubtful stability

Question ID : **630680505429**
Option 1 ID : **6306801975248**
Option 2 ID : **6306801975247**
Option 3 ID : **6306801975246**
Option 4 ID : **6306801975245**
Status : **Answered**
Chosen Option : **2**

nd a grey surface are exposed to the same radiative environment. Which of the following statements is true
nissivity (ϵ)?

$\epsilon_{ack} = \epsilon_{grey}$

relation between both surfaces cannot be expressed

$\epsilon_{ack} < \epsilon_{grey}$

$\epsilon_{ack} > \epsilon_{grey}$

Question ID : **630680505433**
Option 1 ID : **6306801975262**
Option 2 ID : **6306801975264**
Option 3 ID : **6306801975263**
Option 4 ID : **6306801975261**
Status : **Answered**
Chosen Option : **4**

thermal diffusivity of $1 \times 10^{-6} m^2/s$ reaches a Fourier number of 0.15 in 500 seconds, what is its characteristic
)?

m

m

5 m

5 m

Question ID : **630680505432**
Option 1 ID : **6306801975259**
Option 2 ID : **6306801975257**

he following is true statement for Lagrange's (Indirect Approach)?

forces considered.

forces handled via same expression.

e-body Diagrams useful.

ermediate forces less readily available.

Question ID : 630680505402
Option 1 ID : 6306801975140
Option 2 ID : 6306801975137
Option 3 ID : 6306801975139
Option 4 ID : 6306801975138
Status : Not Answered
Chosen Option : –

ts of two spur gears. If the input gear has 24 teeth and rotates at 1200 RPM, and the output gear has 72 teeth, what l in RPM?

)0 rpm

)0 rpm

) rpm

) rpm

Question ID : 630680505414
Option 1 ID : 6306801975185
Option 2 ID : 6306801975188
Option 3 ID : 6306801975186
Option 4 ID : 6306801975187
Status : Answered
Chosen Option : 3

onstruction, what is the primary purpose of using a damp-proof course (DPC)?

provide insulation to the building

nt water seepage into the building from the ground

enhance the aesthetic appeal of the building

support the structural integrity of the building

Question ID : 630680505479
Option 1 ID : 6306801975446
Option 2 ID : 6306801975447
Option 3 ID : 6306801975448
Option 4 ID : 6306801975445
Status : Answered
Chosen Option : 4

he following is considered an output peripheral in a computer system?

use

nitor

d Drive

yboard

Question ID : **630680505475**
Option 1 ID : **6306801975430**
Option 2 ID : **6306801975431**
Option 3 ID : **6306801975429**
Option 4 ID : **6306801975432**
Status : **Answered**
Chosen Option : **2**

ring process, what is the primary purpose of a Request for Proposal (RFP)?

announce the project budget to potential contractors.

st a detailed project plan from potential contractors.

potential contractors to submit proposals for a project.

finalize the contract terms with the chosen contractor.

Question ID : **630680505482**
Option 1 ID : **6306801975460**
Option 2 ID : **6306801975457**
Option 3 ID : **6306801975458**
Option 4 ID : **6306801975459**
Status : **Not Answered**
Chosen Option : **–**

n Economic Order Quantity (EOQ) model for inventory control. The annual demand for their product is 10,000 ; cost per order is Rs.100, and the holding cost per unit per year is Rs.2. What is the EOQ for this product? (May osest value)

units

0 units

nits

0 units

Question ID : **630680505463**
Option 1 ID : **6306801975382**
Option 2 ID : **6306801975384**
Option 3 ID : **6306801975381**
Option 4 ID : **6306801975383**
Status : **Answered**
Chosen Option : **4**

ıe cycle, the implementation of regeneration through feedwater heating:

he average temperature of heat addition, thereby reducing cycle efficiency.

ct on the average temperature of heat addition but increases the total heat input.

ıe total heat input, thereby decreasing the thermal efficiency of the cycle.

e average temperature of heat addition, thereby increasing cycle efficiency.

Question ID : **630680505440**
Option 1 ID : **6306801975291**
Option 2 ID : **6306801975289**
Option 3 ID : **6306801975290**
Option 4 ID : **6306801975292**
Status : **Answered**
Chosen Option : **4**

ıas a main scale with a least count of 1 mm and a vernier scale with 10 divisions. If the 5th division of the vernier
main scale reading after the 20 mm mark, what is the precise measurement?

50 mm
05 mm
25 mm
15 mm

Question ID : **630680505457**
Option 1 ID : **6306801975357**
Option 2 ID : **6306801975358**
Option 3 ID : **6306801975360**
Option 4 ID : **6306801975359**
Status : **Answered**
Chosen Option : **1**

nade of a material with Poisson's ratio ν =0.3 is stretched such that its length increases by 5%. If the diameter of
ly 10 mm, what is the new diameter of the rod after stretching?

5 mm
5 mm
)0 mm
15 mm

Question ID : **630680505407**
Option 1 ID : **6306801975159**
Option 2 ID : **6306801975158**
Option 3 ID : **6306801975160**
Option 4 ID : **6306801975157**
Status : **Answered**
Chosen Option : **1**

xt of cement concrete, what is the primary purpose of adding aggregates?

decrease the setting time of concrete.

ıce the compressive strength and durability of concrete.

improve the color and texture of the finished surface.

increase the thermal expansion of concrete.

Question ID : **630680505480**
Option 1 ID : **6306801975449**
Option 2 ID : **6306801975452**
Option 3 ID : **6306801975451**
Option 4 ID : **6306801975450**
Status : **Not Answered**
Chosen Option : **–**

primary goal of the 'BharatNet' project in the context of e-Governance in India?

establish a nationwide broadband network

provide digital literacy to rural citizens

digitize government records

promote online financial transactions such as UPI

Question ID : **630680505470**
Option 1 ID : **6306801975410**
Option 2 ID : **6306801975411**
Option 3 ID : **6306801975412**
Option 4 ID : **6306801975409**
Status : **Answered**
Chosen Option : **1**

iechanical components for dynamic loading, which expression correctly represents Goodman line for assessing

gue stress concertation factor

durance limit

gth

ength in tension

tress

$$\frac{s\sigma_a}{} + \left(\frac{n_s\sigma_m}{S_{ut}}\right)^2 = 1$$

$$\frac{a}{} + \frac{\sigma_m}{S_{yt}} = \frac{\sigma_m}{n_s}$$

$$\frac{a}{} + \left(\frac{n_s\sigma_m}{S_{ut}}\right)^2 = \frac{1}{n_s}$$

$$\frac{a}{} + \frac{\sigma_m}{S_{ut}} = \frac{1}{n_s}$$

Question ID : **630680505421**
Option 1 ID : **6306801975215**
Option 2 ID : **6306801975214**
Option 3 ID : **6306801975216**
Option 4 ID : **6306801975213**
Status : **Answered**
Chosen Option : **1**

m, what does a flatter slope in the high-cycle fatigue region (beyond 10^3 cycles) typically indicate about a behavior?

eater resistance to fatigue failure

gher sensitivity to stress concentrations

ver endurance limit

l impact of environmental factors on fatigue strength

Question ID : **630680505422**
Option 1 ID : **6306801975218**
Option 2 ID : **6306801975217**
Option 3 ID : **6306801975219**
Option 4 ID : **6306801975220**
Status : **Not Answered**
Chosen Option : **--**

est conducted on a concrete specimen using a Universal Testing Machine, if the specimen fails at a load of 300 kN onal area of the specimen is 150 cm², what is the compressive strength of the concrete?

) kPa

MPa

)0 kPa

fPa

Question ID : **630680505411**
Option 1 ID : **6306801975173**
Option 2 ID : **6306801975175**
Option 3 ID : **6306801975176**
Option 4 ID : **6306801975174**
Status : **Answered**
Chosen Option : **2**

n tables to determine the properties of superheated steam at a given pressure and temperature, which of the rrect approach?

the saturated steam tables and adjust for superheat.

erpolate between two temperatures at constant pressure.

rpolate between two pressures at constant temperature.

ectly read the values without any interpolation.

Question ID : **630680505436**
Option 1 ID : **6306801975274**
Option 2 ID : **6306801975276**
Option 3 ID : **6306801975275**
Option 4 ID : **6306801975273**
Status : **Not Answered**
Chosen Option : **–**

ır programming problem, the feasible region:

solutions that satisfy the constraint equations but not necessarily the non-negativity restrictions.

of only the boundary lines formed by the constraints.

the intersection of all the constraint inequalities and the non-negativity restrictions.

ts all possible values that satisfy the objective function.

Question ID : **630680505464**
Option 1 ID : **6306801975387**
Option 2 ID : **6306801975386**
Option 3 ID : **6306801975388**
Option 4 ID : **6306801975385**
Status : **Answered**
Chosen Option : **3**

rain curve for a ductile material shows regions of elastic and plastic deformation. At a certain point on the curve, its maximum stress before necking occurs. This point is known as:

cture point

portional limit

ld point

imate tensile strength

Question ID : **630680505444**
Option 1 ID : **6306801975306**
Option 2 ID : **6306801975307**
Option 3 ID : **6306801975305**
Option 4 ID : **6306801975308**
Status : **Answered**
Chosen Option : **4**

ction planning, which strategy is most effective for a manufacturing company facing highly variable demand while e changes in workforce levels?

lementing a Just-In-Time (JIT) production system.

a constant production rate and using inventory to absorb fluctuations in demand.

viding the service or product at an earlier time period.

djusting production rates to match demand and hiring temporary staff as needed.

Question ID : **630680505461**
Option 1 ID : **6306801975376**
Option 2 ID : **6306801975373**
Option 3 ID : **6306801975375**
Option 4 ID : **6306801975374**
Status : **Not Answered**
Chosen Option : **--**

ing the 5S methodology in a manufacturing setting primarily helps in:

imizing the supply chain and logistics.

ancing employee skills and capabilities.

lucing lead time for product development.

proving workplace organization and efficiency.

Question ID : **630680505462**
Option 1 ID : **6306801975379**
Option 2 ID : **6306801975380**
Option 3 ID : **6306801975377**
Option 4 ID : **6306801975378**
Status : **Not Answered**
Chosen Option : **--**

r's theory, for a column with both ends pinned (hinged), if the length of the column is doubled and all other factors
ow does the critical buckling load change?

ıcreases by a factor of two

lecreases by a factor of four

ecreases by a factor of sixteen

emains unchanged

Question ID : **630680505409**
Option 1 ID : **6306801975166**
Option 2 ID : **6306801975165**
Option 3 ID : **6306801975167**
Option 4 ID : **6306801975168**
Status : **Answered**
Chosen Option : **2**

terferometer, if the wavelength of the light source is halved, how does this affect the resolution of the system?

resolution is quadrupled.

resolution remains unchanged.

e resolution is doubled.

resolution is halved.

Question ID : **630680505458**
Option 1 ID : **6306801975363**
Option 2 ID : **6306801975364**
Option 3 ID : **6306801975362**
Option 4 ID : **6306801975361**
Status : **Not Answered**
Chosen Option : **–**

lachining (USM) is particularly effective for machining which type of materials?

t, ductile materials

ermoplastics and polymers

rd and brittle materials such as ceramics

gh-strength ferrous metals

Question ID : **630680505454**
Option 1 ID : **6306801975347**
Option 2 ID : **6306801975345**
Option 3 ID : **6306801975346**
Option 4 ID : **6306801975348**
Status : **Answered**
Chosen Option : **3**

tage air compressor operating under ideal conditions. If each stage of the compressor is designed to have the same
ch of the following statements is true regarding the overall efficiency of the compressor?

ency first increases and then decreases with the number of stages.

number of stages has no impact on the efficiency.

efficiency decreases as the number of stages increases.

efficiency increases as the number of stages increases.

Question ID : **630680505439**
Option 1 ID : **6306801975288**
Option 2 ID : **6306801975285**
Option 3 ID : **6306801975286**
Option 4 ID : **6306801975287**
Status : **Not Answered**
Chosen Option : **--**

the spin speed is doubled while keeping the mass and radius of the gyroscope wheel constant, what is the effect on
uple assuming no external forces are acting?

gyroscopic couple is quadrupled

gyroscopic couple is halved

gyroscopic couple is doubled

gyroscopic couple remains the same

Question ID : **630680505412**
Option 1 ID : **6306801975180**
Option 2 ID : **6306801975177**
Option 3 ID : **6306801975178**
Option 4 ID : **6306801975179**
Status : **Answered**
Chosen Option : **3**

l is most suitable for making a cutting tool used in high-speed machining of superalloys?

gh-Speed Steel

ycrystalline Diamond

bic Boron Nitride

nented Carbide

Question ID : **630680505452**
Option 1 ID : **6306801975339**
Option 2 ID : **6306801975337**
Option 3 ID : **6306801975340**
Option 4 ID : **6306801975338**
Status : **Answered**
Chosen Option : **4**

rod subjected to a tensile stress of 300 MPa has a yield strength in tension of 400 MPa and in compression of 380
) the Maximum Shear Stress Theory (Tresca's Criterion), at what stress level will the rod begin to yield?

) MPa

) MPa

) MPa

MPa

Question ID : **630680505420**
Option 1 ID : **6306801975211**
Option 2 ID : **6306801975209**
Option 3 ID : **6306801975212**
Option 4 ID : **6306801975210**
Status : **Answered**
Chosen Option : **1**

is being tested in a wind tunnel to study its aerodynamic properties. If the airplane's speed (V), wing area (A), air
e coefficient of drag (C_d) are known, which of the following combinations would correctly yield the drag force (
airplane using dimensional analysis?

$= C_d \times 2\rho \times V^2 \times A$

$= \frac{1}{2} \times C_d \times \rho \times V^2 \times A$

$= \frac{1}{2} \times C_d \times \frac{\rho}{V} \times A$

$= C_d \times \frac{V}{\rho} \times A$

Question ID : **630680505425**
Option 1 ID : **6306801975231**
Option 2 ID : **6306801975229**
Option 3 ID : **6306801975230**
Option 4 ID : **6306801975232**
Status : **Answered**
Chosen Option : **2**

nal steady-state heat conduction scenario, a rod of length L with thermal conductivity k experiences a temperature
, along its length. If the length of the rod is doubled and all other conditions remain unchanged, the new
ent in the rod will be:

ved.

drupled.

hanged.

bled.

Question ID : **630680505430**
Option 1 ID : **6306801975250**
Option 2 ID : **6306801975252**
Option 3 ID : **6306801975249**
Option 4 ID : **6306801975251**
Status : **Answered**
Chosen Option : **3**

ding machines, which factor most significantly affects the surface finish of the workpiece?

: hardness of the grinding wheel

e grain size of the grinding wheel

: speed of the grinding wheel

: material of the workpiece

Question ID : **630680505451**
Option 1 ID : **6306801975336**
Option 2 ID : **6306801975335**
Option 3 ID : **6306801975334**
Option 4 ID : **6306801975333**
Status : **Answered**
Chosen Option : **3**

f freedom system with a damping ratio of 0.05 is subjected to forced vibration at a frequency that is 1.5 times its
If the system's natural frequency is 10 Hz, what is the frequency of the forced vibration?

Hz

Hz

Hz

Hz

Question ID : **630680505416**
Option 1 ID : **6306801975195**
Option 2 ID : **6306801975193**
Option 3 ID : **6306801975194**
Option 4 ID : **6306801975196**
Status : **Answered**
Chosen Option : **4**

n with uniform cross-sectional area operates in a steady-state condition. If the thermal conductivity of the fin
s, what is the impact on the fin's efficiency?

: efficiency remains unchanged

: efficiency decreases

: efficiency first increases and then decreases

e efficiency increases

Question ID : **630680505431**
Option 1 ID : **6306801975254**
Option 2 ID : **6306801975256**
Option 3 ID : **6306801975253**
Option 4 ID : **6306801975255**
Status : **Answered**
Chosen Option : **3**

uing system with an arrival rate of 6 customers per hour and a service rate of 10 customers per hour, what is the
f customers in the system (L)?

customers

customers

customers

customers

Question ID : **630680505466**
Option 1 ID : **6306801975395**
Option 2 ID : **6306801975394**
Option 3 ID : **6306801975396**
Option 4 ID : **6306801975393**
Status : **Answered**
Chosen Option : **2**

sothermal expansion of an ideal gas, the work done by the gas is given by:

$= \frac{P_1 V_1 - P_2 V_2}{\gamma - 1}$

$= \frac{1}{2} m(v_2{}^2 - v_1{}^2)$

$= nRT \ \ln\left(\frac{V_2}{V_1}\right)$

$= P(V_2 - V_1)$

Question ID : **630680505435**
Option 1 ID : **6306801975270**
Option 2 ID : **6306801975269**
Option 3 ID : **6306801975271**
Option 4 ID : **6306801975272**
Status : **Answered**
Chosen Option : **3**

ious machine, when the load angle δ is zero, what is the condition of the machine?

machine is operating at unity power factor.

machine is in a state of instability.

machine is not delivering any real power.

machine is generating maximum power.

Question ID : **630680505474**
Option 1 ID : **6306801975427**
Option 2 ID : **6306801975425**
Option 3 ID : **6306801975426**
Option 4 ID : **6306801975428**
Status : **Not Answered**
Chosen Option : **--**

rinding wheels, how does the grain size of the abrasive material affect the surface finish and material removal rate hining process?

grain size results in a better surface finish and higher MRR.

ıin size results in a better surface finish and higher MRR.

ıin size results in a better surface finish but lower MRR.

grain size results in a lower surface finish and lower MRR.

Question ID : **630680505455**
Option 1 ID : **6306801975349**
Option 2 ID : **6306801975352**
Option 3 ID : **6306801975351**
Option 4 ID : **6306801975350**
Status : **Answered**
Chosen Option : **3**

tem exhibits critical damping. Which of the following best describes the time it takes for the system to return to being displaced?

ıger than an undamped system but with oscillations

:antaneous

ɔrtest possible time without oscillating

ıe is equal to that of an undamped system

Question ID : **630680505418**
Option 1 ID : **6306801975204**
Option 2 ID : **6306801975203**
Option 3 ID : **6306801975202**
Option 4 ID : **6306801975201**
Status : **Answered**
Chosen Option : **3**

erminate planar frame, if one of the horizontal members is removed, how will it affect the structure's stability?

change will not affect the structure's stability.

structure will remain stable but more flexible.

structure will become more rigid.

structure will become unstable.

Question ID : **630680505403**
Option 1 ID : **6306801975144**
Option 2 ID : **6306801975142**
Option 3 ID : **6306801975141**
Option 4 ID : **6306801975143**
Status : **Not Answered**
Chosen Option : **--**

ıist air, Stream A and Stream B, are mixed. Stream A has a dry-bulb temperature of 30°C and a relative humidity of
3 has a dry-bulb temperature of 20°C and a relative humidity of 50%. Assuming no heat loss to the surroundings
ɛed final state, which of the following outcomes is most likely for the mixture?

ɛmperature higher than 30°C, relative humidity lower than both streams

nperature between 20°C and 30°C, relative humidity higher than both streams

nperature between 20°C and 30°C, relative humidity higher than both streams

nperature between 20°C and 30°C, relative humidity lower than both streams

Question ID : **630680505442**
Option 1 ID : **6306801975297**
Option 2 ID : **6306801975299**
Option 3 ID : **6306801975298**
Option 4 ID : **6306801975300**
Status : **Answered**
Chosen Option : **2**

ɔwing lost-core molding process is popularized by "The Ashland process" uses thermosetting hybrid system of
ł polyurethane as the binder?

ld box

-bake

t box

ll molding

Question ID : **630680505446**
Option 1 ID : **6306801975314**
Option 2 ID : **6306801975316**
Option 3 ID : **6306801975315**
Option 4 ID : **6306801975313**
Status : **Answered**
Chosen Option : **4**