HPCL Engineer

Previous YearPaper (Mechanical) 18 Aug, 2024)

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ID	
Name	
r Name	
	18/08/2024
	2:00 PM - 4:30 PM
	Mechanical Engineer

sh Language

ces of a paragraph are given below in jumbled order. Arrange the sentences in the order to form a meaningful and coherent paragraph.

e natural, seasonal fluctuations are called the flood pulse, and they're essential for vital for nourishing agriculture.
Mekong Basin, the stark difference between dry and wet season river flows es wetlands' importance.
support biodiversity, act as natural water filters and buffer against floods.
g the rainy season, powerful flooding injects life into vast floodplain habitats.
nds—defined as ecosystems flooded or saturated by water, including floodplains, s and mangroves—are vital ecological guardians worldwide.

ADBEC

EABCD

ECDBA

ECBDA

Question ID : 630680940967
Option 1 ID : 6306803688430
Option 2 ID : 6306803688428
Option 3 ID : 6306803688427
Option 4 ID : 6306803688429
Status : Answered
Chosen Option : 3

t the most appropriate meaning of the underlined idiom.

father, Jayant is a chip off the old block, with his interest in computers

Someone with rigid belief-system

A person interested in latest gadgets and technology

Very similar in character to their parent

Unusually old fashioned and old school

Question ID : 630680987560
Option 1 ID : 6306803874238
Option 2 ID : 6306803874235
Option 3 ID : 6306803874236
Option 4 ID : 6306803874237
Status : Answered

consider deleting the given sentence (below the instructions) as it is not
l.The sentence in which the words do NOT have any spelling errors.

a playwrite who has the privilege to meet the monarch in solitude.

I know a playwright who has the privilege to meet the monarch in solitude.

I know a playwrite who has the privelege to meet the monarch in soletude.

I know a playwright who has the privilege to meet the monarc in solitude.

I know a playwrite who has the privelege to meet the monarch in solitude.

Question ID : 630680132282
Option 1 ID : 630680512294
Option 2 ID : 630680512297
Option 3 ID : 630680512296
Option 4 ID : 630680512295
Status : Answered
Chosen Option : 1

he most appropriate option to fill in the blank.

rogrammes are essential to support _____ elderly in our community.

an

the

am

a

Question ID : 630680940883
Option 1 ID : 6306803688028
Option 2 ID : 6306803688030
Option 3 ID : 6306803688029
Option 4 ID : 6306803688027
Status : Answered
Chosen Option : 2

he most appropriate ANTONYM of the underlined word in the given sentence.

yer's argument was germane to the case.

Instrumental

Pertinent

Incidental

Detrimental

Question ID : 630680987601
Option 1 ID : 6306803874409
Option 2 ID : 6306803874410
Option 3 ID : 6306803874407
Option 4 ID : 6306803874408
Status : Answered
Chosen Option : 4

he most appropriate option to fill in the blank.

e applicants, Maria's qualifications were the _____.

most impressive

impressivest

more impressive

impressive

Question ID : 630680940896
Option 1 ID : 6306803688085
Option 2 ID : 6306803688086
Option 3 ID : 6306803688084
Option 4 ID : 6306803688083
Status : Answered
Chosen Option : 1

he most appropriate option to fill in the blanks.

all the runners, John was the _____, finishing the race in _____ time.

fastest; the least

fastest; less

fast; least

faster; less

Question ID : 630680940922
Option 1 ID : 6306803688214
Option 2 ID : 6306803688211
Option 3 ID : 6306803688212
Option 4 ID : 6306803688213
Status : Answered
Chosen Option : 1

hension:

e given passage and answer the questions that follow.

lication of AI in education varies enormously across countries, usually reflecting existing disparities in technological infrastructure, funding, policy support and digital levels. Developed and rich countries can rely on more robust technology ucture as well on an ecosystem for innovation that includes the private sector. This em is supporting schools and universities in leading experiments with AI in on. However, this is not the case in the Global South and, broadly speaking, in ing countries as they are grappling with fundamental challenges mostly related to the erequisites to make technology functional to quality education, from infrastructure to ty. Against this backdrop, I see two main priorities to make technology deliver on its g-lasting promise of 'leapfrogging' for all. First, it's about ensuring that investments ually close the existing digital divide, in terms of connectivity, content and capacity. an half of the world is still offline, while the other half is developing the future ion of AI tools through an unprecedent investment from public and private sectors. On r side, human capacities will be decisive to steer the technological revolution. re, digital skills for teachers and learners should be prioritised in curriculum ment, and digital literacy must be part of the core competencies all citizens should the future regardless of age, level of education and social position. Second, we must n inclusion. At UNESCO, we are working to ensure that AI technology will improve onal opportunities for all and help close rather than widen the existing divides. While ogy is not neutral, as already mentioned, decision making is and will remain our ibility as humankind. We can decide what kind of future we want, and this requires a change in our relationships with nature, technology and each other. When it comes to ogy, including generative AI, we can decide to unlock the potential, getting more on ethics, safety and inclusion or trying to protect us and our future from technology, and trying to buy time. Without a doubt, AI presents innovative opportunities to nd transform educational experiences. But as we do this, it will be crucial to prioritise considerations and the preservation of education as a social and human-centred our. In other words, it's a question of finding the right balance between blind fanatism olute inaction and I am cautiously optimistic about it.

stion No : 8

es the passage suggest about the future relationship between technology and on?

Education should avoid using technology altogether.

Technology should be cautiously integrated into education.

Education and technology should remain separate.

Technology will replace traditional educational methods.

Question ID : 630680944202
Option 1 ID : 6306803701616
Option 2 ID : 6306803701615
Option 3 ID : 6306803701618
Option 4 ID : 6306803701617
Status : Answered
Chosen Option : 2

hension:

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stion No : 9

f the following is a synonym for the term 'disparities' as used in the passage?

Agreements

Differences

Equivalences

Similarities

Question ID : 630680944201
Option 1 ID : 6306803701614
Option 2 ID : 6306803701612
Option 3 ID : 6306803701611
Option 4 ID : 6306803701613
Status : Answered
Chosen Option : 2

hension:

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stion No : 10

ng to the passage, what is one of the main priorities for making technology deliver omise of 'leapfrogging' for all?

Increasing private sector investment in technology

Enhancing digital skills for teachers and learners

Developing new AI tools for education

Ensuring equal access to physical infrastructure

Question ID : **630680944203**
Option 1 ID : **6306803701619**
Option 2 ID : **6306803701622**
Option 3 ID : **6306803701620**
Option 4 ID : **6306803701621**
Status : **Not Answered**
Chosen Option : **--**

hension:

e given passage and answer the questions that follow.

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stion No : 11

ould be the most appropriate title for the passage?

AI and Technological Advances

Bridging the Digital Divide with AI in Education

Challenges in Global Education

The Role of UNESCO in Education

Question ID : **630680944200**
Option 1 ID : **6306803701607**
Option 2 ID : **6306803701610**
Option 3 ID : **6306803701608**
Option 4 ID : **6306803701609**
Status : **Answered**
Chosen Option : **2**

hension:

e given passage and answer the questions that follow.

lication of AI in education varies enormously across countries, usually reflecting existing disparities in technological infrastructure, funding, policy support and digital levels. Developed and rich countries can rely on more robust technology ucture as well on an ecosystem for innovation that includes the private sector. This em is supporting schools and universities in leading experiments with AI in on. However, this is not the case in the Global South and, broadly speaking, in ing countries as they are grappling with fundamental challenges mostly related to the erequisites to make technology functional to quality education, from infrastructure to ty. Against this backdrop, I see two main priorities to make technology deliver on its g-lasting promise of 'leapfrogging' for all. First, it's about ensuring that investments ually close the existing digital divide, in terms of connectivity, content and capacity. an half of the world is still offline, while the other half is developing the future ion of AI tools through an unprecedent investment from public and private sectors. On r side, human capacities will be decisive to steer the technological revolution. re, digital skills for teachers and learners should be prioritised in curriculum ment, and digital literacy must be part of the core competencies all citizens should the future regardless of age, level of education and social position. Second, we must n inclusion. At UNESCO, we are working to ensure that AI technology will improve onal opportunities for all and help close rather than widen the existing divides. While ogy is not neutral, as already mentioned, decision making is and will remain our ibility as humankind. We can decide what kind of future we want, and this requires a change in our relationships with nature, technology and each other. When it comes to ogy, including generative AI, we can decide to unlock the potential, getting more on ethics, safety and inclusion or trying to protect us and our future from technology, and trying to buy time. Without a doubt, AI presents innovative opportunities to nd transform educational experiences. But as we do this, it will be crucial to prioritise considerations and the preservation of education as a social and human-centred our. In other words, it's a question of finding the right balance between blind fanatism olute inaction and I am cautiously optimistic about it.

stion No : 12

the main theme of the passage?

The potential of AI to transform education globally

The role of the private sector in AI development

The disparity in technological infrastructure between developed and developing es

The importance of ethics in technological advancements

Question ID : 630680944204
Option 1 ID : 6306803701623
Option 2 ID : 6306803701626
Option 3 ID : 6306803701624
Option 4 ID : 6306803701625
Status : Answered
Chosen Option : 4

he most appropriate meaning of the underlined idiom.

npany's decision to cut prices had a snowball effect.

An immense transformation of the company structure

A very strange effect on the working of the company

A significant impact on similar things, causing profits to soar

A situation in which something increases in size at a faster and faster rate

Question ID : 630680987576
Option 1 ID : 6306803874301
Option 2 ID : 6306803874302
Option 3 ID : 6306803874299
Option 4 ID : 6306803874300

he most appropriate ANTONYM of the underlined word.

sycophantic behaviour towards the boss was evident.

self-centred

eccentric

autocratic

servile

Question ID : 630680987587
Option 1 ID : 6306803874351
Option 2 ID : 6306803874354
Option 3 ID : 6306803874352
Option 4 ID : 6306803874353
Status : Answered
Chosen Option : 3

he option that can be used as a one-word substitute for the given group of words.

scale departure of people

Idleness

Exodus

Arrival

Immobility

Question ID : 630680941005
Option 1 ID : 6306803688576
Option 2 ID : 6306803688578
Option 3 ID : 6306803688577
Option 4 ID : 6306803688575
Status : Answered
Chosen Option : 2

es of a paragraph are given below in jumbled order. Arrange the sentences in the order to form a meaningful and coherent paragraph.

e island of Mallorca, 10,000 people took to the streets holding banners that read:
is enough!" and "Mallorca is not for sale".
sands of people in Spain are protesting against mass tourism.
ecoming almost impossible for locals to buy a house because of tourism.
le in Mallorca are angry that their rents are increasing.

CBAD

BADC

ABDC

DBAC

Question ID : 630680983994
Option 1 ID : 6306803860048
Option 2 ID : 6306803860046
Option 3 ID : 6306803860047
Option 4 ID : 6306803860045
Status : Answered
Chosen Option : 3

he most appropriate option to fill in the blanks.

_____ mountain in the region offers _____ views of the surrounding landscape.

highest; breathtaking

peacefully; serene

Everest; above

often; rocky

Question ID : 6306801026897
Option 1 ID : 6306804030218
Option 2 ID : 6306804030221
Option 3 ID : 6306804030220
Option 4 ID : 6306804030219
Status : Answered
Chosen Option : 3

titative Aptitude

spends 60% of his monthly salary (in ₹) on the rent of his house. If every month he ends ₹632 on his conveyance and ₹7670 on his grocery and saves the remaining s monthly salary (in ₹) is:

22881

22876

22926

22970

Question ID : 630680789215
Option 1 ID : 6306803092643
Option 2 ID : 6306803092641
Option 3 ID : 6306803092642
Option 4 ID : 6306803092640
Status : Answered
Chosen Option : 4

M of 36, 11, 495 and 225 is:

9882

9900

9980

9889

Question ID : 630680788852
Option 1 ID : 6306803091191
Option 2 ID : 6306803091188
Option 3 ID : 6306803091190
Option 4 ID : 6306803091189
Status : Answered
Chosen Option : 2

o successive discounts, a box with a list price of ₹275 is available at ₹164. If the discount is 33%, what is the first discount percentage? [Give your answer correct to s of decimal.]

11.00%

20.02%

4.37%

11.68%

Question ID : 630680900313
Option 1 ID : 6306803527017
Option 2 ID : 6306803527019
Option 3 ID : 6306803527018
Option 4 ID : 6306803527020
Status : Answered
Chosen Option : 1

of a rectangle having breadth 22 cm is 418 cm^2. Find the perimeter of the rectangle.

Question ID : 630680678855
Option 1 ID : 6306802658914
Option 2 ID : 6306802658915
Option 3 ID : 6306802658916
Option 4 ID : 6306802658913
Status : Answered
Chosen Option : 2

ratio should sugar costing ₹48 per kg be mixed with sugar costing ₹84 per kg so that ıg the mixture at ₹52.5 per kg, there is a profit of 5%?

3 : 32

3 : 35

1 : 36

34 : 2

Question ID : 630680801253
Option 1 ID : 6306803139575
Option 2 ID : 6306803139574
Option 3 ID : 6306803139573
Option 4 ID : 6306803139572
Status : Not Answered
Chosen Option : --

nvested ₹1500 at 5% per annum simple interest in a bank. What amount (in ₹) will he r 4 years?

400

1800

300

1700

Question ID : 630680666013
Option 1 ID : 6306802607615
Option 2 ID : 6306802607612
Option 3 ID : 6306802607613
Option 4 ID : 6306802607614
Status : Answered
Chosen Option : 2

ceeper marks an article at ₹x and offers a discount of 60% on it. He sells it for ₹219 arging VAT of 46% on the discounted price. What is the value of ₹ x?

₹400

₹200

₹375

₹500

Question ID : 630680844520
Option 1 ID : 6306803308009
Option 2 ID : 6306803308008
Option 3 ID : 6306803308006
Option 4 ID : 6306803308007
Status : Answered
Chosen Option : 3

y = 10; x + y − z = 0; 4x + 2y + z = −3; then x, y and z = _____.

−22, 31 and 12

−21, 32 and 12

−21, 34 and 13

−20, 32 and 13

Question ID : 630680401296
Option 1 ID : 6306801565353
Option 2 ID : 6306801565352
Option 3 ID : 6306801565351
Option 4 ID : 6306801565350
Status : Answered
Chosen Option : 3

ıe selling price of a washing machine is ₹14760, the shopkeeper incurs a loss of ıat should be the selling price (in ₹) of that washing machine so as to gain 19%?

18000

20000

21420

23420

e smallest digit in the blank space of the following number,so that the number is divisible by 6.

3

4

2

1

Question ID : 630680397548
Option 1 ID : 6306801550112
Option 2 ID : 6306801550113
Option 3 ID : 6306801550111
Option 4 ID : 6306801550110
Status : Answered
Chosen Option : 2

urved surface area (in cm^2) of a cone of radius 28 cm and height 21 cm.

$\frac{22}{7}$)

Question ID : 630680670478
Option 1 ID : 6306802625481
Option 2 ID : 6306802625482
Option 3 ID : 6306802625480
Option 4 ID : 6306802625483
Status : Answered
Chosen Option : 4

ance (rounded off to two decimal place) between two points on a map is 6 cm. The the map is 1 : 766999. The actual distance (rounded off to two decimal place) n the two points (in km) is:

45.26

46.02

46.35

48.29

Question ID : 630680789717
Option 1 ID : 6306803094651
Option 2 ID : 6306803094648
Option 3 ID : 6306803094650
Option 4 ID : 6306803094649
Status : Not Answered
Chosen Option : --

is added to each of 18, 25, 30 and 31, then the numbers so obtained, in this order, roportion. Then, if 4x : y :: y : (2x-8), and y > 0, what is the value of y?

109

86

96

103

Question ID : 630680954568
Option 1 ID : 6306803742481
Option 2 ID : 6306803742483
Option 3 ID : 6306803742480
Option 4 ID : 6306803742482
Status : Not Answered
Chosen Option : --

ngth, breadth, and height of a wooden box with a lid are 8 cm, 7 cm, and 6 spectively. The total inner surface area of the closed box is 148 cm^2. The ess of the wood (in cm) is:

1

9

21

7

Question ID : 630680358034
Option 1 ID : 6306801394126
Option 2 ID : 6306801394127
Option 3 ID : 6306801394125
Option 4 ID : 6306801394128
Status : Marked For Review
Chosen Option : 4

litres of petrol was poured into an empty storage tank, it was still 10% empty. How etrol (in litres, rounded off to two decimal place) must be poured into the storage rder to fill it?

57.78

53

58.78

56.78

Question ID : 630680574067
Option 1 ID : 6306802245136
Option 2 ID : 6306802245137
Option 3 ID : 6306802245138
Option 4 ID : 6306802245139
Status : Answered
Chosen Option : 1

e

$$+\sqrt{\left((11+\sqrt{\left(19+\sqrt{\left(29+\sqrt{(49)}\right)}\right)}\right)}$$

7

5

3

1

Question ID : 630680704896
Option 1 ID : 6306802761272
Option 2 ID : 6306802761273
Option 3 ID : 6306802761270
Option 4 ID : 6306802761271
Status : Answered
Chosen Option : 3

ution of the system of equations 2x + y− 2z + 1 = 0, 3x − 3y − z = 5, x − 2y + 3z = 6 is:

(−1, −1, −1)

(1, −1, −1)

(−1, 1, 1)

(1, −1, 1)

Question ID : 630680989516
Option 1 ID : 6306803882373
Option 2 ID : 6306803882370
Option 3 ID : 6306803882372
Option 4 ID : 6306803882371
Status : Answered
Chosen Option : 4

nas to reach Amritsar which is 918 km away in 20 hours. His starting speed for 7
as 65 km/hr. For the next 183 km his speed was 61km/hr. By what speed he must
ow so as to reach Amritsar in decided time of 20hours?

25 km/hr

26 km/hr

24 km/hr

28 km/hr

Question ID : 630680985768
Option 1 ID : 6306803867190
Option 2 ID : 6306803867191
Option 3 ID : 6306803867192
Option 4 ID : 6306803867189
Status : Not Answered
Chosen Option : --

leposited a sum of ₹56250 at 20% rate of interest per annum, compounded annually.
ıl amount (in ₹) received by Navjot after 4 years is:

116998

116640

116628

116182

Question ID : 630680809049
Option 1 ID : 6306803169776
Option 2 ID : 6306803169775
Option 3 ID : 6306803169777
Option 4 ID : 6306803169778
Status : Answered
Chosen Option : 2

together can fill a cistern with water in 36 hours. If P alone can fill the cistern with
48 hours, then in how many hours will Q alone fill one-fourth of the same cistern
ter?

73

37

36

72

Question ID : 6306801026861
Option 1 ID : 6306804030097
Option 2 ID : 6306804030096
Option 3 ID : 6306804030094
Option 4 ID : 6306804030095
Status : Answered
Chosen Option : 3

t price of an article is ₹6806. The vendor wants to earn a profit of 34% after giving a
t of 7%. What is the marked price of the article? [Give your answer correct to the
integer.]

₹9806

₹9804

₹9807

₹9802

Question ID : 630680796555
Option 1 ID : 6306803121208
Option 2 ID : 6306803121209
Option 3 ID : 6306803121210
Option 4 ID : 6306803121211
Status : Not Answered
Chosen Option : --

ıf the following is a quadratic equation?

(x + 1)(x + 2) = x + 3

$x^2 + 2=(x + 2)^2 + 1$

$2x^2 = (2x + 2)(x + 1)$

x(x + 1) = (x + 2)(x + 3)

Question ID : 630680182033
Option 1 ID : 630680705356
Option 2 ID : 630680705354
Option 3 ID : 630680705355
Option 4 ID : 630680705357
Status : Answered
Chosen Option : 1

rage weight of a family of five members whose weights are 40 kg, 49 kg, 57 kg, 64
35 kg is:

51

49

50

48

Question ID : 630680657015
Option 1 ID : 6306802572005
Option 2 ID : 6306802572002
Option 3 ID : 6306802572003
Option 4 ID : 6306802572004
Status : Answered
Chosen Option : 2

metallic sphere of radius 10 cm is melted and recast into 125 identical spheres.
the ratio of the surface area of the original sphere to the total surface area of 4
spheres so formed?

25 : 192

25 : 64

50 : 62

23 : 64

Question ID : 630680998325
Option 1 ID : 6306803917206
Option 2 ID : 6306803917203
Option 3 ID : 6306803917204
Option 4 ID : 6306803917205
Status : Not Answered
Chosen Option : --

ılone can do a piece of work in 11, 68 and 44 days respectively. They all started the gether, but A left after 4 days. In how many days, was the remaining work ted?

14

13

12

15

Question ID : 630680661602
Option 1 ID : 6306802590351
Option 2 ID : 6306802590350
Option 3 ID : 6306802590353
Option 4 ID : 6306802590352
Status : Answered
Chosen Option : 2

n was sitting inside train A, which was travelling at 75 km/h. Another train B whose vas 2.5 times the length of train A crossed the person in the opposite direction in 15 s. If the speed of train B was 45 km/h, the length (in metres) of train A is:

220

450

180

200

Question ID : 630680454438
Option 1 ID : 6306801774667
Option 2 ID : 6306801774668
Option 3 ID : 6306801774665
Option 4 ID : 6306801774666
Status : Not Attempted and Marked For Review
Chosen Option : --

6.2 : x and 2 : 6 :: 9 : y. What is the ratio of x to y?

32 : 13

31 : 15

35 : 25

29 : 16

Question ID : 630680801165
Option 1 ID : 6306803139221
Option 2 ID : 6306803139220
Option 3 ID : 6306803139223
Option 4 ID : 6306803139222
Status : Answered
Chosen Option : 2

ɜ: 38 - 8 ÷ 12 × 6

34

33

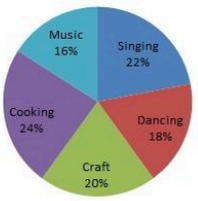
32

37

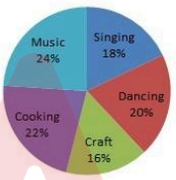
Question ID : 630680688616
Option 1 ID : 6306802697124
Option 2 ID : 6306802697125
Option 3 ID : 6306802697126
Option 4 ID : 6306802697127
Status : Answered
Chosen Option : 1

iven pie charts show the percentage of students of a college ed in different activities. Study the charts and answer the ion that follows.

ıumber of students = 1500



Total boys enrolled in these activities = 1000



is the ratio of the number of girls enrolled in singing to the er of boys enrolled in singing?

2 : 3

5 : 6

3 : 5

6 : 7

Question ID : 630680577880
Option 1 ID : 6306802260365
Option 2 ID : 6306802260368
Option 3 ID : 6306802260366
Option 4 ID : 6306802260367
Status : Answered
Chosen Option : 2

ılary was first reduced by 28% and subsequently raised by 20%. How much age was his final salary lower compared to his initial salary?

28

20

13.6

5.6

Question ID : 630680667556
Option 1 ID : 6306802613786

gth of a rectangular fenced area is 15 m more than its breadth. Its area is 31096 m^2.
dth (in m) is:

151

170

149

169

Question ID : 630680841451
Option 1 ID : 6306803296358
Option 2 ID : 6306803296359
Option 3 ID : 6306803296360
Option 4 ID : 6306803296357
Status : Not Attempted and Marked For Review
Chosen Option : --

n drove at 28 kmph for 2.5 hours, then increased his speed by 28 kmph, and reached
ination in another hour. Find the average speed (in kmph) of the person during the
urney.

37

39

34

36

Question ID : 630680894219
Option 1 ID : 6306803502895
Option 2 ID : 6306803502896
Option 3 ID : 6306803502894
Option 4 ID : 6306803502893
Status : Not Attempted and Marked For Review
Chosen Option : --

wheat is in the form of a cone of diameter 48 m and height 7 m.

ost of the canvas cloth required to just cover the heap if the cost of 1 m^2 canvas cloth is ₹25 (use $\pi = 3.14$)

80

96

96

00

Question ID : 630680650036
Option 1 ID : 6306802545190
Option 2 ID : 6306802545192
Option 3 ID : 6306802545189
Option 4 ID : 6306802545191
Status : Not Attempted and Marked For Review
Chosen Option : --

ılation of a village was 110000. It increased by 10% in the first year and increased in the second year. Its population after two years is _____.

143000

121000

132000

145200

Question ID : 630680591515
Option 1 ID : 6306802314530
Option 2 ID : 6306802314528
Option 3 ID : 6306802314529
Option 4 ID : 6306802314527
Status : Answered
Chosen Option : 4

ectual Potential Test

elow are two sets of numbers. Both the sets are formed using the same ıatical equations or follow a common pattern. Which of the given options follows the et of mathematical equations or patterns as the sets given in the question?
08 – 122 – 143 – 171; 629 – 636 – 650 – 671 – 699

200 – 207 – 221 – 242 – 270

186 – 371 – 557 – 928 – 1485

196 – 203 – 210 – 217 – 224

216 – 230 – 237 – 244 – 251

Question ID : 630680124784
Option 1 ID : 630680483976
Option 2 ID : 630680483974
Option 3 ID : 630680483975
Option 4 ID : 630680483977
Status : Answered
Chosen Option : 1

question is based on the following words.

MAT EAR HUT

each of the words, each letter is changed to the next in the English alphabetical order, how many words formed will have no vowel?

3

4

2

1

Question ID : 630680909683
Option 1 ID : 6306803563696
Option 2 ID : 6306803563697
Option 3 ID : 6306803563695
Option 4 ID : 6306803563694
Status : Answered
Chosen Option : 4

ıould come in place of the question mark (?) in the given series ?

' 219 179 142 ?

123

132

143

148

Question ID : 630680523594
Option 1 ID : 6306802046551
Option 2 ID : 6306802046550
Option 3 ID : 6306802046552
Option 4 ID : 6306802046553
Status : Not Attempted and Marked For Review
Chosen Option : --

ıuestion, a statement is followed by four conclusions. Find out which conclusion is
ɜed on the given statement.
ɛnt: R > G = K ≤ L < M < N
ɜions:

Only II is true

Neither I nor II is true

Both I and II are true

Only I is true

Question ID : 630680418997
Option 1 ID : 6306801634696
Option 2 ID : 6306801634698
Option 3 ID : 6306801634697
Option 4 ID : 6306801634695
Status : Answered
Chosen Option : 4

ɛrtain code language, 'COLD' is coded as '9724' and N' is coded as '8173'. What is the code for 'L' in the given language?

2

8

3

7

Question ID : 630680907985
Option 1 ID : 6306803557011
Option 2 ID : 6306803557013
Option 3 ID : 6306803557012
Option 4 ID : 6306803557010
Status : Answered
Chosen Option : 4

C, D, E and F live on six different floors of the same ing. The lowermost floor in the building is numbered 1, oor above it is numbered 2 and so on, till the topmost is numbered 6.
roduct of floors on which A and D live is 15. B lives ediately above F .The sum of floors on which E and D s 7.
many people live below D?

2

3

1

4

Question ID : 630680908048
Option 1 ID : 6306803557263
Option 2 ID : 6306803557264
Option 3 ID : 6306803557262
Option 4 ID : 6306803557265
Status : Answered
Chosen Option : 1

tain code language,
eans 'A is the mother of B',
eans 'A is the brother of B',
eans 'A is the wife of B',
eans 'A is the father of B' and
eans 'A is the daughter of B'.
n the above information, how is E related to P if 'E× G % K – L × N % P'?

Sister's son

Mother's mother

Daughter's son

Brother's wife

Question ID : 630680503105
Option 1 ID : 6306801966005
Option 2 ID : 6306801966006
Option 3 ID : 6306801966008
Option 4 ID : 6306801966007
Status : Answered
Chosen Option : 2

ond number in the given number pairs is obtained by performing certain
ıatical operation(s) on the first number. Select the option in which the numbers are
in the same way as are the numbers of the following pairs.

Operations should be performed on the whole numbers, without breaking down the
s into their constituent digits. E.g. 13 – Operations on 13 such as
subtracting/multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and
rforming mathematical operations on 1 and 3 is not allowed.)

7, 45

11, 116

4, 21

8, 68

Question ID : 630680493605
Option 1 ID : 6306801928148
Option 2 ID : 6306801928149
Option 3 ID : 6306801928150
Option 4 ID : 6306801928151
Status : Answered
Chosen Option : 2

ıould come in place of the question mark (?) in the given series based on the English
tical order?

RN, QSO, RTP, ?

SUQ

QSU

QUS

SQU

Question ID : 630680426527
Option 1 ID : 6306801664194
Option 2 ID : 6306801664197
Option 3 ID : 6306801664196
Option 4 ID : 6306801664195
Status : Answered
Chosen Option : 1

uestion, a statement is followed by four conclusions. Find out which conclusion is
ed on the given statements.

nt: K > L > M = H < J > F

ions:

Both I and II are true.

Neither I nor II is true.

Only II is true.

Only I is true.

Question ID : 6306801026843
Option 1 ID : 6306804030044
Option 2 ID : 6306804030045
Option 3 ID : 6306804030042
Option 4 ID : 6306804030043
Status : Answered
Chosen Option : 4

he number from among the given options that can replace the question mark (?) in
wing series.

25, 31, 37, ?

44

45

43

47

Question ID : 630680411217
Option 1 ID : 6306801603627
Option 2 ID : 6306801603625
Option 3 ID : 6306801603624
Option 4 ID : 6306801603626
Status : Answered
Chosen Option : 3

ould come in place of the question mark (?) in the given series based on the English
tical order?

K NQO RUS ?

VWY

WYV

WVY

VYW

Question ID : 630680435769
Option 1 ID : 6306801700986
Option 2 ID : 6306801700988
Option 3 ID : 6306801700987

of P, Q, R, S, T, U and V has an exam on a different day of
ek, starting from Monday and ending on Sunday of the
week.
an exam on Thursday. Exactly 4 people have their
ıs between P and Q, none of whom has an exam on
ay. U has an exam immediately before R. V does not
an exam on Friday. P does not have an exam after R.
among the following has an exam on Tuesday?

U

T

P

V

Question ID : 630680908055
Option 1 ID : 6306803557290
Option 2 ID : 6306803557291
Option 3 ID : 6306803557292
Option 4 ID : 6306803557293
Status : Answered
Chosen Option : 1

ole, U, V, W, X, Y and Z, are sitting in a straight row, facing north. Only one person sits
ght of Z. Only three people sit between Y and Z. Only U is sitting between W and X. X
s immediate neighbour.
sitting at the second position from the left end of the row?

W

X

U

V

Question ID : 630680520554
Option 1 ID : 6306802034643
Option 2 ID : 6306802034644
Option 3 ID : 6306802034641
Option 4 ID : 6306802034642
Status : Answered
Chosen Option : 1

ertain code language, 'TALE' is coded as '9284' and
' is coded as '1873'. What is the code for 'A' in the given
language?

2

8

1

3

Question ID : 630680907990
Option 1 ID : 6306803557032
Option 2 ID : 6306803557030
Option 3 ID : 6306803557031
Option 4 ID : 6306803557033
Status : Answered
Chosen Option : 2

ɨdded to each odd digit and 1 is subtracted from each even digit in the number
, what will be the sum of the digits that are third from the left and second from the

6

8

10

14

Question ID : 630680471144
Option 1 ID : 6306801840328
Option 2 ID : 6306801840329
Option 3 ID : 6306801840327
Option 4 ID : 6306801840330
Status : Answered
Chosen Option : 4

ɥuestion is based on the following words.

)PT ASH HUE

many letters are there between the second letter of the word from the right and the second letter of the first from the left?

4

1

3

2

Question ID : 630680909687
Option 1 ID : 6306803563713
Option 2 ID : 6306803563710
Option 3 ID : 6306803563712
Option 4 ID : 6306803563711
Status : Answered
Chosen Option : 2

f the following four word pairs are alike as these have the same relationship and thus ɹroup. Which word pair is the one that does not belong to that group?

Aphid : Paper

Termite : Wood

Locust : Plant

Moth : Wool

Question ID : 630680401356
Option 1 ID : 6306801565225
Option 2 ID : 6306801565227
Option 3 ID : 6306801565228
Option 4 ID : 6306801565226
Status : Answered
Chosen Option : 4

llowing number-pairs, the second number is obtained by performing certain
natical operations on the first number. Which numbers should replace X and Y so that
ern followed by the two numbers on the left side of :: is the same as that on the right
: ?
Operations should be performed on the whole numbers, without breaking down the
s into its constituent digits. E.g. 12 – Operations on 12 such as
subtracting/multiplying etc. to 12 can be performed. Breaking down 12 into 1 and 2
n performing mathematical operations on 1 and 2 is not allowed.)
:: 12 : Y

X = 11, Y = 141

X = 11, Y = 147

X = 13, Y = 144

X = 10, Y = 144

Question ID : 630680376990
Option 1 ID : 6306801469026
Option 2 ID : 6306801469024
Option 3 ID : 6306801469023
Option 4 ID : 6306801469025
Status : Not Answered
Chosen Option : --

P, Q, R, S, T, U and V has an exam on a different day of a week, starting from Monday
ing on Sunday of the same week.
n exam on Saturday. Only 4 people have exams between R and V, neither of whom
xam on Monday. P has an exam immediately after U and S has an exam
ately before U. V has an exam after P.
ny people have exams after P?

2

4

3

1

Question ID : 630680908057
Option 1 ID : 6306803557299
Option 2 ID : 6306803557301
Option 3 ID : 6306803557300
Option 4 ID : 6306803557298
Status : Not Answered
Chosen Option : --

e given statements and conclusions carefully. Assuming that the information given
atements is true, even if it appears to be at variance with commonly known facts,
which of the given conclusions logically follow(s) from the statements.

nts:
andies are juices.
ices are medicines.

ions:
candies are medicines.
medicines are not juices.

Both conclusions I and II follow.

Only conclusion II follows.

Neither conclusion I nor II follows.

Only conclusion I follows.

Question ID : 630680423282

sister of B. B is the father of C. C is the brother of D. D is the husband of E. How is A to E?

Husband's father's sister

Husband's father's sister

Husband's father's mother

Husband's mother's sister

Question ID : 630680422080
Option 1 ID : 6306801646751
Option 2 ID : 6306801646754
Option 3 ID : 6306801646753
Option 4 ID : 6306801646752
Status : Answered
Chosen Option : 1

eople, A, B, C, D, E, F and G are sitting in a straight line, facing north. Only three sit to the right of C. A sits second to the left of C. Only four people sit between A and ıe immediate neighbour of both C and G. D sits second to the left of B. Who sits at eme right of the line?

A

D

F

B

Question ID : 630680335633
Option 1 ID : 6306801305426
Option 2 ID : 6306801305425
Option 3 ID : 6306801305427
Option 4 ID : 6306801305428
Status : Answered
Chosen Option : 3

f the following word pairs are alike as they have the same relationship and hence group. Which word pair does NOT belong to that group?
ırds must be considered as meaningful English words and must not be grouped n the number of letters/number of consonants/vowels in the word.)

Esoteric - Arcane

Reticent - Taciturn

Mellifluous - Dulcet

Exhilarating - Dull

Question ID : 630680697401
Option 1 ID : 6306802731692
Option 2 ID : 6306802731690
Option 3 ID : 6306802731691
Option 4 ID : 6306802731689
Status : Not Answered
Chosen Option : --

ırts from Point A and drives 12 km towards East. He then takes a right turn, drives 3
ıs right and drives 5 km. He takes a final right turn, drives 3 km and stops at Point P.
(shortest distance) and towards which direction should he drive in order to reach
again? (All turns are 90-degree turns only unless otherwise specfied.)

5 km East

7 km East

7 km West

5 km West

Question ID : 630680574740
Option 1 ID : 6306802247767
Option 2 ID : 6306802247766
Option 3 ID : 6306802247765
Option 4 ID : 6306802247764
Status : Answered
Chosen Option : 3

ıdded to each digit in the number 6523847, what will be the difference between the
t and smallest digits in the new number thus formed?

7

6

5

4

Question ID : 630680373815
Option 1 ID : 6306801456532
Option 2 ID : 6306801456531
Option 3 ID : 6306801456533
Option 4 ID : 6306801456534
Status : Answered
Chosen Option : 2

**ch of the following words, each vowel is changed to the
following it in the English alphabetical order and each
ɔnant is changed to the letter preceding it in the English
ıbetical order. In how many letter-clusters thus formed
ıo vowel appear?**

IIT MUD LAD

4

3

2

1

Question ID : 630680909657
Option 1 ID : 6306803563593
Option 2 ID : 6306803563592
Option 3 ID : 6306803563591
Option 4 ID : 6306803563590
Status : Answered
Chosen Option : 1

of the following four word pairs are alike as they have the same relationship
is form a group. Which word pair DOES NOT belong to that group?

rds must be considered as meaningful English words and must not be related to
ner based on the number of letters/number of consonants/vowels in the word.)

Maple - Syrup

Mango - Juice

Tomato - Sauce

Banana - Peel

Question ID : 630680616321
Option 1 ID : 6306802411963
Option 2 ID : 6306802411964
Option 3 ID : 6306802411965
Option 4 ID : 6306802411966
Status : Answered
Chosen Option : 4

the following letter, number and symbol series and answer the question that
Counting to be done from left to right only.

@ 6 K S % 7 R Y # G D 4 2 & T 3 5 E * (Right)

ny such numbers are there which are immediately preceded by a symbol and also
ately followed by a letter?

1

3

2

4

Question ID : 630680908126
Option 1 ID : 6306803557578
Option 2 ID : 6306803557580
Option 3 ID : 6306803557579
Option 4 ID : 6306803557581
Status : Answered
Chosen Option : 3

eople, A, B, C, D, E, F and G are sitting in a straight line, facing north. Only four
sit between B and F. No one sits to the left of E. A sits third to the right of C. D sits
to the left of F. Who sits third to the right of E?

B

G

F

D

Question ID : 630680335637
Option 1 ID : 6306801305444
Option 2 ID : 6306801305442
Option 3 ID : 6306801305443
Option 4 ID : 6306801305441
Status : Answered
Chosen Option : 2

f the following letter-clusters should replace # and % so that the pattern and ship followed between the letter-cluster pair on the left side of :: is the same as that ight side of ::?

:: WYU : %

= HJF, % = RSQ

= HJF, % = RTP

= HLH, % = RTP

= HJE, % = QSO

Question ID : 630680811008
Option 1 ID : 6306803177462
Option 2 ID : 6306803177461
Option 3 ID : 6306803177463
Option 4 ID : 6306803177464
Status : Answered
Chosen Option : 2

even digits in the number 6895732 are added and all the odd digits in the same are added separately, then the respective resultant numbers will have ____ as a n divisor.

9

3

6

8

Question ID : 630680264615
Option 1 ID : 6306801027966
Option 2 ID : 6306801027963
Option 3 ID : 6306801027964
Option 4 ID : 6306801027965
Status : Answered
Chosen Option : 4

f the following letter-clusters should replace # and % so that the pattern and ship followed between the letter-cluster pair on the left side of :: is the same as that ight side of ::?

: MJN : %

= JGK, % = KHL

= JGI, % = KHL

= JGK, % = KIL

= JGK, % = KHM

Question ID : 630680628362
Option 1 ID : 6306802459470
Option 2 ID : 6306802459472
Option 3 ID : 6306802459473
Option 4 ID : 6306802459471
Status : Answered
Chosen Option : 1

e given statements and conclusions carefully. Assuming that the information given
:atements is true, even if it appears to be at variance with commonly known facts,
which of the given conclusions logically follow(s) from the statements.
ents:
are not sheep.
ats are tortoises.
ions:
tortoises are not sheep.
eep are not cats.

Only conclusion I follows

Only conclusion II follows

Both the conclusions follow

Neither conclusion I nor II follows

Question ID : 630680241391
Option 1 ID : 630680935971
Option 2 ID : 630680935972
Option 3 ID : 630680935973
Option 4 ID : 630680935974
Status : Answered
Chosen Option : 4

ain Knowledge

ular velocity of a pinion and gear is 150 rpm and 100 rpm, respectively. The distance
the point of engagement and the pitch point is 20 mm and that between the pitch
d the point of disengagement is 25 mm. Find the sliding velocity in terms of m/s at
inning of the engagement.

0.410

0.523

0.104

0.654

Question ID : 630680102106
Option 1 ID : 630680396783
Option 2 ID : 630680396780
Option 3 ID : 630680396782
Option 4 ID : 630680396781
Status : Not Answered
Chosen Option : --

, how is the expected time (TE) for an activity calculated?

TE = (Optimistic time + 2 × Most likely time + Pessimistic time) / 4

TE = (Optimistic time + 4 × Most likely time + Pessimistic time) / 6

TE = (Optimistic time + Most likely time + Pessimistic time) / 3

TE = (Optimistic time + 2 × Most likely time + Pessimistic time) / 3

Question ID : 6306801000164
Option 1 ID : 6306803924789
Option 2 ID : 6306803924788
Option 3 ID : 6306803924787
Option 4 ID : 6306803924790
Status : Answered
Chosen Option : 2

ıf the following properties is the ability of the moulding material to withstand the ıperatures of the molten metal so that it does NOT cause fusion?

Dry strength

Hot strength

Refractoriness

Green strength

Question ID : 630680121416
Option 1 ID : 630680470623
Option 2 ID : 630680470625
Option 3 ID : 630680470624
Option 4 ID : 630680470622
Status : Answered
Chosen Option : 3

ıling using similitude, which type of similarity is required to ensure that the forces ın the model are in the same ratio as those acting on the prototype?

Dynamic similarity

Geometric similarity

Kinematic similarity

Material similarity

Question ID : 6306801004610
Option 1 ID : 6306803942327
Option 2 ID : 6306803942325
Option 3 ID : 6306803942326
Option 4 ID : 6306803942328
Status : Answered
Chosen Option : 1

ıf the following is NOT typically used to evaluate the performance of forecasting ?

Mean absolute error

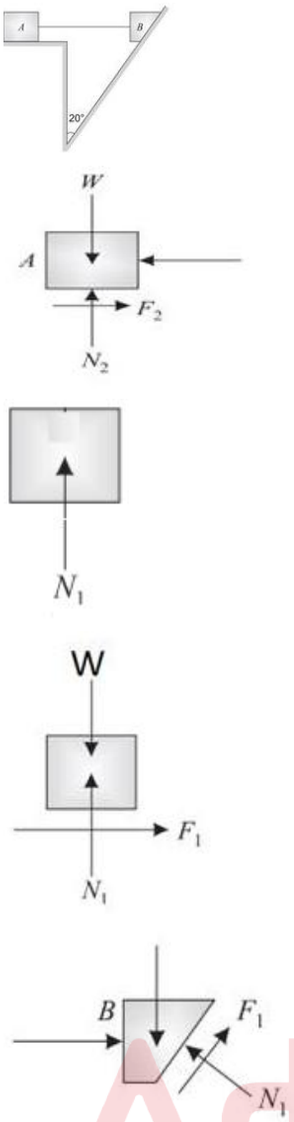
R-squared (coefficient of determination)

Cross-correlation function

Root mean squared error

Question ID : 6306801004741
Option 1 ID : 6306803942829
Option 2 ID : 6306803942832
Option 3 ID : 6306803942831
Option 4 ID : 6306803942830
Status : Answered
Chosen Option : 3

. and B are connected by a rod shown in the figure. The correct free body diagram for body A is:



Question ID : 63068081414
Option 1 ID : 630680315688
Option 2 ID : 630680315690
Option 3 ID : 630680315691
Option 4 ID : 630680315689
Status : Answered
Chosen Option : 1

f the following is a standard form of a Linear Programming Problem (LPP)?

Either maximisation or minimisation with both equality and inequality constraints

Maximisation with equality constraints only

Either maximisation or minimisation with equality constraints only

Minimisation with inequality constraints only

Question ID : 6306801000096

e Economic Order Quantity (EOQ) model, what is the ary objective?

Minimise the total number of orders placed annually

Maximise the inventory turnover rate

Maximise the service level to customers

Minimise the total cost, including ordering and holding

Question ID : 6306801000019
Option 1 ID : 6306803924212
Option 2 ID : 6306803924214
Option 3 ID : 6306803924215
Option 4 ID : 6306803924213
Status : Answered
Chosen Option : 4

of mass 2 kg is running at a speed of 10 rad/sec. The distance between the centre of and shaft axis is 10 mm, the additional deflection induced in the shaft during the is 40 mm. The radially outward force exerted on the shaft is _____.

25 N

20 N

10 N

5 N

Question ID : 630680120808
Option 1 ID : 630680468209
Option 2 ID : 630680468208
Option 3 ID : 630680468207
Option 4 ID : 630680468206
Status : Answered
Chosen Option : 3

erence between the total energy line and hydraulic gradient line is equal to:

piezometric head

datum head

pressure head

velocity head

Question ID : 63068099468
Option 1 ID : 630680386579
Option 2 ID : 630680386576
Option 3 ID : 630680386577
Option 4 ID : 630680386578
Status : Answered
Chosen Option : 4

ıt exchanger in which the cold fluid remains at a constant temperature while the ıture of hot fluid gradually decreases from inlet to outlet is called:

evaporator

recuperative heat exchanger

regenerative heat exchanger

condenser

Question ID : 63068093426
Option 1 ID : 630680362402
Option 2 ID : 630680362401
Option 3 ID : 630680362400
Option 4 ID : 630680362399
Status : Answered
Chosen Option : 1

ow curve equation, the parameter 'n' represents:

strength coefficient

Young's modulus

strain hardening exponent

stress coefficient

Question ID : 630680144844
Option 1 ID : 630680560415
Option 2 ID : 630680560417
Option 3 ID : 630680560414
Option 4 ID : 630680560416
Status : Answered
Chosen Option : 3

ıcipal normal strains measured at a point are 0.002 and 0.001.The material has the modulus as 100GPa and Poisson's ratio as 0.3.The value of the largest normal s _____MPa.

150

252

120

80

Question ID : 63068069872
Option 1 ID : 630680270144
Option 2 ID : 630680270143
Option 3 ID : 630680270142
Option 4 ID : 630680270145
Status : Not Answered
Chosen Option : --

a psychrometric process, if the moisture content of the air is increased along with ing the air temperature, then the process is called:

heating and dehumidification

cooling and dehumidification

heating and humidification

cooling and humidification

Question ID : 630680101183
Option 1 ID : 630680393255
Option 2 ID : 630680393253
Option 3 ID : 630680393254
Option 4 ID : 630680393252
Status : Answered
Chosen Option : 4

er a cylindrical body immersed in a fluid flow. The flow around the body is steady and . Which of the following statements best describes the nature of drag and lift forces n the cylinder?

The drag force is primarily due to friction drag, and the lift force is zero due to the rical shape.

The drag force is primarily due to pressure drag, and the lift force can exist due to hedding.

The drag force is a combination of pressure and friction drag, while the lift force is a symmetrical body.

The drag force is negligible compared to the lift force due to the body's shape and ion.

Question ID : 6306801004540
Option 1 ID : 6306803942053
Option 2 ID : 6306803942054
Option 3 ID : 6306803942055
Option 4 ID : 6306803942056
Status : Answered
Chosen Option : 1

the primary purpose of using the moving average method in time series forecasting?

To measure the correlation between two time series

To smooth out short-term fluctuations and highlight longer-term trends

To identify the trend component of the data

To predict future values based on linear regression

Question ID : 6306801001466
Option 1 ID : 6306803930030
Option 2 ID : 6306803930028
Option 3 ID : 6306803930027
Option 4 ID : 6306803930029
Status : Answered
Chosen Option : 4

nderdamped vibrating system, the consecutive amplitudes x_1, x_2 and x_3 are:

in arithmetic progression

in geometric progression

equal in magnitude

in harmonic progression

Question ID : 630680120811
Option 1 ID : 630680468218
Option 2 ID : 630680468219
Option 3 ID : 630680468221
Option 4 ID : 630680468220
Status : Answered
Chosen Option : 2

correct relation between the throat thickness and the leg length for the strength of fillet welds.

The leg length (h) = 1.414 throat thickness (t)

Throat thickness (t) = 0.707 the leg length (h)

Throat thickness (t) = 1.414 the leg length (h)

The leg length (h) = 0.707 throat thickness (t)

Question ID : 630680118533
Option 1 ID : 630680459236
Option 2 ID : 630680459234
Option 3 ID : 630680459237
Option 4 ID : 630680459235
Status : Answered
Chosen Option : 2

charge of water through a broad crested weir of width 6m is $12m^3$/sec, when the f the flow of water is 1.2m. Calculate the specific energy of the flowing water.

2.357 m

1.98 m

1.342 m

1.789 m

Question ID : 630680103445
Option 1 ID : 630680402025
Option 2 ID : 630680402023
Option 3 ID : 630680402026
Option 4 ID : 630680402024
Status : Answered
Chosen Option : 4

erted gear train, the number of teeth on gears A, B and C are 28, 46 and 56, ively. Gear B-C is a compound gear. Gear A meshes with gear B and gear C meshes ar D. Gears A and C have module of 6 mm and 4 mm, respectively. The number of gear D is:

55 teeth

18 teeth

38 teeth

10 teeth

Question ID : 630680101115
Option 1 ID : 630680392984
Option 2 ID : 630680392986
Option 3 ID : 630680392987
Option 4 ID : 630680392985
Status : Answered
Chosen Option : 1

the primary objective of the assignment problem?

To minimise the total cost or time of assigning tasks to agents

To maximise the total cost of assigning tasks to agents

To assign tasks to agents based on their preferences

To find the shortest path in a network

Question ID : 6306801000058
Option 1 ID : 6306803924368
Option 2 ID : 6306803924367
Option 3 ID : 6306803924369
Option 4 ID : 6306803924370
Status : Answered
Chosen Option : 1

: plates subjected to a tensile force 'P' are connected together by means of a double- utt joint. The force 'P' is 200 kN; diameter of the rivet is 20 mm; thickness of the plate n and width of the plate (w) is 150 mm. The number of rivets is 5 and the sible stresses in tension, compression and shear are 80 N/mm^2, 120 N/mm^2 and 70 respectively. The efficiency of the joint is _____.

70.25%

72.50%

73.33%

74.62%

Question ID : 630680167612
Option 1 ID : 630680649077
Option 2 ID : 630680649076
Option 3 ID : 630680649078
Option 4 ID : 630680649079
Status : Not Answered
Chosen Option : --

f the following coordinate systems is useful for the systems which have symmetry point?

Cylindrical coordinates

Rectangular coordinates

Cartesian coordinates

Spherical coordinates

Question ID : 630680122344
Option 1 ID : 630680474320
Option 2 ID : 630680474318
Option 3 ID : 630680474319
Option 4 ID : 630680474321
Status : Answered
Chosen Option : 4

locity at the inlet for a horizontal pipe is given $u = 3V_0\sqrt{\left(1-\frac{r^2}{a^2}\right)}$ where r is dius and "a" is the radius of the pipe. The expression for the momentum at let is _____.

$1.5\pi\rho V_0^2 r^2$

$4.5\pi\rho V_0^2 r^2$

$2.5\pi\rho V_0^2 r^2$

$3.5\pi\rho V_0^2 r^2$

Question ID : 630680136545
Option 1 ID : 630680528801
Option 2 ID : 630680528800
Option 3 ID : 630680528798
Option 4 ID : 630680528799
Status : Not Answered
Chosen Option : --

ng, the element that serves as a reservoir to compensate for shrinkage is:

riser

ingate

runner

sprue

Question ID : 630680120108
Option 1 ID : 630680465468
Option 2 ID : 630680465469
Option 3 ID : 630680465467
Option 4 ID : 630680465466
Status : Answered
Chosen Option : 1

___ is a non-graduated linear measurement.

Vernier height gauge

Dial indicator

Vernier depth gauge

Telescopic gauge

Question ID : 630680110572
Option 1 ID : 630680428434
Option 2 ID : 630680428437
Option 3 ID : 630680428435
Option 4 ID : 630680428436
Status : Answered
Chosen Option : 1

an unbalanced transportation problem adjusted to become balanced?

By introducing a dummy row if the total supply exceeds the total demand

By reducing the number of rows and columns in the cost matrix

By changing the costs of transportation in the cost matrix

By eliminating the lowest cost cells from the cost matrix

Question ID : 6306801000535
Option 1 ID : 6306803926067
Option 2 ID : 6306803926068
Option 3 ID : 6306803926069
Option 4 ID : 6306803926066
Status : Answered
Chosen Option : 1

on having 24 teeth drives a gear having 72 teeth. The profile of the gear is te with 20° pressure angle, 12 mm module and 12 mm addendum. Find the t ratio.

2.7

2.6

1.6

1.7

Question ID : 630680101112
Option 1 ID : 630680392972
Option 2 ID : 630680392975
Option 3 ID : 630680392974
Option 4 ID : 630680392973
Status : Not Answered
Chosen Option : --

of stress at a point is described by the $\begin{bmatrix} 10 & 0 \\ 0 & -20 \end{bmatrix} MPa$. The magnitude of the maximum shear stress is ___.

-20 MPa

20 MPa

10 MPa

15 MPa

Question ID : 63068069857
Option 1 ID : 630680270083
Option 2 ID : 630680270084
Option 3 ID : 630680270082
Option 4 ID : 630680270085
Status : Answered
Chosen Option : 4

y supported circular shaft of 10-m length is subjected to a 20-kN point load in the of the shaft. The shaft carries 30 kW at a speed of 180 rpm. Find the diameter of the the maximum shear stress in the shaft is 20 MPa.

58.38 mm

233.54 mm

467.09 mm

116.77 mm

Question ID : 630680110598
Option 1 ID : 630680428538
Option 2 ID : 630680428540
Option 3 ID : 630680428541
Option 4 ID : 630680428539
Status : Answered
Chosen Option : 1

ek word 'therme' means:

energy

power

work

heat

Question ID : 630680147607
Option 1 ID : 630680571166
Option 2 ID : 630680571168
Option 3 ID : 630680571169
Option 4 ID : 630680571167
Status : Answered
Chosen Option : 4

ormation of a bar of uniform section under its own weight is _____ the
ation of the bar under the axial load equal to the weight of the body.

equal to

half of

twice

four times of

Question ID : 630680110595
Option 1 ID : 630680428528
Option 2 ID : 630680428527
Option 3 ID : 630680428526
Option 4 ID : 630680428529
Status : Answered
Chosen Option : 2

it temperatures of hot and cold fluids are equal, in case of parallel flow heat
ger, then which of the following will be the LMTD?

Zero

Cannot be determined

Highest

Lowest

Question ID : 630680110530
Option 1 ID : 630680428276
Option 2 ID : 630680428277
Option 3 ID : 630680428274
Option 4 ID : 630680428275
Status : Answered
Chosen Option : 2

ular displacement of a body is a function of time and is given by equation θ= 10 +
where tis in seconds. The angular velocity, whent = 5 seconds is:

93rad/sec

73rad/sec

63rad/sec

53rad/sec

Question ID : 63068081387
Option 1 ID : 630680315582
Option 2 ID : 630680315580
Option 3 ID : 630680315581
Option 4 ID : 630680315583
Status : Answered
Chosen Option : 3

vo shafts are joined in series and single torque is applied, both shafts are subjected ame torque. The two same shafts are joined in parallel having the same single Find the product of angle of twist when the shafts are in series and parallel if the f two shafts is same.

$(G_1 J_1 + G_2 J_2) / T^2L^2$

$T^2L^2/G_1G_2J_1J_2$

$T^2L^2/(G_1 J_1 + G_2 J_2)$

$G_1G_2J_1J_2 / T^2L^2$

Question ID : 630680137603
Option 1 ID : 630680532781
Option 2 ID : 630680532779
Option 3 ID : 630680532780
Option 4 ID : 630680532778
Status : Answered
Chosen Option : 2

ation of motion for a simply supported beam carrying a point load at the centre is
/
10t.The point mass at the centre of the beam is 10kg.What is the stiffness of the

500 N/m

1000 N/m

750 N/m

250 N/m

Question ID : 630680120807
Option 1 ID : 630680468202
Option 2 ID : 630680468204
Option 3 ID : 630680468203
Option 4 ID : 630680468205
Status : Answered
Chosen Option : 2

wo-Phase Method, which of the following statements is true about Phase II?

Phase II involves solving the linear programming problem with the original objective , starting from the feasible solution obtained in Phase I.

Phase II is used to minimise the sum of artificial variables added during Phase I.

Phase II is used to determine the feasibility of the solution found in Phase I.

Phase II involves adding more artificial variables to refine the feasible solution found e I.

Question ID : 6306801000446
Option 1 ID : 6306803925715
Option 2 ID : 6306803925716
Option 3 ID : 6306803925714
Option 4 ID : 6306803925717
Status : Not Answered
Chosen Option : --

of turbulent boundary layer, the velocity distribution:

Follows Prandtl one-seventh power law

Cannot be predicted

Follows linear law

Follows parabolic law

Question ID : 630680134276
Option 1 ID : 630680519951
Option 2 ID : 630680519953
Option 3 ID : 630680519952
Option 4 ID : 630680519950
Status : Answered
Chosen Option : 1

the purpose of a slack variable in a Linear Programming Problem?

To convert a constraint into an equation when the constraint is a$\leqq$ type

To reduce the number of variables in the problem

To convert a constraint into an equation when the constraint is a$\geq$ type

To represent the objective function

Question ID : 6306801000118
Option 1 ID : 6306803924603
Option 2 ID : 6306803924605
Option 3 ID : 6306803924604
Option 4 ID : 6306803924606
Status : Answered
Chosen Option : 1

f the following statements is WRONG about a black body?

It is a good absorber.

It is opaque.

It is a diffuse emitter.

It is a perfect emitter.

Question ID : 63068093414
Option 1 ID : 630680362352
Option 2 ID : 630680362354
Option 3 ID : 630680362353
Option 4 ID : 630680362351
Status : Answered
Chosen Option : 4

f the following moulding methods requires vacuum?

Rotational moulding

Injection moulding

Vacuum moulding

Shell moulding

Question ID : 630680144836
Option 1 ID : 630680560385

y supported circular shaft of 4-m length can sustain a maximum load of 100 kN at its nt. The bending stress is 1.5 times of the shear stress. What is the value of the moment in a beam?

1000 kN-m

10 kN-m

100 kN-m

1 kN-m

Question ID : 630680117130
Option 1 ID : 630680453809
Option 2 ID : 630680453807
Option 3 ID : 630680453808
Option 4 ID : 630680453806
Status : Answered
Chosen Option : 3

ritical Path Method (CPM) , what is the primary purpose of identifying the critical

To calculate the average time required for project completion

To determine the least expensive way to complete the project

To identify the longest sequence of dependent tasks that dictates the project's ion time

To find the most efficient allocation of resources across tasks

Question ID : 6306801000131
Option 1 ID : 6306803924657
Option 2 ID : 6306803924655
Option 3 ID : 6306803924656
Option 4 ID : 6306803924658
Status : Answered
Chosen Option : 3

pressure of 25 kPa is measured at a location in Shimla, where atmospheric pressure is 77 kPa. Determine the pressure (in millimetre of Hg). Given specific gravity of Hg = 13.6, density of water (ρ_w)= 1000 kg/m^3 and g s^2.

194

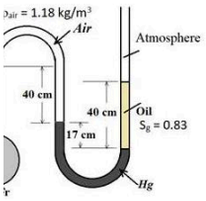
389

584

97

Question ID : 63068081901
Option 1 ID : 630680317636
Option 2 ID : 630680317637
Option 3 ID : 630680317639
Option 4 ID : 630680317638
Status : Answered
Chosen Option : 2

e the gauge pressure (in kN/m^2) at point A shown in the following figure. Specific weight of water is given
$/m^3$. Specific gravity of Hg is 13.6. Acceleration due to gravity (g) = 9.81 m/s^2.



-8.79

−19.15

-14.36

-10.57

Question ID : 63068081926
Option 1 ID : 630680317736
Option 2 ID : 630680317739
Option 3 ID : 630680317738
Option 4 ID : 630680317737
Status : Not Answered
Chosen Option : --

pipe with a diameter of 0.2 m is connected to a reservoir, and water flows into the
m the reservoir. The velocity of water in the pipe is 2 m/s. The entrance to the pipe is
dged. What is the head loss due to the entrance of the pipe?

0.201 m

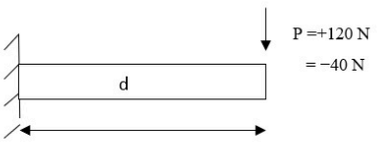
0.301 m

0.401 m

0.102 m

Question ID : 6306801004515
Option 1 ID : 6306803941958
Option 2 ID : 6306803941959
Option 3 ID : 6306803941960
Option 4 ID : 6306803941957
Status : Answered
Chosen Option : 1

ircular cantilever shaft is subjected to ultimate strength S_{ut} = 500 N/mm^2 and yielding strength S_{yt} = 260
s shown in the figure. The force P acting at the free end varies from −40 to +120 N. The factor of safety
at is the diameter of the beam for the corrected endurance limit stress S_e = 120 N/mm^2 and ratio of
$_n$ = 2?



L = 100 mm

11.00 mm

10.50 mm

11.50 mm

12.00 mm

Question ID : 630680110234
Option 1 ID : 630680427301
Option 2 ID : 630680427302
Option 3 ID : 630680427300
Option 4 ID : 630680427299
Status : Not Answered
Chosen Option : --

ıt plate in a steady incompressible flow, which of the following statements about
ry layer thickness is generally correct?

The boundary layer thickness decreases with increasing Reynolds number.

The boundary layer thickness is independent of the Reynolds number.

The boundary layer thickness increases with increasing distance from the leading
the plate and depends on the Reynolds number.

The boundary layer thickness increases linearly with distance from the leading edge
late.

Question ID : 6306801004657
Option 1 ID : 6306803942510
Option 2 ID : 6306803942511
Option 3 ID : 6306803942512
Option 4 ID : 6306803942509
Status : Answered
Chosen Option : 3

e of a cam is defined by which of the following terms?

Pitch circle

Prime circle

Base circle

Pitch curve

Question ID : 630680101106
Option 1 ID : 630680392949
Option 2 ID : 630680392951
Option 3 ID : 630680392948
Option 4 ID : 630680392950
Status : Answered

sible power cycle operates with temperature limits of 800 K and 300 K. If it takes 560
eat, what would be the unavailable work?

200 KJ

180 KJ

190 KJ

210 KJ

Question ID : 630680116719
Option 1 ID : 630680452165
Option 2 ID : 630680452162
Option 3 ID : 630680452164
Option 4 ID : 630680452163
Status : Answered
Chosen Option : 4

ansition temperature is:

not related to polymers

related to crystalline polymers

related to amorphous polymers

related to both amorphous polymers and crystalline polymers

Question ID : 63068094478
Option 1 ID : 630680366610
Option 2 ID : 630680366608
Option 3 ID : 630680366607
Option 4 ID : 630680366609
Status : Answered
Chosen Option : 3

ever beam AB of span L m is fixed at end A and rigidly propped at the free end and is
ed to the uniform distributed load w N/m over the complete span of the beam. Find
reaction at the propped end if the beam caries flexural rigidity EI.

(0.875)wL

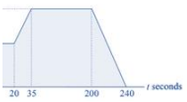
(0.125)wL

(0.625)wL

(0.375)wL

Question ID : 630680110586
Option 1 ID : 630680428493
Option 2 ID : 630680428490
Option 3 ID : 630680428492
Option 4 ID : 630680428491
Status : Answered
Chosen Option : 4

on curve of a particle moving on the rectilinear path is shown in the given figure. The total distance travelled in
; _____m.



5500

4725

6000

4900

Question ID : 63068081384
Option 1 ID : 630680315570
Option 2 ID : 630680315571
Option 3 ID : 630680315569
Option 4 ID : 630680315568
Status : Answered
Chosen Option : 2

sphere, if the Poisson's ratio increases, the longitudinal strain _____.

increases

does not change

decreases

increases curvilinearly

Question ID : 630680110604
Option 1 ID : 630680428563
Option 2 ID : 630680428564
Option 3 ID : 630680428562
Option 4 ID : 630680428565
Status : Answered
Chosen Option : 3

ıe flow curve equation in metal forming, the behaviour of metals can be
ımated in which region?

Elastic region

Plastic region

Elasto-plastic region

Fracture region

Question ID : 630680120114
Option 1 ID : 630680465490
Option 2 ID : 630680465491
Option 3 ID : 630680465492
Option 4 ID : 630680465493
Status : Answered
Chosen Option : 2

nge in internal energy of a closed system undergoing a cycle

is unity

depends on the types of process constituting the cycle

is zero

is undefined

Question ID : 630680116648
Option 1 ID : 630680451878
Option 2 ID : 630680451881
Option 3 ID : 630680451880
Option 4 ID : 630680451879
Status : Answered
Chosen Option : 3

LT system, the dynamic viscosity is represented by _____.

$[M][L]^{-1}[T]^{-1}$

$[M][L][T]^{-1}$

$[M][L][T]^{-2}$

$[M][L]^{-1}[T]^{-2}$

Question ID : 630680103414
Option 1 ID : 630680401900
Option 2 ID : 630680401902
Option 3 ID : 630680401899
Option 4 ID : 630680401901
Status : Answered
Chosen Option : 1

ng to the Prandtl's mixing length theory, the turbulent shear stress is:

$\rho l^2 \left(\frac{du}{dy}\right)^2$

$\rho^2 l \left(\frac{du}{dy}\right)^2$

$\rho^2 l \frac{du}{dy}$

$\rho l^2 \frac{du}{dy}$

Question ID : 63068099492
Option 1 ID : 630680386675
Option 2 ID : 630680386674
Option 3 ID : 630680386672
Option 4 ID : 630680386673
Status : Answered
Chosen Option : 1

f the following is/are the assumptions of Fourier's law of heat conduction?
uction of heat takes place under unsteady state conditions.
eat flow is unidirectional.
is no internal heat generation.

Both 2 and 3

All 1, 2 and 3

Only 1

Both 1 and 2

Question ID : 630680120037
Option 1 ID : 630680465184
Option 2 ID : 630680465185
Option 3 ID : 630680465182
Option 4 ID : 630680465183
Status : Answered
Chosen Option : 1

locity distribution is $\frac{u}{U} = 1 - \frac{y}{\delta}$ where u is the velocity at a distance y from the
Also, u= U at y= δ, where δ is boundary layer thickness. The momentum
ess ɵ will be:

$\frac{\delta}{8}$

$\frac{\delta}{6}$

0

$\frac{\delta}{2}$

Question ID : 630680108840
Option 1 ID : 630680422252
Option 2 ID : 630680422255
Option 3 ID : 630680422253
Option 4 ID : 630680422254
Status : Answered
Chosen Option : 4

f the following mechanisms is NOT an inversion of the double slider mechanism?

Oldham's coupling

Pendulum pump

Elliptical trammel

Donkey pump

Question ID : 630680101098
Option 1 ID : 630680392917
Option 2 ID : 630680392919
Option 3 ID : 630680392918
Option 4 ID : 630680392916
Status : Answered
Chosen Option : 2

-stage compression, the compressed air leaving the first stage is cooled up to the
t temperature with the help of a device called:

a diffuser

an intercooler

a throttle valve

a condenser

Question ID : 630680101187
Option 1 ID : 630680393271
Option 2 ID : 630680393269
Option 3 ID : 630680393268
Option 4 ID : 630680393270
Status : Answered
Chosen Option : 2

er surfaces of walls, floors and ceiling of a house are observed to be at an average
ature of 15°C in winters and 30°C in summers. Now, consider a person standing in a
aintained at 22°C.The surface area and the average outer surface temperature of the
are 1.4 $m^2$and 35°C, respectively.The rate of radiation heat transfer (in W) during
is _____. (Take emissivity = 0.95)

114.16

159.83

166.84

152.31

Question ID : 630680120045
Option 1 ID : 630680465217
Option 2 ID : 630680465214
Option 3 ID : 630680465216
Option 4 ID : 630680465215
Status : Not Answered
Chosen Option : --

atic bar of cross section area A and length L is subjected to the weight per unit
of the bar w. The total strain energy stored in the bar is U and the elastic modulus of
Find the elongation Δ in consideration of strain energy due to its own weight.

U / 3W

U / W

2 U / 3W

3U / W

Question ID : 630680137608
Option 1 ID : 630680532799
Option 2 ID : 630680532801
Option 3 ID : 630680532800
Option 4 ID : 630680532798
Status : Answered
Chosen Option : 3

ımber is used to describe which of the following phenomena?

The ratio of gravitational forces to inertial forces

The ratio of pressure forces to inertial forces

The ratio of inertial forces to viscous forces

The ratio of dynamic pressure to hydrostatic pressure

Question ID : 6306801004629
Option 1 ID : 6306803942403
Option 2 ID : 6306803942402
Option 3 ID : 6306803942401
Option 4 ID : 6306803942404
Status : Answered
Chosen Option : 2

ıf the following statements is FALSE in case of ceramics compared with metals?

Bonds are stronger

Electrical resistance is less

Hardness is more

Thermal conductivity is less

Question ID : 630680203796
Option 1 ID : 630680790383
Option 2 ID : 630680790386
Option 3 ID : 630680790384
Option 4 ID : 630680790385
Status : Answered
Chosen Option : 1

the primary purpose of using the moving average method in forecasting?

To smooth out short-term fluctuations and highlight longer-term trends

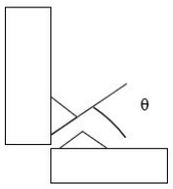
To predict future values based on linear regression

To measure the correlation between two time series

To identify the trend component of the data

Question ID : 6306801000613
Option 1 ID : 6306803926311
Option 2 ID : 6306803926312
Option 3 ID : 6306803926313
Option 4 ID : 6306803926310
Status : Answered
Chosen Option : 2

e given figure and answer the question that follows.



the plane of maximum shear stress in the conventional fillet weld with the load parallel to the weld?

$\theta = 30°$

$\theta = 67.2°$

$\theta = 45°$

$\theta = 60°$

Question ID : 630680110242
Option 1 ID : 630680427334
Option 2 ID : 630680427332
Option 3 ID : 630680427331
Option 4 ID : 630680427333
Status : Answered
Chosen Option : 3

as 6mm diameter and 120mm length. The thermal conductivity of the fin material is $^{-1}K^{-1}$. One end of the fin is maintained at 150°C and its remaining surface is l to ambient air at 50°C. If the convective heat transfer coefficient is $40Wm^{-2}K^{-1}$, loss (in W) from the fin is:

7

4

6

5

Question ID : 630680120072
Option 1 ID : 630680465322
Option 2 ID : 630680465324
Option 3 ID : 630680465325
Option 4 ID : 630680465323
Status : Not Answered
Chosen Option : --

iron body is subjected to the ultimate stress σ_{ult} = 100 MPa and the factor of is 2. Find the working stress for the body at that point.

50 MPa

40 MPa

45 MPa

60 MPa

Question ID : 630680118530
Option 1 ID : 630680459222

e distance from a surface, u is the velocity and U is the free stream velocity, then
f the following are the boundary conditions for velocity profiles over a flat plate?
: 0, u = 0 and du/dy has some finite value
δ, u = U and du/dy = 0.
δ, u = U and du/dy has some finite value.

1,2 and 3 are correct

2 and 3 are correct

1 and 3 are correct

1 and 2 are correct.

Question ID : 630680134277
Option 1 ID : 630680519954
Option 2 ID : 630680519955
Option 3 ID : 630680519956
Option 4 ID : 630680519957
Status : Answered
Chosen Option : 4

east Cost Method for solving the transportation problem, which step is performed

Identify the cell with the lowest cost and allocate as many units as possible.

Allocate units to the cell with the highest cost.

Adjust the supply and demand values by adding a dummy row or column.

Cross out rows or columns with zero supply or demand.

Question ID : 6306801000500
Option 1 ID : 6306803925932
Option 2 ID : 6306803925930
Option 3 ID : 6306803925933
Option 4 ID : 6306803925931
Status : Answered
Chosen Option : 1

electric refrigeration is based on:

Peltier effect

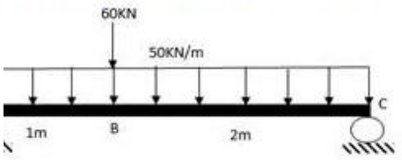
Adiabatic demagnetisation

Joule-Thomson throttling

Joule effect

Question ID : 630680116735
Option 1 ID : 630680452228
Option 2 ID : 630680452229
Option 3 ID : 630680452227
Option 4 ID : 630680452226
Status : Answered
Chosen Option : 1

value of the maximum shear force is _____KN.



115

100

95

125

Question ID : 63068069886
Option 1 ID : 630680270201
Option 2 ID : 630680270199
Option 3 ID : 630680270198
Option 4 ID : 630680270200
Status : Answered
Chosen Option : 1

equation can be expressed as:

$TdS = C_v dT + \frac{T\beta}{k} dV$

$TdS = C_v dT + \frac{Tk}{\beta} dV$

$TdS = C_v dT + \frac{T}{k} dV$

$TdS = C_v dT + \frac{T\beta}{k} dp$

Question ID : 630680116726
Option 1 ID : 630680452190
Option 2 ID : 630680452192
Option 3 ID : 630680452191
Option 4 ID : 630680452193
Status : Answered
Chosen Option : 1

tock is used to _____.

eliminate the need for forecasting

protect against variability in demand and lead time

increase the reorder point

decrease the carrying cost

Question ID : 6306801000042
Option 1 ID : 6306803924307
Option 2 ID : 6306803924306
Option 3 ID : 6306803924304
Option 4 ID : 6306803924305
Status : Answered

ciency of a riveted joint is defined as the ratio of the strength (tensile P_t or shearing ushing P_c) of the riveted joint to the strength of unriveted solid plate. Here the ı of the riveted joint and the strength of the unriveted solid plate, respectively, are:

lowest of P_t, P_s, P_c and compressive strength of plate

highest of P_t, P_s, P_c and compressive strength of plate

lowest of P_t, P_s, P_c and tensile strength of plate

highest of P_t, P_s, P_c and tensile strength of plate

Question ID : 630680110241
Option 1 ID : 630680427329
Option 2 ID : 630680427330
Option 3 ID : 630680427328
Option 4 ID : 630680427327
Status : Answered
Chosen Option : 3

ple gear train, gears X and Y have 48 teeth and the idler gear, in between the gears X as 24 teeth. Find the speed of gear Y, if the speed of gear X is 210 rpm clockwise.

840 rpm clockwise

210 rpm clockwise

210 rpm counter-clockwise

420 rpm counter-clockwise

Question ID : 630680101113
Option 1 ID : 630680392978
Option 2 ID : 630680392976
Option 3 ID : 630680392977
Option 4 ID : 630680392979
Status : Answered
Chosen Option : 2

ɛ fall of a particle can be _____ mathematically.

$\frac{dv}{dt}$

$\frac{da}{dt}$

$\frac{ds}{dt}$

$\frac{d^2v}{dt^2}$

Question ID : 63068081383
Option 1 ID : 630680315564
Option 2 ID : 630680315565
Option 3 ID : 630680315566
Option 4 ID : 630680315567
Status : Answered
Chosen Option : 1

ıeral output response for an underdamped mechanical system is given by the
n _____.

$x = X\sin(2t + \varphi)\, e^{-\varepsilon\omega_n t}$

$x = X\sin(\omega_d t + \varphi)\, e^{-\varepsilon\omega_n t}$

$x = X\sin(\omega_d t + \varphi)\, e^{t}$

$x = X\sin(\omega_d)\, e^{-\varepsilon\omega_n t}$

Question ID : 630680120810
Option 1 ID : 630680468216
Option 2 ID : 630680468215
Option 3 ID : 630680468214
Option 4 ID : 630680468217
Status : Answered
Chosen Option : 2

ig M Method, what is the purpose of introducing artificial variables?

To make sure that initial basic feasible solutions are found for constraints with

To determine the optimal solution without the need for further adjustments

To simplify the constraint equations by eliminating equalities

To ensure that the solution remains feasible at all times

Question ID : 6306801000424
Option 1 ID : 6306803925628
Option 2 ID : 6306803925629
Option 3 ID : 6306803925627
Option 4 ID : 6306803925626
Status : Answered
Chosen Option : 1

ır a smooth plate that is 1.25 m wide and 3.7 m long. The plate is moving in a
ıry air with a velocity of 4.2 m/s. Calculate the thickness of the boundary layer at the
edge of the smooth plate. (Take kinematic viscosity of air as 1.54×10^{-5} m^2/s.)

36.19 mm

29.13 mm

86.22 mm

107.12 mm

Question ID : 630680103423
Option 1 ID : 630680401937
Option 2 ID : 630680401936
Option 3 ID : 630680401938
Option 4 ID : 630680401935
Status : Not Answered
Chosen Option : --

ıensional formula of 'thermal conductivity' is:

$MT^3\theta^{-1}$

$MLT^{-3}\theta^{-1}$

$MLT^3\theta^{-1}$

W/mK

Question ID : 63068095064
Option 1 ID : 630680368953
Option 2 ID : 630680368954
Option 3 ID : 630680368952
Option 4 ID : 630680368951
Status : Answered
Chosen Option : 2

r-bar chain, the shortest link measures 250 mm. The length of the remaining three
ɛ 300 mm, 350 mm and 450 mm. What is the nature of the mechanism if the shortest
xed to obtain a mechanism?

Crank-Crank mechanism

Rocker-Rocker mechanism

Crank-Rocker mechanism (Class I)

Rocker-Rocker mechanism (Class II)

Question ID : 630680101096
Option 1 ID : 630680392911
Option 2 ID : 630680392910
Option 3 ID : 630680392909
Option 4 ID : 630680392908
Status : Answered
Chosen Option : 1

ıd y components of impulse force exerted by the pipe bend on the fluid mass are
l 13kN. The static pressure force acting at the inlet is in the same direction as that of
ulse force in the x-direction and the magnitude is 2kN and Force due to static
e is 1kN opposite to the direction of impulse force in the y-direction. The magnitude
tant is _____ Kn.

10

11

13

12

Question ID : 630680136544
Option 1 ID : 630680528796
Option 2 ID : 630680528794
Option 3 ID : 630680528797
Option 4 ID : 630680528795
Status : Not Answered
Chosen Option : --