

Transmission Corporation of Andhra Pradesh Limited

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✖ icon are incorrect.

Question Paper Name :	CARMEL CARMEL8 Actual1
Subject Name :	Mechanical Engineering
Creation Date :	2026-08-23 11:17:41
Duration :	180
Number of Questions :	100
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Mechanical Engineering

Group Number :	1
Group Id :	4410093207941
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0

General Intelligence and Reasoning

Section Id :	4410093238293
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093249572
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 1 Question Id : 441009512081 Question Type : MCQ Option Shuffling : Yes

Seven people, J, K, L, M, S, T and U are sitting in a row, facing north.
Only three people sit between S and M. J sits to the immediate left of M. No one sits to the right of L. Only two people sit between L and J. T sits to the immediate right of K.
How many people sit between U and T?

Options :

- 4410092003486. ✖ One
- 4410092003487. ✓ Two
- 4410092003488. ✖ Three
- 4410092003489. ✖ Four

Question Number : 2 Question Id : 441009814650 Question Type : MCQ Option Shuffling : Yes

The position(s) of how many letters will remain unchanged if each of the letters in the word HAEMOLYSIN is arranged in reverse English alphabetical order?

Options :

- 4410093212723. ✖ Zero
- 4410093212724. ✓ One
- 4410093212725. ✖ Two
- 4410093212726. ✖ Three

Question Number : 3 Question Id : 441009724182 Question Type : MCQ Option Shuffling : Yes

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

Statements:

- All monkeys are kangaroos.
- Some kangaroos are tigers.



ALL EXAMS, **ONE** SUBSCRIPTION



Test. Analyze. Improve. Repeat.



*Don't just
prepare.
Perform.*

Test Prime – built only
for mock tests.



1,50,000+
Mock Tests



25,000+
Previous Year
Papers



800+
Exam
Covered



500%
Refund on
Selection



5 lakh+
Free Quizzes



Daily
Free PDFs



Top Alerts
Stay Updated

WHY TEST PRIME?

- ✓ Multilingual
- ✓ Detailed Solution
- ✓ Strong and Weak Areas
- ✓ All India Rankings



Safe & Reliable



Trusted by
Lakhs of Aspirants



Your Success,
Our Mission



**DOWNLOAD
TEST PRIME**

Your Success Partner!



Test

Prime



SUCCESS GALLERY!

MEET THE ACHIEVERS



Shreya, SBI PO



Sahil, SBI PO



Srijita, SBI PO



Vikram, IBPS PO



Neeti, IBPS PO



Arya, IBPS PO



Hasan, SSC CGL



Palak, SSC CGL



Priti, UP TGT



Aniket, Bihar Stet



Shaurya, NTPC



Sarita, CTET



Gourav, NTPC



Sanni, NTPC



Abhishek, CTET



Sapna, IBPS Clerk

THEY DID IT. YOU CAN TOO

READ THEIR STORIES!



Conclusions:
I. Some monkeys are tigers.
II. Some kangaroos are monkeys.

- Options :
- 4410092850480. ✖ Only conclusion I follows
 - 4410092850481. ✔ Only conclusion II follows
 - 4410092850482. ✖ Both conclusions I and II follow
 - 4410092850483. ✖ Neither conclusion I nor II follows

Question Number : 4 Question Id : 441009787399 Question Type : MCQ Option Shuffling : Yes
Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statements.

Statements:
All spoons are forks.
All cutlery are forks.

Conclusions:
(I) Some spoons are cutlery.
(II) Some forks are cutlery.

- Options :
- 4410093103595. ✖ Only conclusion (I) follows.
 - 4410093103596. ✔ Only conclusion (II) follows.
 - 4410093103597. ✖ Neither conclusion (I) nor (II) follows.
 - 4410093103598. ✖ Both conclusions (I) and (II) follow.

Question Number : 5 Question Id : 4410091202835 Question Type : MCQ Option Shuffling : Yes
What should come in place of ‘?’ in the given series?
0 11 33 66 110 ?

- Options :
- 4410094744889. ✖ 164
 - 4410094744890. ✔ 165
 - 4410094744891. ✖ 163
 - 4410094744892. ✖ 162

General awareness

Section Id :	4410093238294
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093249573
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 6 Question Id : 4410092201050 Question Type : MCQ Option Shuffling : Yes
In June 2026, India won 114 medals, including 102 gold medals, at the inaugural edition of which championship?

- Options :
- 4410098661340. ✔ World Yogasana Championships
 - 4410098661341. ✖ Asian Para Athletics Championships
 - 4410098661342. ✖ World Junior Shooting Championships
 - 4410098661343. ✖ Asian Indoor Rowing Championships

Question Number : 7 Question Id : 4410092201157 Question Type : MCQ Option Shuffling : Yes
Which of the following social reformers strongly opposed child marriage and promoted widow remarriage?

- Options :
- 4410098661768. ✔ Ishwar Chandra Vidyasagar
 - 4410098661769. ✖ Subhas Chandra Bose
 - 4410098661770. ✖ Lala Lajpat Rai
 - 4410098661771. ✖ Bipin Chandra Pal

Question Number : 8 Question Id : 4410092201145 Question Type : MCQ Option Shuffling : Yes
Who among the following first used the expression “First War of Independence” in nationalist historiography for the Revolt of 1857?

- Options :
- 4410098661720. ✔ V. D. Savarkar

- 4410098661721. ✖ Bal Gangadhar Tilak
- 4410098661722. ✖ Lala Lajpat Rai
- 4410098661723. ✖ Subhas Chandra Bose

Question Number : 9 Question Id : 4410092201161 Question Type : MCQ Option Shuffling : Yes
Which of the following is a recognized language included in the Eighth Schedule of the Indian Constitution?

- Options :
- 4410098661784. ✖ Bhojpuri
 - 4410098661785. ✖ Rajasthani
 - 4410098661786. ✔ Maithili
 - 4410098661787. ✖ Tulu

Question Number : 10 Question Id : 4410092258050 Question Type : MCQ Option Shuffling : Yes
Which geological feature best explains the presence of black soils in the Deccan region of the Peninsular Plateau?

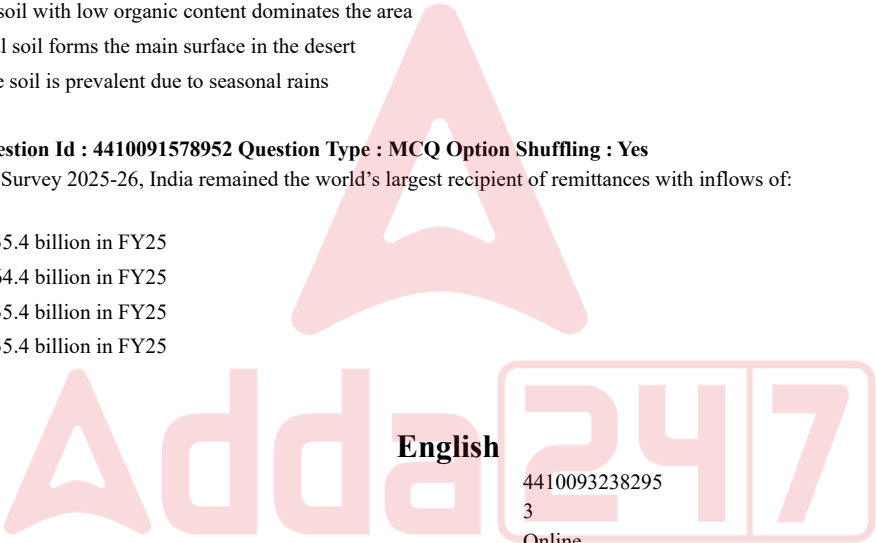
- Options :
- 4410098882748. ✖ Prevailing marine sedimentation processes
 - 4410098882749. ✖ Continuous alluvial deposition from major rivers
 - 4410098882750. ✔ Extensive volcanic activity formed basaltic rocks
 - 4410098882751. ✖ Widespread accumulation of limestone layers

Question Number : 11 Question Id : 4410092258052 Question Type : MCQ Option Shuffling : Yes
What is the predominant soil type found in the Great Indian Desert region?

- Options :
- 4410098882756. ✖ Black cotton soil is common throughout the region
 - 4410098882757. ✔ Sandy soil with low organic content dominates the area
 - 4410098882758. ✖ Alluvial soil forms the main surface in the desert
 - 4410098882759. ✖ Laterite soil is prevalent due to seasonal rains

Question Number : 12 Question Id : 4410091578952 Question Type : MCQ Option Shuffling : Yes
According to the Economic Survey 2025-26, India remained the world’s largest recipient of remittances with inflows of:

- Options :
- 4410096236919. ✖ US\$ 235.4 billion in FY25
 - 4410096236920. ✖ US\$ 164.4 billion in FY25
 - 4410096236921. ✔ US\$ 135.4 billion in FY25
 - 4410096236922. ✖ US\$ 335.4 billion in FY25



Section Id :	4410093238295
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093249575
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Id : 4410092412133 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No
Question Pattern Type : NonMatrix
Question Numbers : (13 to 14)

Read the passage carefully and answer all the questions that follow.
The United Nations declared 2025 as the International Year of Quantum Science and Technology to recognise the contributions of quantum research to modern science and innovation. Quantum technologies are based on principles of quantum physics and have the potential to influence areas such as computing, communication, healthcare, and scientific measurement. Researchers are exploring ways to develop advanced quantum systems that can solve complex problems and improve technological capabilities. However, experts also emphasise the need for responsible development, skilled professionals, and international cooperation to ensure that these technologies benefit society. Educational initiatives and research programmes are encouraged to increase awareness and strengthen scientific capacity among future generations. The global focus on quantum science highlights the importance of supporting innovation while considering ethical, social, and practical challenges associated with emerging technologies.

Sub questions

Question Number : 13 Question Id : 4410092412134 Question Type : MCQ Option Shuffling : Yes
Select the best title that fits the passage.

- Options :
- 4410099486333. ✖ Financial Restructuring Strategies for Global Telecommunication Networks
 - 4410099486334. ✖ Institutional Strategies for Training Next-Generation Quantum Physicists

4410099486335. ✖ The Universal Resolution of Practical Challenges in Modern Physics
4410099486336. ✔ Promoting and Managing the Global Future of Quantum Science

Question Number : 14 Question Id : 4410092412135 Question Type : MCQ Option Shuffling : Yes
Which of the following facts is true according to the passage?

- Options :
4410099486337. ✔ Quantum research requires skilled expertise and responsible development.
4410099486338. ✖ Quantum applications are restricted strictly to numerical computing.
4410099486339. ✖ The United Nations mandated centralized global technological oversight.
4410099486340. ✖ Quantum advancement depends entirely on individual researchers.

Sub-Section Number : 2
Sub-Section Id : 4410093249576
Question Shuffling Allowed : Yes
Is Section Default? : No

Question Number : 15 Question Id : 4410091556286 Question Type : MCQ Option Shuffling : Yes
Select the correct option to complete the sentence.
She completed the statistical analysis _____ to ensure the data remained consistent with the revised methodology.

- Options :
4410096147714. ✔ assiduously
4410096147715. ✖ precipitously
4410096147716. ✖ arbitrarily
4410096147717. ✖ cursorily

Question Number : 16 Question Id : 4410091868874 Question Type : MCQ Option Shuffling : Yes
The parts of a sentence are given below. While the first part (S) is fixed and correctly placed, the remaining segments are jumbled. Rearrange them to form a clear, meaningful, and grammatically correct sentence.

- S. The Cold War created
A. nations for decades
B. relations between powerful
C. increased military competition
D. and shaped international

- Options :
4410097363071. ✔ CDBA
4410097363072. ✖ BACD
4410097363073. ✖ CBAD
4410097363074. ✖ BDAC

Question Number : 17 Question Id : 4410091535319 Question Type : MCQ Option Shuffling : Yes
Complete the sentence with the most appropriate direct speech option.
The police asked the driver where he was going. The driver replied that he was just heading home.

Police: "Where are you going?"
Driver: "_____."

- Options :
4410096064531. ✔ I am just heading home
4410096064532. ✖ I was just heading home
4410096064533. ✖ I will be just heading home
4410096064534. ✖ I must just head home

Quantitative aptitude

Section Id : 4410093238296
Section Number : 4
Section type : Online
Mandatory or Optional : Mandatory
Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 4410093249577
Question Shuffling Allowed : Yes
Is Section Default? : No

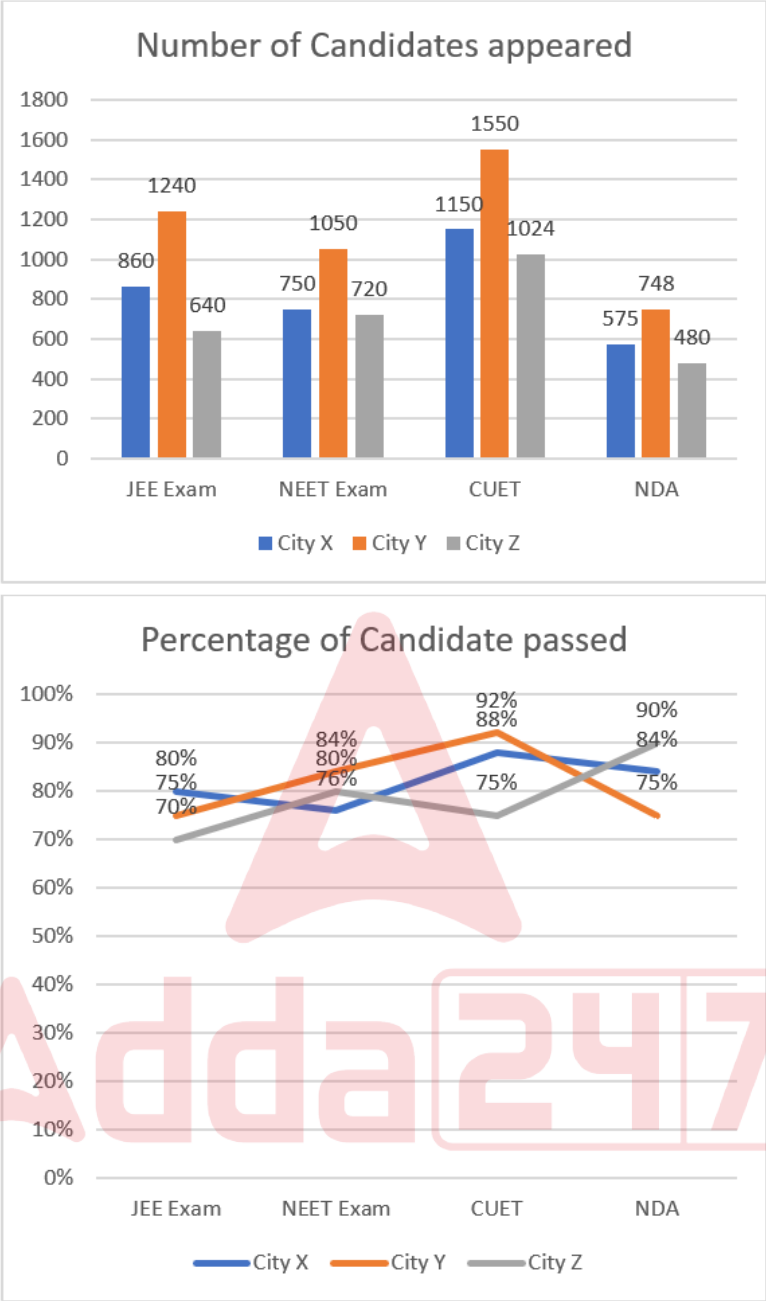
Question Number : 18 Question Id : 441009581206 Question Type : MCQ Option Shuffling : Yes
The average of three numbers is 22. If two numbers are 14 and 26, the third number is:

- Options :
4410092279950. ✔ 26
4410092279951. ✖ 25

4410092279952. ✖ 27
4410092279953. ✖ 28

Question Number : 19 Question Id : 4410092188554 Question Type : MCQ Option Shuffling : Yes

The following bar graph shows the number of candidates appeared in four different exams from three different cities and the line graph shows the percentage of the candidates who got passed in these exams.



Find the ratio of the number of students who passed in NEET exam from city Y to the number of students who passed in CUET exam from city X.

Options :

- 4410098612087. ✔ 441 : 506
- 4410098612088. ✖ 441 : 515
- 4410098612089. ✖ 221 : 437
- 4410098612090. ✖ 221 : 506

Question Number : 20 Question Id : 4410091256990 Question Type : MCQ Option Shuffling : Yes

The population of a town increases by 10% in the first year and decreases by 10% in the second year. Determine the overall percentage change in the population over the two years.

Options :

- 4410094960819. ✔ 1% decrease
- 4410094960820. ✖ 1% increase
- 4410094960821. ✖ No change
- 4410094960822. ✖ 2% decrease

Question Number : 21 Question Id : 4410091355632 Question Type : MCQ Option Shuffling : Yes

A, B and C enter into a partnership. A invests twice as much as B invests and B invests thrice as much as C invests. At the end of the year a profit of ₹1,60,000 is earned. Find the profit share of B.

Options :

- 4410095354977. ✓ ₹48,000
- 4410095354978. ✗ ₹90,000
- 4410095354979. ✗ ₹60,000
- 4410095354980. ✗ ₹50,000

Question Number : 22 Question Id : 4410092188559 Question Type : MCQ Option Shuffling : Yes

Three friends, P, Q, and R, start running simultaneously from the same point on a 240-metre circular track. P and R run in the same direction with speeds of 8 m/s and 4 m/s, respectively, while Q runs in the opposite direction to P at a speed of 4 m/s. After how many seconds will all three be together at the same point on the track for the first time?

Options :

- 4410098612107. ✗ 200
- 4410098612108. ✓ 120
- 4410098612109. ✗ 140
- 4410098612110. ✗ 180

Question Number : 23 Question Id : 4410091220571 Question Type : MCQ Option Shuffling : Yes

The value of $16^3 - 8^3$ is:

Options :

- 4410094815707. ✓ 3584
- 4410094815708. ✗ 3331
- 4410094815709. ✗ 3632
- 4410094815710. ✗ 3421

Question Number : 24 Question Id : 441009601728 Question Type : MCQ Option Shuffling : Yes

Ravina has a cylindrical glass having radius 3.5 cm and height 30 cm. How much water (in liters) can she pour into the glass to completely fill it?

(Use $\pi = \frac{22}{7}$)

Options :

- 4410092362029. ✗ 0.66
- 4410092362030. ✗ 1
- 4410092362031. ✓ 1.155
- 4410092362032. ✗ 1.515

Question Number : 25 Question Id : 441009601582 Question Type : MCQ Option Shuffling : Yes

AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 78^\circ$. G is a point between AB and CD such that $\angle BEG = 19^\circ$ and $\angle GFE = 24^\circ$. What is the measure of $\angle EGF$?

Options :

- 4410092361445. ✓ 73°
- 4410092361446. ✗ 71°
- 4410092361447. ✗ 65°
- 4410092361448. ✗ 64°

Computer knowledge

Section Id :	4410093238297
Section Number :	5
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093249578
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 26 Question Id : 4410092306896 Question Type : MCQ Option Shuffling : Yes

During the evolution of computers, which development marked the beginning of the third generation of computers?

Options :

- 4410099072884. ✓ The introduction of integrated circuits
- 4410099072885. ✗ The use of transistors
- 4410099072886. ✗ The adoption of optical storage media
- 4410099072887. ✗ The development of graphical user interfaces

Question Number : 27 Question Id : 4410092275889 Question Type : MCQ Option Shuffling : Yes
In the MS Word print dialog, what effect does changing the number in the 'Copies' field have?

- Options :**
- 4410098952883. ✓ It determines how many duplicates of the document will be printed
 - 4410098952884. ✗ It speeds up the printing process for large documents
 - 4410098952885. ✗ It changes the number of pages per sheet in the printout
 - 4410098952886. ✗ It increases the font size for all printed pages

Question Number : 28 Question Id : 4410092307312 Question Type : MCQ Option Shuffling : Yes
Which Excel feature or formula is most effective for converting formula-generated data from rows into columns?

- Options :**
- 4410099074544. ✗ Use OFFSET for transposing
 - 4410099074545. ✓ Use TRANSPOSE function
 - 4410099074546. ✗ Use INDIRECT for transposing
 - 4410099074547. ✗ Use PASTE SPECIAL for transpose

Question Number : 29 Question Id : 4410092276353 Question Type : MCQ Option Shuffling : Yes
During a presentation to a client, which approach ensures that each slide advances smoothly in sequence without manual intervention when demonstrating a new product feature set?

- Options :**
- 4410098954731. ✗ Manually advancing each slide using keyboard or mouse
 - 4410098954732. ✗ Using the print preview option during the presentation
 - 4410098954733. ✓ Setting automatic timings for each slide before starting the show
 - 4410098954734. ✗ Restarting the software to trigger the next slide

Question Number : 30 Question Id : 4410092307592 Question Type : MCQ Option Shuffling : Yes
A company employee sends a digital message with documents to a client using the internet. The message reaches the client's inbox within seconds and can be replied to electronically. Which option best describes an electronic mail (e-mail)?

- Options :**
- 4410099075656. ✓ A method of sending messages digitally between computers over a network
 - 4410099075657. ✗ A method of sending messages digitally between computers without a network
 - 4410099075658. ✗ A tool for making voice calls between computers
 - 4410099075659. ✗ A device used to connect computers to a network

Mechanical Engineering

Section Id :	4410093238298
Section Number :	6
Section type :	Online
Mandatory or Optional :	Mandatory
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410093249579
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 31 Question Id : 4410092229856 Question Type : MCQ Option Shuffling : Yes
For a wooden beam subjected to a transverse shear force, which factor increases the maximum shear stress when all other parameters are kept constant?

- Options :**
- 4410098773371. ✓ Decreasing the depth of the cross-section
 - 4410098773372. ✗ Changing the material to one of higher density
 - 4410098773373. ✗ Increasing the length of the beam
 - 4410098773374. ✗ Increasing the width of the cross-section

Question Number : 32 Question Id : 4410092229864 Question Type : MCQ Option Shuffling : Yes
If the modulus of elasticity (E) of a simply supported beam is doubled while keeping all other parameters constant, what will be the effect on the maximum deflection under a central point load?

- Options :**
- 4410098773403. ✗ The maximum deflection is quadrupled
 - 4410098773404. ✗ The maximum deflection is doubled
 - 4410098773405. ✗ The maximum deflection remains unchanged
 - 4410098773406. ✓ The maximum deflection is halved

Question Number : 33 Question Id : 4410092229844 Question Type : MCQ Option Shuffling : Yes

For a shaft subjected to constant torque and having a fixed length, which of the following parameters does *not* affect the polar moment of inertia?

Options :

- 4410098773323. ✖ The inner diameter of a hollow shaft
- 4410098773324. ✖ The cross-sectional shape of the shaft
- 4410098773325. ✔ The length of the shaft
- 4410098773326. ✖ The outer diameter of the shaft

Question Number : 34 Question Id : 4410092229859 Question Type : MCQ Option Shuffling : Yes

A cantilever beam is subjected to a point load at its free end. Which of the following statements best describes the relationship between the beam length and the free-end deflection?

Options :

- 4410098773383. ✖ Deflection decreases as the length increases
- 4410098773384. ✖ Deflection remains unchanged as the length increases
- 4410098773385. ✔ Deflection increases non-linearly as the length increases
- 4410098773386. ✖ Deflection increases linearly as the length increases

Question Number : 35 Question Id : 4410092229871 Question Type : MCQ Option Shuffling : Yes

For a cantilever beam subjected to a uniformly distributed load, which internal force primarily contributes to the strain energy stored in the beam?

Options :

- 4410098773431. ✖ Axial force
- 4410098773432. ✖ Torsional moment
- 4410098773433. ✖ Shear force
- 4410098773434. ✔ Bending moment

Question Number : 36 Question Id : 4410092229874 Question Type : MCQ Option Shuffling : Yes

A cylindrical metal rod is subjected to a uniaxial tensile load, causing it to elongate along its length and contract laterally. If the axial strain is measured as 0.002 and the lateral strain as -0.0006 , what is the Poisson's ratio of the material?

Options :

- 4410098773443. ✔ 0.3
- 4410098773444. ✖ 0.9
- 4410098773445. ✖ 0.45
- 4410098773446. ✖ 0.12

Question Number : 37 Question Id : 4410092229881 Question Type : MCQ Option Shuffling : Yes

For a vertical column of length L , cross-sectional area A , density ρ , and modulus of elasticity E , what is the effect of doubling the column length on the strain energy stored due to its self-weight?

Options :

- 4410098773471. ✔ The strain energy increases by a factor of 8
- 4410098773472. ✖ The strain energy increases by a factor of 6
- 4410098773473. ✖ The strain energy increases by a factor of 4
- 4410098773474. ✖ The strain energy increases by a factor of 2

Question Number : 38 Question Id : 441009291379 Question Type : MCQ Option Shuffling : Yes

The basic configuration of a double slider mechanism includes:

Options :

- 4410091132358. ✖ 3 links, 3 pairs
- 4410091132359. ✔ 4 links, 4 pairs
- 4410091132360. ✖ 5 links, 5 pairs
- 4410091132361. ✖ 4 links, 3 pairs

Question Number : 39 Question Id : 4410091235628 Question Type : MCQ Option Shuffling : Yes

Which of the following describes the direction of the Coriolis acceleration?

Options :

- 4410094876244. ✖ Radially inward direction
- 4410094876245. ✖ Radially outward direction
- 4410094876246. ✔ Perpendicular to the relative velocity and rotation axis
- 4410094876247. ✖ Along the direction of the axis of rotation

Question Number : 40 Question Id : 4410092229886 Question Type : MCQ Option Shuffling : Yes

In the inversion of a slider-crank mechanism where the slider is fixed and the crank rotates, which of the following devices is based on this configuration?

Options :

- 4410098773491. ✔ Reciprocating compressor
- 4410098773492. ✖ Elliptical trammel

4410098773493. ✖ Rotary engine
4410098773494. ✖ Hand pump

Question Number : 41 Question Id : 4410092229888 Question Type : MCQ Option Shuffling : Yes

When the crank of a slider-crank mechanism is at either the inner dead centre (IDC) or outer dead centre (ODC), what is the instantaneous velocity of the slider?

Options :

4410098773499. ✖ The slider moves in the opposite direction
4410098773500. ✔ The velocity of the slider is zero
4410098773501. ✖ The velocity of the slider is maximum
4410098773502. ✖ The slider's velocity equals the crank's angular velocity

Question Number : 42 Question Id : 4410092229891 Question Type : MCQ Option Shuffling : Yes

In a simple epicyclic gear train with the arm fixed, the sun gear is the input and the ring gear is the output. Which gear arrangement provides the greatest speed reduction and hence the highest output torque (neglecting power losses)?

Options :

4410098773511. ✖ A ring gear with fewer teeth than the sun gear.
4410098773512. ✖ A sun gear with more teeth than the ring gear.
4410098773513. ✔ A sun gear with fewer teeth than the ring gear.
4410098773514. ✖ Both sun and ring gear with equal number of teeth.

Question Number : 43 Question Id : 4410091687042 Question Type : MCQ Option Shuffling : Yes

Determine the coefficient of fluctuation of speed when a machine runs at an average speed of 600 rpm and varies between 630 rpm and 570 rpm in a cycle.

Options :

4410096654974. ✔ 0.1
4410096654975. ✖ 0.05
4410096654976. ✖ 0.15
4410096654977. ✖ 0.2

Question Number : 44 Question Id : 4410092229905 Question Type : MCQ Option Shuffling : Yes

A vibrating system exhibits oscillations with gradually decreasing amplitude. Which damping ratio best describes this behavior?

Options :

4410098773567. ✖ Greater than one
4410098773568. ✖ Equal to zero
4410098773569. ✖ Equal to one
4410098773570. ✔ Less than one

Question Number : 45 Question Id : 4410092229895 Question Type : MCQ Option Shuffling : Yes

An undamped mass-spring system has its mass doubled while the spring stiffness remains unchanged. How does the natural frequency of free vibration change?

Options :

4410098773527. ✖ The natural frequency increases by a factor of 2
4410098773528. ✔ The natural frequency increases by a factor of $\sqrt{2}$
4410098773529. ✖ The natural frequency decreases by a factor of $\sqrt{2}$
4410098773530. ✖ The natural frequency decreases by a factor of 2

Question Number : 46 Question Id : 4410092229910 Question Type : MCQ Option Shuffling : Yes

A simply supported beam exhibits a higher natural frequency in its second mode compared to its first. What primarily accounts for this difference?

Options :

4410098773587. ✖ The beam's span is decreased for the second mode
4410098773588. ✖ The material properties change with mode number
4410098773589. ✖ The boundary conditions are altered for higher modes
4410098773590. ✔ The second mode shape has more nodes and higher curvature

Question Number : 47 Question Id : 4410092229904 Question Type : MCQ Option Shuffling : Yes

An industrial valve is fitted with a damper to prevent oscillations after actuation. If the system is designed to be overdamped instead of critically damped, what will be the most likely effect?

Options :

4410098773563. ✖ The valve returns faster with oscillations.
4410098773564. ✔ The valve returns more slowly without oscillation.
4410098773565. ✖ The valve returns instantly to its closed position.
4410098773566. ✖ The valve exhibits unstable oscillations.

Question Number : 48 Question Id : 441009992338 Question Type : MCQ Option Shuffling : Yes

If W_n is the normal force acting on the surfaces, α is the semi cone angle and μ is the coefficient of friction between the surfaces, the total axial force required to engage the clutch is given by ____.

Options :

4410093921484. ✖ $W_n (\sin \alpha - \mu \cos \alpha)$

4410093921485. ✔ $W_n (\sin \alpha + \mu \cos \alpha)$

4410093921486. ✖ $W_n (\sin \alpha \times \mu \cos \alpha)$

4410093921487. ✖ $W_n (\sin \alpha / \mu \cos \alpha)$

Question Number : 49 Question Id : 4410091216198 Question Type : MCQ Option Shuffling : Yes

When applying Goodman's equation for fatigue analysis under biaxial dynamic loading, what is the crucial initial step before using the equation that relates mean and alternating stresses to material properties?

Options :

4410094798198. ✖ Calculate the factor of safety based solely on the maximum principal stress and the material's yield strength.

4410094798199. ✖ Determine the maximum shear stress amplitude and compare it directly to the endurance limit in shear.

4410094798200. ✔ Convert the biaxial mean and alternating stress components into equivalent uniaxial mean and alternating stresses using a static yield criterion (e.g., Von Mises or Tresca).

4410094798201. ✖ Use the average of the maximum and minimum stresses in both directions directly in the Goodman equation without further transformation.

Question Number : 50 Question Id : 441009979424 Question Type : MCQ Option Shuffling : Yes

The elastic failure theory relates complex stress strength to mechanical properties from which of the following tests?

Options :

4410093870235. ✔ Tension test

4410093870236. ✖ Impact test

4410093870237. ✖ Fracture test

4410093870238. ✖ Creep test

Question Number : 51 Question Id : 4410092229917 Question Type : MCQ Option Shuffling : Yes

A helical compression spring experiences shear stress above its allowable design limit. Which design modification most effectively reduces the maximum shear stress?

Options :

4410098773615. ✔ Increase the wire diameter

4410098773616. ✖ Increase the number of coils

4410098773617. ✖ Increase the coil pitch

4410098773618. ✖ Increase the mean coil diameter

Question Number : 52 Question Id : 4410092229918 Question Type : MCQ Option Shuffling : Yes

Two identical steel bars are subjected to the same mean stress but different stress amplitudes under cyclic loading. Which bar is more likely to fail first due to fatigue, and why?

Options :

4410098773619. ✖ The bar with lower stress amplitude, due to slower fatigue damage

4410098773620. ✔ The bar with higher stress amplitude, due to greater fatigue damage accumulation

4410098773621. ✖ Both bars are equally likely, since material is identical

4410098773622. ✖ The bar with higher mean stress, regardless of amplitude

Question Number : 53 Question Id : 441009976907 Question Type : MCQ Option Shuffling : Yes

As per the Hencky and Von Misses theory, The maximum distortion energy is _____

Options :

4410093860453. ✔ the difference between the total strain energy and the strain energy due to uniform stress.

4410093860454. ✖ sum of the total strain energy and the strain energy due to uniform stress.

4410093860455. ✖ the ratio between the total strain energy and the strain energy due to uniform stress.

4410093860456. ✖ the product of the total strain energy and the strain energy due to uniform stress.

Question Number : 54 Question Id : 4410091216202 Question Type : MCQ Option Shuffling : Yes

In a lap riveted joint subjected to a tensile load, which of the following is a common mode of failure for the rivet itself?

Options :

4410094798214. ✖ Tearing of the plate along the row of rivets

4410094798215. ✖ Crushing (bearing) failure of the plate under the rivet head

4410094798216. ✔ Shearing of the rivet across its cross-section

4410094798217. ✖ Splitting of the plate at the edge parallel to the applied load

Question Number : 55 Question Id : 441009184432 Question Type : MCQ Option Shuffling : Yes

A turbine with a high specific speed is generally best for:

Options :

441009729075. ✓ High-flow, low-head applications.
 441009729076. ✗ Low-flow, high-head applications.
 441009729077. ✗ High-flow, high-head applications.
 441009729078. ✗ Low-flow, medium-head applications.

Question Number : 56 Question Id : 441009258545 Question Type : MCQ Option Shuffling : Yes

If the same body is completely submerged in equal volumes of different fluids, in which fluid will it experience the maximum buoyant force?

Options :

4410091008024. ✗ Water
 4410091008025. ✗ Oil
 4410091008026. ✓ Mercury
 4410091008027. ✗ Alcohol

Question Number : 57 Question Id : 4410091281803 Question Type : MCQ Option Shuffling : Yes

Which of the following conditions must be simultaneously satisfied to ensure complete similarity between a turbine model and its prototype during model testing?

Options :

4410095059030. ✗ Equality of Reynolds number and Mach number between model and prototype.
 4410095059031. ✓ Equality of specific speed, flow ratio, and head coefficient between model and prototype.
 4410095059032. ✗ Equality of Euler's head across model and prototype, irrespective of velocity triangles.
 4410095059033. ✗ Equality of velocity ratio, pressure ratio, and cavitation coefficient between model and prototype.

Question Number : 58 Question Id : 4410091436960 Question Type : MCQ Option Shuffling : Yes

Which equation gives the boundary layer thickness (δ) over a flat plate at a distance x from the leading edge for laminar flow, according to the Blasius solution? (Where Re_x = Local Reynolds number)

Options :

4410095676552. ✓ $\delta = \frac{5.0x}{\sqrt{Re_x}}$
 4410095676553. ✗ $\delta = \frac{0.382x}{\sqrt{Re_x}}$
 4410095676554. ✗ $\delta = \frac{0.287x}{\sqrt{Re_x}}$
 4410095676555. ✗ $\delta = \frac{0.074x}{\sqrt{Re_x}}$

Question Number : 59 Question Id : 4410091441564 Question Type : MCQ Option Shuffling : Yes

Which of the following best expresses the head loss (h_c) due to sudden contraction in pipe flow?

(V represent velocity, g is acceleration due to gravity and K is the contraction loss coefficient)

Options :

4410095694899. ✗ $h_c = K \frac{V^2}{g}$
 4410095694900. ✓ $h_c = K \frac{V^2}{2g}$
 4410095694901. ✗ $h_c = \frac{(KV)^2}{2g}$
 4410095694902. ✗ $h_c = \frac{V^2}{2gK}$

Question Number : 60 Question Id : 441009265453 Question Type : MCQ Option Shuffling : Yes

If dynamic viscosity is 0.001 Pa·s and density is 1000 kg/m³, kinematic viscosity is:

Options :

4410091031669. ✓ 1.0×10^{-6} m²/s
 4410091031670. ✗ 1.0×10^{-3} m²/s
 4410091031671. ✗ 1.0×10^{-2} m²/s
 4410091031672. ✗ 1.0 m²/s

Question Number : 61 Question Id : 441009265502 Question Type : MCQ Option Shuffling : Yes

Which among the following design parameters in boundary layer flow is effected by energy thickness?

Options :

4410091031865. ✗ Wall shear
 4410091031866. ✓ Heat transfer
 4410091031867. ✗ Drag force

4410091031868. ✖ Pressure distribution

Question Number : 62 Question Id : 4410091069109 Question Type : MCQ Option Shuffling : Yes

Lambert's Cosine Law is applicable to which type of surfaces?

Options :

4410094221921. ✖ Perfect black bodies only
4410094221922. ✔ Diffuse radiating surfaces
4410094221923. ✖ Surfaces that reflect like mirrors
4410094221924. ✖ Transparent surfaces

Question Number : 63 Question Id : 4410091186579 Question Type : MCQ Option Shuffling : Yes

In a counterflow heat exchanger, the hot fluid enters at 130°C and exits at 90°C, while the cold fluid enters at 30°C and exits at 80°C. Determine the **log mean temperature difference (LMTD)**.

Options :

4410094680494. ✔ 54.84 °C
4410094680495. ✖ 63.91 °C
4410094680496. ✖ 25.32 °C
4410094680497. ✖ 81.75 °C

Question Number : 64 Question Id : 4410091278665 Question Type : MCQ Option Shuffling : Yes

The effectiveness ϵ of a parallel flow heat exchanger with number of transfer units (NTU) and capacity rate ratio $C_r = C_{min}/C_{max}$ is given by:

Options :

4410095046623. ✔ $\epsilon = (1 - e^{(-NTU(1 + C_r))}) / (1 + C_r)$
4410095046624. ✖ $\epsilon = (1 - C_r e^{(-NTU(1 - C_r))}) / (1 - e^{(-NTU(1 - C_r))})$
4410095046625. ✖ $\epsilon = 1 - e^{(-NTU)}$
4410095046626. ✖ $\epsilon = NTU / (1 + NTU)$

Question Number : 65 Question Id : 4410092229920 Question Type : MCQ Option Shuffling : Yes

A composite wall consists of three layers of equal thickness and area. If thermal conductivities $k_A \ll k_B \approx k_C$, which layer contributes most to the total thermal resistance?

Options :

4410098773627. ✖ All layers contribute equally
4410098773628. ✔ Layer A
4410098773629. ✖ Layer B
4410098773630. ✖ Layer C

Question Number : 66 Question Id : 4410092229922 Question Type : MCQ Option Shuffling : Yes

A heat-generating spherical element operates under fixed radius and surface conditions. Which design modification is most effective for reducing the center temperature?

Options :

4410098773635. ✖ Increase the sphere's radius
4410098773636. ✔ Increase the sphere's thermal conductivity
4410098773637. ✖ Decrease the sphere's radius
4410098773638. ✖ Increase the volumetric heat generation rate

Question Number : 67 Question Id : 4410092229927 Question Type : MCQ Option Shuffling : Yes

A shell-and-tube heat exchanger has shell-side baffles spaced farther apart than recommended. What is the most direct effect on the overall heat transfer coefficient?

Options :

4410098773655. ✖ Reduced shell-side turbulence decreases wall resistance
4410098773656. ✖ Increased wall resistance dominates overall resistance
4410098773657. ✖ Increased shell-side turbulence reduces fouling resistance
4410098773658. ✔ Reduced shell-side turbulence increases film resistance, decreasing the coefficient

Question Number : 68 Question Id : 4410091459825 Question Type : MCQ Option Shuffling : Yes

The zeroth law of thermodynamics forms the basis for which of the following?

Options :

4410095767463. ✖ Measurement of pressure
4410095767464. ✔ Measurement of temperature
4410095767465. ✖ Measurement of volume
4410095767466. ✖ Measurement of mass

Question Number : 69 Question Id : 4410091327785 Question Type : MCQ Option Shuffling : Yes

The effective energy content(Exergy) of a reservoir decreases as:

Options :

- 4410095242669. ✓ the temperature approaches environment
- 4410095242670. ✗ the pressure increases
- 4410095242671. ✗ the mass decreases
- 4410095242672. ✗ the velocity rises

Question Number : 70 Question Id : 4410091372849 Question Type : MCQ Option Shuffling : Yes

The thermodynamic temperature scale is independent of:

Options :

- 4410095422830. ✓ The properties of any particular substance
- 4410095422831. ✗ The efficiency of a Carnot engine
- 4410095422832. ✗ The second law of thermodynamics
- 4410095422833. ✗ The zeroth law of thermodynamics

Question Number : 71 Question Id : 4410091399205 Question Type : MCQ Option Shuffling : Yes

In a psychrometric chart, constant enthalpy lines are approximately parallel to:

Options :

- 4410095526545. ✓ Constant wet bulb temperature lines
- 4410095526546. ✗ Constant relative humidity lines
- 4410095526547. ✗ Constant specific volume lines
- 4410095526548. ✗ Constant dry bulb temperature lines

Question Number : 72 Question Id : 4410091447059 Question Type : MCQ Option Shuffling : Yes

An internal combustion (IC) engine works with a compression ratio of 21. If cut-off happens at 10% of the stroke, then the cut-off ratio of this engine is:

Options :

- 4410095716874. ✗ 2
- 4410095716875. ✓ 3
- 4410095716876. ✗ 1
- 4410095716877. ✗ 2.1

Question Number : 73 Question Id : 441009283730 Question Type : MCQ Option Shuffling : Yes

Free air delivery (FAD) of a reciprocating compressor is generally expressed as:

Options :

- 4410091102027. ✗ m³/min at compressor discharge conditions
- 4410091102028. ✓ m³/min at atmospheric inlet conditions
- 4410091102029. ✗ kg/min at compressor suction conditions
- 4410091102030. ✗ m³/min at instantaneous cylinder conditions

Question Number : 74 Question Id : 441009283747 Question Type : MCQ Option Shuffling : Yes

In multistage compression, intercooling is primarily used to:

Options :

- 4410091102099. ✗ increase power required
- 4410091102100. ✗ reduce volumetric efficiency
- 4410091102101. ✓ reduce power consumption
- 4410091102102. ✗ increase air temperature

Question Number : 75 Question Id : 4410091374501 Question Type : MCQ Option Shuffling : Yes

The polytropic efficiency of a reciprocating compressor is higher than the adiabatic efficiency when:

Options :

- 4410095429437. ✓ The process is closer to isothermal
- 4410095429438. ✗ The compression is extremely fast
- 4410095429439. ✗ Clearance volume is zero
- 4410095429440. ✗ Pressure ratio is very low

Question Number : 76 Question Id : 4410091374511 Question Type : MCQ Option Shuffling : Yes

The volumetric efficiency of a reciprocating compressor decreases with ____

Options :

- 4410095429477. ✗ Decreasing clearance volume
- 4410095429478. ✓ Increasing clearance volume
- 4410095429479. ✗ Increasing piston speed
- 4410095429480. ✗ Reducing stroke length

Question Number : 77 Question Id : 4410091684716 Question Type : MCQ Option Shuffling : Yes

Which factor is most critical in determining the optimal interstage pressure for a Multi-stage reciprocating compressor operating at high pressure ratios?

Options :

- 4410096645778. ✓ The ratio of final to initial pressure
- 4410096645779. ✗ Cylinder diameter of the first stage
- 4410096645780. ✗ Piston speed of the second stage
- 4410096645781. ✗ Discharge temperature of the last stage

Question Number : 78 Question Id : 4410092234327 Question Type : MCQ Option Shuffling : Yes

When designing a gating system, why is the ratio of sprue, runner, and gate cross-sectional areas important?

Options :

- 4410098790719. ✓ It controls the flow rate and minimizes turbulence in the mold
- 4410098790720. ✗ It ensures maximum metal temperature at the gate
- 4410098790721. ✗ It prevents chemical reactions between metal and mold
- 4410098790722. ✗ It increases the metal's solidification time uniformly

Question Number : 79 Question Id : 4410092234330 Question Type : MCQ Option Shuffling : Yes

In the NRL (Naval Research Laboratory) method of riser design, why is the modulus of the riser compared with that of the casting?

Options :

- 4410098790731. ✗ To match the volume of the riser to the casting
- 4410098790732. ✗ To standardize riser shapes for different castings
- 4410098790733. ✗ To achieve the same cooling rate in both components
- 4410098790734. ✓ To ensure that the riser solidifies later than the casting

Question Number : 80 Question Id : 4410092234331 Question Type : MCQ Option Shuffling : Yes

If two castings are made of the same material and have the same volume but different shapes, which factor primarily causes their solidification times to differ according to Chvorinov's rule?

Options :

- 4410098790735. ✗ Difference in pouring temperature
- 4410098790736. ✗ Difference in alloy composition
- 4410098790737. ✓ Difference in surface area
- 4410098790738. ✗ Difference in mold constant

Question Number : 81 Question Id : 4410092234337 Question Type : MCQ Option Shuffling : Yes

What is a primary reason for choosing a filler metal with a lower melting point than the base metals in brazing?

Options :

- 4410098790759. ✗ To increase the joint hardness
- 4410098790760. ✗ To provide color contrast with the base metals
- 4410098790761. ✓ To join the base metals without melting or deforming
- 4410098790762. ✗ To reduce the cost of the process

Question Number : 82 Question Id : 44100959752 Question Type : MCQ Option Shuffling : Yes

Which of the following patterns is most suitable for producing axis-symmetric castings?

Options :

- 441009237936. ✗ Single piece pattern
- 441009237937. ✓ Sweep pattern
- 441009237938. ✗ Match plate pattern
- 441009237939. ✗ Skeleton pattern

Question Number : 83 Question Id : 4410091000456 Question Type : MCQ Option Shuffling : Yes

In Merchant's circle diagram, the cutting force (F_c) acts _____.

Options :

- 4410093953627. ✗ Along the shear plane
- 4410093953628. ✗ Perpendicular to cutting velocity
- 4410093953629. ✓ Along the cutting velocity direction
- 4410093953630. ✗ Perpendicular to the resultant force (R)

Question Number : 84 Question Id : 4410092234338 Question Type : MCQ Option Shuffling : Yes

Which statement best describes the effect of a positive back rake angle on cutting performance?

Options :

- 4410098790763. ✗ It restricts chip flow away from the workpiece
- 4410098790764. ✓ It reduces cutting force and facilitates chip removal

4410098790765. ✖ It mainly controls heat generation at the cutting edge
4410098790766. ✖ It increases tool wear during operation

Question Number : 85 Question Id : 4410092234341 Question Type : MCQ Option Shuffling : Yes

Why is the shear plane angle important in the analysis of orthogonal machining?

Options :

4410098790775. ✔ It determines the direction and magnitude of material deformation
4410098790776. ✖ It measures the wear rate of the cutting tool
4410098790777. ✖ It sets the feed rate for chip removal
4410098790778. ✖ It controls the temperature at the tool-work interface

Question Number : 86 Question Id : 4410092234342 Question Type : MCQ Option Shuffling : Yes

Which statement correctly describes the relationship between the cutting force and the shear force in orthogonal machining?

Options :

4410098790779. ✖ The cutting force is always less than the shear force.
4410098790780. ✔ The cutting and shear forces are related by Merchant's theory.
4410098790781. ✖ The cutting force and shear force act in the same direction and are identical.
4410098790782. ✖ The cutting force is always equal to the shear force.

Question Number : 87 Question Id : 4410091503504 Question Type : MCQ Option Shuffling : Yes

Which of the following types of coordinate measuring machines is best suited for large, heavy workpieces?

Options :

4410095938208. ✖ Cantilever type
4410095938209. ✖ Bridge type
4410095938210. ✔ Horizontal boring mill type
4410095938211. ✖ Floating bridge type

Question Number : 88 Question Id : 441009998317 Question Type : MCQ Option Shuffling : Yes

Which phase is predominantly present in pure iron at room temperature?

Options :

4410093945185. ✖ Austenite
4410093945186. ✖ Martensite
4410093945187. ✔ Ferrite
4410093945188. ✖ Cementite

Question Number : 89 Question Id : 4410091049183 Question Type : MCQ Option Shuffling : Yes

Which statement accurately describes the behavior of thermosetting plastics?

Options :

4410094145819. ✖ They can be molded repeatedly
4410094145820. ✖ They melt when heated
4410094145821. ✖ They dissolve easily in water
4410094145822. ✔ They become permanently hard after heating

Question Number : 90 Question Id : 4410091310650 Question Type : MCQ Option Shuffling : Yes

In the iron-iron carbide equilibrium diagram, which of the following correctly represents the basic phases present across the composition range of steel and cast iron?

Options :

4410095174306. ✔ Ferrite, Austenite, Cementite, Liquid
4410095174307. ✖ Ferrite, Pearlite, Bainite, Cementite
4410095174308. ✖ Austenite, Martensite, Pearlite, Cementite
4410095174309. ✖ Ferrite, Liquid, Martensite, Bainite

Question Number : 91 Question Id : 4410091372360 Question Type : MCQ Option Shuffling : Yes

During spheroidizing annealing, cementite particles transform into spheroids due to:

Options :

4410095420861. ✖ Grain boundary migration
4410095420862. ✔ Decrease in interfacial energy
4410095420863. ✖ Dislocation multiplication
4410095420864. ✖ Nucleation of martensite

Question Number : 92 Question Id : 4410091470943 Question Type : MCQ Option Shuffling : Yes

The primary reason for the brittleness of ceramics is:

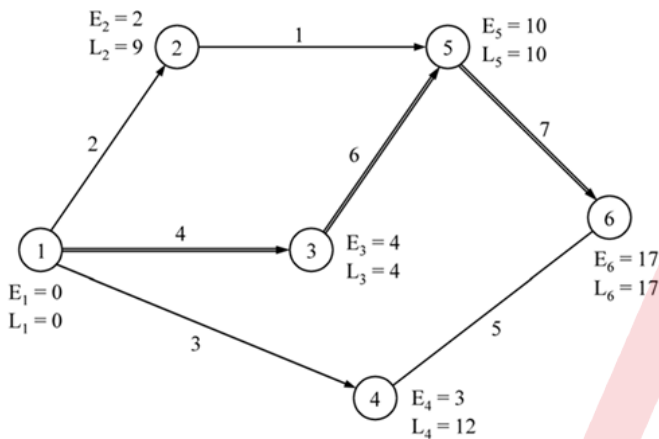
Options :

- 4410095811715. ✓ Strong ionic and covalent bonding restricting dislocation motion
- 4410095811716. ✗ Weak van der Waals interactions allowing easy atom separation
- 4410095811717. ✗ Metallic bonding enabling free movement of dislocations
- 4410095811718. ✗ High internal porosity reducing overall structural cohesion

Question Number : 93 Question Id : 4410091121766 Question Type : MCQ Option Shuffling : Yes
What is calculated in each row and column during Vogel's Approximation Method (VAM) to assist in making the allocation decision?

- Options :
- 4410094422811. ✗ Average cost
 - 4410094422812. ✓ Penalty cost
 - 4410094422813. ✗ Maximum supply
 - 4410094422814. ✗ Total demand

Question Number : 94 Question Id : 441009800572 Question Type : MCQ Option Shuffling : Yes
A small project involves 7 activities, and their time estimates are listed in the following figure. Activities are identified by their beginning (i) and ending (j) node numbers. What is the expected project length of the project?



- Options :
- 4410093156381. ✓ 17 weeks
 - 4410093156382. ✗ 19 weeks
 - 4410093156383. ✗ 21 weeks
 - 4410093156384. ✗ 23 weeks

Question Number : 95 Question Id : 4410091066957 Question Type : MCQ Option Shuffling : Yes
Which of the following is a characteristic of Critical Path Method (CPM)?

- Options :
- 4410094213334. ✗ Uses optimistic and pessimistic time estimates
 - 4410094213335. ✗ Focuses only on events
 - 4410094213336. ✓ Emphasises cost and resource optimisation
 - 4410094213337. ✗ Does not identify critical activities

Question Number : 96 Question Id : 4410091229080 Question Type : MCQ Option Shuffling : Yes
What does the optimal solution of a Transportation Problem represent?

- Options :
- 4410094849785. ✗ The maximum possible transportation cost that satisfies supply and demand constraints
 - 4410094849786. ✓ The minimum transportation cost that satisfies supply and demand constraints
 - 4410094849787. ✗ The allocation of goods that maximizes the number of shipments
 - 4410094849788. ✗ The solution with the least number of allocated cells

Question Number : 97 Question Id : 44100957985 Question Type : MCQ Option Shuffling : Yes
Which is incorrect about the Critical Path Method?

- Options :
- 441009230865. ✗ Activity oriented
 - 441009230866. ✗ Consider cost analysis
 - 441009230867. ✓ Used for R&D projects
 - 441009230868. ✗ Associated with deterministic activities

Question Number : 98 Question Id : 4410092234365 Question Type : MCQ Option Shuffling : Yes

**Test
Prime**

By Adda247

PREVIOUS YEAR PAPERS PDF



PRACTICE MORE, SCORE HIGHER!



**Free
25,000+
PDF's**

High-Quality | Exam-Wise | Updated Regularly



**ATTEMPT AS
MOCK**



Turn PDFs into real exam experience.
Analyze. Improve. Succeed.



Topic-wise &
Exam-wise PDFs



Download &
Study Offline



Attempt as Mock
& Track Score



Smart Analysis
& Performance

AVAILABLE IN



Banking



SSC



Railway



Teaching



UGC



Agriculture



Nursing



Bihar



UP



Punjab



WB



Odisha



TN



AP & Telangana



Haryana



DOWNLOAD TEST PRIME

Test

Prime



SUCCESS GALLERY!

★ MEET THE ACHIEVERS ★



Kunal, RRB JE



Shivam, UPSSSC AGTA



Priya, ANM



KHALILUR, LDA



Manoj, PWD



Atin, JENPAS



Shatarupa, OPSC



Arpita, JENPAS



Shital, SSC JE (Mech)



Nancy, UGC NET



Atul, SSC JE (ELCT)



Rahul, SSC JE (CIVIL)



Anand, SSC JE (ELCT)



Mohan, SSC JE (ELCT)



Saurabh, UGC NET



Ved, SSC JE (Mech)

★ THEY DID IT. YOU CAN TOO ★

READ THEIR STORIES!



Which application is most suitable for a ramjet engine?

Options :

- 4410098790871. ✓ Supersonic missile propulsion
- 4410098790872. ✗ Subsonic cargo transport aircraft
- 4410098790873. ✗ Commercial subsonic airliner
- 4410098790874. ✗ Vertical take-off helicopter

Question Number : 99 Question Id : 4410091506247 Question Type : MCQ Option Shuffling : Yes

Which statement accurately describes the effect of regeneration on the Rankine cycle?

Options :

- 4410095949377. ✓ It increases the mean effective temperature of heat addition.
- 4410095949378. ✗ It decreases the specific volume of the working fluid in the pump.
- 4410095949379. ✗ It adds heat to the fluid at a lower temperature.
- 4410095949380. ✗ It adds heat to the fluid at a higher temperature.

Question Number : 100 Question Id : 4410092234367 Question Type : MCQ Option Shuffling : Yes

Which sequence correctly represents the flow process inside a ramjet engine from inlet to exhaust?

Options :

- 4410098790879. ✗ Combustion, compression by inlet, expansion through nozzle
- 4410098790880. ✗ Mechanical compression, combustion, expansion through nozzle
- 4410098790881. ✗ Expansion through nozzle, combustion, compression by inlet
- 4410098790882. ✓ Compression by inlet, combustion, expansion through nozzle

