

SSC JE 2023 Oct 9 Shift 2 Mechanical Question Paper with Answers

RollNumber	
CandidateName	
VenueName	
ExamDate	09/10/2023
ExamTime	1:00PM-3:00PM
Subject	JuniorEngineer2023MechanicalPaperI

Section:GeneralIntelligenceandReasoning

Q.1 Select the combination of letters that when sequentially placed in the blanks of the given series, will complete the series.

L _ M _ N L _ N _ M _ L _ N _ M N _ L _ M _ N L A

- ns
1. NMLMNLMLNM ✓
2. NMMLNLLMNM ✗
3. NMLMLNMLNL ✗
4. MNLMNLMLNM ✗

QuestionID:264330144518

Option1ID:264330566329

Option2ID:264330566328

Option3ID:264330566330

Option4ID:264330566327

Status:Answered

ChosenOption:1

Q.2 Arrange the following words in a logical and meaningful order.

1. germinate
2. sapling
3. seed
4. seedling
5. tree

- Ans
1. 4,2,1,3,5 ✗
2. 2,3,1,2,4,5 ✗
3. 3,1,4,2,5 ✓
4. 3,4,2,5,1 ✗

QuestionID:26433076672

Option1ID:264330300755

Option2ID:264330300753

Option3ID:264330300754

Option4ID:264330300752

Status:Answered

ChosenOption:1

Q.3 Which of the following numbers will replace the question mark (?) in the given series? 30, 35, 29, ?, 28, 37

- Ans
- 1. 34
 - 2. 33
 - 3. 36
 - 4. 35

QuestionID:26433091643
Option1ID:264330359939
Option2ID:264330359940
Option3ID:264330359937
Option4ID:264330359938
Status:Answered
ChosenOption:3

Q.4 In a certain code language, "SPYH" is coded as "1714236" and "CFOG" is coded as "14135". How will "QTNP" be coded in that language?

- Ans
- 1. 14191314
 - 2. 15171114
 - 3. 15181214
 - 4. 13191314

QuestionID:264330132248
Option1ID:264330518089
Option2ID:264330518088
Option3ID:264330518090
Option4ID:264330518087
Status:Answered
ChosenOption:3

Q.5 Ritu starts from point A and drives 9 km towards South. From there, she takes a left turn and drives 8 km. She then takes a left turn, drives 3 km, turns left and drives 12 km. Finally, she takes a right turn, drives 6 km and stops at point B. How far and in which direction is point B from point A?

- Ans
- 1. 4 km towards East
 - 2. 2 km towards East
 - 3. 4 km towards West
 - 4. 2 km towards West

QuestionID:264330132003
Option1ID:264330517109
Option2ID:264330517107
Option3ID:264330517110
Option4ID:264330517108
Status:Answered
ChosenOption:1

Q.6 Select the number from among the given options that can replace the question mark (?) in the following series.

13, 29, 34, 71, 76, 155, 160, ?

Ans 1.333

2.322

3.332

4.323

QuestionID:26433078930

Option1ID:264330309735

Option2ID:264330309734

Option3ID:264330309732

Option4ID:264330309733

Status:Answered

ChosenOption:4

Q.7

Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.

23:536::21:2::18:331

Ans 1.484

2.444

3.448

4.488

QuestionID:26433078937

Option1ID:264330309760

Option2ID:264330309762

Option3ID:264330309761

Option4ID:264330309763

Status:Answered

ChosenOption:3

Q.8 Select the correct combination of

mathematical signs to sequentially replace the * signs and balance the given equation.

$17 * 7 * 12 * 6 * 2 = 119$

Ans 1. -x÷+x

2. +x-÷

3. x- ÷+

4. +÷x-

QuestionID:26433068112

Option1ID:264330266960

Option2ID:264330266962

Option3ID:264330266963

Option4ID:264330266961

Status: Not Attempted and Marked For Review

ChosenOption:--

Q.9 Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.

1. Bicycle
2. Car
3. Train
4. Auto-rickshaw
5. Bus

Ans 1.1,4,2,5,3

2.4,1,2,3,5

3.4,5,2,3,1

4.4,2,3,5,1

QuestionID:264330131977

Option1ID:264330517003

Option2ID:264330517004

Option3ID:264330517006

Option4ID:264330517005

Status: Answered

ChosenOption: 1

Q.10 Which letter-cluster will replace the question mark (?) to complete the given series?

AYIN, BWLM, DUOL, ?, KQUJ Ans

1. GSRK

2. GTRL

3. HSQM

4. HTSL

QuestionID:264330144505

Option1ID:264330566277

Option2ID:264330566275

Option3ID:264330566278

Option4ID:264330566276

Status: Answered

ChosenOption: 1

Q.11 Each of these seven friends, Kirti, Siya, Amita, Preeti, Deepika, Jeet and Pari, has scored different marks in an exam. Pari has scored more than Kirti but less than Siya. Deepika has scored less than Preeti but more than Amita. Kirti has scored more than Preeti but less than Pari. Siya is not the highest scorer.

Who has scored the least marks?

Ans 1. Pari

2. Siya

3. Amita

4. Jeet

QuestionID:264330144633

Option1ID:264330566789

Option2ID:264330566787

Option3ID:264330566788

Option4ID:264330566790

Status: Answered

ChosenOption: 3

Q.12 Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.
27:95::11:?:9:23

- Ans
- 1.27
 - 2.31
 - 3.25
 - 4.34

QuestionID:264330126041
Option1ID:264330493836
Option2ID:264330493838
Option3ID:264330493839
Option4ID:264330493837
Status:Answered
ChosenOption:2

Q.13 Select the option figure which is embedded in the given figure as its part (rotation is NOT allowed).



Ans

- 1.
- 2.
- 3.
- 4.

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QuestionID:264330144795
Option1ID:264330567438
Option2ID:264330567435
Option3ID:264330567437
Option4ID:264330567436
Status:Answered
ChosenOption:3

Q.14 Two statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

Statements:

All novels are textbooks.

No newspaper is a textbook.

Conclusions:

I. No novel is a newspaper.

II. At least some textbooks are novels.

Is. Ans 1. Both conclusions I and II follow

2. Only conclusion II follows

3. Neither conclusion I nor II follows

4. Only conclusion I follows

QuestionID:264330144659

Option1ID:264330566893

Option2ID:264330566892

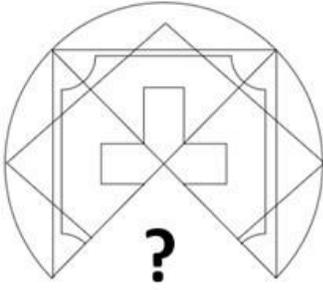
Option3ID:264330566894

Option4ID:264330566891

Status:Answered

ChosenOption:4

Q.15 Select the figure from the options that can replace the question mark (?) and complete the pattern.



Ans

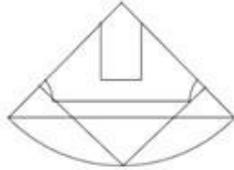
✗1.



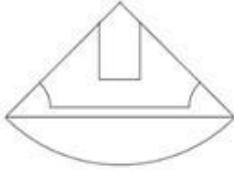
✓2.



✗3.



✗4.



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QuestionID:26433068401
Option1ID:264330268117
Option2ID:264330268119
Option3ID:264330268116
Option4ID:264330268118
Status:Answered
ChosenOption:2

Q.16 'DHL' is related to 'JLN' in a certain way based on the English alphabetical order. In the same way, 'MAC' is related to 'SEE'. Which of the following is related to 'FIP' using the same logic?

- Ans
- 1. YEN
 - 2. ZEO
 - 3. AEN
 - 4. ZEN

QuestionID:264330144610
 Option1ID:264330566695
 Option2ID:264330566697
 Option3ID:264330566696
 Option4ID:264330566698
 Status:NotAnswered

ChosenOption:--

Q.17 Peter departs from his home and walks 10m towards north and then turns right and walks 36 m. Returns left and walks 5 m. Now returns left again and walks 25 m and stops. A pole is placed exactly 15 m south from where he is standing. How far and in which direction is his house from the pole? (Assuming that all turns are 90 degrees turns only.)

- Ans
- 1. 10m, east
 - 2. 21m, west
 - 3. 11m, west
 - 4. 20m, east

QuestionID:264330129765
 Option1ID:264330508294
 Option2ID:264330508293
 Option3ID:264330508291
 Option4ID:264330508292
 Status:Answered

ChosenOption:3

Q.18 Select these two in which the numbers are related in the same way as are the numbers of the following set.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g., 13 Operations on 13 such as adding/subtraction/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(8,4,6)

(13,9,10)

- Ans
- 1. (3,11,2)
 - 2. (2,10,1)
 - 3. (6,42,4)
 - 4. (7,4,5)

QuestionID:264330144443
 Option1ID:264330566029
 Option2ID:264330566030
 Option3ID:264330566027
 Option4ID:264330566028
 Status:Answered

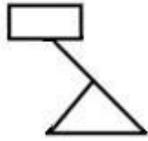
ChosenOption:4

Q.19 In a certain code language, 'MARKET' is coded as '94', and 'SHOP' is coded as '50'. How will 'ITEMS' be coded in that language?

- Ans
- 1. 144
 - 2. 61
 - 3. 69
 - 4. 66

QuestionID:264330144601
 Option1ID:264330566659
 Option2ID:264330566662
 Option3ID:264330566660
 Option4ID:264330566661
 Status:NotAnswered
 ChosenOption:--

Q.20 Select the option in which the given figure is embedded (rotation is NOT allowed).



Ans

- 1.
- 2.
- 3.
- 4.

QuestionID:264330129542
 Option1ID:264330507535
 Option2ID:264330507536
 Option3ID:264330507537
 Option4ID:264330507534
 Status:Answered
 ChosenOption:1

Q.21 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

- 1 - Ostracise
- 2 - Ossification
- 3 - Ostrich
- 4 - Otherwise
- 5 - Osteosible

Ans 1.2,4,5,1,3

2.2,4,1,5,3

3.2,1,5,4,3

4.2,1,4,5,3

QuestionID:264330122428

Option1ID:264330479837

Option2ID:264330479836

Option3ID:264330479838

Option4ID:264330479835

Status:Answered

ChosenOption:2

Q.22 If 'x' means '-', '+' means '+', '-' means '+', '+' means 'x', then what will be the correct answer of the following relation?
 $375 - 25 \div 3 + 5 - 5 \times 2 = ?$

Ans 1.16

2.15

3.20

4.18

QuestionID:264330130215

Option1ID:264330509972

Option2ID:264330509971

Option3ID:264330509974

Option4ID:264330509973

Status:Answered

ChosenOption:1

Q.23 Pointing towards a person in the photograph, Kamla said, "He is the daughter's brother of my husband's father Ashok. Ashok has only two children. How is the person in the photograph related to Kamla?"

Ans 1. Husband's sister's son

2. Husband

3. Husband's brother

4. Sister's husband

QuestionID:264330131047

Option1ID:264330513302

Option2ID:264330513299

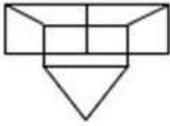
Option3ID:264330513301

Option4ID:264330513300

Status:Answered

ChosenOption:3

Q.24 Select the option that is embedded in the given figure (rotation is NOT allowed).



Ans

- 1.
- 2.
- 3.
- 4.

QuestionID:26433058110
 Option1ID:264330227425
 Option2ID:264330227424
 Option3ID:264330227426
 Option4ID:264330227427
 Status:Answered
 ChosenOption:3

Q.25 Which of the following numbers will replace the question mark (?) in the given series? 212, 213, 215, 219, ?, 243, 275

- 1. 225
- 2. 237
- 3. 235
- 4. 227

QuestionID:26433096013
 Option1ID:264330376821
 Option2ID:264330376823
 Option3ID:264330376824
 Option4ID:264330376822
 Status:Answered
 ChosenOption:4

Q.26 Six students E, F, G, H, I and J are sitting around a circular table facing the centre. H is an immediate neighbour of both E and G. I is sitting third to the left of G. E is sitting second to the right of F. J is an immediate neighbour of both F and G. Who is an immediate neighbour of both G and F?

- Ans
- 1. E
 - 2. I
 - 3. J
 - 4. H

QuestionID:264330144626
Option1ID:264330566759
Option2ID:264330566762
Option3ID:264330566760
Option4ID:264330566761
Status:Answered
ChosenOption:3

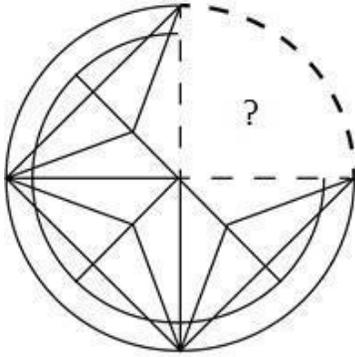
Q.27 Which letter-cluster will replace the question mark (?) to complete the given series?

CFWI, ?, FHTK, IIQL, MJMMAn

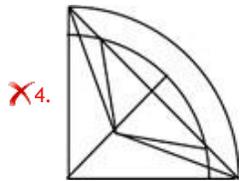
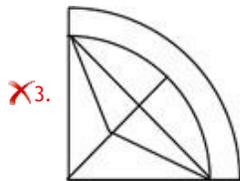
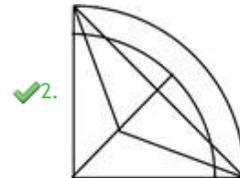
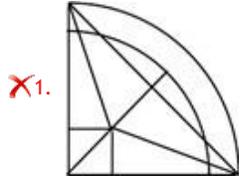
- s
- 1. DIUI
 - 2. DGVJ
 - 3. EGUI
 - 4. EIUJ

QuestionID:264330144497
Option1ID:264330566243
Option2ID:264330566245
Option3ID:264330566244
Option4ID:264330566246
Status:NotAnswered
ChosenOption:--

Q.28 Select the figure from the options that can replace the question mark (?) and complete the pattern.



Ans



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QuestionID:26433092790
Option1ID:264330364452
Option2ID:264330364450
Option3ID:264330364451
Option4ID:264330364449
Status:Answered
ChosenOption:2

Q.29 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



- Ans
1. a ə λ ε d F
 2. s ə γ ε d 7
 3. 9 9 V ε q ƒ
 4. a ə λ ε d 7

QuestionID:26433056961
 Option1ID:264330222830
 Option2ID:264330222829
 Option3ID:264330222831
 Option4ID:264330222828
 Status:Answered

ChosenOption:2

Q.30 In a certain code language, 'FALSE' is written as '97' and 'MYTH' is written as '46'. How will 'LEGEND' be written in that language?

- Ans
1. 127
 2. 119
 3. 121
 4. 115

QuestionID:264330144548
 Option1ID:264330566450
 Option2ID:264330566449
 Option3ID:264330566448
 Option4ID:264330566447
 Status:Answered

ChosenOption:3

Q.31 If '+' means '-', '-'

'means ×', '×' means '+', '+' means '+', then what will come in place of the question mark (?) in the following equation?

$$35 + 84 \times 4 - 3 + 11 = ?$$

- Ans
1. 83
 2. 79
 3. 87
 4. 94

QuestionID:264330126066
 Option1ID:264330493937
 Option2ID:264330493936
 Option3ID:264330493938
 Option4ID:264330493939
 Status:Answered

ChosenOption:3

Q.32 If A denotes '+', B denotes '×', C denotes '-' and D denotes '+', then what will be the value of the following equation?
90D121A11B10C90

- Ans
- 1. 120
 - 2. 100
 - 3. 110
 - 4. 90

QuestionID:264330133254
 Option1ID:264330522066
 Option2ID:264330522065
 Option3ID:264330522063
 Option4ID:264330522064
 Status:Answered
 ChosenOption:3

Q.33 Select the correct mirror image of the given combination when the mirror is placed at MN as shown below.



- Ans
- 1. 9 E 6 F C Z R G
 - 2. 9 E 6 F C Z R G
 - 3. 9 E 6 F C Z R G
 - 4. 9 E 6 F C Z R G

QuestionID:264330144787
 Option1ID:264330567405
 Option2ID:264330567404
 Option3ID:264330567403
 Option4ID:264330567406
 Status:Answered
 ChosenOption:3

Q.34 Select the set in which the numbers are related in the same way as are the numbers of the following set.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g., 13-Operation on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(5,2,121)

(4,3,55)

Ans 1. (2,8,67)

2. (4,2,60)

3. (6,8,91)

4. (3,1,9)

QuestionID:264330144450

Option1ID:264330566057

Option2ID:264330566058

Option3ID:264330566056

Option4ID:264330566055

Status:Answered

ChosenOption:2

Q.35 Which of the following terms will replace the question mark (?) in the given series? XYZV, STUQ, ?, IJKG, DEFB

Ans 1. NOPM

2. NOPO

3. NOPL

4. NOPQ

QuestionID:26433089474

Option1ID:264330351397

Option2ID:264330351400

Option3ID:264330351399

Option4ID:264330351398

Status:Answered

ChosenOption:3

Q.36 In a certain code language, "ABHORRENT" is written as "TNERROHBA" and "CULINARY" is written as "YRANILUC". How will "DELETTANTE" be written in that language?

Ans 1. ETNATTELED

2. ETNATTELDE

3. ELEDETANTT

4. EDELETTANT

QuestionID:264330132326

Option1ID:264330518401

Option2ID:264330518400

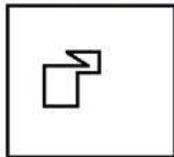
Option3ID:264330518402

Option4ID:264330518399

Status:Answered

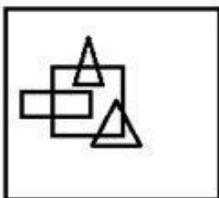
ChosenOption:1

Q.37 Select the option in which the given figure is embedded (rotation is NOT allowed).

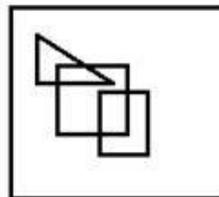


Ans

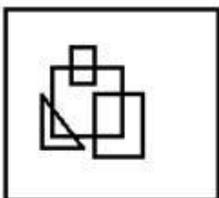
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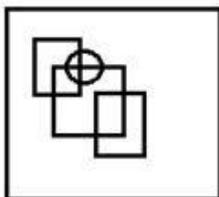
✓2.



✗3.



✗4.



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QuestionID:26433068177

Option1ID:264330267223

Option2ID:264330267222

Option3ID:264330267221

Option4ID:264330267220

Status:NotAnswered

ChosenOption:--

Q.38 Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Jaggery: Sugarcane :: Fabric: ?

- Ans
- 1. Tailor
 - 2. Suits
 - 3. Yarn
 - 4. Cloth

QuestionID:264330144534

Option1ID:264330566392

Option2ID:264330566391

Option3ID:264330566393

Option4ID:264330566394

Status: Answered

ChosenOption:3

Q.39 Seven people, A, B, C, D, E, F and G, are sitting in a straight row, facing north. Only 1 person sits to the left of D. A is an immediate neighbour of D. Only 2 people sit between F and D. Only 3 people sit between C and G. B is not an immediate neighbour of G. Only 2 people sit between E and A.

Who sits to the immediate right of F?

- Ans
- 1. A
 - 2. E
 - 3. B
 - 4. C

QuestionID:264330144643

Option1ID:264330566827

Option2ID:264330566829

Option3ID:264330566828

Option4ID:264330566830

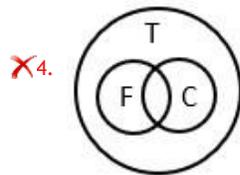
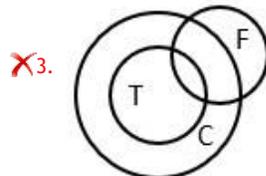
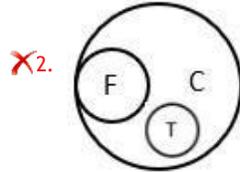
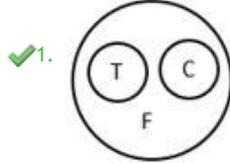
Status: Answered

ChosenOption:3

Q.40 Select the Venn diagram that best illustrates the relationship between the following classes.

Tables, Cupboards, Furniture

Ans



QuestionID:264330144580

Option1ID:264330566578

Option2ID:264330566577

Option3ID:264330566575

Option4ID:264330566576

Status:Answered

ChosenOption:1

Q.41 Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.

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

Denver:Colorado

Ans ✗1. Mysore:Karnataka

✗2. Canberra:Australia

✓3. Lucknow:UttarPradesh

✗4. Delhi:India

QuestionID:264330129755

Option1ID:264330508253

Option2ID:264330508254

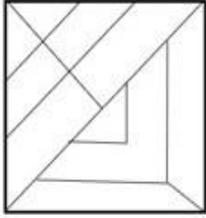
Option3ID:264330508251

Option4ID:264330508252

Status:Answered

ChosenOption:3

Q.42 How many triangles are there in the given figure?



Ans 1.10

2.12

3.14

4.13

QuestionID:26433068430

Option1ID:264330268232

Option2ID:264330268233

Option3ID:264330268234

Option4ID:264330268235

Status:Answered

ChosenOption:1

Q.43 Select these two in which the numbers are related in the same way as are the numbers of the given set.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(361, 49, 266)

(225, 36, 180)

Ans 1. (49, 620, 300)

2. (289, 16, 136)

3. (12, 36, 48)

4. (256, 64, 160)

QuestionID:26433079362

Option1ID:264330311438

Option2ID:264330311436

Option3ID:264330311439

Option4ID:264330311437

Status:NotAnswered

ChosenOption:--

Q.44 Select the word-

pair in which the two words are related in the same way as are the two words in the given pair.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Salt:Sodium

- Ans
- 1. Car: Petrol
 - 2. Water: Hydrogen
 - 3. Leaves: Wood
 - 4. Plant: Tree

QuestionID:264330122544

Option1ID:264330480301

Option2ID:264330480299

Option3ID:264330480302

Option4ID:264330480300

Status:Answered

ChosenOption:2

Q.45 Which letter-cluster will replace the question mark (?) to complete the given series?

ACAW, ELHA, IUOE, ?, UMCM Ans

- 1. PNOI
- 2. PMOI
- 3. ODVI
- 4. ONOI

QuestionID:264330144627

Option1ID:264330566766

Option2ID:264330566764

Option3ID:264330566763

Option4ID:264330566765

Status:Answered

ChosenOption:3

Q.46 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Recession
2. Rebuke
3. Recognize
4. Receive
5. Recover

- Ans
- 1.2,4,1,3,5
 - 2.3,2,1,5,4
 - 3.5,4,1,3,2
 - 4.3,4,1,5,2

QuestionID:264330132448

Option1ID:264330518890

Option2ID:264330518887

Option3ID:264330518888

Option4ID:264330518889

Status:Answered

ChosenOption:1

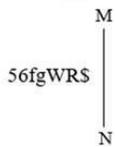
Q.47 If

'O ^ P' means 'O is the brother of P'; 'O * P' means 'O is the mother of P'; 'O + P' means 'O is the husband of P'; 'O @ P' means 'O is the sister of P'; 'O = P' means 'O is the son of P', and 'O % P' means 'O is the father of P', then how is S related to M the following expression?
S = G % H @ E + F * M

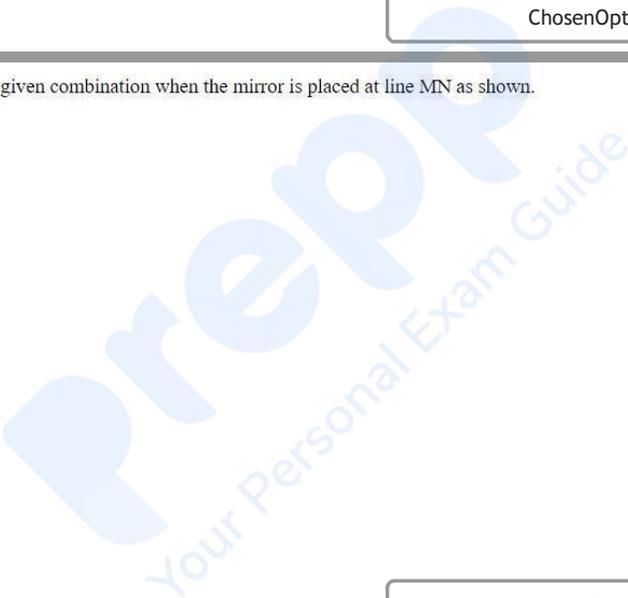
- Ans
- 1. Mother's brother
 - 2. Son
 - 3. Father's father
 - 4. Father's brother

QuestionID:264330144523
 Option1ID:264330566349
 Option2ID:264330566347
 Option3ID:264330566348
 Option4ID:264330566350
 Status:NotAnswered
 ChosenOption:--

Q.48 Select the correct mirror image of the given combination when the mirror is placed at line MN as shown.



- Ans
- 1.
 - 2.
 - 3.
 - 4.



QuestionID:26433058086
 Option1ID:264330227329
 Option2ID:264330227328
 Option3ID:264330227330
 Option4ID:264330227331
 Status:Answered
 ChosenOption:3

Q.49 Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/numbers of consonants/vowels in the word)

Chaos:Peace

- Ans
- 1. Deep: Intense ✗
 - 2. Mourn: Deplore ✗
 - 3. Gradual: Abrupt ✓
 - 4. Generate: Produce ✗

QuestionID:264330144612

Option1ID:264330566704

Option2ID:264330566706

Option3ID:264330566703

Option4ID:264330566705

Status:Answered

ChosenOption:3

Q.50 Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Binocular:View::Spoon:?

- Ans
- 1. Feed ✓
 - 2. Utensil ✗
 - 3. Fork ✗
 - 4. Food ✗

QuestionID:264330144528

Option1ID:264330566369

Option2ID:264330566367

Option3ID:264330566368

Option4ID:264330566370

Status:Answered

ChosenOption:1

Section:GeneralAwareness

Q.1 What are Guyots?

- Ans
- 1. It is a flat topped seamount. ✓
 - 2. These are deep valleys, some comparable to the Grand Canyon. ✗
 - 3. It is a mountain with pointed summits. ✗
 - 4. These are low islands found in the tropical oceans consisting of coral reefs. ✗

QuestionID:264330134910

Option1ID:264330528576

Option2ID:264330528575

Option3ID:264330528578

Option4ID:264330528577

Status:Answered

ChosenOption:2

Q.2 Patayal Sahu, who was conferred the Padma Shri in the year 2023 by the President of India for his significant contribution in the field of medicinal plants in agriculture, is from _____.

- Ans
- 1. Odisha
 - 2. West Bengal
 - 3. Chhattisgarh
 - 4. Jharkhand

QuestionID: 264330132582
Option1ID: 264330519423
Option2ID: 264330519424
Option3ID: 264330519425
Option4ID: 264330519426
Status: NotAnswered
ChosenOption: --

Q.3 The Sangeet Natak Akademi gives fellowships to eminent artists. Gopika Varmareceived it for Mohiniyattam which is a dance form of which state?

- Ans
- 1. Karnataka
 - 2. Andhra Pradesh
 - 3. Kerala
 - 4. Tamil Nadu

QuestionID: 26433064801
Option1ID: 264330253797
Option2ID: 264330253796
Option3ID: 264330253799
Option4ID: 264330253798
Status: NotAnswered
ChosenOption: --

Q.4 Which of the following energy resources is also known as Liquid Gold? Ans

1. Petroleum
- 2. Natural Gas
 - 3. Coal
 - 4. Uranium

QuestionID: 26433071614
Option1ID: 264330280881
Option2ID: 264330280882
Option3ID: 264330280880
Option4ID: 264330280883
Status: Answered
ChosenOption: 1

Q.5 What type of compound is formed when one hydrogen atom in ammonia is substituted by an alkyl or aromatic group?

- Ans
- 1. Secondary amine
 - 2. Carboxylic acid
 - 3. Primary amine
 - 4. Ketone body

QuestionID:264330114122
Option1ID:264330448574
Option2ID:264330448573
Option3ID:264330448575
Option4ID:264330448576
Status:Answered
ChosenOption:3

Q.6 In June 2022, who became the first Indian to be recognised as the Global Sustainable Development Goal (SDG) Pioneer for water stewardship by the United Nations Global Compact (UNGC)?

- Ans
- 1. Ramkrishna Mukkavilli
 - 2. Rajendra Singh
 - 3. Amla Ruia
 - 4. Ayyappa Masagi

QuestionID:264330133015
Option1ID:264330521116
Option2ID:264330521117
Option3ID:264330521115
Option4ID:264330521118
Status:NotAnswered
ChosenOption:--

Q.7 Which of the following is associated with Atoll?

- Ans
- 1. It is made up of two mountain chains separated by a large depression
 - 2. Low islands found in the tropical oceans consisting of coral reefs
 - 3. It is a sea mount with a flat top
 - 4. Ocean basins with gently sloping terrain

QuestionID:264330131747
Option1ID:264330516087
Option2ID:264330516088
Option3ID:264330516090
Option4ID:264330516089
Status:NotAnswered
ChosenOption:--

Q.8 In October 2021, MUDRA Toolbox was launched by the _____ in five Indian languages.

- Ans
- 1. Indian Council of Medical Research (ICMR)
 - 2. Indian Council of Social Science Research (ICSSR)
 - 3. Indian Council of Historical Research (ICHR)
 - 4. Indian Agricultural Research Institute (ICAR)

QuestionID: 26433082798
 Option1ID: 264330325027
 Option2ID: 264330325025
 Option3ID: 264330325028
 Option4ID: 264330325026
 Status: Answered
 ChosenOption: 1

Q.9 Match the column-A with column-B.

Column-A (Block Periodic Table)

- a. s-block
- b. p-block
- c. d-block
- d. f-block

Column-B (Elements)

- i. La
- ii. Cu
- iii. Al
- iv. Na

- Ans
- 1. a-iii, b-iv, c-ii, d-i
 - 2. a-i, b-iii, c-ii, d-iv
 - 3. a-iv, b-iii, c-ii, d-i
 - 4. a-i, b-ii, c-iii, d-iv

QuestionID: 264330131785
 Option1ID: 264330516242
 Option2ID: 264330516239
 Option3ID: 264330516240
 Option4ID: 264330516241
 Status: Answered
 ChosenOption: 3

Q.10 What does the 'Print Range' option allow you to do when printing a document?

- Ans
- 1. Add header and footer information to the printed pages
 - 2. Choose the specific pages or range of pages to be printed
 - 3. Adjust the size of the printed document to fit on a specific number of pages
 - 4. Print the document with different fonts and styles

QuestionID: 264330168600
 Option1ID: 264330661214
 Option2ID: 264330661212
 Option3ID: 264330661211
 Option4ID: 264330661213
 Status: Not Answered
 ChosenOption: --

Q.11 Who among the following attacked Gujarat and plundered the Somnath Temple in the 11th century?

- Ans
- 1. Ahmad Shah Abdali
 - 2. Qutubuddin Aibak
 - 3. Mahmud of Ghazni
 - 4. Muhammad Bin Qasim

QuestionID: 26433089867
Option1ID: 264330352946
Option2ID: 264330352947
Option3ID: 264330352948
Option4ID: 264330352945
Status: Answered
ChosenOption: 3

Q.12 To which of the following gharanas of music did Ustad Amir Khan, a renowned vocalist, belong?

- Ans
- 1. Agra
 - 2. Jaipur-Atrauli
 - 3. Rangeela
 - 4. Indore

QuestionID: 26433066684
Option1ID: 264330261262
Option2ID: 264330261263
Option3ID: 264330261260
Option4ID: 264330261261
Status: Not Answered
ChosenOption: --

Q.13 According to the Centre for Monitoring Indian Economy (CMIE), in which state of India was the unemployment rate recorded as 0.1%, as of September 2022?

- Ans
- 1. Chhattisgarh
 - 2. Tamil Nadu
 - 3. Madhya Pradesh
 - 4. Uttarakhand

QuestionID: 264330113297
Option1ID: 264330445275
Option2ID: 264330445274
Option3ID: 264330445276
Option4ID: 264330445273
Status: Answered
ChosenOption: 2

Q.14 Which of the following Buddhist sites is NOT found in the Vengire region of Andhra Pradesh?

- Ans
- 1. Nagarjunkonda
 - 2. Amaravati
 - 3. Chaukhundi
 - 4. Jagayyapetta

QuestionID:26433072648

Option1ID:264330284853

Option2ID:264330284852

Option3ID:264330284854

Option4ID:264330284855

Status:Answered

ChosenOption:4

Q.15 In which year was the Television (TV) service started in India? Ans



1. 1968

- 2. 1959
- 3. 1986
- 4. 1975

QuestionID:264330113277

Option1ID:264330445196

Option2ID:264330445193

Option3ID:264330445195

Option4ID:264330445194

Status:Answered

ChosenOption:3

Q.16 Electric field can be defined as:

- Ans
- 1. energy per unit charge
 - 2. force per unit current
 - 3. energy per unit current
 - 4. force per unit charge

QuestionID:264330118016

Option1ID:264330463881

Option2ID:264330463880

Option3ID:264330463879

Option4ID:264330463882

Status:Answered

ChosenOption:2

Q.17 When did Bhagat Singh and Batukeshwar Dutt throw the bombs inside the Central Assembly in Delhi?

- Ans 1. 8 April 1929
 2. 8 January 1929
 3. 8 March 1929
 4. 8 May 1929

QuestionID:264330111402
 Option1ID:264330437695
 Option2ID:264330437694
 Option3ID:264330437696
 Option4ID:264330437693
 Status:Answered
 ChosenOption:4

Q.18 Match the following columns.

Column-A

- i. Fat
 ii. Protein
 iii. Carbohydrate
 iv. Minerals

Column-B

- a. Sugar
 b. Calcium and sodium
 c. Amino acid
 d. Glycerol and fatty acid

- Ans 1. i-c, ii-d, iii-a, iv-b
 2. i-b, ii-a, iii-d, iv-c
 3. i-a, ii-b, iii-c, iv-d
 4. i-d, ii-c, iii-a, iv-b

QuestionID:264330114131
 Option1ID:264330448610
 Option2ID:264330448611
 Option3ID:264330448609
 Option4ID:264330448612
 Status:Answered
 ChosenOption:4

Q.19 According to the Census of India 2011, what is the sex ratio of Daman and Diu? Ans 1. 618

2. 518
 3. 818
 4. 718

QuestionID:264330119810
 Option1ID:264330469517
 Option2ID:264330469518
 Option3ID:264330469515
 Option4ID:264330469516
 Status:Answered
 ChosenOption:4

Q.20 Which of the following adulterants is mixed with sunflower oil and sesame oil to increase their quantity?

- Ans
- 1. Mustard oil
 - 2. Lentil oil
 - 3. Rhodamine
 - 4. Argemone oil

QuestionID:264330109935
Option1ID:264330432017
Option2ID:264330432018
Option3ID:264330432020
Option4ID:264330432019
Status:Answered
ChosenOption:1

Q.21 Which of the following Acts is regarded as the precursor to the Indian Constitution? Ans

- 1. Government of India Act of 1909
- 2. Government of India Act of 1945
- 3. Government of India Act of 1919
- 4. Government of India Act of 1935

QuestionID:264330112753
Option1ID:264330443097
Option2ID:264330443100
Option3ID:264330443098
Option4ID:264330443099
Status:Answered
ChosenOption:4

Q.22 Which of the following is the largest phylum of animalia? Ans

- 1. Mollusca
- 2. Annelida
- 3. Chordata
- 4. Arthropoda

QuestionID:264330103805
Option1ID:264330407521
Option2ID:264330407524
Option3ID:264330407522
Option4ID:264330407523
Status:Answered
ChosenOption:4

Q.23 Name the project which was launched for tackling the increasing HIV prevalence in the eight North-Eastern states.

- Ans
- 1. Mission Aware
 - 2. Mission Sampark
 - 3. Project Sunrise
 - 4. Project Empower

QuestionID:264330156920
Option1ID:264330615058
Option2ID:264330615056
Option3ID:264330615055
Option4ID:264330615057
Status:NotAnswered
ChosenOption:--

Q.24 The boundary line separating one drainage basin from another is called _____.

- Ans
- 1. terrace
 - 2. floodplain
 - 3. peneplain
 - 4. watershed

QuestionID:26433055322
Option1ID:264330216272
Option2ID:264330216275
Option3ID:264330216274
Option4ID:264330216273
Status:Answered
ChosenOption:2

Q.25 Which of the following measures of money supply is considered most liquid? Ans

- 1. M2
- 2. M4
- 3. M3
- 4. M1

QuestionID:26433092379
Option1ID:264330362806
Option2ID:264330362808
Option3ID:264330362807
Option4ID:264330362805
Status:NotAnswered
ChosenOption:--

Q.26 The first Bose-Einstein condensate (BEC) made of which atom was reported by the team of Eric Cornell and Carl Wieman in 1995?

- Ans
- 1. ^{87}Rb
 - 2. ^{137}Cs
 - 3. ^{90}Sr
 - 4. ^{228}Ra

QuestionID:264330141689

Option1ID:264330555075

Option2ID:264330555078

Option3ID:264330555077

Option4ID:264330555076

Status:Answered

ChosenOption:4

Q.27 Which of the following is a type of shield volcano that is large (up to several 1,000 m high and 200 km across) but NOT steep (usually 2° to 10°) and the magma is almost always mafic?

- Ans
- 1. Mount Etna, Sicily
 - 2. Mount Fuji, Japan
 - 3. Kilauea volcano, Hawaii
 - 4. Aguilera, Chile

QuestionID:264330113790

Option1ID:264330447245

Option2ID:264330447246

Option3ID:264330447248

Option4ID:264330447247

Status:Answered

ChosenOption:2

Q.28 Where was India House founded in the UK? Ans

- 1. Bristol
- 2. London
- 3. Edinburgh
- 4. Manchester

QuestionID:264330109048

Option1ID:264330428471

Option2ID:264330428469

Option3ID:264330428472

Option4ID:264330428470

Status:NotAnswered

ChosenOption:--

Q.29 What is the total outlay for the development of Comprehensive Handicrafts Cluster Development Scheme, which has been extended till FY 2026?

- Ans
- 1. ₹100 crore
 - 2. ₹120 crore
 - 3. ₹160 crore
 - 4. ₹140 crore

QuestionID: 264330156918
 Option1ID: 264330615047
 Option2ID: 264330615048
 Option3ID: 264330615050
 Option4ID: 264330615049
 Status: Not Answered
 ChosenOption: --

Q.30 Select the correct pair of Indian classical dancers of Odissi style.

- Ans
- 1. Meenakshi Sundaram Pillai and Savitha Sastry
 - 2. Sujata Mohapatra and Madhavi Mudgal
 - 3. Mallika Sarabhai and Shobha Naidu
 - 4. Amala Shankar and Singhajit Singh

QuestionID: 264330130516
 Option1ID: 264330511178
 Option2ID: 264330511176
 Option3ID: 264330511177
 Option4ID: 264330511175
 Status: Not Answered
 ChosenOption: --

Q.31 Which of the following is NOT included in fundamental duties? Ans

- 1. Respect the national flag and the national anthem
- 2. Focus on personal development and individual activities only
- 3. To value and preserve the rich heritage of our composite culture
- 4. To uphold and protect the sovereignty, unity and integrity of India

QuestionID: 264330118533
 Option1ID: 264330465533
 Option2ID: 264330465536
 Option3ID: 264330465535
 Option4ID: 264330465534
 Status: Answered
 ChosenOption: 2

Q.32 President of India, Droupadi Murmu met President of Republic of Suriname, _____ on the sidelines of the 17th Pravasi Bharatiya Divas Convention at Indore, Madhya Pradesh on 10 January 2023.

- Ans
- 1. Johan Kraag
 - 2. Ronald Venetiaan
 - 3. Desi Bouterse
 - 4. Chandrikaprasad Santokhi

QuestionID:264330132578
Option1ID:264330519410
Option2ID:264330519409
Option3ID:264330519408
Option4ID:264330519407

Status: Answered
ChosenOption: 2

Q.33 How are resources divided on the basis of status of development?

- 1. Biotic and abiotic
- 2. Renewable and non-renewable
- 3. Potential, developed stocks and reserves
- 4. Individual, community, national and international

QuestionID:26433086757
Option1ID:264330340671
Option2ID:264330340670
Option3ID:264330340669
Option4ID:264330340672

Status: Answered
ChosenOption: 3

Q.34 Pandit Shambhu Maharaj is a renowned _____ dancer.

- Ans
- 1. Sattriya
 - 2. Odissi
 - 3. Kathak
 - 4. Kuchipudi

QuestionID:26433082118
Option1ID:264330322306
Option2ID:264330322305
Option3ID:264330322307
Option4ID:264330322308

Status: Not Answered
ChosenOption: --

Q.35 Which of the following is an intermediate goods industry? Ans

- 1. Manufacturing of Cars
- 2. Manufacturing of tools
- 3. Manufacturing of plants and machineries
- 4. Manufacturing of refrigerators

QuestionID: 264330144395

Option1ID: 264330565835

Option2ID: 264330565837

Option3ID: 264330565838

Option4ID: 264330565836

Status: Not Answered

ChosenOption: --

Q.36 The Manusmriti, one of the best-known legal texts of early India, is written in _____.

- Ans
- 1. Pali
 - 2. Sanskrit
 - 3. Hindi
 - 4. Prakrit

QuestionID: 264330111370

Option1ID: 264330437566

Option2ID: 264330437568

Option3ID: 264330437565

Option4ID: 264330437567

Status: Not Answered

ChosenOption: --

Q.37 Which of the following items may NOT be treated as an intermediary good? Ans

- 1. Maid produced in a flour mill
- 2. Maida used in a biscuit factory
- 3. Maida used in a house to make paratha
- 4. Maida used to produce bread in a bakery

QuestionID: 264330111727

Option1ID: 264330438995

Option2ID: 264330438994

Option3ID: 264330438993

Option4ID: 264330438996

Status: Not Answered

ChosenOption: --

Q.38 Protection of _____ is the fundamental duty of an Indian citizen.

- Ans
- 1. Holy scriptures
 - 2. Children and old people
 - 3. Villages
 - 4. Wildlife

QuestionID:26433086793
Option1ID:264330340816
Option2ID:264330340814
Option3ID:264330340815
Option4ID:264330340813
Status:NotAnswered
ChosenOption:--

Q.39 Who among the following is NOT part of the Goods and Services Tax Council of India? Ans

- 1. Lieutenant Governor of Union Territories
- 2. Union Finance Minister
- 3. Union Minister of State in charge of Revenue or Finance
- 4. The Minister in-charge of Finance of each state or any other minister nominated by state government

QuestionID:264330130463
Option1ID:264330510966
Option2ID:264330510965
Option3ID:264330510963
Option4ID:264330510964
Status:NotAnswered
ChosenOption:--

Q.40 Who was the Governor-General during the Anglo-Nepal war? Ans

- 1. Lord Auckland
- 2. Lord Hardinge
- 3. Lord Wellesley
- 4. Lord Hastings

QuestionID:264330112165
Option1ID:264330440748
Option2ID:264330440745
Option3ID:264330440747
Option4ID:264330440746
Status:NotAnswered
ChosenOption:--

Q.41 In which city will the 2024 Summer Olympic Games be held?

- 1. Beijing
- 2. Berlin
- 3. Paris
- 4. Brisbane

QuestionID: 264330119265

Option1ID: 264330467348

Option2ID: 264330467347

Option3ID: 264330467350

Option4ID: 264330467349

Status: NotAnswered

ChosenOption:--

Q.42 _____ Central Administrative Tribunal benches exist all over India, as of December 2022.

- Ans
- 1. 17
 - 2. 16
 - 3. 19
 - 4. 18

QuestionID: 264330119678

Option1ID: 264330468989

Option2ID: 264330468990

Option3ID: 264330468987

Option4ID: 264330468988

Status: NotAnswered

ChosenOption:--

Q.43 According to the Global Multidimensional Poverty Index 2022, around _____ people in India climbed out of poverty between 2005-06 and 2019-21.

- Ans
- 1. 3.15 million
 - 2. 4.15 million
 - 3. 5.00 million
 - 4. 4.50 million

QuestionID: 264330157098

Option1ID: 264330615763

Option2ID: 264330615765

Option3ID: 264330615766

Option4ID: 264330615764

Status: NotAnswered

ChosenOption:--

Q.44 Which of the following is an example of a homeothermic animal?

- Ans
- 1. Salamander
 - 2. Cobra
 - 3. Tortoise
 - 4. Penguin

QuestionID: 264330113319
Option1ID: 264330445363
Option2ID: 264330445364
Option3ID: 264330445361
Option4ID: 264330445362
Status: NotAnswered
ChosenOption: --

Q.45 In which of the following games is the term 'header' associated?

- Ans
- 1. Badminton
 - 2. Football
 - 3. Cricket
 - 4. Hockey

QuestionID: 264330109734
Option1ID: 264330431216
Option2ID: 264330431214
Option3ID: 264330431215
Option4ID: 264330431213
Status: NotAnswered
ChosenOption: --

Q.46 Which of the following factors are responsible for spoilage of stored food?

- Ans
- 1. Low temperature and very high pressure
 - 2. High temperature and pressure
 - 3. Moisture and humidity that can allow microbial growth
 - 4. High salt and spice content

QuestionID: 264330109939
Option1ID: 264330432034
Option2ID: 264330432033
Option3ID: 264330432036
Option4ID: 264330432035
Status: NotAnswered
ChosenOption: --

Q.47 Which of the following factors is a geographical factor that affects the distribution of the population in India?

- Ans
- 1. Industrialisation
 - 2. Climate
 - 3. Minerals
 - 4. Urbanisation

QuestionID:264330116480
Option1ID:264330458008
Option2ID:264330458005
Option3ID:264330458007
Option4ID:264330458006
Status:NotAnswered
ChosenOption:--

Q.48 What is the primary objective of cybersecurity? Ans

- 1. To enhance internet connectivity
- 2. To prevent unauthorised access and data breaches
- 3. To protect computers from physical damage
- 4. To create new software applications

QuestionID:264330168583
Option1ID:264330661145
Option2ID:264330661144
Option3ID:264330661143
Option4ID:264330661146
Status:NotAnswered
ChosenOption:--

Q.49 What is the correct sequence of the zones of a pond ecosystem from the bottom to top?

- Ans
- 1. Hypolimnion-Thermocline-Epilimnion
 - 2. Litoral-Thermocline-Epilimnion
 - 3. Hypolimnion-Thermocline-Litoral
 - 4. Epilimnion-Hypolimnion-Thermocline

QuestionID:264330114129
Option1ID:264330448603
Option2ID:264330448601
Option3ID:264330448602
Option4ID:264330448604
Status:NotAnswered
ChosenOption:--



Section: General Engineering Mechanical

Q.1 The value of the gross stage efficiency and Blade efficiency of the single stage of the impulse turbine are 65% and 78% respectively. The value of the nozzle efficiency will be

- Ans
1. 83.33%
 2. 50%
 3. 100%
 4. 50.7%

QuestionID: 264330100602

Option1ID: 264330394954

Option2ID: 264330394956

Option3ID: 264330394955

Option4ID: 264330394953

Status: Not Answered

ChosenOption: --

Q.2 Which of the following statements is INCORRECT about the Benson boiler? Ans

1. The Benson boiler is heavier than other boilers. ✓
2. Benson boilers can be switched on very quickly. ✗
3. In Benson boilers, drums are not used. ✗
4. The average operating pressure for the Benson boiler is higher than 200 bar. ✗

QuestionID: 264330159964

Option1ID: 264330627203

Option2ID: 264330627204

Option3ID: 264330627206

Option4ID: 264330627205

Status: Answered

ChosenOption: 2

Q.3 The process of pushing the heated billet or slug of metal through an die orifice, thus forming an elongated part of a uniform cross-section corresponding to the shape of the die orifice is known as _____

- Ans
- 1. Extrusion process
 - 2. Rolling process
 - 3. Drawing process
 - 4. Machining process

QuestionID:264330100609

Option1ID:264330394982

Option2ID:264330394983

Option3ID:264330394981

Option4ID:264330394984

Status:Answered

ChosenOption:3

Q.4 Which of the following statements is correct about water-tube and fire-tube boilers? Ans

- 1. In case of water-tube boilers, hot gases flow in the tubes.
- 2. In case of fire-tube boilers, hot gases are surrounded over the tubes.
- 3. In case of fire-tube boilers, water flows in the tubes.
- 4. In case of fire-tube boilers, hot gases flow in the tubes.

QuestionID:264330159932

Option1ID:264330627078

Option2ID:264330627077

Option3ID:264330627075

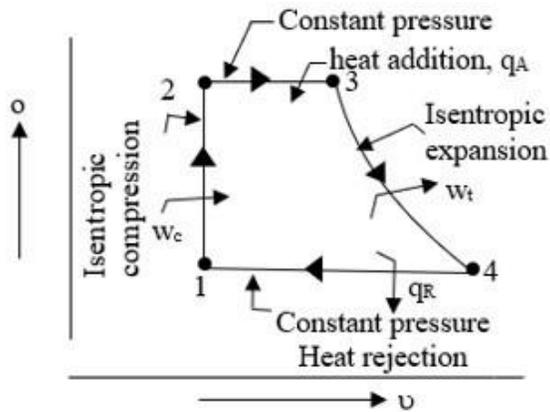
Option4ID:264330627076

Status:Answered

ChosenOption:4

Q.5

The figure shows the P-V diagram of the _____.

Ans 1.opencyclergasturbine 2.steamengine 3.ottocycle 4.steamturbine

QuestionID:264330100150

Option1ID:264330393174

Option2ID:264330393173

Option3ID:264330393175

Option4ID:264330393176

Status:Answered

ChosenOption:2

Q.6What isthevalueof the density of water at 4°C?Ans

 1.10gm/cm³ 2.1000gm/cm³ 3.1gm/cm³ 4.100gm/cm³

QuestionID:26433096271

Option1ID:264330377834

Option2ID:264330377836

Option3ID:264330377833

Option4ID:264330377835

Status:Answered

ChosenOption:3

Q.7 A closed vessel contains 5 kg of air, and 50 kJ of heat is given to it. If 75 kJ of work is done by the system, then which of the following is true?
(Take $C_p = 1.005 \text{ kJ/kg-K}$, $C_v = 0.718 \text{ kJ/kg-K}$)

Ans

- 1. The temperature of the air will increase by 7°
- 2. The temperature of the air will decrease by 7°
- 3. The temperature of the air will increase by 5°
- 4. The temperature of the air will decrease by 34.8°

QuestionID:26433099465

Option1ID:264330390473

Option2ID:264330390474

Option3ID:264330390475

Option4ID:264330390476

Status:Answered

ChosenOption:2

Q.8 Which of the following turbine has 50% degree of reaction? Ans

- 1. Curt turbine
- 2. Hero's Turbine
- 3. Rateau turbine
- 4. Parson's turbine

QuestionID:264330100598

Option1ID:264330394939

Option2ID:264330394938

Option3ID:264330394940

Option4ID:264330394937

Status:Answered

ChosenOption:4

Q.9 If difference of axial components of velocity at inlet and outlet of a de-Laval turbine is found to be 120 m/s and mass flow rate of steam is 7 kg/s then axial thrust on the rotor is

Ans

- 1. 840N
- 2. 17.14N
- 3. 7N
- 4. 120N

QuestionID:264330100601

Option1ID:264330394952

Option2ID:264330394951

Option3ID:264330394949

Option4ID:264330394950

Status:NotAnswered

ChosenOption:--

Q.10 The amount of water striking the runner of the reaction turbine is controlled by _____ Ans

- 1. draft tube
- 2. spear arrangement
- 3. casing
- 4. guide mechanism

QuestionID:26433096721

Option1ID:264330379621

Option2ID:264330379624

Option3ID:264330379623

Option4ID:264330379622

Status: Answered

ChosenOption:4

Q.11 What is the unit of measurement of actual evaporation in steam boilers?

Ans 1. kg fuel burnt/kg water evaporated

- 2. m^3/kg
- 3. kg water evaporated/kg fuel burnt
- 4. kg

QuestionID:264330159957

Option1ID:264330627177

Option2ID:264330627178

Option3ID:264330627176

Option4ID:264330627175

Status: Answered

ChosenOption:3

Q.12 A closed system undergoes a process in which the work done by the system is 100 J and the internal energy decreases by 50 J. According to the first law of thermodynamics, what is the amount of heat transferred into or out of the system?

- Ans 1. 150 J
- 2. 50 J
 - 3. -150 J
 - 4. -50 J

QuestionID:264330157925

Option1ID:264330619062

Option2ID:264330619061

Option3ID:264330619059

Option4ID:264330619060

Status: Answered

ChosenOption:2

Q.13 Which of the following is the correct expression for pressure intensity? Ans

✓ 1. $P = \rho gh$

✗ 2. $P = 0.5\rho gh$

✗ 3. $P = 2\rho gh$

✗ 4. $P = 1.5\rho gh$

QuestionID:264330159150

Option1ID:264330623959

Option2ID:264330623962

Option3ID:264330623960

Option4ID:264330623961

Status:Answered

ChosenOption:1

Q.14 In the context of work done of turbine, the power developed by the runner depends on which of the following parameters?

Ans ✗ 1. Velocity at the exit of draft tube

✗ 2. Blade velocity

✓ 3. Whirl and blade velocities

✗ 4. Whirl velocity only

QuestionID:264330159161

Option1ID:264330624006

Option2ID:264330624004

Option3ID:264330624005

Option4ID:264330624003

Status:Answered

ChosenOption:3

Q.15 What will be the atmospheric pressure at a location where the barometric reading is 750 mm Hg and the gravitational acceleration is $g = 9.81 \text{ m/s}^2$? Assume the density of mercury to be $13,600 \text{ kg/m}^3$.

Ans ✗ 1. 10.006 kPa

✗ 2. 100.06 Pa

✓ 3. 100.06 kPa

✗ 4. 1000.6 Pa

QuestionID:26433096281

Option1ID:264330377874

Option2ID:264330377876

Option3ID:264330377875

Option4ID:264330377873

Status:Answered

ChosenOption:2

Q.16 The evaporation of feed water at 100°C in dry and saturated steam at 100°C at atmospheric pressure is known as _____.

- Ans
- 1. actual evaporation
 - 2. boiler efficiency
 - 3. boiler horsepower
 - 4. equivalent evaporation

QuestionID:264330159961
Option1ID:264330627191
Option2ID:264330627193
Option3ID:264330627194
Option4ID:264330627192
Status:NotAnswered
ChosenOption:--

Q.17 Which of the following is the correct item for Double Volute centrifugal pumps? Ans

- 1. Flow separation does not take place
- 2. Flow is separated into two equal streams by two-cut water that are 90° apart
- 3. Flow is separated into two unequal streams by two-cut water that are 90° apart
- 4. Flow is separated into two equal streams by two-cut water that are 180° apart

QuestionID:264330159091
Option1ID:264330623723
Option2ID:264330623724
Option3ID:264330623726
Option4ID:264330623725
Status:Answered
ChosenOption:3

Q.18 The bent tube of a Bourdon tube pressure gauge will change its shape when exposed to variations of _____.

- Ans
- 1. resistance
 - 2. voltage
 - 3. pressure
 - 4. displacement

QuestionID:26433096302
Option1ID:264330377960
Option2ID:264330377958
Option3ID:264330377959
Option4ID:264330377957
Status:Answered
ChosenOption:3

Q.19 In aqua-ammonia absorption refrigeration system, incomplete refrigeration leads to accumulation of water in:

- Ans
- 1. absorber
 - 2. evaporator
 - 3. heat exchanger
 - 4. condenser

QuestionID:264330157252
Option1ID:264330616372
Option2ID:264330616373
Option3ID:264330616371
Option4ID:264330616374
Status:Answered
ChosenOption:2

Q.20 The difference in low temperature cascade condenser temperature and high temperature cascade evaporator temperature is called _____.

- Ans
- 1. degree of superheat
 - 2. temperature overlap
 - 3. average temperature
 - 4. degree of subcooling

QuestionID:264330157197
Option1ID:264330616151
Option2ID:264330616152
Option3ID:264330616154
Option4ID:264330616153
Status:Answered
ChosenOption:2

Q.21 If the cutter and workpiece movements are in opposite directions, the milling process is known as-

- Ans
- 1. Upmilling
 - 2. Downmilling
 - 3. Facemilling
 - 4. Sidemilling

QuestionID:264330100617
Option1ID:264330395013
Option2ID:264330395014
Option3ID:264330395015
Option4ID:264330395016
Status:Answered
ChosenOption:1

Q.22 In actual air-conditioning applications for R-12 and R-22 refrigerant and operating at a condenser temperature of 40°C and an evaporator temperature of 5°C , the heat rejection factor

is about: Ans 1.1.25

2.2.15

3.1

4.5.12

QuestionID:264330160266

Option1ID:264330628404

Option2ID:264330628405

Option3ID:264330628403

Option4ID:264330628406

Status:Answered

ChosenOption:2

Q.23 The pressure intensity at a point in a fluid is given as 3.924N/cm^2 . What will be the corresponding height of fluid when the fluid is water?

Ans 1.4m of water

2.3.5m of water

3.6m of water

4.2.5m of water

QuestionID:264330159260

Option1ID:264330624400

Option2ID:264330624399

Option3ID:264330624402

Option4ID:264330624401

Status:Answered

ChosenOption:1

Q.24 If the line of stroke of a follower passes through the centre of rotation of a cam, the cam is called _____.

Ans 1. oscillating cam and follower

2. globoidal cam

3. radial cam

4. offset cam

QuestionID:264330162540

Option1ID:264330637489

Option2ID:264330637490

Option3ID:264330637488

Option4ID:264330637487

Status:Answered

ChosenOption:2

Q.25 Scavenging phenomenon occurred in Two-stroke IC engine when

- Ans
- 1. Both transfer port and exhaust port are opened for a while simultaneously
 - 2. Both transfer port and exhaust port are fully closed
 - 3. Both inlet and outlet valve are opened for a while simultaneously
 - 4. Both inlet and outlet valve are fully closed

QuestionID: 264330100586
Option1ID: 264330394889
Option2ID: 264330394890
Option3ID: 264330394891
Option4ID: 264330394892
Status: Answered
ChosenOption: 1

Q.26 Which of the following statements is correct regarding governor?

- Ans
- 1. It controls acceleration of the prime mover.
 - 2. It controls the temperature of the prime mover.
 - 3. It controls the mean speed of the prime mover.
 - 4. It is not a compulsory device of the prime mover.

QuestionID: 264330162546
Option1ID: 264330637511
Option2ID: 264330637514
Option3ID: 264330637513
Option4ID: 264330637512
Status: Answered
ChosenOption: 3

Q.27 On the stress-strain diagram, the material obeys Hooke's law till:

- Ans
- 1. upper yield point
 - 2. point of ultimate stress
 - 3. lower yield point
 - 4. elastic limit

QuestionID: 26433099536
Option1ID: 264330390759
Option2ID: 264330390760
Option3ID: 264330390758
Option4ID: 264330390757
Status: Answered
ChosenOption: 4

Q.28 Which of the following statements is true about hot working process?

- Ans
- 1. All hot working processes must be done above local environment temperature.
 - 2. Hot working process is also a cold working process.
 - 3. It is a process of working above recrystallisation temperature of the materials.
 - 4. It is a process of working above room temperature.

QuestionID:264330157515

Option1ID:264330617421

Option2ID:264330617422

Option3ID:264330617420

Option4ID:264330617419

Status:Answered

ChosenOption:3

Q.29 The point of intersection of the line of action of the resultant hydrostatic force and the submerged surface is called _____.

- Ans
- 1. centre of mass
 - 2. centre of gravity
 - 3. centre of buoyancy
 - 4. centre of pressure

QuestionID:26433096282

Option1ID:264330377880

Option2ID:264330377879

Option3ID:264330377877

Option4ID:264330377878

Status:Answered

ChosenOption:4

Q.30

The continuity equation $\frac{\partial u}{\partial x} + \frac{\partial v}{\partial y} = 0$ is valid for a _____.

- Ans
- 1. unsteady, 2D, compressible flow
 - 2. steady, 2D, compressible flow
 - 3. steady, 2D, incompressible flow
 - 4. unsteady, 2D, incompressible flow

QuestionID:264330100883

Option1ID:264330396080

Option2ID:264330396077

Option3ID:264330396078

Option4ID:264330396079

Status:Answered

ChosenOption:3

Q.31 According to _____, the intensity of pressure in a liquid at rest is constant in all directions.

- Ans
- 1. Newton's law
 - 2. Boyle's law
 - 3. hydrostatic law
 - 4. Pascal's law

QuestionID:26433095681
 Option1ID:264330375508
 Option2ID:264330375507
 Option3ID:264330375505
 Option4ID:264330375506
 Status:Answered

ChosenOption:4

Q.32 Which of the following statements is correct about the force induced draught fan used in steam boilers?

- Ans
- 1. The power required by an induced draught fan is equal to that required by a forced draught fan for the same amount of draught.
 - 2. The power required by an induced draught fan is less than that required by a forced draught fan for the same amount of draught.
 - 3. The power required by an induced draught fan is greater than that required by a forced draught fan for the same amount of draught.
 - 4. The power required by an induced draught fan may be greater than or less than that required by a forced draught fan for the same amount of draught.

QuestionID:264330159945
 Option1ID:264330627129
 Option2ID:264330627128
 Option3ID:264330627127
 Option4ID:264330627130
 Status:NotAnswered

ChosenOption:--

Q.33 A solid circular shaft of diameter d is subjected to a twisting moment T . Which of the following relations can be used to determine the stress developed in the shaft?

- Ans
- 1. $\tau = \frac{16T}{\pi d^3}$
 - 2. $\tau = \frac{32T}{\pi d^3}$
 - 3. $\tau = \frac{128T}{\pi d^3}$
 - 4. $\tau = \frac{64T}{\pi d^3}$

QuestionID:26433099952
 Option1ID:264330392381
 Option2ID:264330392382
 Option3ID:264330392384
 Option4ID:264330392383
 Status:Answered

ChosenOption:1

Q.34 In which of the following cycles does heat addition NOT take place at constant volume?

- Ans
- 1. Lenoir cycle
 - 2. Dual cycle
 - 3. Otto cycle
 - 4. Diesel cycle

QuestionID:264330157517

Option1ID:264330617427

Option2ID:264330617430

Option3ID:264330617428

Option4ID:264330617429

Status: Answered

ChosenOption:3

Q.35 An impulse turbine is running at 1000 rpm with a net head of 600 m. If the discharge through the nozzle is $0.1 \text{ m}^3/\text{s}$, then what will be the power available at the nozzle? Take $g = 10 \text{ m/s}^2$.

- Ans
- 1. 450 kW
 - 2. 600 kW
 - 3. 525 kW
 - 4. 700 kW

QuestionID:26433096720

Option1ID:264330379618

Option2ID:264330379617

Option3ID:264330379619

Option4ID:264330379620

Status: Answered

ChosenOption:2

Q.36 Which of the following is NOT the part of venturimeter setup? Ans

- 1. Throat
- 2. Float
- 3. Converging part
- 4. Diverging part

QuestionID:264330159110

Option1ID:264330623800

Option2ID:264330623802

Option3ID:264330623799

Option4ID:264330623801

Status: Answered

ChosenOption:2

Q.37 Ammonia is NOT used in domestic refrigeration and comfort air-conditioning because:

- Ans
- 1. its heat transfer coefficient is very low
 - 2. it is toxic and flammable
 - 3. lubricating oil is not soluble in ammonia at all
 - 4. it is not soluble in water

QuestionID: 26433096789
Option1ID: 264330379894
Option2ID: 264330379895
Option3ID: 264330379896
Option4ID: 264330379893
Status: Answered
ChosenOption: 2

Q.38 If the temperature of 'A' is equal to the temperature of 'B' and 'C', then the temperature of 'B' will be equal to the temperature of 'C'. This is known as:

- Ans
- 1. Joule's law
 - 2. law of thermal equilibrium
 - 3. law of equality of temperature
 - 4. zeroth law of thermodynamics

QuestionID: 26433095636
Option1ID: 264330375327
Option2ID: 264330375325
Option3ID: 264330375328
Option4ID: 264330375326
Status: Answered
ChosenOption: 4

Q.39 The SI unit of specific heat is:

- Ans
- 1. J/kg
 - 2. J/kg/K
 - 3. J/kg.K
 - 4. JK/kg

QuestionID: 26433099487
Option1ID: 264330390564
Option2ID: 264330390561
Option3ID: 264330390563
Option4ID: 264330390562
Status: Answered
ChosenOption: 3

Q.40 In case of dual cycle of an I.C. engine, heat addition is _____.

- Ans
- 1. only an isobaric process
 - 2. an isentropic process
 - 3. both an isochoric and an isobaric process
 - 4. only an isochoric process

QuestionID:264330157518
Option1ID:264330617433
Option2ID:264330617431
Option3ID:264330617434
Option4ID:264330617432
Status:Answered
ChosenOption:3

Q.41 Which of the following evaporators are also known as prime - surface evaporators? Ans

- 1. Shell-and-tube evaporators
- 2. Finned-tube evaporators
- 3. Plate evaporators
- 4. Bare-tube coil evaporators

QuestionID:264330160267
Option1ID:264330628410
Option2ID:264330628408
Option3ID:264330628409
Option4ID:264330628407
Status:Answered
ChosenOption:1

Q.42 In which percentage generally is lubricating oil mixed with the fuel, which is then inducted into the carburettor in a mist lubricating system?

- Ans
- 1. 40% to 50%
 - 2. 30% to 40%
 - 3. 3% to 6%
 - 4. Zero

QuestionID:26433096533
Option1ID:264330378871
Option2ID:264330378869
Option3ID:264330378870
Option4ID:264330378872
Status:Answered
ChosenOption:2

Q.43 Which of the following point angles of a twist drill is used for general purpose work? Ans 

1. 128°

 2. 118°

 3. 108°

 4. 138°

QuestionID:264330159291

Option1ID:264330624525

Option2ID:264330624524

Option3ID:264330624523

Option4ID:264330624526

Status:Answered

ChosenOption:3

Q.44 The function of an air pre-heater is _____.

Ans  1. to decrease the temperature of air after entering the furnace

 2. to increase the temperature of air after entering the furnace

 3. to decrease the temperature of air before entering the furnace

 4. to increase the temperature of air before entering the furnace

QuestionID:264330100115

Option1ID:264330393036

Option2ID:264330393035

Option3ID:264330393034

Option4ID:264330393033

Status:Answered

ChosenOption:4

Q.45 What will be the specific weight of one litre of petrol of specific gravity 0.7? (Take $g = 9.81 \text{ m/sec}^2$)

Ans  1. 5436 N/m^3

 2. 6867 N/m^3

 3. 7286 N/m^3

 4. 6256 N/m^3

QuestionID:264330159241

Option1ID:264330624323

Option2ID:264330624326

Option3ID:264330624325

Option4ID:264330624324

Status:Answered

ChosenOption:2

Q.46 Which of the following statements are correct?
INCORRECT? Ans

- 1. It is used to transmit power only for shorter distances.
- 2. Rope drives have high mechanical efficiency.
- 3. Shafts do not require exact alignment.
- 4. It has good crushing resistance.

QuestionID:264330166510

Option1ID:264330653084

Option2ID:264330653086

Option3ID:264330653083

Option4ID:264330653085

Status:Answered

ChosenOption:2

Q.47 Which fluid is used to increase the rate of evaporation of the liquid ammonia passing through the evaporator in a domestic Electrolux refrigeration system?

- Ans
- 1. Water
 - 2. Ammonia
 - 3. Mercury
 - 4. Hydrogen

QuestionID:264330157250

Option1ID:264330616365

Option2ID:264330616364

Option3ID:264330616366

Option4ID:264330616363

Status:Answered

ChosenOption:1

Q.48 Which of the following equations is used to calculate major losses in pipes? Ans

- 1. Continuity equation
- 2. Momentum equation
- 3. Darcy-Weisbach equation
- 4. Reynolds' equation

QuestionID:26433096129

Option1ID:264330377287

Option2ID:264330377288

Option3ID:264330377285

Option4ID:264330377286

Status:Answered

ChosenOption:3

Q.49 Which of the following about work transfer is NOT correct?

- Ans
- 1. Work is given by the area under the curve on p-V diagram in case of non-flow process.
 - 2. Work transfer is a boundary phenomenon.
 - 3. Work transfer is a thermodynamic property.
 - 4. Work is a transient phenomenon.

QuestionID:26433095635

Option1ID:264330375322

Option2ID:264330375321

Option3ID:264330375324

Option4ID:264330375323

Status: Answered

ChosenOption:3

Q.50 0.2m^3 of an ideal gas at the pressure of 2 MPa and 600 K is expanded isothermally to 5 times the initial volume. It is then cooled to 300 K at constant volume and then compressed back polytropically to its initial state. The pressure just after the constant volume process is _____.

- Ans
- 1. 0.2 MPa
 - 2. 2.0 MPa
 - 3. 0.8 MPa
 - 4. 0.4 MPa

QuestionID:26433099993

Option1ID:264330392546

Option2ID:264330392547

Option3ID:264330392548

Option4ID:264330392545

Status: Answered

ChosenOption:1

Q.51 Match the types of refrigerants with their representations.

Type of Refrigerant	Representation
1. CFC refrigerants	a. R-22
2. HFC refrigerants	b. R-11
3. HC refrigerants	c. R-134a
4. HCFC refrigerants	d. R-290

- Ans
- 1. 1-a; 2-c; 3-d; 4-b
 - 2. 1-a; 2-d; 3-b; 4-c
 - 3. 1-b; 2-d; 3-c; 4-a
 - 4. 1-b; 2-c; 3-d; 4-a

QuestionID:26433096787

Option1ID:264330379885

Option2ID:264330379888

Option3ID:264330379887

Option4ID:264330379886

Status: Answered

ChosenOption:1

Q.52 In the Bell-Coleman refrigeration cycle, the temperature of the refrigerant is maximum at the:

- Ans
- 1. end of constant pressure cooling process
 - 2. end of isentropic expansion
 - 3. end of isentropic compression
 - 4. start of isentropic compression

QuestionID:264330157193
Option1ID:264330616137
Option2ID:264330616136
Option3ID:264330616138
Option4ID:264330616135
Status:Answered
ChosenOption:3

Q.53 The reversible adiabatic process in Mollier chart is represented by _____.

- Ans
- 1. a line parallel to the saturated vapour line
 - 2. a vertical line
 - 3. a horizontal line
 - 4. a line parallel to the saturated water line

QuestionID:26433095602
Option1ID:264330375191
Option2ID:264330375190
Option3ID:264330375189
Option4ID:264330375192
Status:Answered
ChosenOption:2

Q.54 Which of the following equations is NOT used in deriving the expression for discharge through the steam nozzle?

- Ans
- 1. Continuity equation
 - 2. Newton's equation of viscosity
 - 3. Momentum equation
 - 4. Steady flow energy equation

QuestionID:264330159967
Option1ID:264330627215
Option2ID:264330627218
Option3ID:264330627216
Option4ID:264330627217
Status:Answered
ChosenOption:2

Q.55 A workpiece of diameter D is turned on a lathe, where the diameter of the workpiece is d and the length of this workpiece is L . Then the half angle α is given by:

Ans

✓ 1. $\tan \alpha = \frac{(D-d)}{2L}$

2. $\tan \alpha = \frac{(D-d)}{3L}$

3. $\tan \alpha = \frac{(D-d)}{L}$

4. $\tan \alpha = \frac{(D-d)}{4L}$

QuestionID:264330100616

Option1ID:264330395009

Option2ID:264330395010

Option3ID:264330395012

Option4ID:264330395011

Status:Answered

ChosenOption:4

Q.56 In a Carnot cycle, _____.

Ans ✗ 1. only isothermal processes are reversible

✗ 2. all processes are irreversible

✓ 3. all processes are reversible

✗ 4. only adiabatic processes are reversible

QuestionID:26433099999

Option1ID:264330392571

Option2ID:264330392570

Option3ID:264330392569

Option4ID:264330392572

Status:Answered

ChosenOption:3

Q.57 What pressure head of kerosene of specific gravity 0.8 will be equivalent to a pressure head of 100 m of water?

Ans ✓ 1. 125m

✗ 2. 100m

✗ 3. 120m

✗ 4. 110m

QuestionID:26433096290

Option1ID:264330377909

Option2ID:264330377910

Option3ID:264330377911

Option4ID:264330377912

Status:Answered

ChosenOption:1

Q.58 Which of the following is a suitable unit for measuring the capacity of refrigeration? Ans 1.kg

✗

✓ 2. TR

✗ 3. kJ

✗ 4. Kw/kg

QuestionID:26433099489

Option1ID:264330390571

Option2ID:264330390569

Option3ID:264330390570

Option4ID:264330390572

Status:Answered

ChosenOption:2

Q.59 Latent heat of vaporisation is NOT the _____.

Ans 1. heat required for complete conversion of saturated liquid into dry saturated vapour ✗

✓ 2. heat required for complete conversion of ice into water

✗ 3. heat added at constant temperature of 100°C to convert water into steam

✗ 4. sum of internal latent heat and external work of evaporation

QuestionID:26433099978

Option1ID:264330392485

Option2ID:264330392487

Option3ID:264330392488

Option4ID:264330392486

Status:Answered

ChosenOption:2

Q.60 Which of the following statements about equilibrium is correct?

Ans 1. Summation of all the forces acting in all the possible directions must be non-zero. ✗

✓ 2. Summation of all the forces acting in all the possible directions must be zero.

✗ 3. Summation of all the forces acting in one direction must be zero.

✗ 4. Summation of all the forces acting in one direction must not be zero.

QuestionID:264330162516

Option1ID:264330637393

Option2ID:264330637394

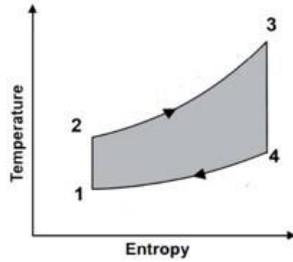
Option3ID:264330637392

Option4ID:264330637391

Status:Answered

ChosenOption:2

Q.61 In the given T-S diagram of Otto cycle, which of the following processes is a heat addition process?



- Ans
- 1.2-3
 - 2.1-2
 - 3.4-1
 - 4.3-4

QuestionID:264330157521

Option1ID:264330617444

Option2ID:264330617443

Option3ID:264330617446

Option4ID:264330617445

Status:Answered

ChosenOption:1

Q.62 The correct expression for the dimensional formula of volumetric discharge in the fluid equation is given by _____.

- Ans
- 1. L^3T^{-1}
 - 2. L^3T^{-3}
 - 3. L^3T^{-2}
 - 4. L^2T^{-1}

QuestionID:264330159105

Option1ID:264330623782

Option2ID:264330623779

Option3ID:264330623781

Option4ID:264330623780

Status:Answered

ChosenOption:1

Q.63 The unit of density in FPS (Foot Pound System) is given by:

- Ans
- ✓ 1. lb/ft^3
 - ✗ 2. lb/ft^2
 - ✗ 3. lb/ft^1
 - ✗ 4. Lb^2/ft^3

QuestionID: 264330159130

Option1ID: 264330623879

Option2ID: 264330623880

Option3ID: 264330623881

Option4ID: 264330623882

Status: Answered

ChosenOption: 1

Q.64 In the boiler mountings, the blow-off cock is fitted at _____.

- Ans
- ✗ 1. the top of the boiler shell
 - ✗ 2. the middle of the boiler shell
 - ✓ 3. the bottom of the boiler shell
 - ✗ 4. near the steam supply line

QuestionID: 264330100121

Option1ID: 264330393057

Option2ID: 264330393058

Option3ID: 264330393059

Option4ID: 264330393060

Status: Answered

ChosenOption: 1

Q.65 A thermometer works on the principle of _____.

- Ans
- ✗ 1. 2nd law of thermodynamics
 - ✗ 2. Joule's law
 - ✗ 3. 3rd law of thermodynamics
 - ✓ 4. Zeroth law of thermodynamics

QuestionID: 264330157557

Option1ID: 264330617587

Option2ID: 264330617590

Option3ID: 264330617588

Option4ID: 264330617589

Status: Answered

ChosenOption: 4

Q.66 The velocity of flow between two adjacent streamlines is inversely proportional to the:

- Ans
- 1. specific weight
 - 2. volume flow rate
 - 3. circulation
 - 4. spacing of the streamlines

QuestionID:264330159216
Option1ID:264330624224
Option2ID:264330624223
Option3ID:264330624226
Option4ID:264330624225
Status:Answered
ChosenOption:4

Q.67 Functionality of nozzle is that, _____

- Ans
- 1. It produces steam at very low pressure
 - 2. It produces steam jet at very high pressure
 - 3. It produces steam jet at very high velocity
 - 4. It produces steam at very low velocity

QuestionID:264330100592
Option1ID:264330394916
Option2ID:264330394913
Option3ID:264330394914
Option4ID:264330394915
Status:Answered
ChosenOption:3

Q.68 Which of the following is NOT a type of steam separator? Ans

- 1. Reciprocating type
- 2. Impactor baffle type
- 3. Centrifugal type
- 4. Reverse current type

QuestionID:264330100117
Option1ID:264330393043
Option2ID:264330393041
Option3ID:264330393044
Option4ID:264330393042
Status:Not Attempted and Marked For Review
ChosenOption:--

Q.69 If the C.O.P. of 1 TR ammonia-water absorption refrigeration plant is 0.5, then the heat supplied in the generator is _____ (1 TR = 3.51 kW)

- Ans
- 1. 10.5 kW
 - 2. 1.5 kW
 - 3. 3.7 kW
 - 4. 3.5 kW

QuestionID:264330157253
Option1ID:264330616378
Option2ID:264330616377
Option3ID:264330616376
Option4ID:264330616375
Status:Answered
ChosenOption:2

Q.70 Which of the following is NOT an example of brittle material? Ans

- 1. High carbon steel
- 2. Aluminium
- 3. Ceramic materials
- 4. Cast iron

QuestionID:264330158029
Option1ID:264330619476
Option2ID:264330619478
Option3ID:264330619477
Option4ID:264330619475
Status:Answered
ChosenOption:2

Q.71 A Kaplan turbine has an outside diameter of runner and hub diameter as 4 m and 2 m, respectively. If the velocity of flow at inlet is 8 m/s, then what will be the discharge passing through the turbine?

- Ans
- 1. 68 m³/s
 - 2. 6.8 m³/s
 - 3. 7.536 m³/s
 - 4. 75.36 m³/s

QuestionID:26433099810
Option1ID:264330391838
Option2ID:264330391840
Option3ID:264330391839
Option4ID:264330391837
Status:Answered
ChosenOption:4

Q.72 Which one of the following is correct statement about Blade cross sectional fluid flow area from inlet to outlet of a turbine?

- Ans
- 1. Constant for impulse turbine and diverging for reaction turbine
 - 2. Constant for reaction turbine and converging for impulse turbine
 - 3. Constant for impulse turbine and converging for reaction turbine
 - 4. Constant for reaction turbine and diverging for impulse turbine

QuestionID:264330100597
Option1ID:264330394935
Option2ID:264330394934
Option3ID:264330394933
Option4ID:264330394936
Status:Answered
ChosenOption:2

Q.73 For the same temperature limit, which of the following cycles has maximum efficiency?

- Ans
- 1. Otto cycle
 - 2. Carnot cycle
 - 3. Normal Stirling cycle
 - 4. Diesel cycle

QuestionID:264330157532
Option1ID:264330617487
Option2ID:264330617490
Option3ID:264330617489
Option4ID:264330617488
Status:Answered
ChosenOption:2

Q.74 Which of the following types of simple manometers measure the gauge pressure of only incompressible fluids?

- Ans
- 1. Piezometer
 - 2. Single column manometer
 - 3. U-tube manometer
 - 4. Differential U-tube manometer

QuestionID:264330100874
Option1ID:264330396043
Option2ID:264330396042
Option3ID:264330396041
Option4ID:264330396044
Status:Answered
ChosenOption:3

Q.75 Which among the following options has same thermal efficiency under ideal conditions (Operate within the same temperature)?

- Ans
- 1. Carnot and dual cycle
 - 2. Carnot cycle and Stirling cycle
 - 3. Carnot cycle and Otto cycle
 - 4. Carnot cycle and Brayton cycle

QuestionID: 264330100545
Option1ID: 264330394725
Option2ID: 264330394728
Option3ID: 264330394726
Option4ID: 264330394727
Status: Answered
ChosenOption: 2

Q.76 Which of the following ideal gas processes has the highest polytropic index?

- Ans
- 1. Isentropic process
 - 2. Isochoric process
 - 3. Isothermal process
 - 4. Isobaric process

QuestionID: 264330157552
Option1ID: 264330617570
Option2ID: 264330617567
Option3ID: 264330617568
Option4ID: 264330617569
Status: Answered
ChosenOption: 2

Q.77 Which of the following is the advantage of axial flow pump?

- Ans
- 1. Low volumetric discharge
 - 2. Medium discharge pressure
 - 3. High head
 - 4. High volumetric discharge

QuestionID: 264330159093
Option1ID: 264330623733
Option2ID: 264330623732
Option3ID: 264330623731
Option4ID: 264330623734
Status: Answered
ChosenOption: 4

Q.78 In two-stroke petrol engine, the air-fuel mixture is prepared in

- 1. Inside the transfer port
- 2. Inside the carburetor and inside the cylinder
- 3. Inside the carburetor but outside the cylinder
- 4. Inside the crankcase chamber

QuestionID:264330100587

Option1ID:264330394893

Option2ID:264330394895

Option3ID:264330394896

Option4ID:264330394894

Status:Answered

ChosenOption:3

Q.79 What will be the ratio of the pressures inside of two fluids, one with a liquid column of 0.4 m of water and the other with a liquid column of 0.2 m of an oil of specific gravity 0.8?

Ans

- 1. $\frac{3}{2}$
- 2. 2
- 3. $\frac{7}{2}$
- 4. $\frac{5}{2}$

QuestionID:264330100869

Option1ID:264330396023

Option2ID:264330396021

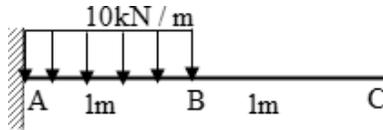
Option3ID:264330396022

Option4ID:264330396024

Status:Answered

ChosenOption:4

Q.80 A cantilever beam carries a uniformly distributed load over a span of 1 m as shown in the figure below. The reactive moment at point A is _____.



- Ans
- 1.30 kN-m
 - 2.0 kN-m
 - 3.10 kN-m
 - 4.5 kN-m

QuestionID:264330162511
 Option1ID:264330637373
 Option2ID:264330637371
 Option3ID:264330637372
 Option4ID:264330637374

Status:Answered

ChosenOption:4

Q.81 For a laminar flow through a circular pipe, the wall shear stress across a section is a function of _____.

- Ans
1. the pressure gradient $\frac{dp}{dz}$ and the radial coordinate r
 2. the pressure gradient $\frac{dp}{dz}$ and the radius R
 3. the pressure gradient $\frac{dp}{dz}$ and the axial velocity V_z
 4. only the pressure gradient $\frac{dp}{dz}$

QuestionID:264330100878
 Option1ID:264330396057
 Option2ID:264330396059
 Option3ID:264330396060
 Option4ID:264330396058

Status:Answered

ChosenOption:2

Q.82 If head imparted by impeller to water is equal to manometric head, then the manometric efficiency of the centrifugal pump will be:

- Ans
- 1.75%
 - 2.50%
 - 3.100%
 - 4. 0%

QuestionID:264330159205
 Option1ID:264330624182
 Option2ID:264330624179
 Option3ID:264330624180
 Option4ID:264330624181

Status:NotAnswered

ChosenOption:--

Q.83 If the pressure intensity at a point in a fluid is given as 2.7 N/cm^2 , then what will be the pressure head of oil of specific gravity 0.9 at that point? Take $g = 10 \text{ m/s}^2$.

- Ans
- 1.3 m of oil
 - 2.3 m of oil
 - 3.3 cm of oil
 - 4.30 cm of oil

QuestionID:26433096296
 Option1ID:264330377936
 Option2ID:264330377934
 Option3ID:264330377933
 Option4ID:264330377935

Status: Answered
 ChosenOption: 2

Q.84 If 5 litres of a certain oil weighs 30 N, then what will be the specific weight of that oil? Ans

- 1.6000 N/m^3
- 2.3000 N/m^3
 - 3.6000 N/m^3
 - 4.3000 N/m^3

QuestionID:26433096276
 Option1ID:264330377856
 Option2ID:264330377853
 Option3ID:264330377854
 Option4ID:264330377855

Status: Answered
 ChosenOption: 1

Q.85 A circular opening, 3 m diameter, in a vertical side of a tank is closed by a disc of 3 m diameter which can rotate about a horizontal diameter and depth of centre of gravity from free surface is 4 m. What will be the total pressure on the disc?

- Ans
- 1.277.4 kN
 - 2.175.7 kN
 - 3.234.89 kN
 - 4.100 kN

QuestionID:264330159257
 Option1ID:264330624390
 Option2ID:264330624387
 Option3ID:264330624388
 Option4ID:264330624389

Status: Not Answered
 ChosenOption: --

Q.86 Water is flowing steadily at a velocity of 20 m/s through a pipe of diameter 0.2 m. The pressure and elevation at point X are 400 kN/m² and 32 m, respectively, while those at another point Y are 300 kN/m² and 34 m, respectively. What will be the head loss between the points X and Y?

Take $g = 10 \text{ m/s}^2$.

- Ans
- 1.6m
 - 2.8m
 - 3.4m
 - 4.10m

QuestionID:264330100882

Option1ID:264330396074

Option2ID:264330396075

Option3ID:264330396076

Option4ID:264330396073

Status:Answered

ChosenOption:2

Q.87 In Beil-Cooleman cycle, the pressure at the end of isentropic compression is same as:

- 1. the pressure in constant pressure expansion
- 2. the pressure at the start of isentropic expansion
- 3. the pressure at the end of isentropic expansion
- 4. the pressure at the start of isentropic compression

QuestionID:264330157191

Option1ID:264330616130

Option2ID:264330616129

Option3ID:264330616128

Option4ID:264330616127

Status:Answered

ChosenOption:2

Q.88 Which of the following is NOT a merit of deadweight safety valve? Ans

- 1. It is a good choice for low-pressure vessels
- 2. Suitable for high pressure boiler
- 3. Gives satisfactory performance during operation
- 4. Simplicity of design

QuestionID:264330100122

Option1ID:264330393064

Option2ID:264330393062

Option3ID:264330393063

Option4ID:264330393061

Status:Answered

ChosenOption:1

Q.89 If the manometric efficiency and mechanical efficiency of a centrifugal pump are 70% and 80%, respectively, then the overall efficiency will be:

- Ans
- 1. 40%
 - 2. 56%
 - 3. 80%
 - 4. 75%

QuestionID:264330159207
 Option1ID:264330624187
 Option2ID:264330624189
 Option3ID:264330624190
 Option4ID:264330624188
 Status:Answered
 ChosenOption:2

Q.90 The dimensional formula for specific gravity is given by:

- Ans
- 1. $M^1L^0T^1$
 - 2. $M^1L^1T^0$
 - 3. $M^0L^0T^0$
 - 4. $M^0L^1T^1$

QuestionID:26433095694
 Option1ID:264330375559
 Option2ID:264330375557
 Option3ID:264330375560
 Option4ID:264330375558
 Status:Answered
 ChosenOption:3

Q.91 Which of the following is a forced circulation type of boiler? Ans

- 1. Cochran boiler
- 2. Lancashire boiler
- 3. LaMont boiler
- 4. Babcock & Wilcox boiler

QuestionID:264330159965
 Option1ID:264330627210
 Option2ID:264330627208
 Option3ID:264330627209
 Option4ID:264330627207
 Status:Answered
 ChosenOption:3

Q.92 Which of the following is an isochoric process? Ans

- 1. Heat is supplied during evaporation.
- 2. Heat supplied is zero.
- 3. Heating of steam in a closed rigid vessel.
- 4. Heating of steam in a cylinder containing a sliding piston.

QuestionID:26433095604

Option1ID:264330375200

Option2ID:264330375199

Option3ID:264330375197

Option4ID:264330375198

Status:Answered

ChosenOption:3

Q.93 Which of the following statements hold true, according to Kelvin Planck's statement?

- Ans
- 1. Some amount of heat taken from a source must be rejected to a higher temperature sink.
 - 2. Perpetual motion machine of the 2nd kind is impossible.
 - 3. It restricts the engine to have mechanical efficiency less than unity.
 - 4. A heat engine must exchange heat from a single heat reservoir.

QuestionID:264330157537

Option1ID:264330617507

Option2ID:264330617510

Option3ID:264330617508

Option4ID:264330617509

Status:Answered

ChosenOption:3

Q.94 The ratio of the actual mass flow rate to that due to isentropic expansion in the nozzle is known as _____.

- Ans
- 1. coefficient of discharge
 - 2. Mach number
 - 3. critical pressure ratio
 - 4. nozzle efficiency

QuestionID:264330159969

Option1ID:264330627224

Option2ID:264330627226

Option3ID:264330627225

Option4ID:264330627223

Status:NotAnswered

ChosenOption:--

Q.95 What is the main function of the condenser in a Rankine cycle power plant? Ans ✗

- 1. To decrease the efficiency of the cycle
- ✓ 2. To condense the steam till it transforms into saturated liquid
- ✗ 3. To increase the temperature of the cooling water
- ✗ 4. To increase the pressure of the steam

QuestionID:264330157919

Option1ID:264330619038

Option2ID:264330619036

Option3ID:264330619037

Option4ID:264330619035

Status: Answered

ChosenOption:2

Q.96 The direction of the friction force is:

- Ans ✓ 1. in the opposite direction of motion of the body or in the opposite direction of the tendency to move
- ✗ 2. in the perpendicular direction of the motion of the body
 - ✗ 3. in the inclined direction of the motion of the body
 - ✗ 4. in the direction of motion of the body

QuestionID:26433096669

Option1ID:264330379414

Option2ID:264330379415

Option3ID:264330379416

Option4ID:264330379413

Status: Answered

ChosenOption:1

Q.97 Heat addition during the constant pressure process is equal to _____.

- Ans ✗ 1. change in entropy
- ✗ 2. change in internal energy
 - ✗ 3. specific heat
 - ✓ 4. change in enthalpy

QuestionID:26433095595

Option1ID:264330375161

Option2ID:264330375163

Option3ID:264330375164

Option4ID:264330375162

Status: Answered

ChosenOption:4

Q.98 In therefrigerationsystem,heatrejectionfactoristheratioof _____ .

- Ans
- 1. loadonthecondensertotheCOP
 - 2. refrigerationcapacitytotheworkdonebycompressor
 - 3. workdonebycompressorto therefrigerationcapacity
 - 4. heatrejectedtotherefrigerationcapacity

QuestionID:26433096778

Option1ID:264330379852

Option2ID:264330379849

Option3ID:264330379851

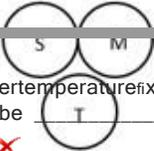
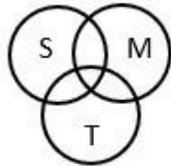
Option4ID:264330379850

Status:Answered

ChosenOption:1

Q.99 Which of the following pressure measurement devices consists of a hollow metal tube bent like a hook whose end is closed and connected to a dial indicator needle?

- Ans
- 1. Piezoelectric transducers
 - 2. Strain-gauge pressure transducers
 - 3. Bourdon tube
 - 4. Pressure transducers



QuestionID:26433096299

Option1ID:264330377947

Option2ID:264330377948

Option3ID:264330377946

Option4ID:264330377945

Status:Answered

ChosenOption:3

Q.100

If the lower temperature fixed by the refrigeration application is high, the C.O.P. of the Carnot refrigerator will be _____ .

- Ans
- 1. less
 - 2. very less
 - 3. the same
 - 4. high

QuestionID:264330157192

Option1ID:264330616131

Option2ID:264330616133

Option3ID:264330616134

Option4ID:264330616132

Status:Answered

ChosenOption:4