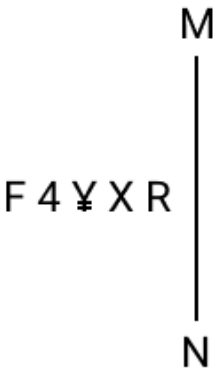


Junior Engineer Civil Mechanical and Electrical Examination 2024 Paper I

| | |
|----------------|---|
| Roll Number | |
| Candidate Name | |
| Venue Name | |
| Exam Date | 05/06/2024 |
| Exam Time | 1:00 PM - 3:00 PM |
| Subject | Junior Engineer 2024 Mechanical Paper I |

Section : General Intelligence and Reasoning

Q.1 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



- Ans
- 1. F 4 ¥ X R
 - 2. R X ¥ 4 F
 - 3. R X ¥ 4 F
 - 4. F 4 ¥ X R

Question ID : 630680456654

Option 1 ID : 6306801783579

Option 2 ID : 6306801783580

Option 3 ID : 6306801783581

Option 4 ID : 6306801783582

Status : Answered

Chosen Option : 3

Q.2 15 is related to 230 following a certain logic. Following the same logic, 4 is related to 65. To which of the following is 12 related following the same logic?

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

- Ans
- 1. 187
 - 2. 186
 - 3. 185
 - 4. 180

Question ID : 630680451715

Option 1 ID : 6306801763946

Option 2 ID : 6306801763947

Option 3 ID : 6306801763948

Option 4 ID : 6306801763949

Status : Answered

Chosen Option : 3

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Q.3 What should come in place of '?' in the given series?
394, 465, 536, 607, 678, ?

Ans ☒ 1. 749

☒ 2. 756

☒ 3. 736

☒ 4. 768

Question ID : 630680378803

Option 1 ID : 6306801476261

Option 2 ID : 6306801476259

Option 3 ID : 6306801476260

Option 4 ID : 6306801476262

Status : Answered

Chosen Option : 1

Q.4 A, B, C, D, E and F are sitting around a circular table facing the centre (not necessarily in the same order). B is sitting to the immediate right of F and immediate left of C. C is sitting to the immediate left of E. A is sitting to the immediate right of E and to the immediate left of D. Who is sitting to the immediate left of F?

Ans ☒ 1. A

☒ 2. B

☒ 3. C

☒ 4. D

Question ID : 630680377010

Option 1 ID : 6306801469105

Option 2 ID : 6306801469103

Option 3 ID : 6306801469104

Option 4 ID : 6306801469106

Status : Answered

Chosen Option : 4

Q.5 Select the correct option that indicates the arrangement of the following planets according to their size.

1. Mars
2. Jupiter
3. Venus
4. Earth
5. Mercury

Ans ☒ 1. 5, 2, 1, 3, 4

☒ 2. 5, 3, 4, 2, 1

☒ 3. 5, 4, 2, 1, 3

☒ 4. 5, 1, 3, 4, 2

Question ID : 630680565832

Option 1 ID : 6306802212276

Option 2 ID : 6306802212278

Option 3 ID : 6306802212277

Option 4 ID : 6306802212279

Status : Answered

Chosen Option : 4

Q.6 In a certain code language, 'FLEW' is coded as '8462' and 'LORD' is coded as '9736'.
What is the code for 'L' in the given code language?

- Ans ☒ 1. 9
☒ 2. 6
☒ 3. 4
☒ 4. 7

Question ID : 630680377195
 Option 1 ID : 6306801469844
 Option 2 ID : 6306801469845
 Option 3 ID : 6306801469843
 Option 4 ID : 6306801469846
 Status : Answered
 Chosen Option : 2

Q.7 Six friends Abby, Bunny, Chan, Dolly, Emma and Fanny have different weights. Dolly's weight is an odd number. Dolly is heavier than Emma but not the heaviest. Chan is heavier than Fanny but lighter than Dolly. Chan is not heavier than Emma but is heavier than Fanny and Abby. Abby's weight is not an odd number. The lightest weight is 45 kilograms and the heaviest weight is 80 kilograms.
Who is the heaviest person in the group?

- Ans ☒ 1. Abby
☒ 2. Bunny
☒ 3. Chan
☒ 4. Emma

Question ID : 630680521125
 Option 1 ID : 6306802036925
 Option 2 ID : 6306802036927
 Option 3 ID : 6306802036926
 Option 4 ID : 6306802036928
 Status : Answered
 Chosen Option : 2

Q.8 Select the option figure that can replace the question mark (?) in the figure given below to complete the pattern.

Ans

✓ 1.

✗ 2.

✗ 3.

✗ 4.

Question ID : 630680525486
Option 1 ID : 6306802054029
Option 2 ID : 6306802054028
Option 3 ID : 6306802054031
Option 4 ID : 6306802054030
Status : Answered

Chosen Option : 1

Q.9 LQNR is related to PURV in a certain way based on the English alphabetical order. In the same way, OTQU is related to SXUY. To which of the following is GLIM related, following the same logic?

- Ans
- ✗ 1. PKMQ
 - ✗ 2. QPMK
 - ✓ 3. KPMQ
 - ✗ 4. PQMK

Question ID : 630680379505
Option 1 ID : 6306801479064
Option 2 ID : 6306801479066
Option 3 ID : 6306801479065
Option 4 ID : 6306801479063
Status : Answered

Chosen Option : 3

Q.10 Madan starts from point A and drives 4 km towards the South. He then takes a left turn and drives 5 km. he then takes a right turn and drives 2 km. He then takes another right turn and drives 3 km. He takes a final right turn and drives 6 km to reach point B. How far (shortest distance) and towards which direction should he drive to reach Point A again? (All turns are 90 degrees turns only unless specified)

- Ans ☐ 1. 3 km West
☒ 2. 2 km West
☐ 3. 3 km East
☐ 4. 2 km East

Question ID : 630680376853
 Option 1 ID : 6306801468477
 Option 2 ID : 6306801468475
 Option 3 ID : 6306801468478
 Option 4 ID : 6306801468476
 Status : Answered
 Chosen Option : 2

Q.11 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
 RQO, LKI, FEC, ZYW, TSQ, ?

- Ans ☐ 1. NML
☐ 2. MNL
☒ 3. NMK
☐ 4. MNK

Question ID : 630680395304
 Option 1 ID : 6306801541420
 Option 2 ID : 6306801541422
 Option 3 ID : 6306801541423
 Option 4 ID : 6306801541421
 Status : Answered
 Chosen Option : 3

Q.12 Select the option that indicates the arrangement of the following words in meaningful and logical order.

1. Word
2. Paragraph
3. Sentence
4. Letter
5. Phrase

- Ans ☐ 1. 1, 3, 2, 4, 5
☐ 2. 2, 1, 5, 4, 3
☐ 3. 5, 1, 3, 2, 4
☒ 4. 4, 1, 5, 3, 2

Question ID : 630680404456
 Option 1 ID : 6306801577324
 Option 2 ID : 6306801577325
 Option 3 ID : 6306801577326
 Option 4 ID : 6306801577327
 Status : Answered
 Chosen Option : 4

Q.13 142 is related to 92 following a certain logic. Following the same logic, 255 is related to 205. To which of the following is 457 related following the same logic?

(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.)

Ans ☒ 1. 407

☒ 2. 417

☒ 3. 427

☒ 4. 437

Question ID : 630680396913

Option 1 ID : 6306801547720

Option 2 ID : 6306801547721

Option 3 ID : 6306801547722

Option 4 ID : 6306801547723

Status : Answered

Chosen Option : 1

Q.14 OB 8 is related to UE 3 in a certain way. In the same way, TO 11 is related to ZR 6. To which of the following is IB 8 related, following the same logic?

Ans ☒ 1. OE 3

☒ 2. PF -3

☒ 3. OF 3

☒ 4. PE 3

Question ID : 630680386527

Option 1 ID : 6306801506818

Option 2 ID : 6306801506821

Option 3 ID : 6306801506819

Option 4 ID : 6306801506820

Status : Answered

Chosen Option : 3

Q.15 What will come in place of the question mark (?) in the following equation if '+' and '÷' are interchanged and 'x' and '-' are interchanged?
 $21 \div 15 \times 52 + 13 - 7 = ?$

Ans ☒ 1. 10

☒ 2. 7

☒ 3. 8

☒ 4. 12

Question ID : 630680376976

Option 1 ID : 6306801468970

Option 2 ID : 6306801468967

Option 3 ID : 6306801468969

Option 4 ID : 6306801468968

Status : Answered

Chosen Option : 3

Q.16 STAR is related to TWCV in a certain way based on the English alphabetical order. In the same way, PARK is related to QDTO. To which of the following is MILK related, following the same logic?

- Ans
- ☒ 1. NLMO
 - ☒ 2. MLNO
 - ☒ 3. NLNO
 - ☒ 4. MLMO

Question ID : 630680376880
 Option 1 ID : 6306801468586
 Option 2 ID : 6306801468584
 Option 3 ID : 6306801468585
 Option 4 ID : 6306801468583
 Status : Answered
 Chosen Option : 3

Q.17 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

- Ans
- ☒ 1.
 - ☒ 2.
 - ☒ 3.
 - ☒ 4.

Question ID : 630680524860
 Option 1 ID : 6306802051539
 Option 2 ID : 6306802051540
 Option 3 ID : 6306802051541
 Option 4 ID : 6306802051542
 Status : Answered
 Chosen Option : 2

Q.18 IMPU is related to LPSX in a certain way based on the English alphabetical order. In the same way, BEKN is related to EHNQ. To which of the following is CLQS related, following the same logic?

- Ans
- ☒ 1. IJSH
 - ☒ 2. FOTV
 - ☒ 3. PLNF
 - ☒ 4. ACLK

Question ID : 630680377696
 Option 1 ID : 6306801471843
 Option 2 ID : 6306801471844
 Option 3 ID : 6306801471845
 Option 4 ID : 6306801471846
 Status : Answered
 Chosen Option : 2

Q.19 Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(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 /deleting /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.)

(9, 576, 8)

(7, 252, 6)

Ans ☒ 1. (4, 82, 5)

☒ 2. (8, 650, 10)

☒ 3. (15, 210, 7)

☒ 4. (10, 40, 2)

Question ID : 630680390232

Option 1 ID : 6306801521373

Option 2 ID : 6306801521372

Option 3 ID : 6306801521371

Option 4 ID : 6306801521370

Status : Answered

Chosen Option : 1

Q.20 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
INJ, LQM, OTP, RWS, ?

Ans ☒ 1. UVZ

☒ 2. VUZ

☒ 3. VZU

☒ 4. UZV

Question ID : 630680376923

Option 1 ID : 6306801468756

Option 2 ID : 6306801468757

Option 3 ID : 6306801468758

Option 4 ID : 6306801468755

Status : Answered

Chosen Option : 4

Q.21 Select the option in which the given figure is embedded (rotation is NOT allowed).

Ans

✗ 1.

✗ 2.

3.

✗ 4.



Question ID : 630680524478

Option 1 ID : 6306802050012

Option 2 ID : 6306802050011

Option 3 ID : 6306802050014

Option 4 ID : 6306802050013

Status : Answered

Chosen Option : 3

Q.22 What should come in place of the question mark (?) in the given series based on the English alphabetical order
KMO, HJL, EGI, BDF, ?

- Ans
- ☒ 1. ZBC
 - ☒ 2. ZAC
 - ☒ 3. YBC
 - ☒ 4. YAC

Question ID : 630680376901

Option 1 ID : 6306801468667

Option 2 ID : 6306801468670

Option 3 ID : 6306801468668

Option 4 ID : 6306801468669

Status : Answered

Chosen Option : 4

Q.23 Jennifer starts from Point D and drives 3 km towards the north. She then takes a left turn and drives 10 km. She then takes another left turn and drives 6 km. She takes one more left turn and drives 5 km. She then takes a right turn and drives 3 km. She takes a final left turn and drives 5 km to reach point E. How far (shortest distance) and towards which direction should she drive in order to reach Point D again? (All turns are 90 degree turns only, unless specified)

- Ans
- ☒ 1. 5 km North
 - ☒ 2. 3 km North
 - ☒ 3. 6 km North
 - ☒ 4. 5 km East

Question ID : 630680378906

Option 1 ID : 6306801476672

Option 2 ID : 6306801476671

Option 3 ID : 6306801476674

Option 4 ID : 6306801476673

Status : Answered

Chosen Option : 3

Q.24 LQKN is related to PUOR in a certain way based on the English alphabetical order. In the same way, INHK is related to MRLO. To which of the following is QVPS related, following the same logic?

- Ans
- ☒ 1. UZWT
 - ☒ 2. WZUT
 - ☒ 3. UZTW
 - ☒ 4. WZTU

Question ID : 630680376720

Option 1 ID : 6306801467945

Option 2 ID : 6306801467944

Option 3 ID : 6306801467946

Option 4 ID : 6306801467943

Status : Answered

Chosen Option : 3

Q.25 In a certain code language,
'A + B' means 'A is the brother of B',
'A - B' means 'A is the mother of B',
'A × B' means 'A is the wife of B' and
'A ÷ B' means 'A is the father of B'.
How is B related to L if 'B × G ÷ T + K - L'?

- Ans
- ☒ 1. Father's father
 - ☒ 2. Sister's daughter
 - ☒ 3. Mother's mother
 - ☒ 4. Brother's daughter

Question ID : 630680377669
Option 1 ID : 6306801471736
Option 2 ID : 6306801471738
Option 3 ID : 6306801471735
Option 4 ID : 6306801471737
Status : Answered
Chosen Option : 3

Q.26 If 'A' stands for '+', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark '?' in the following equation?

10 B 2 D 15 A 3 C 7 = ?

- Ans
- ☒ 1. 22
 - ☒ 2. 20
 - ☒ 3. 21
 - ☒ 4. 24

Question ID : 630680502794
Option 1 ID : 6306801964757
Option 2 ID : 6306801964758
Option 3 ID : 6306801964759
Option 4 ID : 6306801964760
Status : Answered
Chosen Option : 1

Q.27 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 frames are rocks. All rocks are clips. All clips are towels.
Conclusion (I): All frames are towels.
Conclusion (II): At least some clips are frames.

- Ans
- ☒ 1. Only conclusion (I) follows
 - ☒ 2. Only conclusion (II) follows
 - ☒ 3. Both conclusions (I) and (II) follow
 - ☒ 4. Neither conclusion (I) nor (II) follows

Question ID : 630680376527
Option 1 ID : 6306801467175
Option 2 ID : 6306801467176
Option 3 ID : 6306801467178
Option 4 ID : 6306801467177
Status : Answered
Chosen Option : 3

Q.28 What should come in place of the question mark (?) in the given series?
2, 5, 13, 28, 52, 87, ?

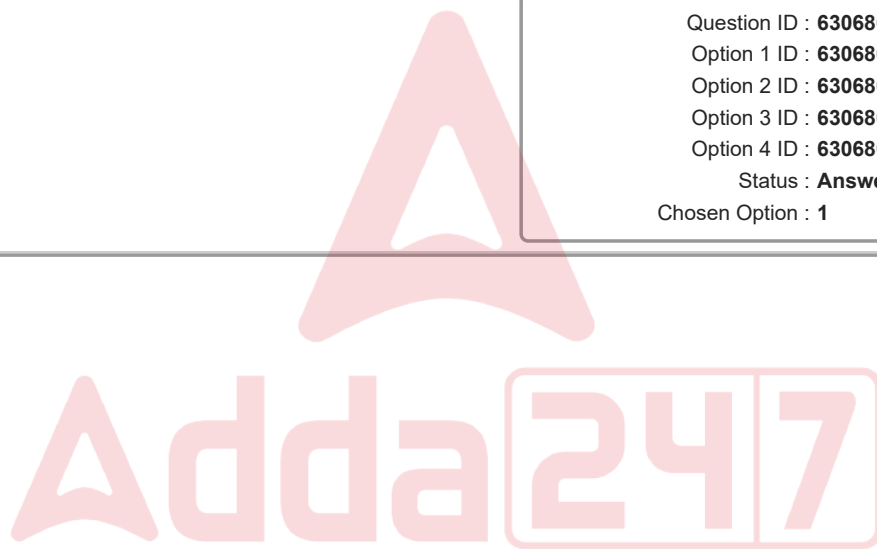
- Ans
- ☒ 1. 98
 - ☒ 2. 135
 - ☒ 3. 107
 - ☒ 4. 130

Question ID : 630680378757
Option 1 ID : 6306801476075
Option 2 ID : 6306801476078
Option 3 ID : 6306801476076
Option 4 ID : 6306801476077
Status : Answered
Chosen Option : 2

Q.29 The position(s) of how many letters will remain unchanged if each of the letters in the word FOREIGN is arranged in the English alphabetical order?

- Ans
- ☒ 1. None
 - ☒ 2. One
 - ☒ 3. Two
 - ☒ 4. Three

Question ID : 630680404425
Option 1 ID : 6306801577200
Option 2 ID : 6306801577201
Option 3 ID : 6306801577202
Option 4 ID : 6306801577203
Status : Answered
Chosen Option : 1



Q.30 Select the option figure in which the given figure is embedded as its part (rotation is NOT allowed).

Ans

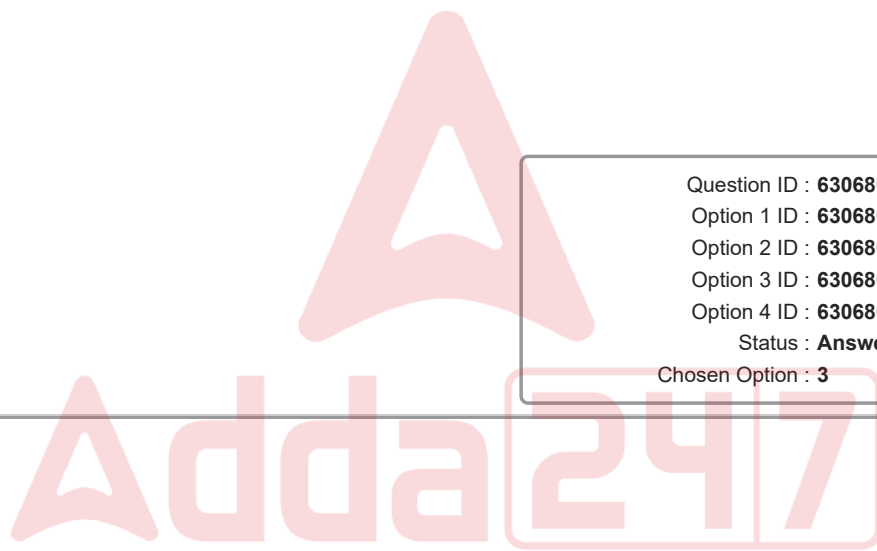
✗ 1.

✗ 2.

3.

✗ 4.

Question ID : 630680422243
Option 1 ID : 6306801647408
Option 2 ID : 6306801647409
Option 3 ID : 6306801647410
Option 4 ID : 6306801647411
Status : Answered
Chosen Option : 3



Q.31 Select the figure from the options that can replace the question mark (?) and complete the given pattern.

Ans

1.

✗ 2.

✗ 3.

✗ 4.



Question ID : 630680524809

Option 1 ID : 6306802051337

Option 2 ID : 6306802051335

Option 3 ID : 6306802051338

Option 4 ID : 6306802051336

Status : Answered

Chosen Option : 1

Q.32 In a certain code language,
A + B means 'A is the sister of B'
A # B means 'A is the brother of B'
A × B means 'A is the wife of B'
A @ B means 'A is the father of B'
Based on the above, how is E related to M if 'E # F × H @ G + M'?

- Ans
- ☐ 1. Mother's father
 - ☐ 2. Father
 - ☒ 3. Mother's brother
 - ☐ 4. Brother

Question ID : 630680376959
Option 1 ID : 6306801468901
Option 2 ID : 6306801468899
Option 3 ID : 6306801468900
Option 4 ID : 6306801468902
Status : Answered
Chosen Option : 3

Q.33 In a certain code language, 'SANG' is coded as '3618', and 'RANG' is coded as '6438'.
What is the code for 'S' in that language?

- Ans
- ☐ 1. 8
 - ☐ 2. 6
 - ☒ 3. 1
 - ☐ 4. 3

Question ID : 630680376410
Option 1 ID : 6306801466710
Option 2 ID : 6306801466708
Option 3 ID : 6306801466709
Option 4 ID : 6306801466707
Status : Answered
Chosen Option : 3

Q.34 A, B, C, D, E, and F are sitting at a circular table facing the centre (not necessarily in the same order). A is to the immediate left of B, E is third to the right of B, D is to the immediate right of C. F is third to the right of C.
Who are the immediate neighbours of E?

- a) A and B
- b) B and D
- c) D and F
- d) F and B

- Ans
- ☐ 1. (d)
 - ☐ 2. (b)
 - ☒ 3. (c)
 - ☐ 4. (a)

Question ID : 630680376401
Option 1 ID : 6306801466674
Option 2 ID : 6306801466672
Option 3 ID : 6306801466673
Option 4 ID : 6306801466671
Status : Answered
Chosen Option : 3

Q.35 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.)

Mycology : Fungi

Ans ✓ 1. Seismology : Earthquakes

✗ 2. Ornithology : Eggs

✗ 3. Paedology : Planets

✗ 4. Entomology : Birds

Question ID : 630680556091

Option 1 ID : 6306802173740

Option 2 ID : 6306802173742

Option 3 ID : 6306802173743

Option 4 ID : 6306802173741

Status : Answered

Chosen Option : 1

Q.36 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
LXC, OZD, RBE, UDF, ?

Ans ✗ 1. YGH

✗ 2. ZDI

✗ 3. XHJ

✓ 4. XFG

Question ID : 630680386936

Option 1 ID : 6306801508455

Option 2 ID : 6306801508456

Option 3 ID : 6306801508457

Option 4 ID : 6306801508454

Status : Answered

Chosen Option : 4

Q.37 In a certain code language, 'apple is healthy' is written as 'di jl ew' and 'apple is red' is written as 'di ko ew'. How is 'red' written in the given language?

Ans ✗ 1. di

✗ 2. jl

✗ 3. ew

✓ 4. ko

Question ID : 630680388165

Option 1 ID : 6306801513222

Option 2 ID : 6306801513225

Option 3 ID : 6306801513224

Option 4 ID : 6306801513223

Status : Answered

Chosen Option : 4

Q.38

Ans ☒ 1. 13

☒ 2. 14

☒ 3. 11

☒ 4. 12

Question ID : 630680524413

Option 1 ID : 6306802049753

Option 2 ID : 6306802049754

Option 3 ID : 6306802049751

Option 4 ID : 6306802049752

Status : Answered

Chosen Option : 1

Q.39 What will come in the place of the question mark (?) in the following equation, if '+' and 'x' are interchanged and '-' and '÷' are interchanged?
 $12 + 4 - 24 \times 11 \div 13 = ?$

Ans ☒ 1. -20

☒ 2. 10

☒ 3. 0

☒ 4. -10

Question ID : 630680377614

Option 1 ID : 6306801471515

Option 2 ID : 6306801471518

Option 3 ID : 6306801471517

Option 4 ID : 6306801471516

Status : Answered

Chosen Option : 3

Q.40 What should come in place of the question mark (?) in the given series.
6, 3, 12, 6, 24, ?, 48, 24, 96

Ans ☒ 1. 48

☒ 2. 12

☒ 3. 6

☒ 4. 24

Question ID : 630680379055

Option 1 ID : 6306801477270

Option 2 ID : 6306801477269

Option 3 ID : 6306801477267

Option 4 ID : 6306801477268

Status : Answered

Chosen Option : 2

Q.41 In a certain code language, 'HAIR' is coded as '7935' and 'AGED' is coded as '4892'. What is the code for 'A' in the given language?

- Ans
- ☒ 1. 3
 - ☒ 2. 4
 - ☒ 3. 5
 - ☒ 4. 9

Question ID : 630680376549
Option 1 ID : 6306801467263
Option 2 ID : 6306801467266
Option 3 ID : 6306801467264
Option 4 ID : 6306801467265
Status : Answered
Chosen Option : 4

Q.42 What will come in the place of the question mark (?) in the following equation, if '+' and '÷' are interchanged and 'x' and '-' are interchanged?
 $10 + 2 - 10 \div 5 \times 10 = ?$

- Ans
- ☒ 1. 40
 - ☒ 2. 45
 - ☒ 3. 35
 - ☒ 4. 32

Question ID : 630680377708
Option 1 ID : 6306801471892
Option 2 ID : 6306801471893
Option 3 ID : 6306801471894
Option 4 ID : 6306801471891
Status : Answered
Chosen Option : 2

Q.43 The position(s) of how many letters will remain unchanged if each of the letters in the word STAMPED is arranged in the English alphabetical order?

- Ans
- ☒ 1. Two
 - ☒ 2. Three
 - ☒ 3. Four
 - ☒ 4. One

Question ID : 630680396640
Option 1 ID : 6306801546652
Option 2 ID : 6306801546653
Option 3 ID : 6306801546654
Option 4 ID : 6306801546655
Status : Answered
Chosen Option : 1

Q.44 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: Some cars are grass. All trucks are cars.

Conclusion 1: Some trucks are not cars.

Conclusion 2: Some trucks are grass.

Ans ☒ 1. Neither conclusion 1 nor 2 follows

☐ 2. Only conclusion 1 follows

☐ 3. Only conclusion 2 follows

☐ 4. Both conclusion 1 and 2 follow

Question ID : 630680381042

Option 1 ID : 6306801485145

Option 2 ID : 6306801485143

Option 3 ID : 6306801485144

Option 4 ID : 6306801485146

Status : Answered

Chosen Option : 1

Q.45 Select the option in which the numbers share the same relationship as that shared by the given number triads.

120-100-60

240-220-180

(NOTE: Operations should be performed on the whole number, 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.)

Ans ☐ 1. 220-210-200

☐ 2. 150-160-140

☐ 3. 90-80-75

☒ 4. 200-180-140

Question ID : 630680387173

Option 1 ID : 6306801509387

Option 2 ID : 6306801509388

Option 3 ID : 6306801509389

Option 4 ID : 6306801509386

Status : Answered

Chosen Option : 4

Q.46 Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(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.)

(45, 23, 73)

(19, 27, 51)

Ans ☐ 1. (31, 17, 48)

☐ 2. (22, 29, 52)

☒ 3. (16, 14, 35)

☐ 4. (12, 19, 30)

Question ID : 630680376817

Option 1 ID : 6306801468333

Option 2 ID : 6306801468332

Option 3 ID : 6306801468334

Option 4 ID : 6306801468331

Status : Answered

Chosen Option : 3

Q.47 This question consists of a pair of words which have a certain relationship to each other. Select the pair which has the same relationship.

(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.)

Altimeter : Altitudes

- Ans ☒ 1. Hygrometer : Humidity
☒ 2. Protractor : Light
☒ 3. Fathometer : Pressure
☒ 4. Taseometer : Wind

Question ID : 630680556096
 Option 1 ID : 6306802173761
 Option 2 ID : 6306802173762
 Option 3 ID : 6306802173760
 Option 4 ID : 6306802173763
 Status : Answered
 Chosen Option : 1

Q.48 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
 DMY, BKW, ZIU, XGS, ?

- Ans ☒ 1. UDP
☒ 2. UFR
☒ 3. VEQ
☒ 4. WCR

Question ID : 630680382493
 Option 1 ID : 6306801490889
 Option 2 ID : 6306801490888
 Option 3 ID : 6306801490890
 Option 4 ID : 6306801490887
 Status : Answered
 Chosen Option : 3

Q.49

- Ans ☒ 1. MVT
☒ 2. MUT
☒ 3. MXT
☒ 4. MNT

Question ID : 630680378698
 Option 1 ID : 6306801475839
 Option 2 ID : 6306801475842
 Option 3 ID : 6306801475841
 Option 4 ID : 6306801475840
 Status : Answered
 Chosen Option : 2

Q.50 In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(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.)
(6, 34)
(8, 46)

- Ans**
- ☒ 1. (7, 38)
 - ☒ 2. (4, 24)
 - ☒ 3. (12, 76)
 - ☒ 4. (10, 58)

Question ID : 630680377730
Option 1 ID : 6306801471981
Option 2 ID : 6306801471982
Option 3 ID : 6306801471980
Option 4 ID : 6306801471979
Status : Answered
Chosen Option : 4

Section : General Awareness

Q.1 To cherish and follow the noble ideals that inspired our national struggle for freedom is a _____ fundamental duty in the list of fundamental duties enshrined in our Indian Constitution.

- Ans**
- ☒ 1. first
 - ☒ 2. second
 - ☒ 3. third
 - ☒ 4. fourth

Question ID : 630680493470
Option 1 ID : 6306801927619
Option 2 ID : 6306801927620
Option 3 ID : 6306801927621
Option 4 ID : 6306801927622
Status : Answered
Chosen Option : 3

Q.2 Who was the leader of the temple entry movement in 1930 at Kalaram temple, Nashik?

- Ans**
- ☒ 1. Swami Achhutanand
 - ☒ 2. NG Ranga
 - ☒ 3. Mahatma Gandhi
 - ☒ 4. Dr. BR Ambedkar

Question ID : 630680572381
Option 1 ID : 6306802238364
Option 2 ID : 6306802238365
Option 3 ID : 6306802238366
Option 4 ID : 6306802238367
Status : Answered
Chosen Option : 4

Q.3 What is the primary focus of the ASPIRE scheme of the Ministry of Micro, Small & Medium Enterprises, Government of India?

- Ans**
- ☒ 1. Urban development
 - ☒ 2. Technology innovation
 - ☒ 3. Environmental conservation
 - ☒ 4. Establishment of livelihoods business incubation centres

Question ID : 630680488098
 Option 1 ID : 6306801906451
 Option 2 ID : 6306801906452
 Option 3 ID : 6306801906453
 Option 4 ID : 6306801906454
 Status : Answered
 Chosen Option : 4

Q.4 Who said “a cherry that will drop into our mouth one day” about the kingdom of Awadh?

- Ans**
- ☒ 1. Lord Lytton
 - ☒ 2. Lord Curzon
 - ☒ 3. Lord Mountbatten
 - ☒ 4. Lord Dalhousie

Question ID : 630680511542
 Option 1 ID : 6306801999292
 Option 2 ID : 6306801999290
 Option 3 ID : 6306801999293
 Option 4 ID : 6306801999291
 Status : Answered
 Chosen Option : 4

Q.5 Who among the following musicians received the Padma Bhushan Award 2022 for his contributions in the field of art?

- Ans**
- ☒ 1. Rashid Khan
 - ☒ 2. Madan Singh Chauhan
 - ☒ 3. Manilal Nag
 - ☒ 4. Chhannulal Mishra

Question ID : 630680701418
 Option 1 ID : 6306802747612
 Option 2 ID : 6306802747610
 Option 3 ID : 6306802747609
 Option 4 ID : 6306802747611
 Status : Answered
 Chosen Option : 1

Q.6 Match the following states with their percentage urban population in India, as per Census 2011.

- i) Kerala a) 10.04%
ii) Madhya Pradesh b) 47.72%
iii) Tamil Nadu c) 27.63%
iv) Himachal Pradesh d) 48.45%

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

Question ID : 630680488637
Option 1 ID : 6306801908567
Option 2 ID : 6306801908568
Option 3 ID : 6306801908569
Option 4 ID : 6306801908570
Status : Answered
Chosen Option : 1

Q.7 The valency of Ca is 2^+ . The valency of O is 2^- . What is the simplified chemical formula of Calcium oxide?

- Ans ☒ 1. Ca_2O_2
☒ 2. CaO
☒ 3. CaO_2
☒ 4. Ca_2O

Question ID : 630680401862
Option 1 ID : 6306801567218
Option 2 ID : 6306801567219
Option 3 ID : 6306801567220
Option 4 ID : 6306801567221
Status : Answered
Chosen Option : 2

Q.8 Arachnids belong to which subphylum of the phylum Arthropoda?

- Ans ☒ 1. Crustacea
☒ 2. Hexapoda
☒ 3. Chelicerata
☒ 4. Myriapoda

Question ID : 630680540420
Option 1 ID : 6306802112768
Option 2 ID : 6306802112770
Option 3 ID : 6306802112767
Option 4 ID : 6306802112769
Status : Answered
Chosen Option : 4

Q.9 Which of the following values is subtracted from the numerical value of temperature expressed in Kelvin to obtain the temperature in degrees Celsius?

- Ans ☒ 1. 293
☒ 2. 273
☒ 3. 253
☒ 4. 313

Question ID : 630680403022
Option 1 ID : 6306801571661
Option 2 ID : 6306801571660
Option 3 ID : 6306801571659
Option 4 ID : 6306801571662
Status : Answered
Chosen Option : 2

Q.10 Identify the INCORRECT pair (railway zone and headquarters) from the following.

- Ans ☒ 1. North Western Railway Zone – Jaipur
☒ 2. South Western Railway Zone – Hubli
☒ 3. Central Railway Zone – Kolkata
☒ 4. South-East Central Railway Zone – Bilaspur

Question ID : 630680510977
Option 1 ID : 6306801997039
Option 2 ID : 6306801997040
Option 3 ID : 6306801997038
Option 4 ID : 6306801997041
Status : Answered
Chosen Option : 3

Q.11 Which compound is used to neutralise fatty acids and convert them into salts in a process called saponification?

- Ans ☒ 1. Sodium hydroxide
☒ 2. Sodium acetate
☒ 3. Sodium chlorate
☒ 4. Sodium fluoride

Question ID : 630680403012
Option 1 ID : 6306801571620
Option 2 ID : 6306801571619
Option 3 ID : 6306801571622
Option 4 ID : 6306801571621
Status : Answered
Chosen Option : 1

Q.12 Sange Meel Se Mulaqat is a documentary on the life of _____, directed by Gautam Ghosh.

- Ans ☒ 1. Pandit Ram Narayan
☒ 2. Pandit Bismillah Khan
☒ 3. Pandit Biswajit Roy Chowdhury
☒ 4. Pandit Bhimsen Joshi

Question ID : 630680701402
Option 1 ID : 6306802747546
Option 2 ID : 6306802747548
Option 3 ID : 6306802747547
Option 4 ID : 6306802747545
Status : Answered
Chosen Option : 1

Q.13 Which of the following sentences is/are correct?

- i. According to the Census of India 2011, the total population of India is 141 crores.
- ii. Between 1911 and 1921, there was a negative rate of growth of India's population.
- iii. Between 1901 and 1951, the average annual growth of India's population did not exceed 1.33%.

- Ans
- ☒ 1. Only i and ii
 - ☒ 2. Only i and iii
 - ☒ 3. Only i
 - ☒ 4. Only ii and iii

Question ID : 630680488238

Option 1 ID : 6306801907011

Option 2 ID : 6306801907012

Option 3 ID : 6306801907013

Option 4 ID : 6306801907014

Status : Answered

Chosen Option : 4

Q.14 How do estuaries serve as critical habitats for various species?

- Ans
- ☒ 1. Estuaries have no ecological significance.
 - ☒ 2. Estuaries provide breeding grounds and nurseries for marine organisms.
 - ☒ 3. Estuaries contribute to desertification.
 - ☒ 4. Estuaries are only important for recreational activities.

Question ID : 630680615281

Option 1 ID : 6306802407798

Option 2 ID : 6306802407799

Option 3 ID : 6306802407800

Option 4 ID : 6306802407801

Status : Answered

Chosen Option : 2

Q.15 Who was elected as the 16th Speaker of the Himachal Pradesh Legislative Assembly in January 2023?

- Ans
- ☒ 1. Kuldeep Singh Pathania
 - ☒ 2. Anurag Thakur
 - ☒ 3. Jai Ram Thakur
 - ☒ 4. Suresh Bhardwaj

Question ID : 630680804277

Option 1 ID : 6306803150840

Option 2 ID : 6306803150841

Option 3 ID : 6306803150839

Option 4 ID : 6306803150842

Status : Answered

Chosen Option : 1

Q.16 The particles that form the main part of the nucleus of an atom are together known as:

- Ans
- ☒ 1. ions
 - ☒ 2. electrons
 - ☒ 3. nucleons
 - ☒ 4. isotopes

Question ID : 630680401910
 Option 1 ID : 6306801567387
 Option 2 ID : 6306801567386
 Option 3 ID : 6306801567389
 Option 4 ID : 6306801567388
 Status : Answered
 Chosen Option : 3

Q.17 The office of the Registrar General and Census Commissioner works under which Ministry of Government of India?

- Ans
- ☒ 1. Ministry of Finance
 - ☒ 2. Ministry of Personnel, Public Grievances and Pensions
 - ☒ 3. Ministry of Home Affairs
 - ☒ 4. Ministry of Social Justice and Empowerment

Question ID : 630680477183
 Option 1 ID : 6306801863901
 Option 2 ID : 6306801863902
 Option 3 ID : 6306801863903
 Option 4 ID : 6306801863904
 Status : Answered
 Chosen Option : 1

Q.18 When was Swami Vivekananda born?

- Ans
- ☒ 1. 12 January 1866
 - ☒ 2. 12 January 1859
 - ☒ 3. 12 January 1863
 - ☒ 4. 12 January 1853

Question ID : 630680511596
 Option 1 ID : 6306801999509
 Option 2 ID : 6306801999507
 Option 3 ID : 6306801999508
 Option 4 ID : 6306801999506
 Status : Answered
 Chosen Option : 1

Q.19 Which are the two major branches of the southwest monsoon in India?

- Ans
- ☒ 1. The Arabian Sea branch and the Bay of Bengal branch
 - ☒ 2. The Arabian Sea branch and the Tibetan plateau branch
 - ☒ 3. The Himalayan Mountain branch and the Gulf of Mannar branch
 - ☒ 4. The Tibetan plateau branch and the Bay of Bengal branch

Question ID : 630680510958
 Option 1 ID : 6306801996962
 Option 2 ID : 6306801996963
 Option 3 ID : 6306801996965
 Option 4 ID : 6306801996964
 Status : Answered
 Chosen Option : 1

Q.20 What is the SI unit of force?

- Ans
- ☒ 1. Watt
 - ☒ 2. Joule
 - ☒ 3. Volt
 - ☒ 4. Newton

Question ID : 630680407778
 Option 1 ID : 6306801590051
 Option 2 ID : 6306801590050
 Option 3 ID : 6306801590052
 Option 4 ID : 6306801590053
 Status : Answered
 Chosen Option : 4

Q.21 If an earthquake happens at the sea floor and one tectonic plate dips under the another, this will most probably lead to a natural disaster known as:

- Ans
- ☒ 1. Typhoon
 - ☒ 2. Tornado
 - ☒ 3. Tsunami
 - ☒ 4. Cyclone

Question ID : 630680546842
 Option 1 ID : 6306802137938
 Option 2 ID : 6306802137937
 Option 3 ID : 6306802137935
 Option 4 ID : 6306802137936
 Status : Answered
 Chosen Option : 3

Q.22 Which of the following committees was responsible for making recommendations that led to the 42nd Constitutional Amendment for the declaration of Fundamental Duties?

- Ans
- ☒ 1. Swaran Singh Committee
 - ☒ 2. Abid Hussain Committee
 - ☒ 3. Khusro Committee
 - ☒ 4. Raja Chelliah Committee

Question ID : 630680618079
 Option 1 ID : 6306802418621
 Option 2 ID : 6306802418622
 Option 3 ID : 6306802418623
 Option 4 ID : 6306802418624
 Status : Answered
 Chosen Option : 1

Q.23 The government of which of the following states launched the 'Nand Baba Milk Mission' scheme in June 2023?

- Ans
- ☐ 1. Bihar
 - ☐ 2. Madhya Pradesh
 - ☐ 3. Himachal Pradesh
 - ☒ 4. Uttar Pradesh

Question ID : 630680513786
 Option 1 ID : 6306802007772
 Option 2 ID : 6306802007770
 Option 3 ID : 6306802007771
 Option 4 ID : 6306802007769
 Status : Answered
 Chosen Option : 2

Q.24 In 1800, which of the following experimental achievements was made by William Nicholson?

- Ans
- ☒ 1. Discovery of water electrolysis
 - ☐ 2. Discovery of thermionic emission
 - ☐ 3. Discovery of electric bulb
 - ☐ 4. Discovery of low-cost filters for polarizing light

Question ID : 630680402063
 Option 1 ID : 6306801567951
 Option 2 ID : 6306801567953
 Option 3 ID : 6306801567950
 Option 4 ID : 6306801567952
 Status : Answered
 Chosen Option : 1

Q.25 Which of the following is a heart-related disease?

- Ans
- ☐ 1. Acromegaly
 - ☐ 2. Diabetes
 - ☐ 3. Goiter
 - ☒ 4. Angina

Question ID : 630680544738
 Option 1 ID : 6306802129715
 Option 2 ID : 6306802129714
 Option 3 ID : 6306802129716
 Option 4 ID : 6306802129717
 Status : Answered
 Chosen Option : 1

Q.26 What is the primary function of the Golgi apparatus?

- Ans
- ☒ 1. Lipid production
 - ☒ 2. Sorting and packaging of cellular products
 - ☒ 3. Cellular respiration
 - ☒ 4. Protein synthesis

Question ID : 630680540550
 Option 1 ID : 6306802113276
 Option 2 ID : 6306802113277
 Option 3 ID : 6306802113278
 Option 4 ID : 6306802113275
 Status : Answered
 Chosen Option : 2

Q.27 Which of the following is the shortcut key to create a new paragraph in MS Word?

- Ans
- ☒ 1. Ctrl + N
 - ☒ 2. Ctrl + P
 - ☒ 3. Enter
 - ☒ 4. Shift + Enter

Question ID : 630680571752
 Option 1 ID : 6306802235916
 Option 2 ID : 6306802235917
 Option 3 ID : 6306802235918
 Option 4 ID : 6306802235919
 Status : Answered
 Chosen Option : 3

Q.28 Which of the following is/are a gymnosperm?

- Ans
- ☒ 1. Mosses
 - ☒ 2. Fern
 - ☒ 3. Rose
 - ☒ 4. Cycas

Question ID : 630680542129
 Option 1 ID : 6306802119459
 Option 2 ID : 6306802119460
 Option 3 ID : 6306802119458
 Option 4 ID : 6306802119457
 Status : Answered
 Chosen Option : 2

Q.29 Which of the following is the correct option for using 'justify' alignment to a paragraph in a document?

- Ans
- ☒ 1. Aligns text only to the left
 - ☒ 2. Aligns text only to the right
 - ☒ 3. Aligns text to both left and right edges
 - ☒ 4. Align text in the center

Question ID : 630680571762
 Option 1 ID : 6306802235952
 Option 2 ID : 6306802235953
 Option 3 ID : 6306802235954
 Option 4 ID : 6306802235955
 Status : Answered
 Chosen Option : 3

Q.30 Which of the following Ministers introduced the Central Goods and Services Tax (Amendment) Bill 2023 and the Integrated Goods and Services Tax (Amendment) Bill 2023 in the Lok Sabha?

- Ans** ☒ 1. Nirmala Sitharaman
☒ 2. Harpal Singh
☒ 3. Bikram Keshari Arukha
☒ 4. Manohar Lal Khattar

Question ID : 630680469607
 Option 1 ID : 6306801834191
 Option 2 ID : 6306801834192
 Option 3 ID : 6306801834193
 Option 4 ID : 6306801834194
 Status : Answered
 Chosen Option : 1

Q.31 Which of the following bacterial infections often affects the lungs?

- Ans** ☒ 1. Tuberculosis
☒ 2. Herpes
☒ 3. Meningitis
☒ 4. Influenza

Question ID : 630680404156
 Option 1 ID : 6306801576110
 Option 2 ID : 6306801576111
 Option 3 ID : 6306801576112
 Option 4 ID : 6306801576113
 Status : Answered
 Chosen Option : 1

Q.32 Which Chief Justice of India was sworn in as the acting President of India on 20th July 1969?

- Ans** ☒ 1. Justice Harilal Jekisundas Kania
☒ 2. Justice M Patanjali Sastri
☒ 3. Justice Sudhi Ranjan Das
☒ 4. Justice Mohammad Hidayatullah

Question ID : 630680407827
 Option 1 ID : 6306801590246
 Option 2 ID : 6306801590247
 Option 3 ID : 6306801590248
 Option 4 ID : 6306801590249
 Status : Answered
 Chosen Option : 4

Q.33 _____ is referred to as paper taxes.

- Ans** ☒ 1. Gift tax
☒ 2. Corporation tax
☒ 3. Customs duty
☒ 4. Excise tax

Question ID : 630680402051
 Option 1 ID : 6306801567904
 Option 2 ID : 6306801567905
 Option 3 ID : 6306801567906
 Option 4 ID : 6306801567907
 Status : Answered
 Chosen Option : 3

Q.34 Name the scheme launched by the Prime Minister on 17 September 2023 that aims to improve the lives of artisans.

- Ans** ☒ 1. PM Vishwakarma
☒ 2. PM Shilpgram
☒ 3. PM Anantakalpaaya
☒ 4. PM Kalashi

Question ID : 630680411164
 Option 1 ID : 6306801603412
 Option 2 ID : 6306801603413
 Option 3 ID : 6306801603414
 Option 4 ID : 6306801603415
 Status : Answered
 Chosen Option : 1

Q.35 Name the first Finance Minister of independent India, whose statue was inaugurated by the Union Textiles Minister in Coimbatore .

- Ans** ☒ 1. RK Shanmugam Chetty
☒ 2. CD Deshmukh
☒ 3. TT Krishnamachari
☒ 4. Sachindra Chaudhuri

Question ID : 630680412664
 Option 1 ID : 6306801609479
 Option 2 ID : 6306801609480
 Option 3 ID : 6306801609481
 Option 4 ID : 6306801609482
 Status : Answered
 Chosen Option : 2

Q.36 Which of the following is a macronutrient?

- Ans** ☒ 1. Vitamins
☒ 2. Carbohydrates
☒ 3. Minerals
☒ 4. Antioxidants

Question ID : 630680411618
 Option 1 ID : 6306801605307
 Option 2 ID : 6306801605308
 Option 3 ID : 6306801605309
 Option 4 ID : 6306801605310
 Status : Answered
 Chosen Option : 2

Q.37 It is a fact that if you drink from a plastic bottle and throw it in the dustbin, it will still be there when your grandchildren are old. What is the reason behind this?

- Ans** ☒ 1. Plastics are biodegradable.
☒ 2. Plastics are radioactive.
☒ 3. Plastics are non-biodegradable.
☒ 4. Plastics are heavy metals.

Question ID : 630680403334
 Option 1 ID : 6306801572845
 Option 2 ID : 6306801572846
 Option 3 ID : 6306801572847
 Option 4 ID : 6306801572848
 Status : Answered
 Chosen Option : 3

Q.38 Which of the following articles of the Constitution of India provides measures to ensure the enforcement of Fundamental Rights?

- Ans** ☒ 1. Article 32
☒ 2. Article 19
☒ 3. Article 14
☒ 4. Article 29

Question ID : 630680511439
 Option 1 ID : 6306801998889
 Option 2 ID : 6306801998887
 Option 3 ID : 6306801998886
 Option 4 ID : 6306801998888
 Status : Answered
 Chosen Option : 1

Q.39 Private income minus tax payment minus non-tax payment will give us the estimate for _____.

- Ans** ☒ 1. private income
☒ 2. gross income
☒ 3. personal disposable income
☒ 4. national income

Question ID : 630680512477
 Option 1 ID : 6306802002879
 Option 2 ID : 6306802002880
 Option 3 ID : 6306802002878
 Option 4 ID : 6306802002881
 Status : Answered
 Chosen Option : 3

Q.40 Who introduced the Anusandhan National Research Foundation Bill, 2023, in the Lok Sabha?

- Ans** ☒ 1. Dr. Jitender Singh
☒ 2. Gopal Rai
☒ 3. Imran Hussain
☒ 4. Piyush Goyal

Question ID : 630680469598
 Option 1 ID : 6306801834155
 Option 2 ID : 6306801834156
 Option 3 ID : 6306801834157
 Option 4 ID : 6306801834158
 Status : Answered
 Chosen Option : 1

Q.41 Narmada Bachao Andolan (Save Narmada Movement) is a/an _____.

- Ans** ☒ 1. Social movement
☒ 2. forest conservation movement
☒ 3. government initiative
☒ 4. project of Jal Shakti Ministry

Question ID : 630680564468
 Option 1 ID : 6306802206804
 Option 2 ID : 6306802206805
 Option 3 ID : 6306802206803
 Option 4 ID : 6306802206806
 Status : Answered
 Chosen Option : 1

Q.42 You grew a small plant in a planter. On maturity, you observed that the plant has green stem, very few branches and the stem is so soft that you could easily break it with your hands. Under which category will you put this plant?

- Ans
- ☒ 1. Tree
 - ☒ 2. Creeper
 - ☒ 3. Shrub
 - ☒ 4. Herb

Question ID : 630680403058
 Option 1 ID : 6306801571801
 Option 2 ID : 6306801571802
 Option 3 ID : 6306801571803
 Option 4 ID : 6306801571804
 Status : Answered
 Chosen Option : 4

Q.43 Who among the following is the author of the book published in December 2021, 'The Monk Who Transformed Uttar Pradesh'?

- Ans
- ☒ 1. Yashika Dutta
 - ☒ 2. Shantanu Gupta
 - ☒ 3. Shashi Tharoor
 - ☒ 4. Amish Tripathi

Question ID : 630680394949
 Option 1 ID : 6306801540065
 Option 2 ID : 6306801540064
 Option 3 ID : 6306801540067
 Option 4 ID : 6306801540066
 Status : Answered
 Chosen Option : 1

Q.44 The total number of bishops in a chess game is _____.

- Ans
- ☒ 1. one
 - ☒ 2. two
 - ☒ 3. three
 - ☒ 4. four

Question ID : 630680430544
 Option 1 ID : 6306801680197
 Option 2 ID : 6306801680198
 Option 3 ID : 6306801680199
 Option 4 ID : 6306801680200
 Status : Answered
 Chosen Option : 4

Q.45 In plant cells, which organelle is responsible for photosynthesis?

- Ans
- ☒ 1. Chloroplast
 - ☒ 2. Mitochondrion
 - ☒ 3. Lysosome
 - ☒ 4. Peroxisome

Question ID : 630680411646
 Option 1 ID : 6306801605419
 Option 2 ID : 6306801605420
 Option 3 ID : 6306801605421
 Option 4 ID : 6306801605422
 Status : Answered
 Chosen Option : 1

Q.46 Olympic medalist Vijender Singh belongs to which State of India?

- Ans ☒ 1. Punjab
☒ 2. Delhi
☒ 3. Haryana
☒ 4. Maharashtra

Question ID : 630680435739
 Option 1 ID : 6306801700873
 Option 2 ID : 6306801700874
 Option 3 ID : 6306801700875
 Option 4 ID : 6306801700876
 Status : Answered
 Chosen Option : 3

Q.47 Which of the following places receives rainfall from the Bay of Bengal branch of southwest monsoon?

- Ans ☒ 1. Ratnagiri
☒ 2. Kolkata
☒ 3. Surat
☒ 4. Panaji

Question ID : 630680511048
 Option 1 ID : 6306801997323
 Option 2 ID : 6306801997322
 Option 3 ID : 6306801997325
 Option 4 ID : 6306801997324
 Status : Answered
 Chosen Option : 2

Q.48 During which years did Khalji dynasty ruled over Delhi?

- Ans ☒ 1. 1451 - 1526
☒ 2. 1414 - 1451
☒ 3. 1320 - 1414
☒ 4. 1290 - 1320

Question ID : 630680511634
 Option 1 ID : 6306801999661
 Option 2 ID : 6306801999660
 Option 3 ID : 6306801999659
 Option 4 ID : 6306801999658
 Status : Answered
 Chosen Option : 3

Q.49 The National Defense Fund is governed by an Executive Committee, which is chaired by the:

- Ans ☒ 1. President
☒ 2. Prime Minister
☒ 3. Vice President
☒ 4. Defence Minister

Question ID : 630680493649
 Option 1 ID : 6306801928324
 Option 2 ID : 6306801928325
 Option 3 ID : 6306801928326
 Option 4 ID : 6306801928327
 Status : Answered
 Chosen Option : 2

Q.50 Which organelle contains enzymes for digesting cellular waste and foreign materials?

- Ans ☒ 1. Nucleus
☒ 2. Mitochondrion
☒ 3. Lysosome
☒ 4. Vacuole

Question ID : 630680411632
 Option 1 ID : 6306801605363
 Option 2 ID : 6306801605364
 Option 3 ID : 6306801605365
 Option 4 ID : 6306801605366
 Status : Answered
 Chosen Option : 3

Section : General Engineering Mechanical

Q.1 In the vapour compression refrigeration cycle with dry saturated vapour after compression, the entropy at the end of compression is the same as the _____.

- Ans ☒ 1. entropy at the end of condensation
☒ 2. entropy at the end of evaporation
☒ 3. entropy at the end of expansion
☒ 4. entropy at the start of expansion

Question ID : 630680506398
 Option 1 ID : 6306801979105
 Option 2 ID : 6306801979107
 Option 3 ID : 6306801979106
 Option 4 ID : 6306801979108
 Status : Answered
 Chosen Option : 2

Q.2 In which of the following compressors, the top cover is bolted to the compressor housing instead of the welded steel shell?

- Ans ☒ 1. Semi-hermetic sealed compressor
☒ 2. Hermetic sealed compressor
☒ 3. Axial compressor
☒ 4. Open compressor

Question ID : 630680506436
 Option 1 ID : 6306801979258
 Option 2 ID : 6306801979257
 Option 3 ID : 6306801979260
 Option 4 ID : 6306801979259
 Status : Answered
 Chosen Option : 4

Q.3 Which of the following impellers are best suited to medium sized pumps with a small amount of soft solids?

- Ans ☒ 1. Semi-open impellers
- ☐ 2. Closed impellers
- ☐ 3. Semi-closed impellers
- ☐ 4. Open impellers

Question ID : 630680508726
 Option 1 ID : 6306801988207
 Option 2 ID : 6306801988205
 Option 3 ID : 6306801988206
 Option 4 ID : 6306801988204
 Status : Answered
 Chosen Option : 2

Q.4 The given figure shows the p-V diagram of:

- Ans ☐ 1. vapour absorption refrigeration system
- ☐ 2. aircraft refrigeration system
- ☐ 3. Electrolux refrigeration system
- ☒ 4. vapour compression refrigeration system

Question ID : 630680332164
 Option 1 ID : 6306801292102
 Option 2 ID : 6306801292104
 Option 3 ID : 6306801292103
 Option 4 ID : 6306801292101
 Status : Answered
 Chosen Option : 4

Q.5 Calculate the polar moment of inertia and the maximum torque transmitted by a solid shaft of diameter 100 mm and length 1.0 m. Let the angle of twist be 2° and the modulus of rigidity, $G = 80 \text{ GPa}$.

- Ans
- ☐ 1.
 - ☐ 2.
 - ☒ 3.
 - ☐ 4.

Question ID : 630680205982

Option 1 ID : 630680798731

Option 2 ID : 630680798734

Option 3 ID : 630680798733

Option 4 ID : 630680798732

Status : Answered

Chosen Option : 3

Q.6 Which of the following is the assumption of Air Standard Cycles?

- Ans
- ☐ 1. The working medium is assumed to be a real gas
 - ☐ 2. Heat is assumed to be supplied from chemical reactions during the cycle
 - ☒ 3. Some heat is assumed to be rejected to a constant low temperature sink
 - ☐ 4. The working medium has variable specific heat with varying temperature

Question ID : 630680502664

Option 1 ID : 6306801964238

Option 2 ID : 6306801964239

Option 3 ID : 6306801964241

Option 4 ID : 6306801964240

Status : Answered

Chosen Option : 3

Q.7 Which of the following is the effect of frictional resistance to the flow of the steam jet over the blade in steam turbines?

- Ans
- ☒ 1. The velocity of flow at the outlet to the moving blade is less than that of flow at the inlet to the moving blade.
 - ☐ 2. The velocity of flow at the outlet to the moving blade is equal to that of flow at the inlet to the moving blade.
 - ☐ 3. The velocity of flow at the outlet to the moving blade is greater than that of flow at the inlet to the moving blade.
 - ☐ 4. There is no effect of frictional resistance to the flow of the steam jet over the blade.

Question ID : 630680502687

Option 1 ID : 6306801964331

Option 2 ID : 6306801964330

Option 3 ID : 6306801964332

Option 4 ID : 6306801964333

Status : Answered

Chosen Option : 1

Q.8

Determine the stress induced in the steel bars of reinforced concrete structure, if the modular ratio for steel and concrete is 14.5 and the stress applied on the concrete is 2.5 MPa.

- Ans
- ☐ 1. 42.75 MPa
 - ☐ 2. 30.25 MPa
 - ☐ 3. 24.50 MPa
 - ☒ 4. 36.25 MPa

Question ID : 630680327982
 Option 1 ID : 6306801275899
 Option 2 ID : 6306801275900
 Option 3 ID : 6306801275898
 Option 4 ID : 6306801275897
 Status : Answered
 Chosen Option : 4

Q.9 Under which of the following conditions does the Francis turbine operate?

- Ans
- ☒ 1. Medium head and medium discharge
 - ☐ 2. High head and high discharge
 - ☐ 3. High head and low discharge
 - ☐ 4. Low head and high discharge

Question ID : 630680193066
 Option 1 ID : 630680748802
 Option 2 ID : 630680748804
 Option 3 ID : 630680748801
 Option 4 ID : 630680748803
 Status : Answered
 Chosen Option : 1

Q.10 The function of a halide torch is:

- Ans
- ☐ 1. superheating the vapour refrigerant
 - ☐ 2. defrosting of the cooling coil
 - ☐ 3. facilitating better lubrication in the refrigerator
 - ☒ 4. detecting leakage of the refrigerant

Question ID : 630680506409
 Option 1 ID : 6306801979150
 Option 2 ID : 6306801979149
 Option 3 ID : 6306801979151
 Option 4 ID : 6306801979152
 Status : Answered
 Chosen Option : 4

Q.11 If N is the speed of the compressor in RPM, then what will be the isentropic power for a double acting compressor? Where W = work required by the compressor.

- Ans
- ☒ 1. $WN/60$
 - ☒ 2. $WN/2$
 - ☒ 3. $2WN/60$
 - ☒ 4. WN

Question ID : 630680506433
 Option 1 ID : 6306801979246
 Option 2 ID : 6306801979248
 Option 3 ID : 6306801979247
 Option 4 ID : 6306801979245
 Status : Answered
 Chosen Option : 3

Q.12 In a hot working process, metals are deformed _____.

- Ans
- ☒ 1. at their recrystallisation temperature
 - ☒ 2. above their recrystallisation temperature
 - ☒ 3. below their recrystallisation temperature
 - ☒ 4. at any recrystallisation temperature

Question ID : 630680503239
 Option 1 ID : 6306801966543
 Option 2 ID : 6306801966541
 Option 3 ID : 6306801966542
 Option 4 ID : 6306801966544
 Status : Answered
 Chosen Option : 2

Q.13 For the laminar flow through circular pipes, shear stress distribution across a section is _____.

- Ans
- ☒ 1. parabolic
 - ☒ 2. cubic
 - ☒ 3. logarithmic
 - ☒ 4. linear

Question ID : 630680193038
 Option 1 ID : 630680748690
 Option 2 ID : 630680748692
 Option 3 ID : 630680748691
 Option 4 ID : 630680748689
 Status : Answered
 Chosen Option : 1

Q.14 Which of the following statements is true about an SI engine in comparison to a CI engine?

- Ans
- ☒ 1. The compression ratio is comparatively high.
 - ☒ 2. The operating speed is very high.
 - ☒ 3. The cost of running is comparatively low.
 - ☒ 4. The air-fuel ratio is high.

Question ID : 630680502709
 Option 1 ID : 6306801964419
 Option 2 ID : 6306801964420
 Option 3 ID : 6306801964421
 Option 4 ID : 6306801964418
 Status : Answered
 Chosen Option : 2

Q.15 Which of the following statements is true about the fuel feed pump used for diesel engines?

- Ans** ☒ 1. It is a spring-loaded, plunger type reciprocating pump.
☒ 2. It is a centrifugal type pump.
☒ 3. When the plunger of the feed pump is lifted upwards, the inlet valve remains open. Therefore, it is not suitable to inject fuel at that time.
☒ 4. The plunger of the fuel feed pump is actuated by the governor.

Question ID : 630680502732
 Option 1 ID : 6306801964512
 Option 2 ID : 6306801964510
 Option 3 ID : 6306801964513
 Option 4 ID : 6306801964511
 Status : Answered
 Chosen Option : 4

Q.16 When the compressor and motor operate on the same shaft and are enclosed in a common casing, they are known as _____.

- Ans** ☒ 1. reciprocating compressors
☒ 2. centrifugal compressors
☒ 3. hermetic sealed compressors
☒ 4. axial compressors

Question ID : 630680506440
 Option 1 ID : 6306801979273
 Option 2 ID : 6306801979274
 Option 3 ID : 6306801979275
 Option 4 ID : 6306801979276
 Status : Answered
 Chosen Option : 3

Q.17 When the fluid pressure is measured above the absolute zero pressure, the measured pressure is known as _____.

- Ans** ☒ 1. vacuum pressure
☒ 2. absolute pressure
☒ 3. atmospheric pressure
☒ 4. gauge pressure

Question ID : 630680193056
 Option 1 ID : 630680748764
 Option 2 ID : 630680748762
 Option 3 ID : 630680748761
 Option 4 ID : 630680748763
 Status : Answered
 Chosen Option : 2

Q.18 Which of the following factors is taken into consideration when determining the maximum suction height of a centrifugal pump?

- Ans
- ☒ 1. Manometric efficiency
 - ☒ 2. Priming
 - ☒ 3. Mechanical efficiency
 - ☒ 4. Cavitation

Question ID : 630680193035
 Option 1 ID : 630680748679
 Option 2 ID : 630680748677
 Option 3 ID : 630680748680
 Option 4 ID : 630680748678
 Status : Answered
 Chosen Option : 1

Q.19 Which of the following statements is true about quantity governing?

- Ans
- ☒ 1. Due to quantity governing, the engine efficiency is altered.
 - ☒ 2. The compression ratio varies with charge supplied.
 - ☒ 3. The mixture strength remains the same with variation in the speed of the engine.
 - ☒ 4. This method is mostly preferred for diesel engines.

Question ID : 630680502681
 Option 1 ID : 6306801964309
 Option 2 ID : 6306801964308
 Option 3 ID : 6306801964306
 Option 4 ID : 6306801964307
 Status : Answered
 Chosen Option : 4

Q.20 Which of the following is the correct designation of the refrigerant CCl_3F ?

- Ans
- ☒ 1. R 11
 - ☒ 2. R 21
 - ☒ 3. R 12
 - ☒ 4. R 22

Question ID : 630680506454
 Option 1 ID : 6306801979329
 Option 2 ID : 6306801979331
 Option 3 ID : 6306801979330
 Option 4 ID : 6306801979332
 Status : Answered
 Chosen Option : 3

Q.21 Which of the following statements is true about hit and miss governing?

- Ans
- ☒ 1. It increases the efficiency of engine.
 - ☒ 2. It is a suitable governing method for heavy IC engines.
 - ☒ 3. In this method of governing, none of the cycles should be idle throughout the running of engine.
 - ☒ 4. This method of governing requires higher weight of flywheel.

Question ID : 630680502674
 Option 1 ID : 6306801964279
 Option 2 ID : 6306801964278
 Option 3 ID : 6306801964281
 Option 4 ID : 6306801964280
 Status : Answered
 Chosen Option : 2

Q.22 A cantilever beam of length 2 m is subjected to a point load of 3 kN at a distance of 2 m and is subjected to a UDL of 3 kN/m for a total distance of 1.5 m from the fixed end. Calculate the shear force and bending moment at the fixed end.

- Ans
- ☒ 1. -12.5 kN, -8.547 kN-m
 - ☒ 2. -7.5 kN, -9.375 kN-m
 - ☒ 3. -10 kN, 15.254 kN-m
 - ☒ 4. -5.75 kN, -5.545 kN-m

Question ID : 630680205958

Option 1 ID : 630680798638

Option 2 ID : 630680798635

Option 3 ID : 630680798636

Option 4 ID : 630680798637

Status : Answered

Chosen Option : 2

Q.23 The heat rejection in Stirling cycle takes place at:

- Ans
- ☒ 1. constant pressure
 - ☒ 2. constant temperature
 - ☒ 3. constant enthalpy
 - ☒ 4. constant volume

Question ID : 630680412680

Option 1 ID : 6306801609544

Option 2 ID : 6306801609545

Option 3 ID : 6306801609546

Option 4 ID : 6306801609543

Status : Answered

Chosen Option : 4

Q.24 Which of the following is correct for Pelton wheel?
Where, α & β = guide blade angle at inlet and outlet, respectively
 Θ & ϕ = vane angle at inlet and outlet, respectively

- Ans
- ☒ 1. $\beta = 0^\circ$ and $\phi = 0^\circ$
 - ☒ 2. $\alpha = 0^\circ$ and $\beta = 0^\circ$
 - ☒ 3. $\alpha = 0^\circ$ and $\phi = 0^\circ$
 - ☒ 4. $\alpha = 0^\circ$ and $\Theta = 0^\circ$

Question ID : 630680508732

Option 1 ID : 6306801988229

Option 2 ID : 6306801988230

Option 3 ID : 6306801988228

Option 4 ID : 6306801988231

Status : Answered

Chosen Option : 1

Q.25 'No slip condition' at a fixed surface is applicable to the flow of which type of fluids?

- Ans ☒ 1. All real fluids
☒ 2. Only ideal fluids
☒ 3. All non-Newtonian fluids
☒ 4. Only Newtonian fluids

Question ID : 630680508717
 Option 1 ID : 6306801988170
 Option 2 ID : 6306801988171
 Option 3 ID : 6306801988169
 Option 4 ID : 6306801988168
 Status : Answered
 Chosen Option : 4

Q.26 Which of the following claims about the irreversibility of a system is true?

- Ans ☒ 1. Irreversible processes violate the zeroth law of thermodynamics.
☒ 2. Irreversible processes violate the first law of thermodynamics.
☒ 3. Irreversible processes increase the entropy of the system.
☒ 4. Irreversible processes are always spontaneous.

Question ID : 630680503226
 Option 1 ID : 6306801966490
 Option 2 ID : 6306801966489
 Option 3 ID : 6306801966491
 Option 4 ID : 6306801966492
 Status : Answered
 Chosen Option : 4

Q.27 Which of the following machines violates the Kelvin Planck's statement?

- Ans ☒ 1. Reversible heat engine
☒ 2. PMM2
☒ 3. PMM1
☒ 4. Irreversible heat engine

Question ID : 630680503256
 Option 1 ID : 6306801966609
 Option 2 ID : 6306801966612
 Option 3 ID : 6306801966611
 Option 4 ID : 6306801966610
 Status : Answered
 Chosen Option : 2

Q.28 Which of the following refrigeration lubricants were the first synthetic oils to be used in the refrigeration industry?

- Ans ☒ 1. Alkylbenzenes oil
☒ 2. Polyol ester oil
☒ 3. Mineral oil
☒ 4. Poly alkylene glycol oil

Question ID : 630680506418
 Option 1 ID : 6306801979186
 Option 2 ID : 6306801979187
 Option 3 ID : 6306801979185
 Option 4 ID : 6306801979188
 Status : Answered
 Chosen Option : 4

Q.29 What will not happen if the liquid has greater adhesion than cohesion?

- Ans
- ☒ 1. The angle of contact will be less than 90° in a small diameter tube.
 - ☒ 2. Liquid will tend to rise at the point of contact.
 - ☒ 3. Liquid surface will be concave downwards in a small diameter tube.
 - ☒ 4. Liquid will wet a solid surface.

Question ID : 630680198993
Option 1 ID : 630680771702
Option 2 ID : 630680771700
Option 3 ID : 630680771701
Option 4 ID : 630680771699
Status : Answered
Chosen Option : 1

Q.30 The casting process that employs a permanent metal or ceramic mould, is _____.

- Ans
- ☒ 1. die casting
 - ☒ 2. centrifugal casting
 - ☒ 3. sand casting
 - ☒ 4. investment casting

Question ID : 630680503205
Option 1 ID : 6306801966407
Option 2 ID : 6306801966408
Option 3 ID : 6306801966405
Option 4 ID : 6306801966406
Status : Answered
Chosen Option : 1

Q.31 Which of the following is NOT a part of a bucket type steam trap?

- Ans
- ☒ 1. Injector
 - ☒ 2. Spiral vane
 - ☒ 3. Guide tube
 - ☒ 4. Float

Question ID : 630680502654
Option 1 ID : 6306801964201
Option 2 ID : 6306801964200
Option 3 ID : 6306801964199
Option 4 ID : 6306801964198
Status : Answered
Chosen Option : 1

Q.32 Which of the following evaporators are used for refrigeration units of 2 to 250 TR capacity?

- Ans
- ☒ 1. Shell and coil evaporators
 - ☒ 2. Dry expansion shell and tube evaporators
 - ☒ 3. Flooded shell and tube evaporators
 - ☒ 4. Plate evaporators

Question ID : 630680506419
Option 1 ID : 6306801979190
Option 2 ID : 6306801979192
Option 3 ID : 6306801979189
Option 4 ID : 6306801979191
Status : Answered
Chosen Option : 1

Q.33 Which of the following assertions related to drilling is true?

- Ans
- ☒ 1. Drilling is a process that uses a hammer to make a hole in a workpiece.
 - ☒ 2. Drilling is a process that uses a non-rotating tool to make a hole in a workpiece.
 - ☒ 3. Drilling is a process that uses a saw to make a hole in a workpiece.
 - ☒ 4. Drilling is a process that uses a rotating tool to make a hole in a workpiece.

Question ID : 630680503223
 Option 1 ID : 6306801966480
 Option 2 ID : 6306801966478
 Option 3 ID : 6306801966479
 Option 4 ID : 6306801966477
 Status : Answered
 Chosen Option : 4

Q.34 Variation of power input with speed at constant discharge in case of a centrifugal pump is _____.

- Ans
- ☒ 1. linear
 - ☒ 2. logarithmic
 - ☒ 3. cubic
 - ☒ 4. parabolic

Question ID : 630680198968
 Option 1 ID : 630680771599
 Option 2 ID : 630680771602
 Option 3 ID : 630680771601
 Option 4 ID : 630680771600
 Status : Answered
 Chosen Option : 3

Q.35 Which of the following statements best describes the second law of thermodynamics in relation to cyclic heat and work processes?

- Ans
- ☒ 1. In a cyclic process, the net work output can be equal to, greater than or less than the net heat input, depending on the efficiency of the process.
 - ☒ 2. In a cyclic process, the net heat transfer is always less than the net work done.
 - ☒ 3. In a cyclic process, the net heat transfer is equal to the net work done.
 - ☒ 4. In a cyclic process, the net heat transfer is always greater than the net work done.

Question ID : 630680503230
 Option 1 ID : 6306801966508
 Option 2 ID : 6306801966507
 Option 3 ID : 6306801966505
 Option 4 ID : 6306801966506
 Status : Answered
 Chosen Option : 3

Q.36 The process that involves passage of a higher-pressure fluid through a narrow constriction is called:

- Ans ☒ 1. throttling process
☒ 2. hyperbolic process
☒ 3. free expansion process
☒ 4. polytropic process

Question ID : 630680348148
 Option 1 ID : 6306801354884
 Option 2 ID : 6306801354882
 Option 3 ID : 6306801354883
 Option 4 ID : 6306801354881
 Status : Answered
 Chosen Option : 1

Q.37 The brake power of an engine can be measured by using a rope brake dynamometer. It is given by the expression: (Where, 'D' is diameter of the brake drum; 'W' is the weight and 'S' is the spring scale reading, 'N' Speed in rpm)

- Ans ☒ 1. $\pi DN (W + S)$
☒ 2. $DN (W + S)$
☒ 3. $DN (W - S)$
☒ 4. $\pi DN (W - S)$

Question ID : 630680386536
 Option 1 ID : 6306801506854
 Option 2 ID : 6306801506857
 Option 3 ID : 6306801506856
 Option 4 ID : 6306801506855
 Status : Answered
 Chosen Option : 1

Q.38 Which of the following is NOT a type of sawing?

- Ans ☒ 1. Circular sawing
☒ 2. Hack sawing
☒ 3. Straight sawing
☒ 4. Band sawing

Question ID : 630680503248
 Option 1 ID : 6306801966580
 Option 2 ID : 6306801966577
 Option 3 ID : 6306801966579
 Option 4 ID : 6306801966578
 Status : Answered
 Chosen Option : 2

Q.39 In the battery ignition system for SI engines, with increase in the speed, the _____.

- Ans ☒ 1. sparking voltage drops
☒ 2. sparking voltage first increases and then becomes constant
☒ 3. sparking voltage increases
☒ 4. sparking voltage remains the same

Question ID : 630680502730
 Option 1 ID : 6306801964503
 Option 2 ID : 6306801964505
 Option 3 ID : 6306801964502
 Option 4 ID : 6306801964504
 Status : Answered
 Chosen Option : 2

Q.40 For the H-S diagram of a vapour compression refrigeration cycle, the specific enthalpy of the refrigerant coming out from the compressor _____.

- Ans ☒ 1. may increase or decrease
☒ 2. decreases
☒ 3. increases
☒ 4. remains constant

Question ID : 630680506443
 Option 1 ID : 6306801979288
 Option 2 ID : 6306801979286
 Option 3 ID : 6306801979285
 Option 4 ID : 6306801979287
 Status : Answered
 Chosen Option : 3

Q.41 Which of the following gas combination is commonly used in oxyfuel-gas welding?

- Ans ☒ 1. Oxygen and acetylene
☒ 2. Oxygen and H_2
☒ 3. Oxygen and Nitrogen
☒ 4. Oxygen and CO_2

Question ID : 630680503272
 Option 1 ID : 6306801966673
 Option 2 ID : 6306801966675
 Option 3 ID : 6306801966676
 Option 4 ID : 6306801966674
 Status : Answered
 Chosen Option : 1

Q.42 Which of the following does NOT indicate that the refrigeration plant has to be charged with the refrigerant?

- Ans ☒ 1. Reduction in the efficiency of the plant
☒ 2. Short cycling of compressor
☒ 3. High suction pressure
☒ 4. Difficult to maintain temperature of rooms and holds

Question ID : 630680506410
 Option 1 ID : 6306801979156
 Option 2 ID : 6306801979153
 Option 3 ID : 6306801979154
 Option 4 ID : 6306801979155
 Status : Answered
 Chosen Option : 4

Q.43 A drill bit of diameter 25 mm has cutting speed of 15.7 m/min. What is the speed of rotation of drill?

- Ans ☒ 1. 200 RPM
☒ 2. 314 RPM
☒ 3. 400 RPM
☒ 4. 500 RPM

Question ID : 630680503251
 Option 1 ID : 6306801966590
 Option 2 ID : 6306801966592
 Option 3 ID : 6306801966589
 Option 4 ID : 6306801966591
 Status : Answered
 Chosen Option : 1

Q.44 In the porter governor, the main constituent of controlling force is:

- Ans
- ☒ 1. mass of flyball
 - ☒ 2. friction force
 - ☒ 3. mass of sleeve
 - ☒ 4. spring force

Question ID : 630680509132
 Option 1 ID : 6306801989825
 Option 2 ID : 6306801989824
 Option 3 ID : 6306801989826
 Option 4 ID : 6306801989823
 Status : Answered
 Chosen Option : 3

Q.45 The distance of centre of pressure from free surface of liquid is independent of:

- Ans
- ☒ 1. the density of liquid
 - ☒ 2. the distance of C.G. from free surface of liquid
 - ☒ 3. the surface area
 - ☒ 4. the moment of inertia

Question ID : 630680508637
 Option 1 ID : 6306801987850
 Option 2 ID : 6306801987851
 Option 3 ID : 6306801987849
 Option 4 ID : 6306801987848
 Status : Answered
 Chosen Option : 1

Q.46 Which of the following prevents the high-pressure vapour refrigerant from flowing back to the evaporator in rotating blade type rotary compressor?

- Ans
- ☒ 1. Throttling valve
 - ☒ 2. Check valve
 - ☒ 3. Pressure valve
 - ☒ 4. Safety valve

Question ID : 630680506437
 Option 1 ID : 6306801979262
 Option 2 ID : 6306801979263
 Option 3 ID : 6306801979264
 Option 4 ID : 6306801979261
 Status : Answered
 Chosen Option : 2

Q.47 In the process of brazing, the filler metal is drawn into the joint by means of _____.

- Ans
- ☒ 1. Low viscosity
 - ☒ 2. High diffusion
 - ☒ 3. Capillary action
 - ☒ 4. Surface tension

Question ID : 630680205053
 Option 1 ID : 630680795077
 Option 2 ID : 630680795078
 Option 3 ID : 630680795076
 Option 4 ID : 630680795075
 Status : Answered
 Chosen Option : 3

Q.48 Carbon steel contains a carbon percentage of about 0.21%. The possible type of carbon steel is _____.

- Ans
- ☒ 1. alloy steel
 - ☒ 2. stainless steel
 - ☒ 3. mild steel
 - ☒ 4. medium carbon steel

Question ID : 630680191553
 Option 1 ID : 630680742833
 Option 2 ID : 630680742836
 Option 3 ID : 630680742835
 Option 4 ID : 630680742834
 Status : Answered
 Chosen Option : 3

Q.49 Total gradient line (or total energy line) is parallel to hydraulic gradient line with a vertical distance of _____. (The symbols have their usual meanings.)

- Ans
- ☒ 1.
 - ☒ 2.
 - ☒ 3.
 - ☒ 4.

Question ID : 630680198989
 Option 1 ID : 630680771684
 Option 2 ID : 630680771685
 Option 3 ID : 630680771686
 Option 4 ID : 630680771683
 Status : Answered
 Chosen Option : 1

Q.50 Which of the following is NOT the application for steam in industry?

- Ans
- ☒ 1. Heating
 - ☒ 2. Propulsion
 - ☒ 3. De-atomisation
 - ☒ 4. Humidification

Question ID : 630680348139
 Option 1 ID : 6306801354845
 Option 2 ID : 6306801354846
 Option 3 ID : 6306801354848
 Option 4 ID : 6306801354847
 Status : Answered
 Chosen Option : 3

Q.51 A cooling system is essentially required in internal combustion engines to

- Ans
- ☒ 1. keep the engine very hot or very cool
 - ☒ 2. remove heat at a faster rate when the engine is cool
 - ☒ 3. remove heat at a faster rate when engine is hot
 - ☒ 4. remove about 70% of heat generated in the combustion chamber

Question ID : 630680382380
Option 1 ID : 6306801490436
Option 2 ID : 6306801490437
Option 3 ID : 6306801490435
Option 4 ID : 6306801490438
Status : Answered
Chosen Option : 3

Q.52 Which of the following is NOT a frequent pattern-making process in manufacturing?

- Ans
- ☒ 1. Welding pattern
 - ☒ 2. Investment pattern
 - ☒ 3. Match plate pattern
 - ☒ 4. Sweep pattern

Question ID : 630680503200
Option 1 ID : 6306801966388
Option 2 ID : 6306801966387
Option 3 ID : 6306801966386
Option 4 ID : 6306801966385
Status : Answered
Chosen Option : 1

Q.53 The location of centre of gravity for a sphere of radius (R) from the geometrical centre is at a distance of:

- Ans
- ☒ 1. R
 - ☒ 2. 0.25R
 - ☒ 3. 0
 - ☒ 4. 0.5R

Question ID : 630680509611
Option 1 ID : 6306801991665
Option 2 ID : 6306801991667
Option 3 ID : 6306801991668
Option 4 ID : 6306801991666
Status : Answered
Chosen Option : 3

Q.54 Which of the following is NOT a lathe turning operation?

- Ans
- ☒ 1. Sawing
 - ☒ 2. Facing
 - ☒ 3. Grooving
 - ☒ 4. Threading

Question ID : 630680503220
Option 1 ID : 6306801966467
Option 2 ID : 6306801966465
Option 3 ID : 6306801966468
Option 4 ID : 6306801966466
Status : Answered
Chosen Option : 1

Q.55 A closed system undergoes a cycle consisting of two processes. Process 1-2 is an isothermal expansion whereas Process 2-1 is an isentropic compression. According to the first law of thermodynamics, which of the following statements is true for this cycle?

- Ans**
- ☒ 1. Work done during Process 1-2 is zero.
 - ☒ 2. Heat transfer during Process 2-1 is zero.
 - ☒ 3. Work done during Process 2-1 is zero.
 - ☒ 4. Heat transfer during Process 1-2 is zero.

Question ID : 630680503235
 Option 1 ID : 6306801966525
 Option 2 ID : 6306801966528
 Option 3 ID : 6306801966526
 Option 4 ID : 6306801966527
 Status : Answered
 Chosen Option : 2

Q.56 The Kaplan turbine is an example of _____ .

- Ans**
- ☒ 1. tangential flow turbine
 - ☒ 2. radial flow turbine
 - ☒ 3. mixed-flow turbine
 - ☒ 4. axial flow turbine

Question ID : 630680193067
 Option 1 ID : 630680748805
 Option 2 ID : 630680748808
 Option 3 ID : 630680748806
 Option 4 ID : 630680748807
 Status : Answered
 Chosen Option : 2

Q.57 In which of the following areas is supercharging NOT so important?

- Ans**
- ☒ 1. Engines working at high altitudes
 - ☒ 2. Racing cars
 - ☒ 3. Marine and automotive engines where weight and space are important
 - ☒ 4. Domestic bikes

Question ID : 630680502665
 Option 1 ID : 6306801964243
 Option 2 ID : 6306801964244
 Option 3 ID : 6306801964242
 Option 4 ID : 6306801964245
 Status : Answered
 Chosen Option : 3

Q.58 What will be the value of the axial thrust on a wheel when there is no blade friction?

- Ans**
- ☒ 1. Zero
 - ☒ 2. Minimum
 - ☒ 3. Maximum
 - ☒ 4. Equal to the tangential force on the blade

Question ID : 630680502690
 Option 1 ID : 6306801964344
 Option 2 ID : 6306801964343
 Option 3 ID : 6306801964342
 Option 4 ID : 6306801964345
 Status : Answered
 Chosen Option : 1

Q.59 Which of the following statements is correct about the location of centre of pressure?

- Ans** ☒ 1. Centre of pressure may lie at any location irrespective of the centre of gravity of the vertically immersed surface.
- ☒ 2. Centre of pressure coincides with the centre of gravity of the vertically immersed surface.
- ☒ 3. Centre of pressure lies below the centre of gravity of the vertically immersed surface.
- ☒ 4. Centre of pressure lies above the centre of gravity of the vertically immersed surface.

Question ID : 630680199002

Option 1 ID : 630680771738

Option 2 ID : 630680771737

Option 3 ID : 630680771735

Option 4 ID : 630680771736

Status : Answered

Chosen Option : 3

Q.60 In a Hartnell governor, if a spring of greater stiffness is used, then the governor will be:

- Ans** ☒ 1. insensitive
- ☒ 2. less sensitive
- ☒ 3. Isochronous
- ☒ 4. more sensitive

Question ID : 630680335145

Option 1 ID : 6306801303800

Option 2 ID : 6306801303798

Option 3 ID : 6306801303799

Option 4 ID : 6306801303797

Status : Answered

Chosen Option : 2

Q.61 When pressure is measured above the atmospheric pressure, it is termed as:

- Ans** ☒ 1. absolute pressure
- ☒ 2. gauge pressure
- ☒ 3. vacuum pressure
- ☒ 4. stagnation pressure

Question ID : 630680508636

Option 1 ID : 6306801987844

Option 2 ID : 6306801987846

Option 3 ID : 6306801987845

Option 4 ID : 6306801987847

Status : Answered

Chosen Option : 2

Q.62 The Kelvin-Planck statement of the Second Law states that _____.

- Ans** ☒ 1. work can be converted completely into heat
- ☒ 2. it is impossible to convert all the heat absorbed from a single reservoir into work
- ☒ 3. heat cannot flow spontaneously from a colder body to a hotter body
- ☒ 4. it is possible to convert all the heat absorbed from a single reservoir into work

Question ID : 630680503229

Option 1 ID : 6306801966504

Option 2 ID : 6306801966501

Option 3 ID : 6306801966503

Option 4 ID : 6306801966502

Status : Answered

Chosen Option : 2

Q.63 If there is flow of real fluid at fixed boundary, then no-slip condition:

- Ans
- ☒ 1. does not occur
 - ☒ 2. may or may not occur
 - ☒ 3. depends on the type of flow
 - ☒ 4. occurs

Question ID : 630680508622
 Option 1 ID : 6306801987788
 Option 2 ID : 6306801987790
 Option 3 ID : 6306801987791
 Option 4 ID : 6306801987789
 Status : Answered
 Chosen Option : 2

Q.64 If the power output of a hydraulic turbine is 100 kW and overall efficiency is 50%, then what will be the power supplied at the inlet of the turbine?

- Ans
- ☒ 1. 200 kW
 - ☒ 2. 250 kW
 - ☒ 3. 150 kW
 - ☒ 4. 50 kW

Question ID : 630680508632
 Option 1 ID : 6306801987830
 Option 2 ID : 6306801987831
 Option 3 ID : 6306801987829
 Option 4 ID : 6306801987828
 Status : Answered
 Chosen Option : 1

Q.65 The overall efficiency of the turbine is given by:

- Ans
- ☒ 1. overall efficiency = mechanical efficiency / hydraulic efficiency
 - ☒ 2. overall efficiency = hydraulic efficiency / mechanical efficiency
 - ☒ 3. overall efficiency = hydraulic efficiency × mechanical efficiency
 - ☒ 4. overall efficiency = mechanical efficiency² / hydraulic efficiency²

Question ID : 630680508612
 Option 1 ID : 6306801987749
 Option 2 ID : 6306801987748
 Option 3 ID : 6306801987751
 Option 4 ID : 6306801987750
 Status : Answered
 Chosen Option : 3

Q.66 The fluid that becomes less viscous as it is sheared harder is called _____.

- Ans
- ☒ 1. dilatant fluid
 - ☒ 2. thixotropic fluid
 - ☒ 3. Newtonian fluid
 - ☒ 4. pseudo-plastic fluid

Question ID : 630680508720
 Option 1 ID : 6306801988181
 Option 2 ID : 6306801988180
 Option 3 ID : 6306801988183
 Option 4 ID : 6306801988182
 Status : Answered
 Chosen Option : 1

Q.67 Which of the following statements is INCORRECT about the air pre-heater in a steam boiler?

- Ans ☒ 1. In the tubular type of air pre-heater, hot flue gases flow in the direction opposite to that of air travel.
- ☒ 2. In the regenerative type of air pre-heater, heat from flue gases is transferred to air through an intermediate heat storage medium.
- ☒ 3. Use of the air pre-heater leads to less atmospheric pollution.
- ☒ 4. In the tubular type of air pre-heater, hot flue gases flow through the outside of the tubes of the air pre-heater.

Question ID : 630680502656

Option 1 ID : 6306801964209

Option 2 ID : 6306801964207

Option 3 ID : 6306801964208

Option 4 ID : 6306801964206

Status : Answered

Chosen Option : 4

Q.68 A cyclic heat engine takes 40 kJ of heat from a 100°C temperature reservoir. If it gives 40 kJ of work, then which of the following statements is correct?

- Ans ☒ 1. The engine violates the Kelvin Planck's statement
- ☒ 2. The engine violates the Clausius statement.
- ☒ 3. The engine violates the 1st law of thermodynamics.
- ☒ 4. The engine violates 1st law of thermodynamics as well as Kelvin Planck's statement.

Question ID : 630680503257

Option 1 ID : 6306801966614

Option 2 ID : 6306801966615

Option 3 ID : 6306801966613

Option 4 ID : 6306801966616

Status : Answered

Chosen Option : 1

Q.69 Which of the following is NOT an example of Newtonian fluid?

- Ans ☒ 1. Water
- ☒ 2. Printer's ink
- ☒ 3. Kerosene
- ☒ 4. Air

Question ID : 630680199007

Option 1 ID : 630680771755

Option 2 ID : 630680771758

Option 3 ID : 630680771757

Option 4 ID : 630680771756

Status : Answered

Chosen Option : 2

Q.70 In case of a four-stroke diesel engine, the valve timing diagram is expressed in terms of ____.

- Ans
- ☒ 1. the time taken for opening and closing of the valve with respect to only TDC
 - ☒ 2. the time taken for opening and closing of the valve with respect to TDC and BDC
 - ☒ 3. the degree of the crank angle at the time of opening and closing of the valve
 - ☒ 4. the linear movement of the piston with respect to TDC and BDC

Question ID : 630680502711
Option 1 ID : 6306801964427
Option 2 ID : 6306801964426
Option 3 ID : 6306801964428
Option 4 ID : 6306801964429
Status : Answered
Chosen Option : 3

Q.71 Which of the following statements is INCORRECT about no slip boundary condition?

- Ans
- ☒ 1. In case of the no slip boundary condition at a fixed solid boundary, the fluid will have zero velocity.
 - ☒ 2. During no slip condition the fluid velocity at all fluid–solid boundaries is equal to that of the solid boundary.
 - ☒ 3. The no slip condition can be defined for viscous flows.
 - ☒ 4. In case of the no slip boundary condition at a fixed solid boundary, the fluid will have some velocity relative to the boundary.

Question ID : 630680199006
Option 1 ID : 630680771753
Option 2 ID : 630680771751
Option 3 ID : 630680771754
Option 4 ID : 630680771752
Status : Answered
Chosen Option : 4

Q.72 A sample of an ideal gas is compressed isothermally from volume of 4 l to 2 l. If the initial pressure is 2 atm, what is the final pressure?

- Ans
- ☒ 1. 1 atm
 - ☒ 2. 4 atm
 - ☒ 3. 8 atm
 - ☒ 4. 2 atm

Question ID : 630680503215
Option 1 ID : 6306801966445
Option 2 ID : 6306801966447
Option 3 ID : 6306801966448
Option 4 ID : 6306801966446
Status : Answered
Chosen Option : 2

Q.73 The surging phenomenon in a centrifugal compressor occurs when the refrigeration load decreases to below:

- Ans**
- ☒ 1. 35% of the rated capacity
 - ☐ 2. 65% of the rated capacity
 - ☐ 3. 55% of the rated capacity
 - ☐ 4. 45% of the rated capacity

Question ID : 630680506395
 Option 1 ID : 6306801979093
 Option 2 ID : 6306801979096
 Option 3 ID : 6306801979095
 Option 4 ID : 6306801979094
 Status : Answered
 Chosen Option : 4

Q.74 In actual air-conditioning applications, the heat rejection factor depends upon the:

- Ans**
- ☐ 1. rate of flow
 - ☐ 2. evaporator temperature
 - ☒ 3. evaporator and condenser temperatures
 - ☐ 4. condenser temperature

Question ID : 630680506427
 Option 1 ID : 6306801979223
 Option 2 ID : 6306801979222
 Option 3 ID : 6306801979224
 Option 4 ID : 6306801979221
 Status : Answered
 Chosen Option : 3

Q.75 For measurement of dryness fraction of steam, use of a separating calorimeter is suitable _____.

- Ans**
- ☐ 1. when dryness fraction is greater than 1
 - ☐ 2. for any condition of steam
 - ☐ 3. when dryness fraction is greater than 0.95
 - ☒ 4. when dryness fraction is less than 0.95

Question ID : 630680502761
 Option 1 ID : 6306801964629
 Option 2 ID : 6306801964628
 Option 3 ID : 6306801964626
 Option 4 ID : 6306801964627
 Status : Answered
 Chosen Option : 4

Q.76 The mass transfer process in an open system is commonly modelled using the _____ equation.

- Ans**
- ☐ 1. third law of thermodynamics
 - ☐ 2. second law of thermodynamics
 - ☒ 3. mass balance
 - ☐ 4. zeroth law of thermodynamics

Question ID : 630680503178
 Option 1 ID : 6306801966299
 Option 2 ID : 6306801966298
 Option 3 ID : 6306801966300
 Option 4 ID : 6306801966297
 Status : Answered
 Chosen Option : 3

Q.77 Which of the following statements are correct regarding the characteristics of Entropy?

- 1) It increases when heat is supplied irrespective of the fact whether temperature changes or not.
- 2) It decreases when heat is removed whether temperature changes or not.
- 3) It remains unchanged in all adiabatic frictionless processes.
- 4) It increases if temperature of heat is lowered without work being done as in a throttling process.

Ans ☒ 1. 1, 2, 3 and 4
☒ 2. Only 1, 2 and 3
☒ 3. Only 1, 3 and 4
☒ 4. Only 2, 3 and 4

Question ID : 630680395246
 Option 1 ID : 6306801541195
 Option 2 ID : 6306801541192
 Option 3 ID : 6306801541194
 Option 4 ID : 6306801541193
 Status : Answered
 Chosen Option : 2

Q.78 The zeroth law of thermodynamics is based on the concept of _____.

Ans ☒ 1. enthalpy
☒ 2. temperature
☒ 3. heat capacity
☒ 4. entropy

Question ID : 630680503210
 Option 1 ID : 6306801966428
 Option 2 ID : 6306801966427
 Option 3 ID : 6306801966425
 Option 4 ID : 6306801966426
 Status : Answered
 Chosen Option : 2

Q.79 In a boiler test, the water supplied to a boiler per hour is 2250 kg. The mass of water in the boiler at the end of the one hour is found to be less than that at commencement by 250 kg. The coal burnt per hour is 250 kg. What will be the actual evaporation per kg of the fuel burnt of the boiler?

Ans ☒ 1. 8 kg
☒ 2. 10 kg
☒ 3. 2500 kg
☒ 4. 250 kg

Question ID : 630680502645
 Option 1 ID : 6306801964162
 Option 2 ID : 6306801964163
 Option 3 ID : 6306801964165
 Option 4 ID : 6306801964164
 Status : Answered
 Chosen Option : 2

Q.80 If a point is to be at the free surface of a liquid open to the atmosphere, where the pressure is the atmospheric pressure P_{atm} , then the gauge pressure at a depth 'h' from the free surface becomes:

- Ans ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Question ID : 630680508737
 Option 1 ID : 6306801988248
 Option 2 ID : 6306801988250
 Option 3 ID : 6306801988251
 Option 4 ID : 6306801988249
 Status : Answered
 Chosen Option : 1

Q.81 Name the welding defect in which we observe a long and continuous visual separation line between the base metal and the heat affected zone.

- Ans ☒ 1. Lamellar tearing
- ☒ 2. Hot cracking
- ☒ 3. Incomplete fusion
- ☒ 4. Undercut

Question ID : 630680211307
 Option 1 ID : 630680819375
 Option 2 ID : 630680819376
 Option 3 ID : 630680819377
 Option 4 ID : 630680819378
 Status : Answered
 Chosen Option : 1

Q.82 What will be the power lost in friction assuming uniform pressure theory, when a vertical shaft of 100 mm diameter rotating at 150 r.p.m. rests on a flat end foot step bearing? The coefficient of friction is equal to 0.05 and the shaft carries a vertical load of 15 KN.

- Ans ☒ 1. 392.7 W
- ☒ 2. 392.7 KW
- ☒ 3. 39.27 KW
- ☒ 4. 39.27 W

Question ID : 630680227834
 Option 1 ID : 630680884013
 Option 2 ID : 630680884011
 Option 3 ID : 630680884012
 Option 4 ID : 630680884014
 Status : Answered
 Chosen Option : 1

Q.83 The conventional depth of a cut considered in the parting operation using a lathe is _____.

- Ans ☒ 1. 3 mm to 10 mm
☒ 2. 20 mm to 25 mm
☒ 3. 12 mm to 16 mm
☒ 4. 1 mm to 2 mm

Question ID : 630680205078
 Option 1 ID : 630680795175
 Option 2 ID : 630680795178
 Option 3 ID : 630680795177
 Option 4 ID : 630680795176
 Status : Answered
 Chosen Option : 4

Q.84 The heat transfer during constant pressure heating of a gas in a cylinder containing a sliding piston is equal to _____.

- Ans ☒ 1. zero
☒ 2. the change in enthalpy
☒ 3. the work done by the piston
☒ 4. the change in internal energy

Question ID : 630680503275
 Option 1 ID : 6306801966688
 Option 2 ID : 6306801966686
 Option 3 ID : 6306801966687
 Option 4 ID : 6306801966685
 Status : Answered
 Chosen Option : 2

Q.85 Which part of the arc welding element/equipment is consumable?

- Ans ☒ 1. Electrode
☒ 2. AC/DC transformer
☒ 3. Electrical cables
☒ 4. Electrode holder

Question ID : 630680205050
 Option 1 ID : 630680795066
 Option 2 ID : 630680795064
 Option 3 ID : 630680795063
 Option 4 ID : 630680795065
 Status : Answered
 Chosen Option : 1

Q.86 Which of the following options is correct about four-stroke engines when compared with two-stroke engines?

- Ans** ☒ 1. The thermodynamic cycle is completed in two strokes of the piston or in one revolution of the crankshaft.
- ☒ 2. Thermal efficiency is higher.
- ☒ 3. Light weight and simplicity due to absence of the valve actuating mechanism, with the initial cost of the engine being low
- ☒ 4. Lower volumetric efficiency due to lesser time taken for mixture intake

Question ID : 630680181695
 Option 1 ID : 630680704022
 Option 2 ID : 630680704024
 Option 3 ID : 630680704025
 Option 4 ID : 630680704023
 Status : Answered
 Chosen Option : 2

Q.87 Which of the following is used to increase the temperature of steam above its saturation temperature?

- Ans** ☒ 1. Superheater
- ☒ 2. Air pre-heater
- ☒ 3. Steam dryer
- ☒ 4. Economiser

Question ID : 630680502707
 Option 1 ID : 6306801964412
 Option 2 ID : 6306801964411
 Option 3 ID : 6306801964413
 Option 4 ID : 6306801964410
 Status : Answered
 Chosen Option : 1

Q.88 The manometric head of a centrifugal pump is independent of which of the following factors?

- Ans** ☒ 1. Frictional head loss in suction pipe
- ☒ 2. Loss of head in impeller and casing
- ☒ 3. Frictional losses in bearings
- ☒ 4. Frictional head loss in delivery pipe

Question ID : 630680198966
 Option 1 ID : 630680771592
 Option 2 ID : 630680771591
 Option 3 ID : 630680771593
 Option 4 ID : 630680771594
 Status : Answered
 Chosen Option : 3

Q.89 Enthalpy of a system in an open flow is given by $h = u + pv$, where pv is the _____.

- Ans
- ☒ 1. moving boundary work
 - ☒ 2. flow work
 - ☒ 3. external work
 - ☒ 4. momentum energy

Question ID : 630680503243
 Option 1 ID : 6306801966557
 Option 2 ID : 6306801966558
 Option 3 ID : 6306801966560
 Option 4 ID : 6306801966559
 Status : Answered
 Chosen Option : 2

Q.90 The distance of the centre of pressure from the free surface of the liquid is independent of the:

- Ans
- ☒ 1. density of liquid
 - ☒ 2. moment of inertia about the centre of gravity
 - ☒ 3. depth of the centre of gravity from the free surface
 - ☒ 4. area exposed to the liquid

Question ID : 630680508740
 Option 1 ID : 6306801988262
 Option 2 ID : 6306801988263
 Option 3 ID : 6306801988261
 Option 4 ID : 6306801988260
 Status : Answered
 Chosen Option : 1

Q.91 The mist lubrication system is generally used for _____.

- Ans
- ☒ 1. two stroke cycle engine
 - ☒ 2. gas engine
 - ☒ 3. air refrigeration cycle engine
 - ☒ 4. four stroke cycle engine

Question ID : 630680502667
 Option 1 ID : 6306801964251
 Option 2 ID : 6306801964253
 Option 3 ID : 6306801964252
 Option 4 ID : 6306801964250
 Status : Answered
 Chosen Option : 3

Q.92

- Ans
- ☒ 1. The equation is the steady flow energy equation for steam nozzles.
 - ☒ 2. There is no mechanical work done by the steam nozzle.
 - ☒ 3. The equation considers frictional losses in the steam nozzle.
 - ☒ 4. The flow is adiabatic in steam nozzles.

Question ID : 630680502641

Option 1 ID : 6306801964146

Option 2 ID : 6306801964148

Option 3 ID : 6306801964149

Option 4 ID : 6306801964147

Status : Answered

Chosen Option : 3

Q.93 The casting process that employs a wax pattern coated with a ceramic shell to make the mould, is _____.

- Ans
- ☒ 1. sand casting
 - ☒ 2. centrifugal casting
 - ☒ 3. die casting
 - ☒ 4. investment casting

Question ID : 630680503204

Option 1 ID : 6306801966401

Option 2 ID : 6306801966404

Option 3 ID : 6306801966403

Option 4 ID : 6306801966402

Status : Answered

Chosen Option : 4

Q.94 A complex geometry is placed in the X-Y plane. If the geometry is found to be symmetrical about the Y-axis, then which of the following is correct to calculate the centre of gravity?

- Ans
- ☒ 1. X co-ordinate is a non-zero value
 - ☒ 2. Z co-ordinate is a non-zero value
 - ☒ 3. Y co-ordinate is zero
 - ☒ 4. X co-ordinate is zero

Question ID : 630680509603

Option 1 ID : 6306801991634

Option 2 ID : 6306801991636

Option 3 ID : 6306801991633

Option 4 ID : 6306801991635

Status : Answered

Chosen Option : 4

Q.95 The maximum frictional force that comes in play when a body just begins to slide over the surface of another body is called:

- Ans**
- ☒ 1. kinetic friction
 - ☒ 2. static friction
 - ☒ 3. dynamic friction
 - ☒ 4. limiting friction

Question ID : 630680394585
 Option 1 ID : 6306801538626
 Option 2 ID : 6306801538628
 Option 3 ID : 6306801538627
 Option 4 ID : 6306801538629
 Status : Answered
 Chosen Option : 2

Q.96 In a milling machine, bulky workpieces of irregular shapes are clamped directly on the milling machine table by using _____.

- Ans**
- ☒ 1. swivel vise
 - ☒ 2. angle plates
 - ☒ 3. T-bolts and clamps
 - ☒ 4. V-blocks

Question ID : 630680205087
 Option 1 ID : 630680795214
 Option 2 ID : 630680795211
 Option 3 ID : 630680795212
 Option 4 ID : 630680795213
 Status : Answered
 Chosen Option : 3

Q.97 What is the main benefit of double volute casing over single volute casing of a centrifugal pump?

- Ans**
- ☒ 1. Radial load balancing
 - ☒ 2. High discharge
 - ☒ 3. Less power requirement
 - ☒ 4. High efficiency

Question ID : 630680198970
 Option 1 ID : 630680771607
 Option 2 ID : 630680771609
 Option 3 ID : 630680771608
 Option 4 ID : 630680771610
 Status : Answered
 Chosen Option : 1

Q.98 Isochronism in a governor is desirable when _____.

- Ans**
- ☒ 1. the engine operates at low speeds
 - ☒ 2. the engine operates at high speeds
 - ☒ 3. the engine is just getting started
 - ☒ 4. one speed is desired under one load

Question ID : 630680502673
 Option 1 ID : 6306801964274
 Option 2 ID : 6306801964275
 Option 3 ID : 6306801964276
 Option 4 ID : 6306801964277
 Status : Answered
 Chosen Option : 3

Q.99 The volumetric efficiency of a single-stage reciprocating air compressor is the ratio of the:

- Ans**
- ☒ 1. swept volume to the clearance volume
 - ☒ 2. free air delivered to the displacement of the compressor
 - ☒ 3. swept volume to the effective swept volume
 - ☒ 4. displacement of the compressor to the free air delivered

Question ID : 630680181651

Option 1 ID : 630680703848

Option 2 ID : 630680703846

Option 3 ID : 630680703849

Option 4 ID : 630680703847

Status : Answered

Chosen Option : 2

Q.100 When a system is undergoing constant volume process, then heat transfer is equal to:

- Ans**
- ☒ 1. change in entropy
 - ☒ 2. change in enthalpy
 - ☒ 3. work transfer
 - ☒ 4. change in internal energy

Question ID : 630680403968

Option 1 ID : 6306801575361

Option 2 ID : 6306801575359

Option 3 ID : 6306801575360

Option 4 ID : 6306801575358

Status : Answered

Chosen Option : 4