

Junior Engineer Civil Mechanical and Electrical Examination 2024 Paper I

Roll Number	
Candidate Name	
Venue Name	
Exam Date	07/06/2024
Exam Time	1:00 PM - 3:00 PM
Subject	Junior Engineer 2024 Mechanical Paper I

Section : General Intelligence and Reasoning

Q.1 Select the figure from the options that can replace the question mark (?) and complete the given pattern.

Ans

 1.

 2.

3.

 4.

Question ID : 630680524805
Option 1 ID : 6306802051320
Option 2 ID : 6306802051319
Option 3 ID : 6306802051322
Option 4 ID : 6306802051321
Status : Answered
Chosen Option : 3

Q.2 Select the option in which the numbers share the same relationship as that shared by the given pairs of numbers.

5 : 101

10 : 201

(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. 6 : 120

 2. 7 : 50

 3. 6 : 121

 4. 8 : 140

Question ID : 630680387171

Option 1 ID : 6306801509379

Option 2 ID : 6306801509378

Option 3 ID : 6306801509380

Option 4 ID : 6306801509381

Status : Answered

Chosen Option : 3

Q.3 In a certain code language,

'A + B' means 'A is the brother of B',

'A - B' means 'A is the husband of B',

'A × B' means 'A is the sister of B' and

'A ÷ B' means 'A is the mother of B'.

How is B related to T if 'B + D - G ÷ P × T'?

Ans  1. Sister

 2. Father's brother

 3. Mother's brother

 4. Sister's daughter

Question ID : 630680377672

Option 1 ID : 6306801471750

Option 2 ID : 6306801471747

Option 3 ID : 6306801471749

Option 4 ID : 6306801471748

Status : Answered

Chosen Option : 2

Q.4 In a certain code language, 'CAFE' is coded as '3795' and 'FIND' is coded as '8634'. What is the code for 'F' in the given code language?

Ans  1. 3

 2. 4

 3. 8

 4. 9

Question ID : 630680388414

Option 1 ID : 6306801514174

Option 2 ID : 6306801514175

Option 3 ID : 6306801514176

Option 4 ID : 6306801514177

Status : Answered

Chosen Option : 1

Q.5 CJHF and HOMK are related to each other in a certain way based on the English alphabetical order. In the same way, SZXV and XECA are related to each other. Which of the following is related to DLTR, following the same logic?

- Ans
- ☐ 1. KQYX
 - ☐ 2. KQYW
 - ☐ 3. IQYX
 - ☒ 4. IQYW

Question ID : 630680379161
Option 1 ID : 6306801477693
Option 2 ID : 6306801477691
Option 3 ID : 6306801477694
Option 4 ID : 6306801477692
Status : Answered
Chosen Option : 4

Q.6 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
AYH, BWJ, CUL, DSN, ?

- Ans
- ☐ 1. FPR
 - ☒ 2. EQP
 - ☐ 3. EPL
 - ☐ 4. EQS

Question ID : 630680378952
Option 1 ID : 6306801476856
Option 2 ID : 6306801476855
Option 3 ID : 6306801476857
Option 4 ID : 6306801476858
Status : Answered
Chosen Option : 2

Q.7 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 : 630680456655
Option 1 ID : 6306801783583
Option 2 ID : 6306801783584
Option 3 ID : 6306801783585
Option 4 ID : 6306801783586
Status : Answered
Chosen Option : 4

Q.8 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.)
(17, 68, 8)
(16, 72, 9)

- Ans  1. (25, 140, 12)
 2. (13, 78, 5)
 3. (11, 109, 13)
 4. (10, 105, 21)

Question ID : 630680376811
Option 1 ID : 6306801468310
Option 2 ID : 6306801468308
Option 3 ID : 6306801468307
Option 4 ID : 6306801468309
Status : Answered
Chosen Option : 4

Q.9 Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.
1. Elderly
2. Adolescent
3. Infant
4. Adult
5. Baby

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

Question ID : 630680395038
Option 1 ID : 6306801540420
Option 2 ID : 6306801540421
Option 3 ID : 6306801540422
Option 4 ID : 6306801540423
Status : Answered
Chosen Option : 1

Q.10 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.
If Chan weighs 68 kilograms, which of the following can be the possible weight of Dolly (in kilograms)?

- Ans  1. 72
 2. 66
 3. 71
 4. 65

Question ID : 630680521124
Option 1 ID : 6306802036921
Option 2 ID : 6306802036922
Option 3 ID : 6306802036923
Option 4 ID : 6306802036924
Status : Answered
Chosen Option : 3

Q.11 Suresh starts from his home and drives 5 km towards the south. He then takes a left turn, drives 6 km, turns left, and drives 9 km. He then takes a left turn and drives 3 km and turns left, then drives 7 km to reach his office.
In which direction is the office with respect to his home?
(All turns are 90° turns only, unless specified.)

- Ans
- ☐ 1. North-east
 - ☒ 2. South-east
 - ☐ 3. West
 - ☐ 4. North-west

Question ID : 630680376875
Option 1 ID : 6306801468565
Option 2 ID : 6306801468566
Option 3 ID : 6306801468564
Option 4 ID : 6306801468563
Status : Answered
Chosen Option : 2

Q.12

- Ans
- ☐ 1. 15
 - ☒ 2. 18
 - ☐ 3. 16
 - ☐ 4. 14

Question ID : 630680524411
Option 1 ID : 6306802049743
Option 2 ID : 6306802049746
Option 3 ID : 6306802049744
Option 4 ID : 6306802049745
Status : Answered
Chosen Option : 2

Q.13 PARK is related to QCUM in a certain way based on the English alphabetical order. In the same way, STOP is related to TVRR. To which of the following is RAMP related, following the same logic?

- Ans
- ☒ 1. SCPR
 - ☐ 2. TCPR
 - ☐ 3. SCQR
 - ☐ 4. TCQR

Question ID : 630680376878
Option 1 ID : 6306801468577
Option 2 ID : 6306801468578
Option 3 ID : 6306801468576
Option 4 ID : 6306801468575
Status : Answered
Chosen Option : 1

Q.14 In a certain code language, 'MADE' is coded as '3517' and 'DOGS' is coded as '2458'.
What is the code for 'D' in the given language?

- Ans ☒ 1. 4
☒ 2. 2
☒ 3. 1
☒ 4. 5

Question ID : 630680376548
Option 1 ID : 6306801467261
Option 2 ID : 6306801467260
Option 3 ID : 6306801467259
Option 4 ID : 6306801467262
Status : Answered
Chosen Option : 4

Q.15 JNHF is related to MQKI in a certain way based on the English alphabetical order. In the same way, HLF D is related to KOIG. To which of the following is FJDB related, following the same logic?

- Ans ☒ 1. IMGE
☒ 2. IMEG
☒ 3. MIGE
☒ 4. MIEG

Question ID : 630680466958
Option 1 ID : 6306801823802
Option 2 ID : 6306801823803
Option 3 ID : 6306801823804
Option 4 ID : 6306801823805
Status : Answered
Chosen Option : 1

Q.16 What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?
 $20 - 2 \div 4 \times 2 + 6 = ?$

- Ans ☒ 1. 20
☒ 2. 18
☒ 3. 22
☒ 4. 14

Question ID : 630680377707
Option 1 ID : 6306801471887
Option 2 ID : 6306801471888
Option 3 ID : 6306801471890
Option 4 ID : 6306801471889
Status : Answered
Chosen Option : 2

Q.17 SPUR is related to WTYV in a certain way based on the English alphabetical order. In the same way, PMRO is related to TQVS. To which of the following is IFKH related, following the same logic?

- Ans
- ☐ 1. JMLO
 - ☐ 2. JMOL
 - ☐ 3. MJLO
 - ☒ 4. MJOL

Question ID : 630680376568
Option 1 ID : 6306801467341
Option 2 ID : 6306801467342
Option 3 ID : 6306801467340
Option 4 ID : 6306801467339
Status : Answered
Chosen Option : 4

Q.18 Anil starts from point A and drives 7 km towards the east. He then takes a left turn, drives 3 km, turns left, and drives 9 km. He then takes a right turn and drives 3 km. He takes a final right turn, drives 2 km, and stops at point P. How far (shortest distance) and towards which direction should he drive in order to reach point A again?
(All turns are 90° turns only, unless specified.)

- Ans
- ☐ 1. 8 km towards the east
 - ☒ 2. 6 km towards the south
 - ☐ 3. 9 km towards the east
 - ☐ 4. 6 km towards the west

Question ID : 630680377443
Option 1 ID : 6306801470836
Option 2 ID : 6306801470835
Option 3 ID : 6306801470837
Option 4 ID : 6306801470838
Status : Answered
Chosen Option : 2

Q.19 6 is related to 76 following a certain logic. Following the same logic, 8 is related to 102. To which of the following is 15 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. 198
 - ☒ 2. 193
 - ☐ 3. 190
 - ☐ 4. 197

Question ID : 630680451720
Option 1 ID : 6306801763966
Option 2 ID : 6306801763967
Option 3 ID : 6306801763968
Option 4 ID : 6306801763969
Status : Answered
Chosen Option : 2

Q.20 What will come in place of the question mark (?) in the following equation if '+' and '÷' are interchanged and '×' and '-' are interchanged?
 $84 + 12 \times 9 \div 13 - 21 = ?$

Ans  1. 264

 2. 271

 3. 259

 4. 273

Question ID : 630680376975

Option 1 ID : 6306801468964

Option 2 ID : 6306801468963

Option 3 ID : 6306801468965

Option 4 ID : 6306801468966

Status : Answered

Chosen Option : 2

Q.21 843 is related to 732 following a certain logic. Following the same logic, 632 is related to 521. To which of the following is 357 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. 240

 2. 246

 3. 340

 4. 346

Question ID : 630680396898

Option 1 ID : 6306801547660

Option 2 ID : 6306801547661

Option 3 ID : 6306801547662

Option 4 ID : 6306801547663

Status : Answered

Chosen Option : 2

Q.22 What should come in place of the question mark (?) in the given series?
23, 26, 31, 38, 49, ?

Ans  1. 60

 2. 61

 3. 59

 4. 62

Question ID : 630680376727

Option 1 ID : 6306801467973

Option 2 ID : 6306801467972

Option 3 ID : 6306801467974

Option 4 ID : 6306801467971

Status : Answered

Chosen Option : 4

Q.23 'AC 2' is related to 'DF 8' in a certain way based on the English alphabetical and numerical order. In the same way, 'IK 5' is related to 'LN 125'. To which of the following is 'QS 7' related following the same logic?

- Ans  1. SY 343
 2. TU 343
 3. TV 343
 4. SU 343

Question ID : 630680377768
Option 1 ID : 6306801472132
Option 2 ID : 6306801472133
Option 3 ID : 6306801472131
Option 4 ID : 6306801472134
Status : Answered
Chosen Option : 3

Q.24 In a certain code language, 'KNOT' is coded as '3618' and 'NOTE' is coded as '6438'. What is the code for 'E' in the given code language?

- Ans  1. 1
 2. 3
 3. 4
 4. 6

Question ID : 630680377755
Option 1 ID : 6306801472079
Option 2 ID : 6306801472080
Option 3 ID : 6306801472081
Option 4 ID : 6306801472082
Status : Answered
Chosen Option : 3

Q.25 Select the option in which the given figure is embedded (rotation is NOT allowed).

Ans

 1.

 2.

 3.

 4.

Question ID : 630680422242
Option 1 ID : 6306801647404
Option 2 ID : 6306801647405
Option 3 ID : 6306801647406
Option 4 ID : 6306801647407
Status : Answered
Chosen Option : 3

Q.26 What should come in place of the question mark (?) in the given series?
115, 91, 70, 52, 37, ?

Ans  1. 21

 2. 25

 3. 27

 4. 23

Question ID : 630680380560
Option 1 ID : 6306801483227
Option 2 ID : 6306801483230
Option 3 ID : 6306801483228
Option 4 ID : 6306801483229
Status : Answered
Chosen Option : 2

Q.27 Select the option in which the given figure is embedded (rotation is NOT allowed).

Ans

 1.

 2.

3.

 4.

Question ID : 630680524486

Option 1 ID : 6306802050046

Option 2 ID : 6306802050043

Option 3 ID : 6306802050044

Option 4 ID : 6306802050045

Status : Answered

Chosen Option : 3

Q.28 The position(s) of how many letters will remain unchanged if each of the letters in the word 'BLANKET' is arranged in alphabetical order?

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

Question ID : 630680375961
Option 1 ID : 6306801464915
Option 2 ID : 6306801464918
Option 3 ID : 6306801464917
Option 4 ID : 6306801464916
Status : Answered
Chosen Option : 2

Q.29 What should come in place of the question mark (?) in the given series based on the English alphabetical order?

FLOY, JPSC, NTWG, RXAK, ?

- Ans ☒ 1. VBG T
☒ 2. VBEO
☒ 3. VOED
☒ 4. VOBE

Question ID : 630680469537
Option 1 ID : 6306801833915
Option 2 ID : 6306801833916
Option 3 ID : 6306801833917
Option 4 ID : 6306801833918
Status : Answered
Chosen Option : 2

Q.30 What should come in place of '?' in the given series?
147, 206, 124, 183, 101, 160, ?

- Ans ☒ 1. 78
☒ 2. 61
☒ 3. 40
☒ 4. 56

Question ID : 630680378806
Option 1 ID : 6306801476272
Option 2 ID : 6306801476273
Option 3 ID : 6306801476274
Option 4 ID : 6306801476271
Status : Answered
Chosen Option : 1

Q.31 Q, R, S, T, U, and V are sitting around a circular table, facing the centre (not necessarily in the same order) . S sits second to the left of R. Q sits third to the right of S. T is not an immediate neighbour of S. U sits to the immediate left of S. How many people are sitting between U and R when counted from the right of R?

- Ans ☒ 1. Two
 ☐ 2. Three
 ☐ 3. One
 ☐ 4. Zero

Question ID : 630680377643
Option 1 ID : 6306801471633
Option 2 ID : 6306801471634
Option 3 ID : 6306801471632
Option 4 ID : 6306801471631
Status : Answered
Chosen Option : 1

Q.32 In a certain code language,
'A + B' means 'A is the mother of B',
'A - B' means 'A is the brother of B',
'A × B' means 'A is the husband of B',
'A ÷ B' means 'A is the father of B'.
How is Z related to V if 'Z ÷ X - C ÷ V × B + N'?

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

Question ID : 630680378721
Option 1 ID : 6306801475933
Option 2 ID : 6306801475934
Option 3 ID : 6306801475932
Option 4 ID : 6306801475931
Status : Answered
Chosen Option : 4

Q.33 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.)
(47, 1, 23)
(58, 4, 27)

- Ans ☒ 1. (74, 18, 28)
 ☐ 2. (36, 30, 5)
 ☐ 3. (50, 14, 16)
 ☐ 4. (64, 5, 12)

Question ID : 630680376819
Option 1 ID : 6306801468340
Option 2 ID : 6306801468341
Option 3 ID : 6306801468342
Option 4 ID : 6306801468339
Status : Answered
Chosen Option : 1

Q.34 Select the option in which the given figure is embedded (rotation is NOT allowed).

Ans

 1.

2.

 3.

 4.

Question ID : 630680524474
Option 1 ID : 6306802049997
Option 2 ID : 6306802049996
Option 3 ID : 6306802049995
Option 4 ID : 6306802049998
Status : Answered
Chosen Option : 2

Q.35 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 roads are speed-breakers. No speed-breaker is a home.

Conclusion 1: Some roads are homes.

Conclusion 2: Some homes are speed-breakers.

- Ans**  1. Only conclusion (2) follows
-  2. Both conclusion (1) and conclusion (2) follow
-  3. Only conclusion (1) follows
4. None of the conclusions follow

Question ID : 630680381550

Option 1 ID : 6306801487132

Option 2 ID : 6306801487133

Option 3 ID : 6306801487131

Option 4 ID : 6306801487134

Status : Answered

Chosen Option : 4

Q.36 Select the option figure that will replace the question mark (?) in the figure given below to complete the pattern.

Ans

 1.

 2.

 3.

 4.

Question ID : 630680525605
Option 1 ID : 6306802054507
Option 2 ID : 6306802054505
Option 3 ID : 6306802054504
Option 4 ID : 6306802054506
Status : Answered
Chosen Option : 2

Q.37 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
SJF, NEA, IZV, DUQ, ?

Ans  1. YPL

 2. YQL

 3. XPL

 4. XPM

Question ID : 630680376693
Option 1 ID : 6306801467838
Option 2 ID : 6306801467835
Option 3 ID : 6306801467836
Option 4 ID : 6306801467837
Status : Answered
Chosen Option : 1

Q.38 The position of how many letters will remain unchanged if each of the letters in the word 'SALIENT' is arranged in the English alphabetical order?

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

Question ID : 630680404433
Option 1 ID : 6306801577232
Option 2 ID : 6306801577233
Option 3 ID : 6306801577234
Option 4 ID : 6306801577235
Status : Answered
Chosen Option : 2

Q.39 CF 9 is related to IL 21 in a certain way. In the same way, MP 29 is related to SV 41. To which of the following is KN 25 related, following the same logic?

- Ans ☒ 1. QT 37
☒ 2. GJ 18
☒ 3. QS 37
☒ 4. LJ 18

Question ID : 630680375828
Option 1 ID : 6306801464384
Option 2 ID : 6306801464383
Option 3 ID : 6306801464385
Option 4 ID : 6306801464386
Status : Answered
Chosen Option : 1

Q.40 What should come in place of the question mark (?) in the given series based on the English alphabetical order?
DMU, HQY, LUC, PYG, TCK, ?

- Ans ☒ 1. TDL
☒ 2. XGO
☒ 3. YHL
☒ 4. UBI

Question ID : 630680379361
Option 1 ID : 6306801478488
Option 2 ID : 6306801478489
Option 3 ID : 6306801478490
Option 4 ID : 6306801478487
Status : Answered
Chosen Option : 2

Q.41 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: Some machines are shrugs. All machines are bins. No shrug is a cloth.
Conclusion (I): No cloth is a machine.
Conclusion (II): At least some shrugs are bins.

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

Question ID : 630680376525
Option 1 ID : 6306801467167
Option 2 ID : 6306801467169
Option 3 ID : 6306801467170
Option 4 ID : 6306801467168
Status : Answered
Chosen Option : 4

Q.42 Seven people - S, O, L, D, I, E, and R - are sitting around a circular table, facing the centre (not necessarily in the same order). O sits fourth to the left of E and R sits third to the right of O. L sits to the immediate left of R and to the immediate right of D. S sits second to the right of R.
Who are the immediate neighbours of I?

- Ans ☒ 1. S and E
☒ 2. O and D
☒ 3. O and L
☒ 4. S and O

Question ID : 630680377624
Option 1 ID : 6306801471555
Option 2 ID : 6306801471557
Option 3 ID : 6306801471558
Option 4 ID : 6306801471556
Status : Answered
Chosen Option : 4

Q.43 What should come in place of ? in the given series based on the English alphabetical order?
BLH, EKF, HJD, KIB, ?

- Ans ☒ 1. NHZ
☒ 2. MEX
☒ 3. MFX
☒ 4. OGY

Question ID : 630680375974
Option 1 ID : 6306801464967
Option 2 ID : 6306801464968
Option 3 ID : 6306801464970
Option 4 ID : 6306801464969
Status : Answered
Chosen Option : 1

Q.44 This question consists of a pair of words that have a certain relationship to each other. Select the pair that 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.)

Pressure : Pascal

- Ans  1. Force : Candela
-  2. Electric Potential : Volt
-  3. Sound : Watt
-  4. Frequency : Ohm

Question ID : 630680571477
Option 1 ID : 6306802234945
Option 2 ID : 6306802234946
Option 3 ID : 6306802234947
Option 4 ID : 6306802234948
Status : Answered
Chosen Option : 2

Q.45 Select the pair in which the numbers are related to each other in the same way as are the numbers of the given pairs.
(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.)
(297, 466)
(342, 511)

- Ans  1. (194, 353)
-  2. (116, 292)
-  3. (189, 348)
-  4. (225, 394)

Question ID : 630680392062
Option 1 ID : 6306801528624
Option 2 ID : 6306801528625
Option 3 ID : 6306801528623
Option 4 ID : 6306801528622
Status : Answered
Chosen Option : 4

Q.46 What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?
 $61 - 45 \times 15 + 5 \div 9 = ?$

- Ans  1. 4
-  2. 14
-  3. 19
-  4. 9

Question ID : 630680377615
Option 1 ID : 6306801471521
Option 2 ID : 6306801471519
Option 3 ID : 6306801471522
Option 4 ID : 6306801471520
Status : Answered
Chosen Option : 3

Q.47 In a certain code language, 'CARE' is coded as '3195' and 'HARE' is coded as '9341'.
What is the code for 'H' in that language?

Ans  1. 4

 2. 9

 3. 5

 4. 1

Question ID : **630680376411**
Option 1 ID : **6306801466714**
Option 2 ID : **6306801466712**
Option 3 ID : **6306801466711**
Option 4 ID : **6306801466713**
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?
CEH, FHK, IKN, LNQ, ?

Ans  1. OQS

 2. OQT

 3. PQT

 4. PQS

Question ID : **630680394867**
Option 1 ID : **6306801539755**
Option 2 ID : **6306801539754**
Option 3 ID : **6306801539753**
Option 4 ID : **6306801539752**
Status : **Answered**
Chosen Option : **2**

Q.49 Select the correct option that indicates the arrangement of the following words in a logical and meaningful order.

1. Eiffel Tower
2. Europe
3. Paris
4. Earth
5. France

Ans  1. 4, 1, 2, 5, 3

 2. 4, 2, 5, 3, 1

 3. 4, 5, 3, 1, 2

 4. 4, 2, 1, 3, 5

Question ID : **630680565825**
Option 1 ID : **6306802212251**
Option 2 ID : **6306802212249**
Option 3 ID : **6306802212250**
Option 4 ID : **6306802212248**
Status : **Answered**
Chosen Option : **2**

Q.50 If A means +, B means −, C means × and D means ÷, then what will come in place of the question mark (?) in the following equation?

40 B 6 C 7 A 30 D 5 = ?

Ans  1. 4

 2. 2

 3. 5

 4. 3

Question ID : 630680388273

Option 1 ID : 6306801513616

Option 2 ID : 6306801513614

Option 3 ID : 6306801513617

Option 4 ID : 6306801513615

Status : Answered

Chosen Option : 1

Section : General Awareness

Q.1 The equipment used to record the intensity of an earthquake is _____.

Ans  1. seismograph

 2. calorimeter

 3. pyrometer

 4. barometer

Question ID : 630680564465

Option 1 ID : 6306802206789

Option 2 ID : 6306802206787

Option 3 ID : 6306802206788

Option 4 ID : 6306802206790

Status : Answered

Chosen Option : 1

Q.2 Who is the writer of Indian president's biography 'Droupadi Murmu : From Tribal Hinterlands to Raisina Hill'?

Ans  1. Kamala Surayya

 2. Kasturi Ray

 3. Phoolan Devi

 4. Mary Kom

Question ID : 630680493448

Option 1 ID : 6306801927531

Option 2 ID : 6306801927532

Option 3 ID : 6306801927533

Option 4 ID : 6306801927534

Status : Answered

Chosen Option : 1

Q.3 Which of the following is NOT a major river basin in India?

- Ans ☒ 1. Narmada
☒ 2. Tapi
☒ 3. Krishna
☒ 4. Kalindi

Question ID : 630680511004
Option 1 ID : 6306801997147
Option 2 ID : 6306801997149
Option 3 ID : 6306801997146
Option 4 ID : 6306801997148
Status : Answered
Chosen Option : 4

Q.4 If the government decides to privatise a major public sector industry, what might be an unintended consequence?

- Ans ☒ 1. Reduction in corruption
☒ 2. Immediate increase in public revenue
☒ 3. Potential monopolistic practices
☒ 4. Enhancement of operational efficiency

Question ID : 630680543955
Option 1 ID : 6306802126610
Option 2 ID : 6306802126607
Option 3 ID : 6306802126609
Option 4 ID : 6306802126608
Status : Answered
Chosen Option : 3

Q.5 Which of the following is a shortcut key to undo the last action in many word processors?

- Ans ☒ 1. Ctrl + Z
☒ 2. Ctrl + X
☒ 3. Ctrl + C
☒ 4. Ctrl + V

Question ID : 630680571764
Option 1 ID : 6306802235960
Option 2 ID : 6306802235961
Option 3 ID : 6306802235962
Option 4 ID : 6306802235963
Status : Answered
Chosen Option : 1

Q.6 Which type of cell lacks a membrane-bound nucleus?

- Ans ☒ 1. Prokaryotic cell
☒ 2. Eukaryotic cell
☒ 3. Animal cell
☒ 4. Plant cell

Question ID : 630680411628
Option 1 ID : 6306801605347
Option 2 ID : 6306801605348
Option 3 ID : 6306801605349
Option 4 ID : 6306801605350
Status : Answered
Chosen Option : 1

Q.7 How many fundamental duties of citizens have been enumerated by the 42nd Amendment of the Constitution, adopted in 1976?

- Ans  1. 9
-  2. 10
-  3. 11
-  4. 13

Question ID : 630680493463
Option 1 ID : 6306801927591
Option 2 ID : 6306801927592
Option 3 ID : 6306801927593
Option 4 ID : 6306801927594
Status : Answered
Chosen Option : 3

Q.8 According to the Census 2011 of India, arrange the following metropolitan cities on the basis of population in ascending order?
A. Delhi
B. Mumbai
C. Kolkata

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

Question ID : 630680477225
Option 1 ID : 6306801864061
Option 2 ID : 6306801864062
Option 3 ID : 6306801864063
Option 4 ID : 6306801864064
Status : Answered
Chosen Option : 2

Q.9 Through which of the following body parts does food need to pass before reaching the intestines?

- Ans  1. Windpipe --> Food pipe
-  2. Mouth --> Rectum
-  3. Oesophagus --> Stomach
-  4. Stomach --> Rectum

Question ID : 630680539639
Option 1 ID : 6306802109681
Option 2 ID : 6306802109682
Option 3 ID : 6306802109683
Option 4 ID : 6306802109684
Status : Answered
Chosen Option : 3

Q.10 Food rich in carbohydrates (like potatoes) and those rich in fats (like butter) are also known as _____.

Ans ☒ 1. Energy-Giving Food

☐ 2. Main Course

☐ 3. Unsafe Food

☐ 4. Fast Food

Question ID : 630680539583

Option 1 ID : 6306802109461

Option 2 ID : 6306802109462

Option 3 ID : 6306802109463

Option 4 ID : 6306802109464

Status : Answered

Chosen Option : 1

Q.11 The National Waterway (NW) – 3 is located in which of the following states?

Ans ☒ 1. Kerala

☐ 2. Gujarat

☐ 3. Maharashtra

☐ 4. Andhra Pradesh

Question ID : 630680510975

Option 1 ID : 6306801997030

Option 2 ID : 6306801997031

Option 3 ID : 6306801997032

Option 4 ID : 6306801997033

Status : Not Answered

Chosen Option : --

Q.12 In 2010, in which Indian state did the crisis of microfinance happen?

Ans ☐ 1. Karnataka

☐ 2. Tamil Nadu

☒ 3. Andhra Pradesh

☐ 4. Maharashtra

Question ID : 630680402049

Option 1 ID : 6306801567896

Option 2 ID : 6306801567897

Option 3 ID : 6306801567898

Option 4 ID : 6306801567899

Status : Not Answered

Chosen Option : --

Q.13 The concept of 'Standard Urban Area (SUA)' was introduced in which census of India?

Ans ☒ 1. Census 1971

☐ 2. Census 1961

☐ 3. Census 1951

☐ 4. Census 1981

Question ID : 630680477207

Option 1 ID : 6306801863993

Option 2 ID : 6306801863994

Option 3 ID : 6306801863995

Option 4 ID : 6306801863996

Status : Not Answered

Chosen Option : --

Q.14 A nonstop train moving on a straight track with a uniform acceleration passed station A at a velocity of 'u' and reached the next station B at a velocity of '5u'. Its average velocity between the given stations is:

- Ans ☒ 1. 2u
☒ 2. 2.5u
☒ 3. 3u
☒ 4. 4u

Question ID : 630680419680
Option 1 ID : 6306801637213
Option 2 ID : 6306801637214
Option 3 ID : 6306801637215
Option 4 ID : 6306801637216
Status : Answered
Chosen Option : 3

Q.15 What is the medical term for high blood pressure?

- Ans ☒ 1. Hypoglycemia
☒ 2. Hypertension
☒ 3. Hypotension
☒ 4. Hyperglycemia

Question ID : 630680701423
Option 1 ID : 6306802747630
Option 2 ID : 6306802747631
Option 3 ID : 6306802747629
Option 4 ID : 6306802747632
Status : Answered
Chosen Option : 2

Q.16 In September 2023, Skill India Mission introduced a scheme that aims to spread awareness at grass root level about free skill training programmes for youth through robust skill training. What is the name of that scheme?

- Ans ☒ 1. Skills on the Go
☒ 2. Skills on Wheels
☒ 3. Skills on the Move
☒ 4. Skill Bus

Question ID : 630680479130
Option 1 ID : 6306801871473
Option 2 ID : 6306801871474
Option 3 ID : 6306801871475
Option 4 ID : 6306801871476
Status : Not Answered
Chosen Option : --

Q.17 Select the correct arrangement of the parts of the food canal in humans from the starting point to the ending point.

- Ans ☒ 1. The buccal cavity ----> Oesophagus ----> Stomach ----> Large intestine ----> Small intestine ----> Rectum ----> Anus
- ☒ 2. The buccal cavity ----> Oesophagus ----> Stomach ----> Small intestine ----> Large intestine ----> Anus ----> Rectum
- ☒ 3. The buccal cavity ----> Oesophagus ----> Stomach ----> Large intestine ----> Small intestine ----> Anus ----> Rectum
- ☒ 4. The buccal cavity ----> Oesophagus ----> Stomach ----> Small intestine ----> Large intestine ----> Rectum ----> Anus

Question ID : 630680403185
Option 1 ID : 6306801572261
Option 2 ID : 6306801572262
Option 3 ID : 6306801572263
Option 4 ID : 6306801572264
Status : Answered
Chosen Option : 4

Q.18 Which Indian state passed the Right to Health (RTH) bill, which guarantees access to equitable healthcare services for all patients in March 2023?

- Ans ☒ 1. Gujarat
- ☒ 2. Maharashtra
- ☒ 3. Rajasthan
- ☒ 4. Tamil Nadu

Question ID : 630680513810
Option 1 ID : 6306802007868
Option 2 ID : 6306802007867
Option 3 ID : 6306802007866
Option 4 ID : 6306802007865
Status : Answered
Chosen Option : 3

Q.19 Calcium hydroxide is the chemical name of which of the following saturated aqueous solutions?

- Ans ☒ 1. Hard water
- ☒ 2. Carbonated water
- ☒ 3. Black Water
- ☒ 4. Limewater

Question ID : 630680403001
Option 1 ID : 6306801571578
Option 2 ID : 6306801571575
Option 3 ID : 6306801571576
Option 4 ID : 6306801571577
Status : Answered
Chosen Option : 4

Q.20 Which of the following states has the largest legislative assembly (in terms of number of members) in the country as on 30th September 2023?

- Ans
- ☐ 1. Rajasthan
 - ☐ 2. Tamil Nadu
 - ☐ 3. Madhya Pradesh
 - ☒ 4. Uttar Pradesh

Question ID : 630680407819
Option 1 ID : 6306801590214
Option 2 ID : 6306801590215
Option 3 ID : 6306801590216
Option 4 ID : 6306801590217
Status : Not Answered
Chosen Option : --

Q.21 All the living and non-living things in a particular area constitute the _____ of the area.

- Ans
- ☐ 1. Life Circle
 - ☒ 2. Ecosystem
 - ☐ 3. Species
 - ☐ 4. Food Web

Question ID : 630680539335
Option 1 ID : 6306802108470
Option 2 ID : 6306802108471
Option 3 ID : 6306802108468
Option 4 ID : 6306802108469
Status : Answered
Chosen Option : 2

Q.22 Which white powder, ubiquitous in modern kitchens, combines with acid to produce carbon dioxide?

- Ans
- ☐ 1. Sodium phosphate
 - ☐ 2. Sodium fluoride
 - ☐ 3. Sodium nitrate
 - ☒ 4. Sodium bicarbonate

Question ID : 630680404439
Option 1 ID : 6306801577258
Option 2 ID : 6306801577257
Option 3 ID : 6306801577259
Option 4 ID : 6306801577256
Status : Answered
Chosen Option : 4

Q.23 Which of the following Hindustani ragas corresponds to the 'Mohanam Ragam' of Carnatic music?

- Ans ☒ 1. Bhoop
☐ 2. Aadi
☐ 3. Zilla
☐ 4. Bagkauns

Question ID : 63068078057
Option 1 ID : 630680302289
Option 2 ID : 630680302290
Option 3 ID : 630680302292
Option 4 ID : 630680302291
Status : Not Answered
Chosen Option : --

Q.24 If 'G', 'M' and 'R' represent the universal gravitation constant, mass of the earth and radius of the earth, respectively, then which of the following is the correct expression for the acceleration due to gravity (g) on the surface of the earth?

- Ans ☒ 1. GM/R^2
☐ 2. GM^2/R
☐ 3. GM/R
☐ 4. GMR^2

Question ID : 630680406262
Option 1 ID : 6306801584275
Option 2 ID : 6306801584272
Option 3 ID : 6306801584273
Option 4 ID : 6306801584274
Status : Answered
Chosen Option : 1

Q.25 According to the census of India 2011, which of the following states has the highest density of population per square kilometre?

- Ans ☐ 1. Uttar Pradesh
☐ 2. Maharashtra
☒ 3. West Bengal
☐ 4. Odisha

Question ID : 630680477179
Option 1 ID : 6306801863885
Option 2 ID : 6306801863886
Option 3 ID : 6306801863887
Option 4 ID : 6306801863888
Status : Answered
Chosen Option : 3

Q.26 Rama experiences a drop in temperature as she is getting higher and higher in the mountains while trekking. What could be the cause of this?

- Ans
- ☒ 1. Less water
 - ☒ 2. Lower air pressure at altitude
 - ☒ 3. Higher air pressure at altitude
 - ☒ 4. Rama's fatigue

Question ID : 630680546823
Option 1 ID : 6306802137858
Option 2 ID : 6306802137860
Option 3 ID : 6306802137859
Option 4 ID : 6306802137861
Status : Answered
Chosen Option : 2

Q.27 Karnam Malleshwari won a bronze medal at which Olympic games?

- Ans
- ☒ 1. 2000 Sydney
 - ☒ 2. 2004 Athens
 - ☒ 3. 2008 Beijing
 - ☒ 4. 2012 London

Question ID : 630680435732
Option 1 ID : 6306801700849
Option 2 ID : 6306801700850
Option 3 ID : 6306801700851
Option 4 ID : 6306801700852
Status : Not Answered
Chosen Option : --

Q.28 In 1527, battle of Khanwa fought between Babur and ruler of Mewar _____ .

- Ans
- ☒ 1. Prithviraj
 - ☒ 2. Rana Pratap
 - ☒ 3. Rana Sanga
 - ☒ 4. Rana Mewari

Question ID : 630680511631
Option 1 ID : 6306801999647
Option 2 ID : 6306801999646
Option 3 ID : 6306801999649
Option 4 ID : 6306801999648
Status : Answered
Chosen Option : 3

Q.29 Which part of the cell is responsible for generating the primary energy molecule ATP in eukaryotic animals?

- Ans
- ☒ 1. Mitochondria
 - ☒ 2. Endoplasmic reticulum
 - ☒ 3. Cell wall
 - ☒ 4. Vacuoles

Question ID : 630680403313
Option 1 ID : 6306801572763
Option 2 ID : 6306801572765
Option 3 ID : 6306801572764
Option 4 ID : 6306801572762
Status : Answered
Chosen Option : 1

Q.30 The first Anglo-Afghan war took place between 1838 - _____ .

- Ans ☒ 1. 1840
☒ 2. 1842
☒ 3. 1844
☒ 4. 1841

Question ID : 630680511482
Option 1 ID : 6306801999050
Option 2 ID : 6306801999052
Option 3 ID : 6306801999053
Option 4 ID : 6306801999051
Status : Answered
Chosen Option : 2

Q.31 For strengthening the fundamental duties, the Verma Committee identified a few existing acts by which a proper implementation of such duties can be accomplished. Which of the following was NOT referred by him?

- Ans ☒ 1. Representation of People Act, 1951
☒ 2. Protection of Civil Rights Act, 1955
☒ 3. Unlawful Activities Protection Act, 1967
☒ 4. Wildlife Segregation Act, 1970

Question ID : 630680615088
Option 1 ID : 6306802407020
Option 2 ID : 6306802407021
Option 3 ID : 6306802407022
Option 4 ID : 6306802407023
Status : Answered
Chosen Option : 4

Q.32 Which minister was in the news to launch the country's first crash testing programme 'Bharat NCAP', on 22 August 2023?

- Ans ☒ 1. Nitin Gadkari
☒ 2. Raj Nath Singh
☒ 3. Amit Shah
☒ 4. Ashwini Vaishnaw

Question ID : 630680412669
Option 1 ID : 6306801609499
Option 2 ID : 6306801609500
Option 3 ID : 6306801609501
Option 4 ID : 6306801609502
Status : Answered
Chosen Option : 1

Q.33 Why is there a need to encourage Indian farmers to switch to sustainable crops / farming systems?

- Ans ☒ 1. To increase upfront costs
- ☒ 2. To meet the current calorie needs of the population
- ☒ 3. To address environmental damage and degradation of ecosystem services
- ☒ 4. To reduce the use of technology in agriculture

Question ID : 630680488131
Option 1 ID : 6306801906583
Option 2 ID : 6306801906584
Option 3 ID : 6306801906585
Option 4 ID : 6306801906586
Status : Answered
Chosen Option : 3

Q.34 What is the full form of GST?

- Ans ☒ 1. Gifts and Sale Tax
- ☒ 2. Goods and Services Tax
- ☒ 3. Goods and Sale Tax
- ☒ 4. Gifts and Services Tax

Question ID : 630680511442
Option 1 ID : 6306801998901
Option 2 ID : 6306801998898
Option 3 ID : 6306801998900
Option 4 ID : 6306801998899
Status : Answered
Chosen Option : 2

Q.35 5 stones were dropped from the top of a building. They all fell to the ground in straight lines. What can be said about their motion?

- Ans ☒ 1. They had rectilinear motion
- ☒ 2. They had curvilinear motion
- ☒ 3. They had slow motion
- ☒ 4. They had gravity free motion

Question ID : 630680401746
Option 1 ID : 6306801566754
Option 2 ID : 6306801566755
Option 3 ID : 6306801566756
Option 4 ID : 6306801566757
Status : Answered
Chosen Option : 1

Q.36 Who among the following eminent musicians was born in Bihar?

- Ans ☒ 1. Ustad Bismillah Khan
- ☒ 2. Ustad Zakir Hussain
- ☒ 3. Pandit Shivkumar Sharma
- ☒ 4. Pandit Ravi Shankar

Question ID : 630680436911
Option 1 ID : 6306801705575
Option 2 ID : 6306801705574
Option 3 ID : 6306801705573
Option 4 ID : 6306801705576
Status : Not Answered
Chosen Option : --

Q.37 What is the function of the endoplasmic reticulum (ER)?

- Ans
- ☐ 1. DNA replication
 - ☐ 2. Protein synthesis
 - ☐ 3. Energy production
 - ☒ 4. Lipid synthesis and detoxification

Question ID : 630680540557
Option 1 ID : 6306802113305
Option 2 ID : 6306802113303
Option 3 ID : 6306802113306
Option 4 ID : 6306802113304
Status : Answered
Chosen Option : 2

Q.38 When and where was the Veda Samaj, inspired by the Brahmo Samaj, established?

- Ans
- ☐ 1. Bombay 1867
 - ☐ 2. Lahore 1875
 - ☐ 3. Calcutta 1830
 - ☒ 4. Madras 1864

Question ID : 630680511588
Option 1 ID : 6306801999475
Option 2 ID : 6306801999477
Option 3 ID : 6306801999476
Option 4 ID : 6306801999474
Status : Not Answered
Chosen Option : --

Q.39 Which of the following is NOT one of the five outlined pillars of Atmanirbhar Bharat?

- Ans
- ☐ 1. Economy
 - ☐ 2. Infrastructure
 - ☐ 3. Demand
 - ☒ 4. Resilience

Question ID : 630680481009
Option 1 ID : 6306801878620
Option 2 ID : 6306801878621
Option 3 ID : 6306801878622
Option 4 ID : 6306801878623
Status : Not Answered
Chosen Option : --

Q.40 Sometimes when heated, solid changes into liquid at normal atmospheric pressure on reaching its melting point. What is the name of the amount of heat required?

- Ans
- ☐ 1. Latent heat of diffusion
 - ☒ 2. Latent heat of fusion
 - ☐ 3. Latent melting point
 - ☐ 4. Latent change of state point

Question ID : 630680402653
Option 1 ID : 6306801570211
Option 2 ID : 6306801570212
Option 3 ID : 6306801570213
Option 4 ID : 6306801570214
Status : Answered
Chosen Option : 2

Q.41 On 26 July 2023, Tenzing Yangki created history in Arunachal Pradesh by achieving a prestigious UPSC rank and becoming the state's first female _____.

- Ans** ☒ 1. India Police Service Officer
- ☐ 2. Indian Administrative Service Officer
- ☐ 3. Education Commissioner
- ☐ 4. Revenue Officer

Question ID : **630680804275**
Option 1 ID : **6306803150831**
Option 2 ID : **6306803150832**
Option 3 ID : **6306803150834**
Option 4 ID : **6306803150833**
Status : **Not Answered**
Chosen Option : --

Q.42 What balances the atmospheric pressure with equal force so that animals do not crumble under the high pressure exerted on them by the atmosphere?

- Ans** ☐ 1. Moon's gravitational pull
- ☐ 2. Pressure because of sunlight
- ☐ 3. Energy produced by the food consumed
- ☒ 4. Blood Pressure

Question ID : **630680401765**
Option 1 ID : **6306801566826**
Option 2 ID : **6306801566827**
Option 3 ID : **6306801566828**
Option 4 ID : **6306801566829**
Status : **Answered**
Chosen Option : 4

Q.43 'Ama Odisha Nabin Odisha' scheme was implemented by which department in July 2023 by Odisha Government?

- Ans** ☐ 1. Health and Family Welfare Department
- ☐ 2. Housing and Urban Development
- ☒ 3. Panchayati Raj and Drinking Water Department
- ☐ 4. General Administration Department

Question ID : **630680411160**
Option 1 ID : **6306801603396**
Option 2 ID : **6306801603397**
Option 3 ID : **6306801603398**
Option 4 ID : **6306801603399**
Status : **Answered**
Chosen Option : 2

Q.44 The Palamu plateau is located in which of the following states?

- Ans** ☐ 1. Tripura
- ☐ 2. Karnataka
- ☐ 3. Telangana
- ☒ 4. Jharkhand

Question ID : **630680511005**
Option 1 ID : **6306801997151**
Option 2 ID : **6306801997150**
Option 3 ID : **6306801997153**
Option 4 ID : **6306801997152**
Status : **Not Answered**
Chosen Option : --

Q.45 Who among the following was one of the co-founders of the Swaraj Party within the Congress to argue for a return to council politics?

- Ans ☒ 1. Gopal Krishna Gokhale
☒ 2. Chittaranjan Das
☒ 3. Rabindranath Tagore
☒ 4. Mahatma Gandhi

Question ID : 630680511623
Option 1 ID : 6306801999617
Option 2 ID : 6306801999616
Option 3 ID : 6306801999615
Option 4 ID : 6306801999614
Status : Not Answered
Chosen Option : --

Q.46 In which city is the Arun Jaitley Stadium located?

- Ans ☒ 1. New Delhi
☒ 2. Punjab
☒ 3. Mumbai
☒ 4. Chennai

Question ID : 630680436045
Option 1 ID : 6306801702117
Option 2 ID : 6306801702118
Option 3 ID : 6306801702119
Option 4 ID : 6306801702120
Status : Not Answered
Chosen Option : --

Q.47 In which year did Louis Pasteur discover that yeast is responsible for producing alcohol from sugar?

- Ans ☒ 1. 1830
☒ 2. 1857
☒ 3. 1891
☒ 4. 1904

Question ID : 630680404445
Option 1 ID : 6306801577280
Option 2 ID : 6306801577281
Option 3 ID : 6306801577282
Option 4 ID : 6306801577283
Status : Not Answered
Chosen Option : --

Q.48 Which of the following set of Articles of the Indian Constitution guarantees different types of freedoms to its citizens?

- Ans ☒ 1. Articles 14 – 19
☒ 2. Articles 19 – 22
☒ 3. Articles 25 – 30
☒ 4. Articles 32 – 35

Question ID : 630680493491
Option 1 ID : 6306801927702
Option 2 ID : 6306801927703
Option 3 ID : 6306801927704
Option 4 ID : 6306801927705
Status : Answered
Chosen Option : 2

Q.49 How does the formation of igneous rocks occur?

- Ans ☒ 1. Formation through compression
- ☒ 2. Formation through volcanic activity
- ☒ 3. Formation through weathering
- ☒ 4. Formation through sedimentation

Question ID : 630680615260
Option 1 ID : 6306802407714
Option 2 ID : 6306802407715
Option 3 ID : 6306802407716
Option 4 ID : 6306802407717
Status : Answered
Chosen Option : 2

Q.50 What are 'Bullets' in Microsoft Word?

- Ans ☒ 1. Characters used for decoration
- ☒ 2. Small dots, squares, dashes, or graphics preceding text
- ☒ 3. Large circles indicating importance
- ☒ 4. Highlighted text

Question ID : 630680670146
Option 1 ID : 6306802624160
Option 2 ID : 6306802624161
Option 3 ID : 6306802624162
Option 4 ID : 6306802624163
Status : Answered
Chosen Option : 2

Section : General Engineering Mechanical

Q.1 The ignition coil of an IC engine stores the energy in its _____.

- Ans ☒ 1. resistor
- ☒ 2. magnetic field
- ☒ 3. capacitor
- ☒ 4. electric field

Question ID : 630680502675
Option 1 ID : 6306801964285
Option 2 ID : 6306801964283
Option 3 ID : 6306801964284
Option 4 ID : 6306801964282
Status : Answered
Chosen Option : 3

Q.2 The pressure, which is measured with reference to absolute vacuum pressure is called:

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

Question ID : **630680508640**
Option 1 ID : **6306801987861**
Option 2 ID : **6306801987862**
Option 3 ID : **6306801987860**
Option 4 ID : **6306801987863**
Status : **Answered**
Chosen Option : **4**

Q.3 In case of a flat pivot bearing, which of the following options is correct about the sliding friction?

- Ans**
- ☒ 1. The sliding friction consideration is along the length of the shaft which is inside the bearing.
 - ☒ 2. The sliding friction consideration is along the vertical curved surface of contact between the pivot and the shaft.
 - ☒ 3. There is no sliding friction between the pivot and the shaft.
 - ☒ 4. The sliding friction consideration is along the flat surface of contact between the pivot and the shaft.

Question ID : **630680509137**
Option 1 ID : **6306801989845**
Option 2 ID : **6306801989844**
Option 3 ID : **6306801989846**
Option 4 ID : **6306801989843**
Status : **Answered**
Chosen Option : **2**

Q.4 Coefficient of discharge (C_d) of a flow-measuring device is defined as the _____ .

- Ans**
- ☒ 1. ratio of theoretical discharge to actual discharge
 - ☒ 2. ratio of actual discharge to theoretical discharge
 - ☒ 3. product of actual discharge and theoretical discharge
 - ☒ 4. product of cross-sectional area and velocity

Question ID : **630680193042**
Option 1 ID : **630680748706**
Option 2 ID : **630680748705**
Option 3 ID : **630680748707**
Option 4 ID : **630680748708**
Status : **Answered**
Chosen Option : **2**

Q.5 Which of the following assertions holds true when a constant volume of gas is heated?

- Ans ☒ 1. The temperature of the gas remains constant
- ☒ 2. The heat added to the gas is equal to the change in internal energy
- ☒ 3. The change in enthalpy of the gas is zero
- ☒ 4. The work done by the gas is a finite value

Question ID : 630680503193
Option 1 ID : 6306801966360
Option 2 ID : 6306801966358
Option 3 ID : 6306801966359
Option 4 ID : 6306801966357
Status : Answered
Chosen Option : 2

Q.6 Which of the following is NOT a type of friction?

- Ans ☒ 1. Kinematic friction
- ☒ 2. Kinetic friction
- ☒ 3. Static friction
- ☒ 4. Dynamic friction

Question ID : 630680394587
Option 1 ID : 6306801538634
Option 2 ID : 6306801538635
Option 3 ID : 6306801538637
Option 4 ID : 6306801538636
Status : Answered
Chosen Option : 1

Q.7 Determine the torsional rigidity of a hollow shaft of 200 mm external diameter and 150 mm internal diameter. Consider $G = 90 \text{ GPa}$.

- Ans ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Question ID : 630680205981
Option 1 ID : 630680798729
Option 2 ID : 630680798727
Option 3 ID : 630680798730
Option 4 ID : 630680798728
Status : Not Answered
Chosen Option : --

Q.8 Which of the following statements is true about the Carnot cycle?

- Ans ☒ 1. Its efficiency depends only on the pressure difference between the two reservoirs.
- ☒ 2. It is a reversible cycle.
- ☒ 3. It involves only two reversible isothermal processes.
- ☒ 4. The efficiency of the Carnot cycle is always less than that of any other heat engine operating between the same two temperatures.

Question ID : 630680503233
Option 1 ID : 6306801966519
Option 2 ID : 6306801966517
Option 3 ID : 6306801966518
Option 4 ID : 6306801966520
Status : Answered
Chosen Option : 2

Q.9 Which of the following methods is NOT used for the leakage detection of CFC refrigerants?

- Ans ☒ 1. Halide torch
- ☒ 2. Electronic leak detection device
- ☒ 3. Burning candle
- ☒ 4. Soap solution

Question ID : 630680506408
Option 1 ID : 6306801979147
Option 2 ID : 6306801979148
Option 3 ID : 6306801979146
Option 4 ID : 6306801979145
Status : Not Answered
Chosen Option : --

Q.10 A system undergoes a process in which it absorbs 500 J of heat and does 250 J of work. What is the change in the internal energy of the system?

- Ans ☒ 1. 750 J
- ☒ 2. -250 J
- ☒ 3. -750 J
- ☒ 4. 250 J

Question ID : 630680503213
Option 1 ID : 6306801966440
Option 2 ID : 6306801966438
Option 3 ID : 6306801966437
Option 4 ID : 6306801966439
Status : Answered
Chosen Option : 4

Q.11 The value of specific gravity of mercury is _____.

- Ans ☒ 1. 0.136
- ☒ 2. 1.36
- ☒ 3. 13.6
- ☒ 4. 0.0012

Question ID : 630680508721
Option 1 ID : 6306801988186
Option 2 ID : 6306801988185
Option 3 ID : 6306801988187
Option 4 ID : 6306801988184
Status : Answered
Chosen Option : 3

Q.12 Which of the following equations is based on the fact that the mass flow rate at any section remains constant?

- Ans ☒ 1. Steady flow energy equation
☒ 2. Bernoulli's equation
☒ 3. Continuity equation
☒ 4. Momentum equation

Question ID : 630680502702
Option 1 ID : 6306801964392
Option 2 ID : 6306801964393
Option 3 ID : 6306801964390
Option 4 ID : 6306801964391
Status : Answered
Chosen Option : 3

Q.13 Which pressure indicates the difference between the atmospheric pressure and the absolute pressure?

- Ans ☒ 1. Vacuum pressure
☒ 2. System pressure
☒ 3. Gauge pressure
☒ 4. Local atmospheric pressure

Question ID : 630680508741
Option 1 ID : 6306801988264
Option 2 ID : 6306801988266
Option 3 ID : 6306801988265
Option 4 ID : 6306801988267
Status : Answered
Chosen Option : 3

Q.14 When a system expands freely against vacuum, then work transfer involved is:

- Ans ☒ 1. negative
☒ 2. zero
☒ 3. positive
☒ 4. either positive or negative

Question ID : 630680404004
Option 1 ID : 6306801575503
Option 2 ID : 6306801575504
Option 3 ID : 6306801575502
Option 4 ID : 6306801575505
Status : Answered
Chosen Option : 2

Q.15 A quick return motion mechanism used in shaper machine

- Ans ☒ 1. Maximize the time of forward stroke
☒ 2. Reduce the motion of the machine
☒ 3. Complete return stroke as quickly as possible
☒ 4. Complete cutting stroke as quickly as possible

Question ID : 630680503270
Option 1 ID : 6306801966668
Option 2 ID : 6306801966665
Option 3 ID : 6306801966666
Option 4 ID : 6306801966667
Status : Answered
Chosen Option : 3

Q.16

Ans  1.

 2.

 3.

 4.

Question ID : 630680502686

Option 1 ID : 6306801964328

Option 2 ID : 6306801964326

Option 3 ID : 6306801964329

Option 4 ID : 6306801964327

Status : Answered

Chosen Option : 1

Q.17 In a P-V diagram, if $pV = \text{Constant}$, then the process is called _____.

Ans  1. constant-volume process

 2. adiabatic process

 3. constant-pressure process

 4. isothermal process

Question ID : 630680503228

Option 1 ID : 6306801966497

Option 2 ID : 6306801966500

Option 3 ID : 6306801966499

Option 4 ID : 6306801966498

Status : Answered

Chosen Option : 2

Q.18 Mention the sequence of points that mild steel material undergoes failure by referring to the stress strain diagram.

Ans  1. Yielding, Elastic Deformation, Strain Hardening, Necking,Fracture

 2. Elastic Deformation, Yielding, Strain Hardening, Necking,Fracture

 3. Elastic Deformation, Strain Hardening, Yielding, Necking,Fracture

 4. Yielding, Elastic Deformation, Necking, Strain Hardening,Fracture

Question ID : 630680205972

Option 1 ID : 630680798693

Option 2 ID : 630680798691

Option 3 ID : 630680798692

Option 4 ID : 630680798694

Status : Answered

Chosen Option : 3

Q.19 The correct relationship between the coefficient of friction (μ) and the angle of friction $:(\phi)$ is

- Ans ☒ 1. $\mu = \cot \phi$
☒ 2. $\mu = \tan \phi$
☒ 3. $\mu = \sin \phi$
☒ 4. $\mu = \cos \phi$

Question ID : 630680509605
Option 1 ID : 6306801991642
Option 2 ID : 6306801991641
Option 3 ID : 6306801991644
Option 4 ID : 6306801991643
Status : Answered
Chosen Option : 2

Q.20 Which of the following statements is INCORRECT about atmospheric pressure?

- Ans ☒ 1. The equivalent value of atmospheric pressure is 10.3 cm of water.
☒ 2. Atmospheric pressure is also called barometric pressure.
☒ 3. Atmospheric pressure varies with altitude.
☒ 4. The atmospheric air exerts normal pressure upon all the surfaces in contact.

Question ID : 630680193057
Option 1 ID : 630680748768
Option 2 ID : 630680748767
Option 3 ID : 630680748766
Option 4 ID : 630680748765
Status : Answered
Chosen Option : 1

Q.21 In an open channel flow, which device increases the enthalpy of gas using external work transfer?

- Ans ☒ 1. Turbine
☒ 2. Motor
☒ 3. Boiler
☒ 4. Compressor

Question ID : 630680503242
Option 1 ID : 6306801966554
Option 2 ID : 6306801966556
Option 3 ID : 6306801966553
Option 4 ID : 6306801966555
Status : Answered
Chosen Option : 3

Q.22 Which of the following are fire tube boilers?

- Ans ☒ 1. Loeffler boilers
☒ 2. Benson boilers
☒ 3. Scotch-marine boilers
☒ 4. Stirling boilers

Question ID : 630680503267
Option 1 ID : 6306801966656
Option 2 ID : 6306801966655
Option 3 ID : 6306801966654
Option 4 ID : 6306801966653
Status : Answered
Chosen Option : 4

Q.23 In case of two-stroke petrol engines, if exhaust gases do NOT leave the cylinder, then:

- Ans ☒ 1. fresh charge gets diluted and efficiency of the engine increases
- ☒ 2. fresh charge gets diluted and efficiency of the engine decreases
- ☒ 3. fresh charge gets diluted and efficiency of the engine remains unchanged
- ☒ 4. fresh charge gets diluted and performance of the engine increases

Question ID : 630680181693
Option 1 ID : 630680704016
Option 2 ID : 630680704017
Option 3 ID : 630680704014
Option 4 ID : 630680704015
Status : Answered
Chosen Option : 2

Q.24 Which of the following materials is commonly used as a cutting tool material?

- Ans ☒ 1. Aluminium
- ☒ 2. Diamond
- ☒ 3. Copper
- ☒ 4. Brass

Question ID : 630680503218
Option 1 ID : 6306801966457
Option 2 ID : 6306801966459
Option 3 ID : 6306801966460
Option 4 ID : 6306801966458
Status : Answered
Chosen Option : 2

Q.25 Under ideal conditions, for a drop of 80 kJ/kg enthalpy, what will be the approximate velocity of steam at the outlet of the nozzle if the inlet velocity of the steam is 2 m/s?

- Ans ☒ 1. 13 m/s
- ☒ 2. 120 m/s
- ☒ 3. 400 m/s
- ☒ 4. 410 m/s

Question ID : 630680503258
Option 1 ID : 6306801966619
Option 2 ID : 6306801966620
Option 3 ID : 6306801966617
Option 4 ID : 6306801966618
Status : Answered
Chosen Option : 3

Q.26 The difference between the total head at the outlet of a centrifugal pump and the total head at the inlet of a centrifugal pump is called _____.

- Ans ☒ 1. suction head
- ☒ 2. dynamic head
- ☒ 3. static head
- ☒ 4. manometric head

Question ID : 630680198965
Option 1 ID : 630680771589
Option 2 ID : 630680771590
Option 3 ID : 630680771587
Option 4 ID : 630680771588
Status : Answered
Chosen Option : 2

Q.27 According to the second law of thermodynamics, work is said to be _____ and heat is said to be _____.

- Ans
- ☐ 1. high-grade energy; high-grade energy
 - ☐ 2. low-grade energy; low-grade energy
 - ☒ 3. high-grade energy; low-grade energy
 - ☐ 4. low-grade energy; high-grade energy

Question ID : 630680503231
Option 1 ID : 6306801966510
Option 2 ID : 6306801966512
Option 3 ID : 6306801966509
Option 4 ID : 6306801966511
Status : Answered
Chosen Option : 3

Q.28 Sulphur dioxide refrigerant can be designated as:

- Ans
- ☐ 1. R-729
 - ☐ 2. R-744
 - ☐ 3. R-727
 - ☒ 4. R-764

Question ID : 630680348156
Option 1 ID : 6306801354915
Option 2 ID : 6306801354914
Option 3 ID : 6306801354913
Option 4 ID : 6306801354916
Status : Not Answered
Chosen Option : --

Q.29 The Zenith carburettor is a type of _____.

- Ans
- ☐ 1. multiple-venturi carburettor
 - ☐ 2. constant-vacuum carburettor
 - ☒ 3. constant-choke carburettor
 - ☐ 4. multijet carburettor

Question ID : 630680502728
Option 1 ID : 6306801964496
Option 2 ID : 6306801964495
Option 3 ID : 6306801964494
Option 4 ID : 6306801964497
Status : Not Answered
Chosen Option : --

Q.30 For a winter air-conditioning system, relative humidity should NOT be more than:

- Ans
- ☐ 1. 75%
 - ☐ 2. 60%
 - ☒ 3. 40%
 - ☐ 4. 90%

Question ID : 630680348154
Option 1 ID : 6306801354906
Option 2 ID : 6306801354905
Option 3 ID : 6306801354908
Option 4 ID : 6306801354907
Status : Not Answered
Chosen Option : --

Q.31 The bearing surface provided at any position along the shaft (but not at the end of the shaft) to carry the axial thrust, is known as _____.

- Ans ☒ 1. flat bearing surface
☒ 2. truncated bearing surface
☒ 3. conical bearing surface
☒ 4. collar

Question ID : 630680227832

Option 1 ID : 630680884003

Option 2 ID : 630680884006

Option 3 ID : 630680884005

Option 4 ID : 630680884004

Status : Answered

Chosen Option : 3

Q.32 In the P-H diagram of the vapour compression cycle, the compression process is shown by a/an _____.

- Ans ☒ 1. inclined straight line with a negative slope
☒ 2. curved line
☒ 3. inclined straight line with a positive slope
☒ 4. vertical line

Question ID : 630680506444

Option 1 ID : 6306801979292

Option 2 ID : 6306801979290

Option 3 ID : 6306801979291

Option 4 ID : 6306801979289

Status : Answered

Chosen Option : 1

Q.33 Which of the following expressions gives the area of flow for a Kaplan turbine?
Where, D = diameter, B = width of vane, D_o = outer diameter of runner, D_h = diameter of hub

- Ans ☒ 1.
☒ 2.
☒ 3.
☒ 4.

Question ID : 630680508730

Option 1 ID : 6306801988220

Option 2 ID : 6306801988223

Option 3 ID : 6306801988222

Option 4 ID : 6306801988221

Status : Not Answered

Chosen Option : --

Q.34 Which of the following statements is/are correct regarding Fire Tube Boilers?
1)In fire tube boilers, the hot gases are inside the tubes and water surrounds the tubes.
2)Cochran boiler is a type of fire tube boiler.
3)Stirling boiler is a type of fire tube boiler.

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

Question ID : 630680395229
Option 1 ID : 6306801541127
Option 2 ID : 6306801541125
Option 3 ID : 6306801541126
Option 4 ID : 6306801541124
Status : Answered
Chosen Option : 1

Q.35 _____ is the machining process that uses a saw blade to remove material from a workpiece.

- Ans ☒ 1. Drilling
☒ 2. Filing
☒ 3. Turning
☒ 4. Sawing

Question ID : 630680503219
Option 1 ID : 6306801966461
Option 2 ID : 6306801966462
Option 3 ID : 6306801966464
Option 4 ID : 6306801966463
Status : Answered
Chosen Option : 4

Q.36 Which of the following statements is INCORRECT about the Cochran boiler?

- Ans ☒ 1. The Cochran boiler is a multi-tubular boiler.
☒ 2. The Cochran boiler is an externally fired boiler.
☒ 3. The Cochran boiler is a natural circulation type boiler.
☒ 4. The Cochran boiler is a vertical boiler.

Question ID : 630680502642
Option 1 ID : 6306801964151
Option 2 ID : 6306801964150
Option 3 ID : 6306801964153
Option 4 ID : 6306801964152
Status : Not Answered
Chosen Option : --

Q.37 Calculate the minimum diameter of the shaft, such that the shearing stress does NOT exceed 50 N/mm^2 during torque transmission of 15000 N-m .

- Ans
- ☒ 1. 120.6 mm
 - ☒ 2. 98.4 mm
 - ☒ 3. 100.2 mm
 - ☒ 4. 115.2 mm

Question ID : **630680205984**
Option 1 ID : **630680798741**
Option 2 ID : **630680798742**
Option 3 ID : **630680798740**
Option 4 ID : **630680798739**
Status : **Not Answered**
Chosen Option : --

Q.38 Manometric efficiency of a centrifugal pump is defined as the _____.

- Ans
- ☒ 1. ratio of the power available at the impeller to the power at the shaft
 - ☒ 2. difference of the manometric head and the static head
 - ☒ 3. ratio of the manometric head to the head imparted by the impeller
 - ☒ 4. ratio of the actual discharge to the theoretical discharge

Question ID : **630680198964**
Option 1 ID : **630680771585**
Option 2 ID : **630680771586**
Option 3 ID : **630680771583**
Option 4 ID : **630680771584**
Status : **Not Answered**
Chosen Option : --

Q.39 Chezy's equation is applicable for:

- Ans
- ☒ 1. steady internal flow
 - ☒ 2. transient internal flow
 - ☒ 3. steady open flow
 - ☒ 4. transient open flow

Question ID : **630680508618**
Option 1 ID : **6306801987773**
Option 2 ID : **6306801987772**
Option 3 ID : **6306801987775**
Option 4 ID : **6306801987774**
Status : **Not Answered**
Chosen Option : --

Q.40 The right limb of a simple manometer containing mercury is open to atmosphere. The left limb is connected to a pipe in which a fluid of specific gravity 0.9 is flowing. The centre of the pipe is 12 cm below the level of mercury in the right limb. The difference of mercury level in the two limbs is 20 cm. What is the pressure of fluid in the pipe (take $g = 10 \text{ m/s}^2$)?

- Ans
- ☒ 1. 27200 N/m^2
 - ☒ 2. 26480 N/m^2
 - ☒ 3. 27920 N/m^2
 - ☒ 4. 720 N/m^2

Question ID : 630680199001

Option 1 ID : 630680771732

Option 2 ID : 630680771731

Option 3 ID : 630680771733

Option 4 ID : 630680771734

Status : Answered

Chosen Option : 2

Q.41 In which of the following turbines, the ends of the blades are welded to disks to form a cage like a hamster cage and instead of the bars, the turbine has the trough-shaped steel blades?

- Ans
- ☒ 1. Pelton turbine
 - ☒ 2. Kaplan turbine
 - ☒ 3. Francis turbine
 - ☒ 4. Cross-flow turbine

Question ID : 630680508630

Option 1 ID : 6306801987820

Option 2 ID : 6306801987823

Option 3 ID : 6306801987821

Option 4 ID : 6306801987822

Status : Not Answered

Chosen Option : --

Q.42 The data for an impulse steam turbine are given as follows.

(i) Mean blade velocity = 400 m/s

(ii) Absolute velocity of steam at the inlet to the moving blade = 1200 m/s

(iii) Sum of velocities of whirl at the inlet and the outlet of the blade = 1500 m/s

What will be the efficiency of the blade?

- Ans
- ☒ 1. 0.42
 - ☒ 2. 0.5
 - ☒ 3. 0.83
 - ☒ 4. 0.67

Question ID : 630680502689

Option 1 ID : 6306801964338

Option 2 ID : 6306801964339

Option 3 ID : 6306801964341

Option 4 ID : 6306801964340

Status : Not Answered

Chosen Option : --

Q.43 The continuous injection system usually has a _____.

- Ans ☐ 1. plunger pump
☐ 2. gear pump
☐ 3. vane pump
☒ 4. rotary pump

Question ID : 630680502731
Option 1 ID : 6306801964506
Option 2 ID : 6306801964508
Option 3 ID : 6306801964509
Option 4 ID : 6306801964507
Status : Not Answered
Chosen Option : --

Q.44 In a vapour absorption refrigeration system, heating, cooling and refrigeration take place at the temperatures of 100°C, 20°C and -5°C, respectively. Find the maximum C.O.P. of the system.

- Ans ☐ 1. 1.5
☐ 2. 2.7
☒ 3. 2.3
☐ 4. 1.8

Question ID : 630680506400
Option 1 ID : 6306801979113
Option 2 ID : 6306801979116
Option 3 ID : 6306801979115
Option 4 ID : 6306801979114
Status : Not Answered
Chosen Option : --

Q.45 The product of the area of the surface and the intensity of pressure at the centroid of the area is called _____.

- Ans ☐ 1. pressure density
☐ 2. buoyant force
☐ 3. viscous force
☒ 4. total pressure

Question ID : 630680508738
Option 1 ID : 6306801988252
Option 2 ID : 6306801988254
Option 3 ID : 6306801988255
Option 4 ID : 6306801988253
Status : Answered
Chosen Option : 2

Q.46 What is the SI unit of surface tension?

Ans  1.

 2.

 3.

 4.

Question ID : 630680198996

Option 1 ID : 630680771714

Option 2 ID : 630680771712

Option 3 ID : 630680771711

Option 4 ID : 630680771713

Status : Answered

Chosen Option : 3

Q.47 In a vapour compression refrigeration system, the lowest temperature during the cycle is observed after:

Ans  1. evaporation

 2. compression

 3. expansion

 4. condensation

Question ID : 630680506389

Option 1 ID : 6306801979071

Option 2 ID : 6306801979070

Option 3 ID : 6306801979072

Option 4 ID : 6306801979069

Status : Answered

Chosen Option : 2

Q.48 The boiling point of inorganic refrigerant R-744 is _____.

Ans  1. -15.8°C

 2. -73.6°C

 3. +22.4°C

 4. +33.6°C

Question ID : 630680506404

Option 1 ID : 6306801979131

Option 2 ID : 6306801979130

Option 3 ID : 6306801979132

Option 4 ID : 6306801979129

Status : Not Answered

Chosen Option : --

Q.49 Which of the following types of cast iron is the hardest among all?

- Ans ☒ 1. White cast iron
- ☐ 2. Brittle cast iron
- ☐ 3. Ductile cast iron
- ☐ 4. Gray cast iron

Question ID : 630680191552
Option 1 ID : 630680742829
Option 2 ID : 630680742832
Option 3 ID : 630680742831
Option 4 ID : 630680742830
Status : Answered
Chosen Option : 4

Q.50 Which of the following is NOT a component of a hydroelectric power plant?

- Ans ☐ 1. Surge tank
- ☒ 2. Condenser
- ☐ 3. Penstock
- ☐ 4. Tailrace

Question ID : 630680193064
Option 1 ID : 630680748794
Option 2 ID : 630680748796
Option 3 ID : 630680748793
Option 4 ID : 630680748795
Status : Not Answered
Chosen Option : --

Q.51 For which of the following fluids is the rate of deformation proportional to the shear stress?

- Ans ☐ 1. Blood
- ☒ 2. Gasoline
- ☐ 3. Rice starch
- ☐ 4. Milk

Question ID : 630680508715
Option 1 ID : 6306801988162
Option 2 ID : 6306801988161
Option 3 ID : 6306801988163
Option 4 ID : 6306801988160
Status : Not Answered
Chosen Option : --

Q.52 Which of the following statements is INCORRECT about the high-pressure and low-water safety alarm in a steam boiler?

- Ans ☐ 1. The high-pressure and low-water safety alarm has two valves.
- ☐ 2. The high-pressure and low-water safety alarm is a safety mounting against high pressure and low water levels.
- ☒ 3. The high-pressure and low-water safety alarm is suitable for a locomotive boiler.
- ☐ 4. The high-pressure and low-water safety alarm operates with loud noise.

Question ID : 630680502646
Option 1 ID : 6306801964169
Option 2 ID : 6306801964166
Option 3 ID : 6306801964167
Option 4 ID : 6306801964168
Status : Not Answered
Chosen Option : --

Q.53 Which of the following is NOT a function of lubricating oils used in refrigerants?

- Ans ☒ 1. Transferring heat from the crank-case to the compressor
☒ 2. Sealing the gas between the suction and discharge ports
☒ 3. Decreasing the coolant temperature and hence increasing COP
☒ 4. Minimising friction

Question ID : 630680506446
Option 1 ID : 6306801979299
Option 2 ID : 6306801979298
Option 3 ID : 6306801979300
Option 4 ID : 6306801979297
Status : Not Answered
Chosen Option : --

Q.54 Which of the following is a requirement of a good ignition system?

- Ans ☒ 1. It should give good performance at low speed but at high-speed, performance doesn't matter.
☒ 2. It should be as small as possible in size.
☒ 3. It should have good reproducibility of secondary voltage rise.
☒ 4. It should have very low spark duration.

Question ID : 630680502669
Option 1 ID : 6306801964259
Option 2 ID : 6306801964261
Option 3 ID : 6306801964260
Option 4 ID : 6306801964258
Status : Answered
Chosen Option : 4

Q.55 Which of the following types of steam nozzle is suitable for use when the inlet steam velocity is very low and the outlet steam velocity is desired to be supersonic?

- Ans ☒ 1. Divergent nozzle
☒ 2. Convergent-divergent nozzle
☒ 3. Divergent-convergent nozzle
☒ 4. Convergent nozzle

Question ID : 630680502701
Option 1 ID : 6306801964387
Option 2 ID : 6306801964388
Option 3 ID : 6306801964389
Option 4 ID : 6306801964386
Status : Not Answered
Chosen Option : --

Q.56 When a body is immersed in a fluid, upward force exerted by the fluid is equal to the _____.

- Ans ☒ 1. volume of water displaced by the body
☒ 2. weight of the body
☒ 3. weight of the fluid displaced by the body
☒ 4. density of the Body

Question ID : 630680202479
Option 1 ID : 630680785157
Option 2 ID : 630680785156
Option 3 ID : 630680785155
Option 4 ID : 630680785158
Status : Answered
Chosen Option : 3

Q.57 _____ is a type of rolling process used in metalworking.

- Ans ☒ 1. Injection moulding
☒ 2. Powder metallurgy
☒ 3. Hot rolling
☒ 4. Hydroforming

Question ID : 630680503238
Option 1 ID : 6306801966540
Option 2 ID : 6306801966538
Option 3 ID : 6306801966539
Option 4 ID : 6306801966537
Status : Answered
Chosen Option : 3

Q.58 Identify the operation of production of flat vertical surfaces on both sides of a workpiece by using two side milling cutters mounted on the same arbor.

- Ans ☒ 1. Side milling
☒ 2. Gang milling
☒ 3. Straddle milling
☒ 4. Face milling

Question ID : 630680205085
Option 1 ID : 630680795205
Option 2 ID : 630680795203
Option 3 ID : 630680795204
Option 4 ID : 630680795206
Status : Answered
Chosen Option : 4

Q.59 Which part of the lathe has a long shaft with the keyway extending from the feed box across and in front of the bed?

- Ans ☒ 1. Headstock spindle
☒ 2. Feed rod
☒ 3. Sliding gear shaft
☒ 4. Lead screw

Question ID : 630680205072
Option 1 ID : 630680795153
Option 2 ID : 630680795152
Option 3 ID : 630680795154
Option 4 ID : 630680795151
Status : Answered
Chosen Option : 2

Q.60 The area under a P-V diagram represents _____.

- Ans ☒ 1. the efficiency of the system
☒ 2. the heat added to the system
☒ 3. the heat rejected by the system
☒ 4. the net work done by the system

Question ID : 630680503227
Option 1 ID : 6306801966496
Option 2 ID : 6306801966494
Option 3 ID : 6306801966495
Option 4 ID : 6306801966493
Status : Answered
Chosen Option : 4

Q.61 For ammonia refrigerating systems, the tubes of a shell and tube condenser are made of_____.

- Ans ☒ 1. aluminium
☒ 2. steel
☒ 3. copper
☒ 4. brass

Question ID : 630680506430
Option 1 ID : 6306801979234
Option 2 ID : 6306801979235
Option 3 ID : 6306801979233
Option 4 ID : 6306801979236
Status : Not Answered
Chosen Option : --

Q.62 In case of a single stage centrifugal compressor, the compression ratio that an impeller can develop is limited to about:

- Ans ☒ 1. 3.5
☒ 2. 4.0
☒ 3. 4.5
☒ 4. 3.0

Question ID : 630680506441
Option 1 ID : 6306801979279
Option 2 ID : 6306801979280
Option 3 ID : 6306801979278
Option 4 ID : 6306801979277
Status : Not Answered
Chosen Option : --

Q.63 Which of the following is an advantage of multistage reciprocating air compressor?

- Ans ☒ 1. Lubrication improved due to lower temperature
☒ 2. Volumetric efficiency increases for the same pressure ratio
☒ 3. Less expensive with longer life
☒ 4. Chance of leakage loss is low

Question ID : 630680502678
Option 1 ID : 6306801964295
Option 2 ID : 6306801964294
Option 3 ID : 6306801964296
Option 4 ID : 6306801964297
Status : Not Answered
Chosen Option : --

Q.64 Which of the following governing methods is used for gas engines?

- Ans ☒ 1. Controlled governing
☒ 2. Quality governing
☒ 3. Hit-and-miss governing
☒ 4. Quantity governing

Question ID : 630680502725
Option 1 ID : 6306801964485
Option 2 ID : 6306801964483
Option 3 ID : 6306801964482
Option 4 ID : 6306801964484
Status : Not Answered
Chosen Option : --

Q.65 Which of the following statements is INCORRECT about the friction factor of Darcy's equation?

- Ans ☒ 1. The value of friction factor depends on the Reynolds number of the flow.
- ☒ 2. Friction factor is a dimensionless quantity.
- ☒ 3. The value of friction factor depends on the roughness condition of the pipe surface.
- ☒ 4. Friction factor value is same for all the flow conditions.

Question ID : 630680198986
Option 1 ID : 630680771674
Option 2 ID : 630680771671
Option 3 ID : 630680771673
Option 4 ID : 630680771672
Status : Not Answered
Chosen Option : --

Q.66 Which of the following statements is correct about slotting process?

- Ans ☒ 1. Both, tool and workpiece can reciprocate according to the size of slotting machine and workpiece.
- ☒ 2. The tool reciprocates horizontally and the workpiece is fed into the cutting tool.
- ☒ 3. The workpiece reciprocates horizontally and the tool is fed in.
- ☒ 4. The tool reciprocates vertically and the workpiece is fed into the cutting tool.

Question ID : 630680503252
Option 1 ID : 6306801966596
Option 2 ID : 6306801966593
Option 3 ID : 6306801966595
Option 4 ID : 6306801966594
Status : Not Answered
Chosen Option : --

Q.67 If the indicated power and frictional power of an engine are 100 KW and 25 KW, respectively, then what will be the brake power of the engine?

- Ans ☒ 1. 62.5 KW
- ☒ 2. 125 KW
- ☒ 3. 50 KW
- ☒ 4. 75 KW

Question ID : 630680382396
Option 1 ID : 6306801490502
Option 2 ID : 6306801490499
Option 3 ID : 6306801490500
Option 4 ID : 6306801490501
Status : Answered
Chosen Option : 4

Q.68 Which of the following moulding techniques uses a sand and clay mixture as the mould material?

- Ans ☒ 1. Green sand moulding
- ☐ 2. Investment casting
- ☐ 3. Die casting
- ☐ 4. Shell moulding

Question ID : 630680503203
Option 1 ID : 6306801966398
Option 2 ID : 6306801966399
Option 3 ID : 6306801966400
Option 4 ID : 6306801966397
Status : Answered
Chosen Option : 1

Q.69 At absolute zero temperature ($T = 0K$), the specific enthalpy of an ideal gas is:

- Ans ☒ 1. 0
- ☐ 2. infinite
- ☐ 3. 1
- ☐ 4. <0

Question ID : 630680404000
Option 1 ID : 6306801575486
Option 2 ID : 6306801575488
Option 3 ID : 6306801575487
Option 4 ID : 6306801575489
Status : Answered
Chosen Option : 1

Q.70 In chemical machining, material is removed from the work piece by _____.

- Ans ☐ 1. chemical burning
- ☒ 2. chemical dissolution
- ☐ 3. chemical evaporation
- ☐ 4. erosion

Question ID : 630680503250
Option 1 ID : 6306801966587
Option 2 ID : 6306801966588
Option 3 ID : 6306801966585
Option 4 ID : 6306801966586
Status : Answered
Chosen Option : 2

Q.71 Which of the following statements is true for magneto ignition system?

- Ans ☐ 1. More frequent maintenance is required compared to coil ignition system.
- ☐ 2. Its intensity of spark is very good even at low speed.
- ☐ 3. It is simpler in construction than coil ignition system.
- ☒ 4. The efficiency of the system improves as the engine speed increases.

Question ID : 630680502670
Option 1 ID : 6306801964264
Option 2 ID : 6306801964263
Option 3 ID : 6306801964262
Option 4 ID : 6306801964265
Status : Not Answered
Chosen Option : --

Q.72 The fully halogenated refrigerants with chlorine (Cl) atom in their molecules are referred to as:

- Ans ☒ 1. HCFC refrigerants
☒ 2. CFC refrigerants
☒ 3. inorganic refrigerants
☒ 4. hydro-carbon refrigerants

Question ID : 630680506412
Option 1 ID : 6306801979163
Option 2 ID : 6306801979164
Option 3 ID : 6306801979162
Option 4 ID : 6306801979161
Status : Not Answered
Chosen Option : --

Q.73 What is the purpose of a pattern in the casting pattern procedure?

- Ans ☒ 1. To pour molten metal into the mould cavity
☒ 2. To create the mould cavity
☒ 3. To remove the casting from the mould
☒ 4. To clean the mould before casting

Question ID : 630680503201
Option 1 ID : 6306801966390
Option 2 ID : 6306801966389
Option 3 ID : 6306801966391
Option 4 ID : 6306801966392
Status : Answered
Chosen Option : 2

Q.74 In which of the following types of draught is air forced into the boiler under pressure by a fan?

- Ans ☒ 1. Natural draught
☒ 2. Forced draught
☒ 3. Steam jet draught
☒ 4. Induced draught

Question ID : 630680502652
Option 1 ID : 6306801964190
Option 2 ID : 6306801964191
Option 3 ID : 6306801964193
Option 4 ID : 6306801964192
Status : Answered
Chosen Option : 4

Q.75 Which shielding gas is commonly used in TIG welding?

- Ans ☒ 1. Carbon dioxide
☒ 2. Oxygen
☒ 3. Argon
☒ 4. Hydrogen

Question ID : 630680205052
Option 1 ID : 630680795071
Option 2 ID : 630680795072
Option 3 ID : 630680795073
Option 4 ID : 630680795074
Status : Answered
Chosen Option : 1

Q.76 In a side milling cutter, the angle between the cleared flank of the blade and a tangent to the periphery in a diametral plane passing through the cutting edge is called _____.

- Ans ☒ 1. peripheral clearance angle
- ☐ 2. peripheral relief angle
- ☐ 3. face relief angle
- ☐ 4. face clearance angle

Question ID : 630680205086
Option 1 ID : 630680795210
Option 2 ID : 630680795208
Option 3 ID : 630680795209
Option 4 ID : 630680795207
Status : Not Answered
Chosen Option : --

Q.77 Which of the following forced convection evaporator units have a discharge air rate from 60 m/min to 90 m/min?

- Ans ☐ 1. Frosting evaporators
- ☐ 2. Defrosting evaporators
- ☐ 3. High velocity cooling forced convection evaporators
- ☒ 4. Low velocity cooling forced convection evaporators

Question ID : 630680506424
Option 1 ID : 6306801979209
Option 2 ID : 6306801979210
Option 3 ID : 6306801979211
Option 4 ID : 6306801979212
Status : Not Answered
Chosen Option : --

Q.78 What is the order of temperature generated at the anode during arc generation in electric arc welding?

- Ans ☐ 1. 2000°C
- ☒ 2. 6000°C
- ☐ 3. 3500°C
- ☐ 4. 4500°C

Question ID : 630680211303
Option 1 ID : 630680819359
Option 2 ID : 630680819361
Option 3 ID : 630680819360
Option 4 ID : 630680819362
Status : Not Answered
Chosen Option : --

Q.79 Free expansion process is _____.

- Ans ☒ 1. a reversible process
- ☒ 2. initially it is reversible and later it become irreversible
- ☒ 3. an irreversible process
- ☒ 4. sometimes reversible and sometimes irreversible

Question ID : 630680503255
Option 1 ID : 6306801966605
Option 2 ID : 6306801966608
Option 3 ID : 6306801966606
Option 4 ID : 6306801966607
Status : Answered
Chosen Option : 3

Q.80 Vertical depth of any point below the free surface in a liquid at rest is known as _____.

- Ans ☒ 1. pressure head
- ☒ 2. velocity head
- ☒ 3. datum head
- ☒ 4. total head

Question ID : 630680193060
Option 1 ID : 630680748777
Option 2 ID : 630680748779
Option 3 ID : 630680748778
Option 4 ID : 630680748780
Status : Answered
Chosen Option : 4

Q.81 The pressure at any point in a fluid at rest has the same magnitude in all the directions. This fact is known as _____.

- Ans ☒ 1. the pressure law
- ☒ 2. Bernoulli's law
- ☒ 3. Pascal's law
- ☒ 4. Newton's law

Question ID : 630680193058
Option 1 ID : 630680748772
Option 2 ID : 630680748769
Option 3 ID : 630680748770
Option 4 ID : 630680748771
Status : Answered
Chosen Option : 3

Q.82 Consider an air standard cycle in which the air enters the compressor at 1.0 bar and 20°C. The pressure of air leaving the compressor is 3.5 bar and the temperature at the turbine inlet is 600°C. For 1 kg of air, determine the efficiency of the cycle:

- Ans
- ☒ 1.
 - ☐ 2.
 - ☐ 3.
 - ☐ 4.

Question ID : 630680502754
Option 1 ID : 6306801964600
Option 2 ID : 6306801964598
Option 3 ID : 6306801964599
Option 4 ID : 6306801964601
Status : Not Answered
Chosen Option : --

Q.83 The boiling point of refrigerant R-13 is _____.

- Ans
- ☐ 1. +86.6°C
 - ☐ 2. -107.7°C
 - ☒ 3. -81.4°C
 - ☐ 4. - 157.5°C

Question ID : 630680506407
Option 1 ID : 6306801979142
Option 2 ID : 6306801979141
Option 3 ID : 6306801979143
Option 4 ID : 6306801979144
Status : Not Answered
Chosen Option : --

Q.84 If 'u' is the velocity of the runner and 'V' is the velocity of the jet at inlet, what is the condition for the maximum hydraulic efficiency of a Pelton wheel?

- Ans
- ☐ 1. $V = u$
 - ☐ 2. $V = u/2$
 - ☒ 3. $V = 2u$
 - ☐ 4. $V = 3u$

Question ID : 630680199990
Option 1 ID : 630680775406
Option 2 ID : 630680775407
Option 3 ID : 630680775405
Option 4 ID : 630680775408
Status : Not Answered
Chosen Option : --

Q.85 Internal combustion engines have ____.

- Ans ☒ 1. lower thermal efficiency than external combustion engine
- ☒ 2. higher thermal efficiency than external combustion engine
- ☒ 3. high initial cost compared to external combustion engine
- ☒ 4. low power to weight ratio compared to external combustion engine

Question ID : 630680502662
Option 1 ID : 6306801964231
Option 2 ID : 6306801964230
Option 3 ID : 6306801964233
Option 4 ID : 6306801964232
Status : Answered
Chosen Option : 2

Q.86 Brake power involves determination of the:

- Ans ☒ 1. inertia and displacement of the shaft
- ☒ 2. piston indicator
- ☒ 3. pressure and piston displacement
- ☒ 4. torque and angular speed of the shaft

Question ID : 630680181703
Option 1 ID : 630680704055
Option 2 ID : 630680704057
Option 3 ID : 630680704056
Option 4 ID : 630680704054
Status : Answered
Chosen Option : 3

Q.87 In a single stationary blade type rotary compressor, a blade is set into the slot of a cylinder in such a manner that it always maintains contact with the roller by means of:

- Ans ☒ 1. centrifugal force
- ☒ 2. spring
- ☒ 3. gravity
- ☒ 4. cam and follower

Question ID : 630680506438
Option 1 ID : 6306801979267
Option 2 ID : 6306801979268
Option 3 ID : 6306801979266
Option 4 ID : 6306801979265
Status : Not Answered
Chosen Option : --

Q.88 The total pressure acting on any immersed body is independent of:

- Ans ☒ 1. the density of liquid
- ☒ 2. the depth of C.G. of body from free surface of liquid
- ☒ 3. the angle made by surface with the free surface of liquid
- ☒ 4. the surface area of body

Question ID : 630680508634
Option 1 ID : 6306801987836
Option 2 ID : 6306801987838
Option 3 ID : 6306801987839
Option 4 ID : 6306801987837
Status : Not Answered
Chosen Option : --

Q.89 Pump disassembling is NOT necessary in _____ .

- Ans ☒ 1. open impellers
- ☐ 2. semi-open impellers
- ☐ 3. cannot be predicted
- ☐ 4. closed impellers

Question ID : 630680508725
Option 1 ID : 6306801988200
Option 2 ID : 6306801988202
Option 3 ID : 6306801988203
Option 4 ID : 6306801988201
Status : Answered
Chosen Option : 1

Q.90 For the given overall heat transfer coefficient and temperature difference, if the area of evaporator surface increases, then the capacity of evaporator:

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

Question ID : 630680506425
Option 1 ID : 6306801979216
Option 2 ID : 6306801979214
Option 3 ID : 6306801979213
Option 4 ID : 6306801979215
Status : Answered
Chosen Option : 2

Q.91 Which of the following statements is INCORRECT about the steam separator in a steam boiler?

- Ans ☐ 1. In the steam separator, water separates out from steam due to its greater inertia.
- ☐ 2. In the steam separator, steam is made to change its direction of flow.
- ☒ 3. Steam separator is provided to collect the water resulting from partial condensation of steam.
- ☐ 4. Steam separator is also known as steam drier.

Question ID : 630680502655
Option 1 ID : 6306801964202
Option 2 ID : 6306801964203
Option 3 ID : 6306801964205
Option 4 ID : 6306801964204
Status : Not Answered
Chosen Option : --

Q.92 The condition of equilibrium states that a stationary body that is subjected to coplanar forces will be in equilibrium if the algebraic sum of all the _____ and the algebraic sum of _____ of all the external forces about any point in their plane is zero.

- Ans** ☒ 1. internal forces; moment
☒ 2. external forces; moment
☒ 3. internal forces; couple
☒ 4. external forces; couple

Question ID : 630680394575
Option 1 ID : 6306801538588
Option 2 ID : 6306801538587
Option 3 ID : 6306801538586
Option 4 ID : 6306801538589
Status : Answered
Chosen Option : 2

Q.93 When there is a _____, work is transferred over the system boundary in an open system.

- Ans** ☒ 1. change in the potential energy of the fluid
☒ 2. difference in datum head between the system and surroundings
☒ 3. change in the kinetic energy of the fluid
☒ 4. difference in pressure between the system and surroundings

Question ID : 630680503175
Option 1 ID : 6306801966286
Option 2 ID : 6306801966288
Option 3 ID : 6306801966285
Option 4 ID : 6306801966287
Status : Answered
Chosen Option : 4

Q.94 The enthalpy of an open system _____.

- Ans** ☒ 1. increases as energy is added to the system
☒ 2. remains constant
☒ 3. decreases as energy is added to the system
☒ 4. is not a meaningful concept

Question ID : 630680503209
Option 1 ID : 6306801966422
Option 2 ID : 6306801966421
Option 3 ID : 6306801966423
Option 4 ID : 6306801966424
Status : Answered
Chosen Option : 1

Q.95 Which of the following statements is correct in case of semi-open impeller?

- Ans** ☒ 1. Both sides of the impeller vanes are covered with baseplates.
☒ 2. One side of the impeller vanes is covered with a baseplate.
☒ 3. Both sides of the impeller vanes are covered with crown plates.
☒ 4. Impeller vanes are not covered with baseplates.

Question ID : 630680198975
Option 1 ID : 630680771627
Option 2 ID : 630680771628
Option 3 ID : 630680771630
Option 4 ID : 630680771629
Status : Answered
Chosen Option : 4

Q.96 Which of the following is the condition of the maximum discharge of flue gases through a chimney in a steam boiler?

- Ans** ☒ 1. The temperature of flue gases is slightly greater than twice the atmospheric temperature in Kelvin units.
- ☐ 2. The maximum discharge of flue gases through a chimney does not depend on the temperature of flue gases in the steam boiler.
- ☐ 3. The temperature of flue gases is exactly equal to twice the atmospheric temperature in Kelvin units.
- ☐ 4. The temperature of flue gases is equal to the atmospheric temperature in Kelvin units.

Question ID : 630680502650
Option 1 ID : 6306801964184
Option 2 ID : 6306801964185
Option 3 ID : 6306801964183
Option 4 ID : 6306801964182
Status : Not Answered
Chosen Option : --

Q.97 In the study of flow of fluid in pipes, total energy line is also known as

- Ans** ☐ 1. hydraulic gradient line
- ☐ 2. pressure line
- ☒ 3. energy gradient line
- ☐ 4. piezometric head line

Question ID : 630680198987
Option 1 ID : 630680771675
Option 2 ID : 630680771676
Option 3 ID : 630680771678
Option 4 ID : 630680771677
Status : Not Answered
Chosen Option : --

Q.98 The ratio of the actual brake thermal efficiency obtained from an engine to the theoretical efficiency of the engine cycle is called:

- Ans** ☒ 1. relative efficiency
- ☐ 2. combustion efficiency
- ☐ 3. brake thermal efficiency
- ☐ 4. scavenging efficiency

Question ID : 630680348136
Option 1 ID : 6306801354834
Option 2 ID : 6306801354835
Option 3 ID : 6306801354833
Option 4 ID : 6306801354836
Status : Answered
Chosen Option : 3

Q.99 Which of the following is the chemical formula of hydro-carbon refrigerant R-170?

- Ans ☒ 1. C_2H_6
 ☐ 2. C_3H_3
 ☐ 3. C_4H_{10}
 ☐ 4. C_3H_6

Question ID : **630680506406**
Option 1 ID : **6306801979138**
Option 2 ID : **6306801979137**
Option 3 ID : **6306801979139**
Option 4 ID : **6306801979140**
Status : **Not Answered**
Chosen Option : --

Q.100 What will be the average pressure in plate clutch when the axial force is 4 kN. The inside radius of the contact surface is 50 mm and the outside radius is 100 mm. Assume uniform wear.

- Ans ☐ 1. 17 N/mm^2
 ☐ 2. 0.17 N/m^2
 ☒ 3. 0.17 N/mm^2
 ☐ 4. 1.7 N/mm^2

Question ID : **630680227842**
Option 1 ID : **630680884044**
Option 2 ID : **630680884046**
Option 3 ID : **630680884045**
Option 4 ID : **630680884043**
Status : **Not Answered**
Chosen Option : --