

# SSC JE ME 2019 28th Oct 2020 Shift 2

Section : General Intelligence and Reasoning

**Q.1** A clock is rotated in a way that the digit 6 is replaced by 12 and the digit 3 is replaced by 9. In which direction respectively will the hour and the minute hand be at exactly 01:45 hours?

- Ans**
- 1. North-East and West
  - 2. South-East and East
  - 3. North-East and West
  - 4. South-West and East

Question ID : 654978826  
Status : Answered  
Chosen Option : 3

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

1. Jhansi
2. Bhopal
3. Leh
4. Vellore
5. Chandigarh

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

Question ID : 654978807  
Status : Answered  
Chosen Option : 4

**Q.3** Select the option that can replace question mark (?) in the following matrix.

51	64	48
103	129	97
155	194	?

- Ans**
- 1. 244
  - 2. 146
  - 3. 144
  - 4. 148

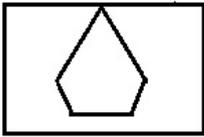
Question ID : **654978838**  
Status : **Answered**  
Chosen Option : **2**

**Q.4** Mehak is standing to the north of Karishma. Kartik is standing to the east of Karishma. Kartik is standing in which direction with respect to Mehak?

- Ans**
- 1. North-East
  - 2. North-West
  - 3. South-West
  - 4. South-East

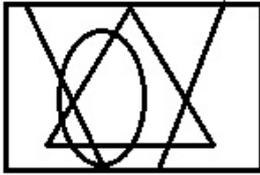
Question ID : **654978825**  
Status : **Answered**  
Chosen Option : **4**

Q.5 Select the option in which the given figure is embedded. (Rotation is NOT allowed)

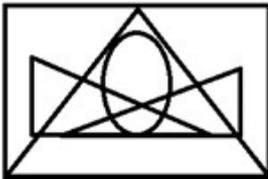


Ans

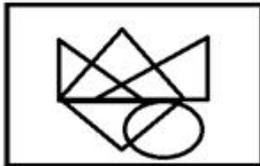
✓ 1.



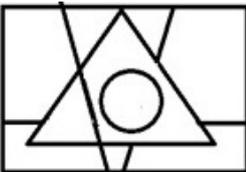
✗ 2.



✗ 3.



✗ 4.



Question ID : 654978844  
Status : Answered  
Chosen Option : 1

Q.6 Looking at a picture of a girl, Ramesh said, "She is my son's mother's sister-in-law's only daughter". How is the girl is related to Ramesh?

Ans ✗ 1. Daughter

✗ 2. Sister

✗ 3. Cousin

✓ 4. Niece

Question ID : 654978827  
Status : Answered  
Chosen Option : 1

**Q.7** 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:**

1. All axes are knives.
2. No knife is sharp.

**Conclusions:**

- I. All knives are axes.
- II. Some axes are sharp.

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

Question ID : **654978823**  
Status : **Answered**  
Chosen Option : **2**

**Q.8** 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:**

1. All lions are dogs.
2. All tigers are cats.
3. All cats are snakes.
4. Some horses are dogs.

**Conclusions:**

- I. Some horses are cats.
- II. Some cats are lions.

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

Question ID : **654978824**  
Status : **Answered**  
Chosen Option : **4**

**Q.9** Arrange the following medical conditions in a logical and meaningful order.

1. Stroke
2. Gastritis
3. Sore throat
4. Hip dislocation
5. Heart attack

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

Question ID : **654978806**  
Status : **Answered**  
Chosen Option : **4**

**Q.10** Select the combination of letters that when sequentially placed in the blanks of the given letter series will complete the series.

\_ q r \_ r p \_ p \_ p q \_ q r \_

- Ans**
- 1. q, r, q, p, r, q
  - 2. p, r, q, r, p, q
  - 3. p, q, r, q, r, p
  - 4. q, r, p, q, r, p

Question ID : **654978804**  
Status : **Answered**  
Chosen Option : **3**

**Q.11** Looking at a picture of a girl, Samuel said, "She is the daughter of my paternal grandfather's only daughter". How is the girl related to Samuel?

- Ans**
- 1. Mother
  - 2. Aunt
  - 3. Cousin
  - 4. Sister-in-law

Question ID : **654978828**  
Status : **Answered**  
Chosen Option : **3**

**Q.12** Select the combination of letters that when sequentially placed in the blanks of the given letter series will complete the series.

\_ \_ r \_ p q \_ s \_ q r \_

- Ans**
- 1. q, s, p, q, s, r
  - 2. p, q, s, r, q, s
  - 3. p, q, s, r, p, s
  - 4. q, s, q, p, s, r

Question ID : **654978805**  
Status : **Answered**  
Chosen Option : **3**

**Q.13** Select the option in which the two words are related in the same way as are the two words in the given word-pair.  
Alphabet : Chapter

- Ans**
- 1. Wood : Soil
  - 2. Honeycomb : Beehive
  - 3. Water Cannon : Fire
  - 4. Socket : Electricity

Question ID : **654978814**  
Status : **Answered**  
Chosen Option : **2**

**Q.14** Arrange the following words in the order in which they appear in the English dictionary.

1. Deficit
2. Deliberation
3. Defamation
4. Defecation
5. Definition

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

Question ID : 654978809  
Status : Answered  
Chosen Option : 1

**Q.15** Select the correct combination of mathematical signs that can sequentially replace the '\*\*' signs to balance the given equation.

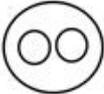
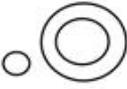
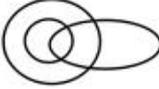
$$3 * 6 * 5 * 3 * 5 = 0$$

- Ans**
- 1. +, ×, −, +
  - 2. +, ×, ÷, −
  - 3. −, +, ×, +
  - 4. +, ÷, −, ×

Question ID : 654978839  
Status : Answered  
Chosen Option : 3

**Q.16** Select the Venn diagram that best illustrates the relationship between the following classes.

Rainbow, Nature, Human

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

Question ID : 654978849  
Status : Answered  
Chosen Option : 3

**Q.17** Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

PALM : SDOP :: MARE : ?

- Ans**
- 1. PDUH
  - 2. RCVG
  - 3. RDUH
  - 4. PDHU

Question ID : 654978815  
Status : Answered  
Chosen Option : 1

**Q.18** In a certain code language 'CANDID' is written as 'EFPIKI'. How will 'MATURE' be written in the same code language?

- Ans**
- 1. OEVYTJ
  - 2. OEYVUI
  - 3. OFVZTJ
  - 4. OFZVTJ

Question ID : 654978819  
Status : Answered  
Chosen Option : 3

**Q.19** Which of the following statements is correct for Quantity A and B?

**Quantity A**

(-8) (6) (4) (-9) (-12)

**Quantity B**

(6) (-4) (6) (2) (-4)

- Ans**
- 1. Quantity A is twice as that of Quantity B
  - 2. Both are equal
  - 3. Quantity B is bigger
  - 4. Quantity A is bigger

Question ID : 654978841  
Status : Answered  
Chosen Option : 3

**Q.20** Select the option that is related to the third term in the same way as the second term is related to the first term.

ALMOND : BMNPOE :: PATTERN : ?

- Ans**
- 1. QBUUFSO
  - 2. QBSSFSO
  - 3. QBUUESO
  - 4. QAUSFSO

Question ID : 654978816  
Status : Answered  
Chosen Option : 1

**Q.21** In a certain code language, if CAR is coded as 22 and BEGAN is coded as 29, then how will FLOWER be coded in the same language?

- Ans**
- 1. 76
  - 2. 79
  - 3. 80
  - 4. 97

Question ID : 654978821  
Status : Answered  
Chosen Option : 2

**Q.22** Three different positions of the same dice are shown. Find the number on the face opposite to the face showing number '4'.

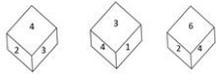


Figure 1   Figure 2   Figure 3

- Ans**
- 1. 6
  - 2. 1
  - 3. 2
  - 4. 5

Question ID : 654978843  
Status : Answered  
Chosen Option : 4

**Q.23** Four boys A, B, C, D and 4 girls M, N, O, P are sitting around a round table facing each other.

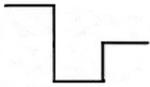
- i. No 2 boys and girls are sitting together.
- ii. M is sitting to the right of B.
- iii. O is facing N and is sitting to the left of A.
- iv. C is sitting to the right of P.

Which two persons are sitting adjacent to D, to the left and right respectively?

- Ans**
- 1. M and N
  - 2. M and O
  - 3. O and M
  - 4. N and M

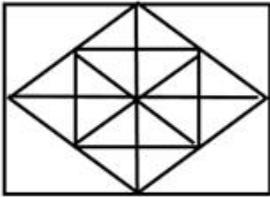
Question ID : 654978830  
Status : Not Answered  
Chosen Option : --

**Q.24** Select the option in which the given figure is embedded. (Rotation is NOT allowed)

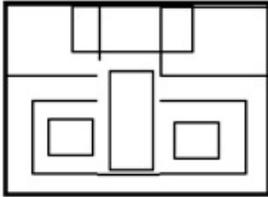


**Ans**

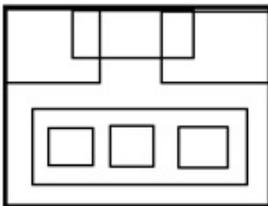
✓ 1.



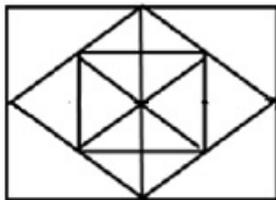
✗ 2.



✗ 3.



✗ 4.



Question ID : 654978846  
Status : Answered  
Chosen Option : 2

**Q.25** Select the option that can replace the question mark (?) in the following series.

E, G, J, L, O, ?

**Ans** ✗ 1. P

✗ 2. J

✓ 3. Q

✗ 4. R

Question ID : 654978801  
Status : Answered  
Chosen Option : 3

**Q.26** Select the option that is related to the third term in the same way as the second term is related to the first term.

Chef : Cooking : : Doctor : ?

- Ans**
- 1. Tablet
  - 2. Surgery
  - 3. Nurse
  - 4. Hospital

Question ID : **654978810**  
Status : **Answered**  
Chosen Option : **2**

**Q.27** Select the option in which the two words are related in the same way as are the two words in the given word-pair.

Lost : Found

- Ans**
- 1. Upbeat : Cheerful
  - 2. Shadow : Gloomy
  - 3. Less : Miserable
  - 4. Dormant : Active

Question ID : **654978813**  
Status : **Answered**  
Chosen Option : **4**

**Q.28** Select the combination of letters that when sequentially placed in the blanks of the given letter series will complete the series.

\_ m \_ o p \_ m n \_ p l \_ n o \_

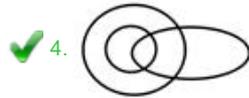
- Ans**
- 1. l, n, l, m, o, p
  - 2. n, l, o, n, m, p
  - 3. l, n, l, o, m, p
  - 4. n, o, l, m, n, o

Question ID : **654978803**  
Status : **Answered**  
Chosen Option : **3**

**Q.29** Select the Venn diagram that best illustrates the relationship between the following classes.

Indian, Football Player, Sports Person

Ans



Question ID : 654978850

Status : Answered

Chosen Option : 4

**Q.30** Four number-pairs have been given, out of which three are alike in some manner and one is different. Select the number-pair that is different from the rest.

Ans

1. 17 : 221

2. 13 : 169

3. 12 : 156

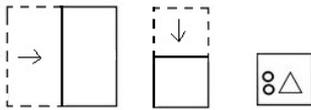
4. 19 : 249

Question ID : 654978835

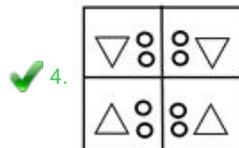
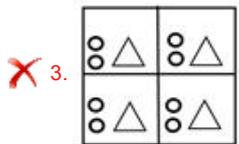
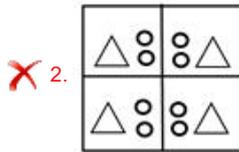
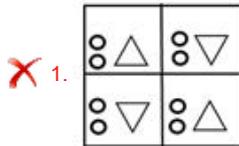
Status : Not Answered

Chosen Option : --

**Q.31** A paper is folded and cut as shown in the following figure. How will it appear when unfolded?



**Ans**



Question ID : 654978848

Status : Answered

Chosen Option : 4

**Q.32** In a certain code language, 'TOGETHER' is coded as '41834932', 'WE' is coded as '53' and 'LIVE' is coded as 0673. What will be the code for 'VERTIGO' in the same language?

- Ans**
- ✓ 1. 7324681
  - ✗ 2. 6324731
  - ✗ 3. 6234731
  - ✗ 4. 7322681

Question ID : 654978822

Status : Answered

Chosen Option : 1

**Q.33** Identify the number that does NOT belong to the following series.

1, 16, 35, 60, 85, 116

- Ans**
- ✗ 1. 85
  - ✗ 2. 116
  - ✓ 3. 60
  - ✗ 4. 35

Question ID : 654978832

Status : Not Answered

Chosen Option : --

**Q.34** Bala is 40 years old. Akshay is younger than Bala. Rahul is between Akshay and Anirudh, while Bala is between Akshay and Darpan. If there is a consecutive difference of 4 years between their ages, then what is the age of Rahul?

- Ans
- 1. 36 years
  - 2. 32 years
  - 3. 44 years
  - 4. 28 years

Question ID : 654978842  
Status : Answered  
Chosen Option : 4

**Q.35** Arrange the following words in a meaningful sequence.

a) Beryllium b) Hydrogen c) Sulphur d) Neon

- Ans
- 1. badc
  - 2. cabd
  - 3. bcda
  - 4. abdc

Question ID : 654978808  
Status : Answered  
Chosen Option : 1

**Q.36** Select the option that can replace question mark (?) in the following matrix.

8	10	24
18	36	40
13	23	?

- Ans
- 1. 36
  - 2. 14
  - 3. 32
  - 4. 23

Question ID : 654978837  
Status : Not Answered  
Chosen Option : --

**Q.37** Select the option that can replace the question mark (?) in the following series.

D, I, P, Y, ?

- Ans
- 1. Z
  - 2. J
  - 3. W
  - 4. I

Question ID : 654978802  
Status : Answered  
Chosen Option : 2

**Q.38** Select the option in which the two numbers share the same relationship as that shared by the given number-pair.

256 : 32

- Ans**
- 1. 13 : 169
  - 2. 169 : 26
  - 3. 144 : 16
  - 4. 96 : 12

Question ID : 654978834

Status : Not Answered

Chosen Option : --

**Q.39** Select the correct combination of mathematical signs that can sequentially replace the '\*\*' signs to balance the given equation.

$7 * 3 * 5 * 15 * 8 = 8$

- Ans**
- 1. -, +, ×, ÷
  - 2. +, +, ×, -
  - 3. +, ×, -, ÷
  - 4. -, +, ×, +

Question ID : 654978840

Status : Answered

Chosen Option : 2

**Q.40** Select the option that is related to the third term in the same way as the second term is related to the first term.

BHARAT : CJBTVB :: INDIAN : ?

- Ans**
- 1. JPKCO
  - 2. KOEKBP
  - 3. JPELBP
  - 4. JPEKBP

Question ID : 654978817

Status : Answered

Chosen Option : 4

**Q.41** Thomas, Jack, Harry, Sam, Yash and Jason are sitting equidistant from each other around a round table facing towards the centre. Yash is to the right of Sam. Harry is between Thomas and Jack. Jason is between Sam and Thomas. Who is sitting in front of Sam?

- Ans**
- 1. Sam
  - 2. Yash
  - 3. Jason
  - 4. Harry

Question ID : 654978836

Status : Not Answered

Chosen Option : --

**Q.42** Select the option that is related to the third term in the same way as the second term is related to the first term.

Rome : Italy : : Ankara : ?

- Ans**
- 1. South korea
  - 2. Sudan
  - 3. Iraq
  - 4. Turkey

Question ID : **654978812**  
Status : **Answered**  
Chosen Option : **4**

**Q.43** The position of the first and eighth letters of the word ADMINISTRATION are interchanged. Similarly, the second and ninth letters are interchanged, and so on. Which will be the fourth letter from the right end?

- Ans**
- 1. S
  - 2. T
  - 3. I
  - 4. N

Question ID : **654978829**  
Status : **Answered**  
Chosen Option : **3**

**Q.44** In a certain code language, 'NEVER LOOK BACK' is written as 'HNPNS AWWB KRZB'. How will 'VOCABLE' be written in the same code language?

- Ans**
- 1. NPWZRKA
  - 2. NWZRKAN
  - 3. PWZRKAN
  - 4. PWZKRAN

Question ID : **654978820**  
Status : **Answered**  
Chosen Option : **3**

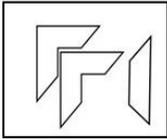
**Q.45** Identify the number that does NOT belong to the following series.

15, 16, 34, 105, 424, 2142, 12756

- Ans**
- 1. 34
  - 2. 105
  - 3. 16
  - 4. 2142

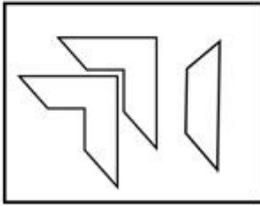
Question ID : **654978833**  
Status : **Not Answered**  
Chosen Option : **--**

**Q.46** Select the correct mirror image of the given figure when the mirror is placed to the right side of the figure.

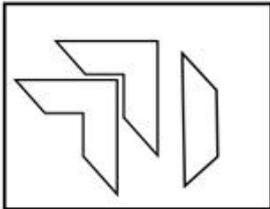


**Ans**

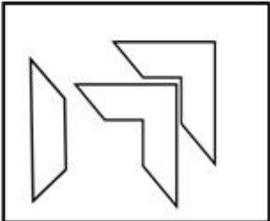
1.



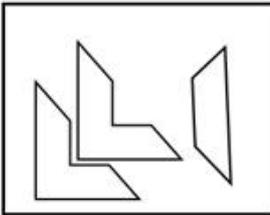
2.



3.



4.



Question ID : 654978847  
Status : Answered  
Chosen Option : 3

**Q.47** Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

ACCOMMODATE : CAEMOKQBCRC :: APPARENTLY : ?

**Ans**

1. CNRYTPRCWN

2. CNRYTCROWN

3. CNRYTRPNW

4. CNRYTCPRNW

Question ID : 654978818  
Status : Not Answered  
Chosen Option : --

Q.48 Select the option that can replace the question mark (?) in the following series.

$$\frac{1}{196}, \frac{1}{14}, ?, 14$$

Ans  1. 1

2.  $\frac{2}{3}$

3.  $\frac{1}{7}$

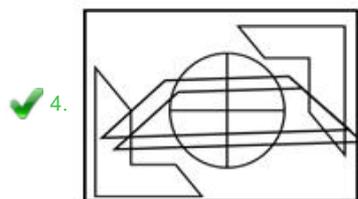
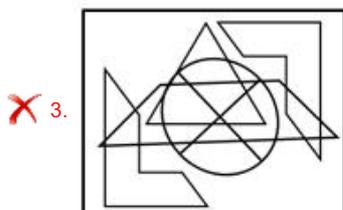
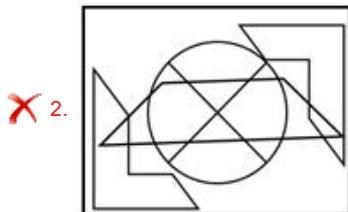
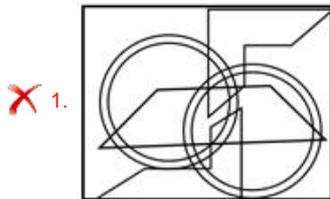
4.  $\frac{1}{2}$

Question ID : 654978831  
Status : Answered  
Chosen Option : 1

Q.49 Select the option in which the given figure is embedded. (Rotation is NOT allowed)



Ans



Question ID : 654978845  
Status : Answered  
Chosen Option : 4

**Q.50** Select the option that is related to the third term in the same way as the second term is related to the first term.

Cheetah : Fast : : Turtle : ?

- Ans**
- 1. Hard
  - 2. Fast
  - 3. Slow
  - 4. Tired

Question ID : **654978811**  
Status : **Answered**  
Chosen Option : **3**

Section : **General Awareness**

**Q.1** Which of the following is **INCORRECT** about modern periodic table?

- Ans**
- 1. Modern periodic table has 15 columns
  - 2. From left to right across a period, each element has one more proton than the element before it
  - 3. Columns of the modern table are called groups
  - 4. Rows of the modern periodic table are called periods

Question ID : **654978878**  
Status : **Answered**  
Chosen Option : **1**

**Q.2** Which of the following is **NOT** a Maharatna company?

- Ans**
- 1. Steel Authority of India Limited
  - 2. Hindustan Copper Limited
  - 3. Oil & Natural Gas Corporation Limited
  - 4. Bharat Heavy Electricals Limited

Question ID : **654978860**  
Status : **Answered**  
Chosen Option : **2**

**Q.3** Tata Steel Tour Championship 2019 is related to:

- Ans**
- 1. tennis
  - 2. golf
  - 3. hockey
  - 4. badminton

Question ID : **654978900**  
Status : **Not Answered**  
Chosen Option : **--**

**Q.4 The Central Industrial Security Force (CISF) is observing 2020 as the Year of:**

- Ans  1. Mobility  
 2. Plant Health  
 3. Connectivity  
 4. Prosperity

Question ID : **654978855**  
Status : **Not Answered**  
Chosen Option : --

**Q.5 Who was the President of India when Emergency was imposed in India for the third time in 1975?**

- Ans  1. Giani Zail Singh  
 2. Basappa Dasappa Jatti  
 3. Fakhruddin Ali Ahmed  
 4. Zakir Husain Khan

Question ID : **654978895**  
Status : **Not Answered**  
Chosen Option : --

**Q.6 Which of the following is NOT present in chlorophyll?**

- Ans  1. Magnesium  
 2. Nitrogen  
 3. Potassium  
 4. Carbon

Question ID : **654978864**  
Status : **Answered**  
Chosen Option : 4

**Q.7 For which state did the Asian Development Bank (ADB) and the Government of India in 2019 sign a \$206 million loan to develop water supply and sewerage infrastructure?**

- Ans  1. Maharashtra  
 2. Karnataka  
 3. Tamil Nadu  
 4. Rajasthan

Question ID : **654978859**  
Status : **Not Answered**  
Chosen Option : --

**Q.8 Which of the following is used as a bio-indicator of air pollution?**

- Ans  1. Fern  
 2. Cycas  
 3. Pseudomonas  
 4. Lichens

Question ID : **654978872**  
Status : **Answered**  
Chosen Option : 4

**Q.9 Which of the following is NOT a variety of rice?**

- Ans  1. Birsa Dhan-105  
 2. Karjat-2  
 3. Poovan  
 4. Ratnagiri-3

Question ID : **654978884**  
Status : **Not Answered**  
Chosen Option : --

**Q.10 Which of the following states has proposed a law named Disha Bill, 2019?**

- Ans  1. Maharashtra  
 2. Andhra Pradesh  
 3. Karnataka  
 4. Gujarat

Question ID : **654978853**  
Status : **Answered**  
Chosen Option : 2

**Q.11 Which of the following pairs is NOT correctly matched?**

- Ans  1. Article 114 - Appropriation Bill  
 2. Article 79 - Supreme Court  
 3. Article 280 - Finance Commission  
 4. Article 312 - All India Services

Question ID : **654978897**  
Status : **Answered**  
Chosen Option : 2

**Q.12 Who among the following is related to the Chittagong Armoury Raid?**

- Ans  1. Ashfaqulla Khan  
 2. VD Savarkar  
 3. Aurobindo Ghosh  
 4. Kalpana Datta

Question ID : **654978889**  
Status : **Not Answered**  
Chosen Option : --

**Q.13 Which Indian products are issued with eco-mark?**

- Ans  1. Products which are cost effective  
 2. Products which are not biodegradable  
 3. Product which are environment-friendly  
 4. Products which are free of adulteration

Question ID : **654978868**  
Status : **Answered**  
Chosen Option : 3

Q.14 Which of the following bodies is NOT mentioned in the Constitution?

- Ans
- 1. National Human Rights Commission
  - 2. National Commission for Scheduled Tribes
  - 3. Finance Commission
  - 4. Union Public Service Commission

Question ID : 654978898  
Status : Answered  
Chosen Option : 3

Q.15 The incident on 5 February, 1922, at Chauri Chaura was the main cause for the withdrawal of:

- Ans
- 1. Non-Cooperation Movement
  - 2. Rowlatt Satyagraha
  - 3. Civil Disobedience Movement
  - 4. Quit India Movement

Question ID : 654978888  
Status : Answered  
Chosen Option : 3

Q.16 Choose the INCORRECT match with respect to newspaper and its corresponding editor:

- Ans
- 1. Comrade - Bal Gangadhar Tilak
  - 2. Vande Mataram - Aurobindo Ghosh
  - 3. Sandhya - Brahmabandhab Upadhyay
  - 4. New India - Bipin Chandra Pal

Question ID : 654978891  
Status : Not Answered  
Chosen Option : --

Q.17 Who has the shortest tenure as a Chief Minister?

- Ans
- 1. Om Prakash Chautala
  - 2. Devendra Fadnavis
  - 3. BS Yeddyurappa
  - 4. Harish Rawat

Question ID : 654978894  
Status : Not Answered  
Chosen Option : --

Q.18 Which of the following parasites is the cause of the guinea-worm disease?

- Ans
- 1. Dracunculus medinensis
  - 2. Lymphatic filariasis
  - 3. Strongyloides stercoralis
  - 4. Gnathostomiasis

Question ID : 654978871  
Status : Not Answered  
Chosen Option : --

**Q.19 Choose the INCORRECT pair with respect to wetland and their location?**

- Ans
- 1. Ropar Lake - Punjab
  - 2. Sambhar Lake - Rajasthan
  - 3. Deepor Beel - Assam
  - 4. Harike Lake - Kerala

Question ID : **654978886**  
Status : **Not Answered**  
Chosen Option : --

**Q.20 Where was the 11th BRICS conference held on 13th–14th November, 2019?**

- Ans
- 1. Paris
  - 2. Delhi
  - 3. Moscow
  - 4. Brasilia

Question ID : **654978854**  
Status : **Answered**  
Chosen Option : **3**

**Q.21 Which animal has the scientific name Pterois Volitans?**

- Ans
- 1. Cuttlefish
  - 2. Red Lionfish
  - 3. Starfish
  - 4. Devilfish

Question ID : **654978863**  
Status : **Not Answered**  
Chosen Option : --

**Q.22 Which of the following is the SI unit of pressure?**

- Ans
- 1. Parsec
  - 2. Lumen
  - 3. Candela
  - 4. Pascal

Question ID : **654978866**  
Status : **Answered**  
Chosen Option : **4**

**Q.23 Choose the INCORRECT statement with respect to soils of India.**

- Ans
- 1. The red soil colour is caused by aluminium compounds
  - 2. Regur soil is most suitable for the cultivation of cotton
  - 3. Black soil is also called Regur soil
  - 4. Laterite soil is prone to intensive leaching due to rain

Question ID : **654978885**  
Status : **Answered**  
Chosen Option : **2**

Q.24 Who discovered the first antibiotic 'penicillin'?

- Ans
- 1. James Watson
  - 2. Alexander Fleming
  - 3. Francis Crick
  - 4. Henry Moseley

Question ID : 654978873  
Status : Answered  
Chosen Option : 2

Q.25 Which of the following is NOT a hormone secreted by Islets of Langerhans?

- Ans
- 1. Somatostatin
  - 2. Glucocorticoids
  - 3. Glucagon
  - 4. Insulin

Question ID : 654978876  
Status : Answered  
Chosen Option : 4

Q.26 Cuttlefish belongs to phylum \_\_\_\_\_.

- Ans
- 1. Echinodermata
  - 2. Mollusca
  - 3. Annelida
  - 4. Pisces

Question ID : 654978870  
Status : Answered  
Chosen Option : 4

Q.27 Who won the 26th Annual Crystal Award for spreading awareness about the importance of mental health?

- Ans
- 1. Dia Mirza
  - 2. Priyanka Chopra
  - 3. Akshay Kumar
  - 4. Deepika Padukone

Question ID : 654978893  
Status : Not Answered  
Chosen Option : --

Q.28 On the basis of the recommendation of which commission/committee was the state of Haryana formed?

- Ans
- 1. Dhar Committee
  - 2. Fazl Commission
  - 3. JVP Committee
  - 4. Sardar Hukam Singh Parliamentary Committee

Question ID : 654978896  
Status : Not Answered  
Chosen Option : --

**Q.29 Water gas is a mixture of:**

- Ans  1. carbon monoxide and hydrogen  
 2. carbon dioxide and methane  
 3. carbon dioxide and hydrogen  
 4. carbon monoxide and nitrogen

Question ID : **654978874**  
Status : **Answered**  
Chosen Option : **3**

**Q.30 Saline soils are also known as:**

- Ans  1. Bhangar soils  
 2. Usara soils  
 3. Cotton soil  
 4. Regur soils

Question ID : **654978881**  
Status : **Not Answered**  
Chosen Option : **--**

**Q.31 Which Inert gas is used in cancer treatment?**

- Ans  1. Krypton  
 2. Radon  
 3. Helium  
 4. Argon

Question ID : **654978862**  
Status : **Answered**  
Chosen Option : **2**

**Q.32 Who launched Surakshit Matritva Aashwasan scheme on 10 October 2019?**

- Ans  1. Narendra Modi  
 2. Amit Shah  
 3. Smriti Irani  
 4. Dr. Harsh Vardhan

Question ID : **654978857**  
Status : **Answered**  
Chosen Option : **1**

**Q.33 What does 'P' stand for in HTTPS, an expression commonly found in web addresses?**

- Ans  1. Processor  
 2. Plotter  
 3. Protocol  
 4. Point

Question ID : **654978851**  
Status : **Answered**  
Chosen Option : **3**

Q.34 Which of the following nitrogen base is NOT related to DNA?

- Ans
- 1. Thymine
  - 2. Uracil
  - 3. Adenine
  - 4. Guanine

Question ID : 654978865  
Status : Answered  
Chosen Option : 1

Q.35 The first human heart transplant was done by:

- Ans
- 1. Christiaan Barnard
  - 2. Frederick Gowland Hopkins
  - 3. William Harvey
  - 4. Leeuwenhoek

Question ID : 654978869  
Status : Answered  
Chosen Option : 1

Q.36 Which of the following is NOT correct about Toluene?

- Ans
- 1. It is used for the production of Saccharin.
  - 2. It is used for the production of trinitrotoluene (TNT).
  - 3. It is also known as Toluol.
  - 4. It was first obtained from Aniline.

Question ID : 654978875  
Status : Answered  
Chosen Option : 1

Q.37 What is the base of the hexadecimal number system?

- Ans
- 1. 10
  - 2. 8
  - 3. 16
  - 4. 2

Question ID : 654978852  
Status : Not Answered  
Chosen Option : --

Q.38 The union territory of Puducherry shares boundaries with:

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

Question ID : 654978883  
Status : Answered  
Chosen Option : 1

**Q.39 Choose the correct statement:**

- Ans  1. Desert National Park is located in Rajasthan.  
 2. Gir Forest National Park is located in Maharashtra.  
 3. Manas National Park is located in Madhya Pradesh.  
 4. Khangchendzonga National Park is located in Arunachal Pradesh.

Question ID : **654978882**  
Status : **Answered**  
Chosen Option : **3**

**Q.40 Heat generated in a resistive wire is:**

- Ans  1. proportional to the square of the time of current flow  
 2. proportional to the square of the current flowing in the wire  
 3. proportional to the square of the resistance of the wire  
 4. proportional to the cube of the resistance of the wire

Question ID : **654978879**  
Status : **Answered**  
Chosen Option : **2**

**Q.41 Salem Steel Plant is located in:**

- Ans  1. Tamil Nadu  
 2. Odisha  
 3. Maharashtra  
 4. Jharkhand

Question ID : **654978880**  
Status : **Answered**  
Chosen Option : **4**

**Q.42 Muhammad Bin Tughlaq changed his capital from Delhi to:**

- Ans  1. Lahore  
 2. Munger  
 3. Agra  
 4. Daulatabad

Question ID : **654978887**  
Status : **Answered**  
Chosen Option : **3**

**Q.43 Choose the correct option with respect to the Round Table conference held in the 1930s.**

- Ans  1. MK Gandhi took part in the third Round Table conference  
 2. Lord Reading was the Viceroy when the first Round Table Conference was held  
 3. The Congress participated in all three conferences  
 4. Dr. BR Ambedkar participated in all three conferences

Question ID : **654978890**  
Status : **Not Answered**  
Chosen Option : **--**

**Q.44 Where was the Military Literature Festival 2019 held?**

- Ans
- 1. Gurugram
  - 2. Chandigarh
  - 3. Delhi
  - 4. Faridabad

Question ID : **654978856**  
Status : **Not Answered**  
Chosen Option : --

**Q.45 Under the Pradhan Mantri Shram Yogi Mandhan scheme, the minimum monthly pension for each subscriber is:**

- Ans
- 1. ₹2,000
  - 2. ₹4,000
  - 3. ₹3,000
  - 4. ₹5,000

Question ID : **654978861**  
Status : **Not Answered**  
Chosen Option : --

**Q.46 Which start up has become the first Indian start up to win the 'Space Oscars' award presented by the European Space Agency?**

- Ans
- 1. Hashable
  - 2. iRobot
  - 3. Cloudsnap
  - 4. Blue Sky Analytics

Question ID : **654978858**  
Status : **Answered**  
Chosen Option : 4

**Q.47 What causes Minamata disease?**

- Ans
- 1. Deficiency of vitamin D
  - 2. Mercury poisoning
  - 3. Viral infection
  - 4. Deformed gene

Question ID : **654978867**  
Status : **Answered**  
Chosen Option : 2

**Q.48 Which of the following is NOT correctly matched about bone conditions?**

- Ans
- 1. Fracture - Broken bones of various types
  - 2. Multiple myeloma - Cancer of the plasma cells in bone marrow
  - 3. Rickets - A child's growing bones fail to develop due to a lack of vitamin D
  - 4. Osteoporosis - Infection of the bone

Question ID : **654978877**  
Status : **Answered**  
Chosen Option : 2

Q.49 Where was the Junior National Equestrian Championship 2019 held?

- Ans
- 1. Delhi
  - 2. Pune
  - 3. Chandigarh
  - 4. Bengaluru

Question ID : 654978899  
Status : Not Answered  
Chosen Option : --

Q.50 Who launched his autobiography named as 'Mind Master'?

- Ans
- 1. Chetan Bhagat
  - 2. Yuvraj Singh
  - 3. Rahul Dravid
  - 4. Viswanathan Anand

Question ID : 654978892  
Status : Not Answered  
Chosen Option : --

Section : General Engineering Mechanical

Q.1 Flooding of a river is an example of \_\_\_\_\_ flow.

- Ans
- 1. steady and uniform
  - 2. steady and non-uniform
  - 3. unsteady and non-uniform
  - 4. unsteady and uniform

Question ID : 654978971  
Status : Answered  
Chosen Option : 3

Q.2 In hydraulic coupling, slip is around \_\_\_\_\_ for motors having low to moderate locked rotor torque.

- Ans
- 1. 6-7%
  - 2. 8-10%
  - 3. 2-3%
  - 4. 12-15%

Question ID : 654978990  
Status : Not Answered  
Chosen Option : --

Q.3 A water cooling system consists of a fan used to draw \_\_\_\_\_.

- Ans
- 1. coolant
  - 2. water from the pump
  - 3. lubrication oil
  - 4. air through the radiator

Question ID : 654978929  
Status : Answered  
Chosen Option : 4

Q.4 Volumetric flow rate of river waters is measured directly using \_\_\_\_\_.

- Ans
- 1. ultrasonic flow meters
  - 2. weirs
  - 3. vane meter
  - 4. ultraviolet flow meters

Question ID : 654978986  
Status : Answered  
Chosen Option : 2

Q.5 In \_\_\_\_\_ process, the cross-section of the bar is increased at the cost of reducing its length.

- Ans
- 1. Spinning
  - 2. Reaming
  - 3. Drawing down
  - 4. Upsetting

Question ID : 654978999  
Status : Answered  
Chosen Option : 4

Q.6 \_\_\_\_\_ is a type of anti-frictional bearing.

- Ans
- 1. Pedestal bearing
  - 2. Hydrostatic bearing
  - 3. Collar bearing
  - 4. Needle bearing

Question ID : 654978901  
Status : Answered  
Chosen Option : 1

Q.7 The process of cooling the refrigerant in vapour compression refrigeration system, known as sub-cooling, is done before :

- Ans
- 1. compression
  - 2. condensation
  - 3. throttling
  - 4. evaporation

Question ID : 654978960  
Status : Answered  
Chosen Option : 3

Q.8 Which of the following statements about a principal plane is true?

- Ans
- 1. Shear stress can have any value.
  - 2. It has no normal stress.
  - 3. It has maximum shear stress.
  - 4. No shear stress is present.

Question ID : 654978906  
Status : Answered  
Chosen Option : 1

Q.9 \_\_\_\_\_ process induces compressive residual stresses on a component to nullify the tensile residual stresses within a steel structure.

- Ans
- 1. Welding
  - 2. Brazing
  - 3. Shot peening
  - 4. Heat treatment

Question ID : 6549781000  
Status : Answered  
Chosen Option : 4

Q.10 Which of the following processes generally does NOT occur during the heat treatment of steels?

- Ans
- 1. Grain growth
  - 2. Recrystallisation
  - 3. Recovery
  - 4. Rework

Question ID : 654978998  
Status : Answered  
Chosen Option : 4

Q.11 During the starting of a centrifugal pump, the delivery valve is \_\_\_\_\_.

- Ans
- 1. fully open
  - 2. fully closed
  - 3. slightly open
  - 4. half-open

Question ID : 654978995  
Status : Answered  
Chosen Option : 3

Q.12 \_\_\_\_\_ technique uses wear particles analysis using lubricating oil for predicting the impending failures of machine components.

- Ans
- 1. Spectrography
  - 2. Waveform analysis
  - 3. Envelope analysis
  - 4. Ferrography

Question ID : 654978931  
Status : Answered  
Chosen Option : 1

Q.13 The range of coefficient of discharge for a Venturimeter is generally \_\_\_\_\_.

- Ans
- 1. 0.7-0.8
  - 2. 0.6-0.7
  - 3. 0.5-0.6
  - 4. 0.95-0.97

Question ID : 654978984  
Status : Answered  
Chosen Option : 4

Q.14 The \_\_\_\_\_ part of the vapour compression cycle produces refrigeration effect.

- Ans
- 1. condenser
  - 2. compressor
  - 3. throttle valve
  - 4. evaporator

Question ID : 654978954  
Status : Answered  
Chosen Option : 3

Q.15 In a steam nozzle, heat supplied to steam during the expansion process equals \_\_\_\_\_.

- Ans
- 1. zero
  - 2. heat drop
  - 3. work done
  - 4. change in kinetic energy

Question ID : 654978962  
Status : Not Answered  
Chosen Option : --

Q.16 Heat rejection in vapour absorption refrigerator occurs in:

- Ans
- 1. generator only
  - 2. condenser and absorber
  - 3. absorber only
  - 4. condenser only

Question ID : 654978955  
Status : Answered  
Chosen Option : 1

Q.17 In a Li-Br water absorption cycle \_\_\_\_\_ is used as a refrigerant.

- Ans
- 1. ammonia
  - 2. lithium-bromide
  - 3. water
  - 4. air

Question ID : 654978957  
Status : Answered  
Chosen Option : 3

Q.18 The degrees of freedom for a pure substance at the triple point is \_\_\_\_.

- Ans
- 1. 2
  - 2. 1
  - 3. 0
  - 4. 3

Question ID : 654978910  
Status : Answered  
Chosen Option : 3

Q.19 The octane rating is a measure of the ability of the \_\_\_\_\_ to resist detonation during combustion.

- Ans
- 1. cylinder
  - 2. air mixture
  - 3. piston
  - 4. fuel

Question ID : 654978926  
Status : Answered  
Chosen Option : 4

Q.20 An after-cooler provided in reciprocating compressors performs the function of \_\_\_\_\_

- Ans
- 1. reducing the volume of compressed air
  - 2. reducing temperature of compressed air
  - 3. removal of impurities from compressed air
  - 4. removal of moisture from compressed air

Question ID : 654978950  
Status : Not Answered  
Chosen Option : --

Q.21 Which of the following cycles incorporates two isothermal processes?

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

Question ID : 654978921  
Status : Answered  
Chosen Option : 1

Q.22 \_\_\_\_\_ is a gas-power cycle which consists of two isothermals connected by two constant volume processes.

- Ans
- 1. Atkinson cycle
  - 2. Brayton cycle
  - 3. Ericsson cycle
  - 4. Stirling cycle

Question ID : 654978922  
Status : Not Answered  
Chosen Option : --

Q.23 Which of the following metals contains chromium as its major alloying element?

- Ans
- 1. Copper
  - 2. Stainless steel
  - 3. Titanium
  - 4. Carbon steels

Question ID : 654978996  
Status : Answered  
Chosen Option : 2

Q.24 Which of the following instruments is used for measuring ultra-high vacuum?

- Ans
- 1. Manometer
  - 2. McLeod gauge
  - 3. Cathode ray oscilloscope
  - 4. Bourdon tube

Question ID : 654978973  
Status : Answered  
Chosen Option : 2

Q.25 The anti-knock value of a gasoline engine is defined in terms of a/an \_\_\_\_\_.

- Ans
- 1. Crook number
  - 2. Octane number
  - 3. Cetane number
  - 4. Knock number

Question ID : 654978927  
Status : Answered  
Chosen Option : 2

Q.26 Inside a boiler surface, scales are formed due to the presence of \_\_\_\_\_ in the boiler feed water.

- Ans
- 1. insoluble compounds
  - 2. oils
  - 3. dissolved gases
  - 4. Ca and Mg salts

Question ID : 654978935  
Status : Answered  
Chosen Option : 4

Q.27 A car has a four-stroke in-line diesel engine whose compression ratio is 21 : 1 and expansion ratio is 10 : 1. What is the cut off ratio?

- Ans
- 1. 2.8
  - 2. 2.1
  - 3. 3.2
  - 4. 210

Question ID : 654978925  
Status : Answered  
Chosen Option : 2

Q.28 \_\_\_\_\_ boiler involves circulation of water by natural convention.

- Ans
- 1. Velox
  - 2. Babcock–Wilcox
  - 3. LaMont
  - 4. Benson

Question ID : 654978941  
Status : Answered  
Chosen Option : 2

Q.29 \_\_\_\_\_ use(s) air refrigeration cycle.

- Ans
- 1. Cryogenic chambers
  - 2. Aircraft air-conditioning system
  - 3. Commercial refrigeration
  - 4. Gas chambers

Question ID : 654978917  
Status : Answered  
Chosen Option : 3

Q.30 Multi-stage centrifugal pumps are employed to obtain \_\_\_\_.

- Ans
- 1. pumping of viscous fluids
  - 2. higher discharge
  - 3. higher head
  - 4. higher head and discharge

Question ID : 654978993  
Status : Answered  
Chosen Option : 4

Q.31 If the back pressure is low enough and the throat is sonic, the Mach number is more than 1 in a/an \_\_\_\_\_ section during flow in a convergent-divergent nozzle.

- Ans
- 1. entry
  - 2. converging
  - 3. throat
  - 4. diverging

Question ID : 654978963  
Status : Answered  
Chosen Option : 2

Q.32 Which of the following devices is NOT used to measure flow rate or velocity of fluid?

- Ans
- 1. Current and turbine meter
  - 2. Wire anemometer
  - 3. Pitot tube
  - 4. Piezometer

Question ID : 654978968  
Status : Answered  
Chosen Option : 2

Q.33 \_\_\_\_\_ boiler has a unique characteristic of NOT having a steam separating drum.

- Ans
- 1. LaMont
  - 2. Loeffler
  - 3. Benson
  - 4. Velox

Question ID : 654978943  
Status : Not Answered  
Chosen Option : --

Q.34 For a circular shaft under torsion, shear stress values at the centre of the shaft is \_\_\_\_\_.

- Ans
- 1. zero
  - 2. unity
  - 3. minimum
  - 4. maximum

Question ID : 654978908  
Status : Answered  
Chosen Option : 1

Q.35 For a steam power plant, \_\_\_\_\_ cycle is recommended.

- Ans
- 1. Otto
  - 2. Rankine
  - 3. Brayton
  - 4. Carnot

Question ID : 654978920  
Status : Answered  
Chosen Option : 2

Q.36 Which of the following factors does NOT affect the buckling load?

- Ans
- 1. Slenderness ratio
  - 2. Modulus of elasticity
  - 3. Area moment of inertia
  - 4. Area of cross-section

Question ID : 654978907  
Status : Answered  
Chosen Option : 2

Q.37 Cylinder and piston type flow meters are of \_\_\_\_\_ type.

- Ans
- 1. variable area
  - 2. variable area variable head
  - 3. positive displacement
  - 4. variable head

Question ID : 654978988  
Status : Answered  
Chosen Option : 4

Q.38 \_\_\_\_\_ process is NOT involved in Rankine cycle.

- Ans
- 1. Isentropic expansion
  - 2. Constant pressure heat addition
  - 3. Constant volume heat addition
  - 4. Isentropic compression

Question ID : 654978933  
Status : Answered  
Chosen Option : 2

Q.39 The Pressure-Volume diagram of an ideal reciprocating air compressor consists of \_\_\_\_\_ isobaric, \_\_\_\_\_ adiabatic and \_\_\_\_\_ constant volume processes.

- Ans
- 1. one, two, two
  - 2. one, two, one
  - 3. two, two, zero
  - 4. two, one, one

Question ID : 654978951  
Status : Not Answered  
Chosen Option : --

Q.40 \_\_\_\_\_ involves breaking of fuel into fine particles.

- Ans
- 1. Fine atomisation of fuel
  - 2. Mixing of fuel and air
  - 3. Excess supply of air
  - 4. Air supply at increased pressure

Question ID : 654978923  
Status : Answered  
Chosen Option : 1

Q.41 Mitre gears are generally used for \_\_\_\_\_.

- Ans
- 1. change in direction without effecting speed
  - 2. minimum backlash
  - 3. minimum axial thrust
  - 4. speed reduction

Question ID : 654978904  
Status : Answered  
Chosen Option : 1

Q.42 Refrigerant exits as a high-pressure liquid from the \_\_\_\_\_ in a vapour compression system.

- Ans
- 1. condenser
  - 2. compressor
  - 3. evaporator
  - 4. throttle valve

Question ID : 654978959  
Status : Answered  
Chosen Option : 2

Q.43 \_\_\_\_\_ measures heat loss from a heated wire to measure pressure.

- Ans
- 1. Barometer
  - 2. Pirani gauge
  - 3. Orifice meter
  - 4. Manometer

Question ID : 654978974  
Status : Answered  
Chosen Option : 2

Q.44 Stretching tendency of liquid surfaces is known as \_\_\_\_\_.

- Ans
- 1. Surface tension
  - 2. Cohesion
  - 3. Adhesion
  - 4. Cavitation

Question ID : 654978964  
Status : Answered  
Chosen Option : 1

Q.45 Which of the following is NOT a type of safety valve used for boilers?

- Ans
- 1. Dead-weight type
  - 2. Sliding type
  - 3. Lever type
  - 4. Spring type

Question ID : 654978944  
Status : Not Answered  
Chosen Option : --

Q.46 An increase in the efficiency of Rankine cycle can be expected with \_\_\_\_\_.

- Ans
- 1. decrease in exhaust pressure
  - 2. increase in temperature of heat rejection
  - 3. increase in exhaust pressure
  - 4. decrease in temperature of heat addition

Question ID : 654978934  
Status : Not Answered  
Chosen Option : --

Q.47 For a given system, if heat is denoted by 'Q' and work is denoted by 'w', the cyclic integral of  $(dQ - dw)$  for a closed system will be:

- Ans
- 1. positive
  - 2. unpredictable
  - 3. negative
  - 4. zero

Question ID : 654978916  
Status : Answered  
Chosen Option : 4

Q.48 Which of the following processes reduces the residual stresses within a steel structure?

- Ans
- 1. Cold forming
  - 2. Heat treatment
  - 3. Welding
  - 4. Hot forming

Question ID : 654978997  
Status : Answered  
Chosen Option : 2

Q.49 Identify the positive displacement type of flow meter from the following.

- Ans
- 1. Constant area variable head
  - 2. Variable area variable head
  - 3. Constant head variable area
  - 4. Oval gear type

Question ID : 654978987  
Status : Answered  
Chosen Option : 1

Q.50 Which of the following theories is best applied to brittle materials?

- Ans
- 1. Maximum strain energy theory
  - 2. Maximum principle stress theory
  - 3. Maximum shear stress theory
  - 4. Minimum principle strain theory

Question ID : 654978909  
Status : Answered  
Chosen Option : 2

Q.51 The degree of reaction of a turbine is defined as the ratio of \_\_\_\_\_ drop to total energy transfer.

- Ans
- 1. static pressure
  - 2. velocity energy
  - 3. dynamic energy
  - 4. kinetic energy

Question ID : 654978991  
Status : Answered  
Chosen Option : 4

Q.52 Which of the following is NOT applicable to fire-tube locomotive boilers?

- Ans
- 1. They are placed horizontally
  - 2. They are externally fired
  - 3. They are mobile in nature
  - 4. They are multi-tubular

Question ID : 654978940  
Status : Answered  
Chosen Option : 3

Q.53 In a vapour compression cycle, the refrigerant exists in a superheated vapour state \_\_\_\_\_.

- Ans
- 1. after leaving the evaporator
  - 2. at the exit of the compressor
  - 3. after passing through the condenser
  - 4. after leaving the expansion valve

Question ID : 654978953  
Status : Answered  
Chosen Option : 3

Q.54 Single-stage piston compressors are used to compress air up to pressure of approximately \_\_\_\_\_ bar.

- Ans
- 1. 100
  - 2. 50
  - 3. 150
  - 4. 5

Question ID : 654978947  
Status : Not Answered  
Chosen Option : --

Q.55 Intake air filters are provided in compressors primarily to \_\_\_\_\_ from the suction air.

- Ans
- 1. remove only dirt
  - 2. remove dirt as well as reduce the pressure
  - 3. remove dirt and moisture
  - 4. remove dirt and regulate the temperature

Question ID : 654978949  
Status : Answered  
Chosen Option : 1

Q.56 Shear stress for a fluid at rest is \_\_\_\_\_.

- Ans
- 1. positive
  - 2. negative
  - 3. unpredictable
  - 4. zero

Question ID : 654978978  
Status : Answered  
Chosen Option : 4

Q.57 In a laminar flow, \_\_\_\_\_ can be applied.

- Ans
- 1. Snell's law
  - 2. Fresnel law
  - 3. Grashof's law
  - 4. Newton's law of viscosity

Question ID : 654978977  
Status : Answered  
Chosen Option : 4

Q.58 Over a flat plate, thickness of turbulent boundary layer at a distance  $x$  from leading edge is \_\_\_\_\_.

- Ans
- 1.  $X^{4/5}$
  - 2.  $X^{5/4}$
  - 3.  $X^{2/5}$
  - 4.  $X^{3/4}$

Question ID : 654978979  
Status : Not Answered  
Chosen Option : --

Q.59 For an orifice meter, an orifice of diameter  $d$  is fitted in a pipe of diameter  $D$ . The coefficient of discharge is a function of \_\_\_\_\_.

- Ans
- 1.  $d/D$  and Reynolds' number
  - 2.  $d/D$  and Grashof number
  - 3. Reynolds' number
  - 4. Grashof number

Question ID : 654978985  
Status : Not Answered  
Chosen Option : --

Q.60 \_\_\_\_\_ thermodynamic property remains constant in a throttling process.

- Ans
- 1. Entropy
  - 2. Enthalpy
  - 3. Energy
  - 4. Specific energy

Question ID : 654978915  
Status : Answered  
Chosen Option : 2

Q.61 \_\_\_\_\_ fluid is incompressible.

- Ans
- 1. Newtonian
  - 2. Non-Newtonian
  - 3. Real
  - 4. Ideal

Question ID : 654978982  
Status : Answered  
Chosen Option : 3

Q.62 \_\_\_\_\_ occurs when vapour pressure is less than pressure above a liquid surface at a given temperature.

- Ans
- 1. Freezing
  - 2. Condensation
  - 3. Gauging
  - 4. Boiling

Question ID : 654978970  
Status : Answered  
Chosen Option : 4

Q.63 For an isolated system, which of the following holds true?

- Ans
- 1. Only mass crosses the boundary.
  - 2. Mass or energy does not cross the boundaries.
  - 3. Only energy crosses the boundary.
  - 4. Mass and energy both cross the boundaries.

Question ID : 654978913  
Status : Answered  
Chosen Option : 2

Q.64 Due to the turbidity of the water in boiler feed water, \_\_\_\_\_ is caused.

- Ans
- 1. cracking
  - 2. sludge
  - 3. embrittlement
  - 4. corrosion

Question ID : 654978937  
Status : Not Answered  
Chosen Option : --

Q.65 What is the use of a Hermetic sealed compressor?

- Ans
- 1.

It is used in domestic refrigerators to prevent leakages of refrigerant.

- 2.

It is used to supply air at constant low volume in high pressure applications such as in industrial operations.

- 3.

It is used to supply air at low pressure in high volume applications such as air curtains.

- 4. It is used in aircraft engines to supply air to the cabin.

Question ID : 654978956  
Status : Answered  
Chosen Option : 1

Q.66 The value of viscosity of an ideal fluid is \_\_\_\_\_.

- Ans
- 1. 0
  - 2. >2
  - 3. 1
  - 4. >1

Question ID : 654978980  
Status : Answered  
Chosen Option : 1

Q.67 The vapour compression refrigeration cycle operates on reversed \_\_\_\_\_ cycle.

- Ans
- 1. Rankine
  - 2. Atkinson
  - 3. Ericsson
  - 4. Joule's

Question ID : 654978952  
Status : Answered  
Chosen Option : 1

Q.68 Density of an ideal fluid is always \_\_\_\_\_.

- Ans
- 1. zero
  - 2. increasing
  - 3. decreasing
  - 4. constant

Question ID : 654978981  
Status : Answered  
Chosen Option : 4

Q.69 The upward force on a body immersed in water, because of the fluid surrounding it, is known as \_\_\_\_\_.

- Ans
- 1. Archimedes' Force
  - 2. Gravitation Force
  - 3. Force of Viscosity
  - 4. Buoyancy Force

Question ID : 654978975  
Status : Answered  
Chosen Option : 4

Q.70 Lancashire boiler can also be classified as a \_\_\_\_\_ pass boiler.

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

Question ID : 654978939  
Status : Answered  
Chosen Option : 3

Q.71 Thermostat comes into operation at temperatures of about \_\_\_\_\_ in automobile water cooling systems.

- Ans
- 1. 20 °C
  - 2. 80 °C
  - 3. 60 °C
  - 4. 40 °C

Question ID : 654978930  
Status : Answered  
Chosen Option : 4

Q.72 While running through a bend a bicycle remains stable due to \_\_\_\_\_.

- Ans
- 1. reaction action
  - 2. centrifugal action
  - 3. curvature action
  - 4. gyroscopic action

Question ID : 654978903  
Status : Answered  
Chosen Option : 4

Q.73 Specific energy is \_\_\_\_\_ at critical depth for a given discharge in a channel.

- Ans
- 1. zero
  - 2. minimum
  - 3. unpredictable
  - 4. maximum

Question ID : 654978976  
Status : Answered  
Chosen Option : 4

Q.74 U type of configuration is possible in \_\_\_\_\_ for pressure measurement.

- Ans
- 1. Bourdon tube
  - 2. Pirani gauge
  - 3. Manometer
  - 4. Orifice meter

Question ID : 654978972  
Status : Answered  
Chosen Option : 3

Q.75 The approximate percentage of carbon in bituminous coal used as a fuel for boiler is \_\_\_\_\_.

- Ans
- 1. 20 - 30%
  - 2. 65 - 80%
  - 3. 40 - 50%
  - 4. 10 - 20%

Question ID : 654978936  
Status : Not Answered  
Chosen Option : --

Q.76 Which of the following forces does NOT act on fluid which is at rest?

- Ans  1. Viscous  
 2. Gravity  
 3. Surface tension  
 4. Hydrostatic

Question ID : 654978966  
Status : Answered  
Chosen Option : 4

Q.77 For a simply supported beam, the bending moment at the support is \_\_\_\_\_ kNm.

- Ans  1.  $>1$   
 2.  $<1$   
 3. 1  
 4. 0

Question ID : 654978905  
Status : Answered  
Chosen Option : 2

Q.78 The increase in entropy of a system represents \_\_\_\_\_ of energy.

- Ans  1. preservation  
 2. generation  
 3. degradation  
 4. upgradation

Question ID : 654978919  
Status : Answered  
Chosen Option : 3

Q.79 While classifying the boilers into fire-tube and water-tube, mark out the odd one out of the options given below.

- Ans  1. Stirling boiler  
 2. Locomotive boiler  
 3. Lancashire boiler  
 4. Cochran boiler

Question ID : 654978938  
Status : Answered  
Chosen Option : 4

Q.80 When fluid is flowing through a duct, the local velocity at a point can be measured by a \_\_\_\_\_.

- Ans  1. flow nozzle  
 2. current meter  
 3. vane anemometer  
 4. pitot-static tube

Question ID : 654978983  
Status : Answered  
Chosen Option : 4

Q.81 \_\_\_\_\_ gives an idea about the pressure in a static fluid.

- Ans
- 1. Pascal's law
  - 2. Weber's law
  - 3. Newton's law
  - 4. Grashof's law

Question ID : 654978969  
Status : Answered  
Chosen Option : 1

Q.82 The phase where any substance loses the distinction between liquid and vapour is called \_\_\_\_\_.

- Ans
- 1. Crystal point
  - 2. Ignition point
  - 3. Critical point
  - 4. Dew point

Question ID : 654978911  
Status : Answered  
Chosen Option : 3

Q.83 \_\_\_\_\_ CANNOT be counted as a boiler mounting.

- Ans
- 1. Blow-off cock
  - 2. Fusible plug
  - 3. Stop valve
  - 4. Feed water pump

Question ID : 654978945  
Status : Answered  
Chosen Option : 4

Q.84 Which type of pump is commonly used nowadays to force water into the boiler?

- Ans
- 1. Centrifugal pump
  - 2. Rotary pump
  - 3. Single-stage reciprocating pump
  - 4. Duplex pump

Question ID : 654978946  
Status : Not Answered  
Chosen Option : --

Q.85 \_\_\_\_\_ is the presentation of the anti-knock value of diesel fuel.

- Ans
- 1. Fuel number
  - 2. Diesel constant
  - 3. Cetane number
  - 4. Octane number

Question ID : 654978928  
Status : Answered  
Chosen Option : 3

Q.86 Milk, blood and clay are examples of \_\_\_\_\_ fluid.

- Ans
- 1. Pseudo-plastic
  - 2. Perfect
  - 3. Ideal
  - 4. Newtonian

Question ID : 654978967  
Status : Answered  
Chosen Option : 1

Q.87 \_\_\_\_\_ boiler is capable of generating a small quantity of steam per unit time at high pressure.

- Ans
- 1. Lancashire
  - 2. Babcock–Wilcox
  - 3. Locomotive
  - 4. Scottish marine

Question ID : 654978942  
Status : Not Answered  
Chosen Option : --

Q.88 The triple point of water is at \_\_\_\_\_ mm of Hg.

- Ans
- 1. 2.58
  - 2. 4.58
  - 3. 3.28
  - 4. 3.35

Question ID : 654978912  
Status : Not Answered  
Chosen Option : --

Q.89 \_\_\_\_\_ is closely related to working of hydraulic turbines.

- Ans
- 1. Faraday's law
  - 2. Charles' law
  - 3. Newton's second law
  - 4. Bragg's law

Question ID : 654978989  
Status : Answered  
Chosen Option : 3

Q.90 Oil spreads on the surface of water because \_\_\_\_\_.

- Ans
- 1. oil has low vapour pressure
  - 2. oil is heavier than water
  - 3. of surface tension effect
  - 4. oil is lighter than water

Question ID : 654978965  
Status : Answered  
Chosen Option : 4

Q.91 Expansion of steam in Rankine cycle is assumed to be \_\_\_\_\_.

- Ans
- 1. isothermal
  - 2. isentropic
  - 3. hyperbolic
  - 4. polytropic

Question ID : 654978932  
Status : Not Answered  
Chosen Option : --

Q.92 If suction, compression and delivery of the air takes place on one side of the piston only then the compressor is known as:

- Ans
- 1. single stage
  - 2. multistage
  - 3. double acting
  - 4. single acting

Question ID : 654978948  
Status : Not Answered  
Chosen Option : --

Q.93 The steam expansion process in a nozzle can be approximated as a/an \_\_\_\_\_ process.

- Ans
- 1. adiabatic
  - 2. throttling
  - 3. polytropic
  - 4. free expansion

Question ID : 654978961  
Status : Not Answered  
Chosen Option : --

Q.94 \_\_\_\_\_ Irreversibility is due to the friction in the system.

- Ans
- 1. Chemical
  - 2. Frictional
  - 3. Internal
  - 4. Rotary

Question ID : 654978918  
Status : Answered  
Chosen Option : 3

Q.95 For an unsteady operation and \_\_\_\_\_ hydraulic transmission through fluid coupling is suitable.

- Ans
- 1. low starting torque
  - 2. high starting speed
  - 3. increasing torque
  - 4. increasing speed

Question ID : 654978992  
Status : Not Answered  
Chosen Option : --

Q.96 Hardness is induced within the gear teeth to avoid \_\_\_\_\_.

- Ans
- 1. abrasion
  - 2. wear
  - 3. pitting
  - 4. meshing

Question ID : 654978902  
Status : Answered  
Chosen Option : 2

Q.97 \_\_\_\_\_ property is stated by first law of thermodynamics.

- Ans
- 1. Internal energy
  - 2. Entropy
  - 3. Temperature
  - 4. Pressure

Question ID : 654978914  
Status : Answered  
Chosen Option : 1

Q.98 Liquid enters the centrifugal pump \_\_\_\_\_.

- Ans
- 1. from the centre
  - 2. from the bottom
  - 3. radially
  - 4. from the top

Question ID : 654978994  
Status : Answered  
Chosen Option : 3

Q.99 A two-stroke cycle engine \_\_\_\_\_ as compared to a four-stroke cycle engine of the same size.

- Ans
- 1. has greater volumetric efficiency
  - 2. has less wear and tear of moving parts
  - 3. produces more power
  - 4. has greater thermal efficiency

Question ID : 654978924  
Status : Answered  
Chosen Option : 4

Q.100 The refrigerant reaches its highest temperature when the vapour leaves the \_\_\_\_\_ in a refrigeration system based on vapour compression.

- Ans
- 1. throttle valve
  - 2. evaporator
  - 3. compressor
  - 4. condenser

Question ID : 654978958  
Status : Answered  
Chosen Option : 3