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Subject	JUNIOR ENGINEER (MECHANICAL)

Section : **General Awareness**

Q.1 **Which among the following is an autobiography of Dalai Lama?**

Ans
✗ 1. Living History
✗ 2. My Life
✗ 3. Walk This Way
✓ 4. Freedom in Exile

Question ID : **630680278385**
Option 1 ID : **6306801081897**
Option 2 ID : **6306801081899**
Option 3 ID : **6306801081900**
Option 4 ID : **6306801081898**
Status : **Not Answered**
Chosen Option : **--**

Q.2 **The Rowlatt Act, which authorized the British government to detain individuals without trial, was passed in which year?**

Ans
✗ 1. 1901
✗ 2. 1909
✗ 3. 1925
✓ 4. 1919

Question ID : **630680278401**
Option 1 ID : **6306801081963**
Option 2 ID : **6306801081964**
Option 3 ID : **6306801081961**
Option 4 ID : **6306801081962**
Status : **Answered**
Chosen Option : **4**

Q.3 कौन सा सूक्ष्म वित्तीय (माइक्रोफाइनेंस) संस्थान स्टॉक एक्सचेंज में सूचीबद्ध होने वाला भारत का पहला संस्थान बना है?

Ans ✔ 1. SKS सूक्ष्म वित्तीय (माइक्रोफाइनेंस)
✘ 2. भारत वित्तीय समावेशन लिमिटेड
✘ 3. उज्जीवन वित्तीय सेवाएं
✘ 4. बंधन बैंक

Question ID : **630680278393**
Option 1 ID : **6306801081929**
Option 2 ID : **6306801081932**
Option 3 ID : **6306801081930**
Option 4 ID : **6306801081931**
Status : **Not Answered**
Chosen Option : **--**

Q.4 _____ was started by Mirza Gulam Ahmed in 1889 in order to spread western education among Indian Muslims.

Ans ✘ 1. All India Muslim Movement
✔ 2. Ahmadiya Movement
✘ 3. Wahabi Movement
✘ 4. Faraizi Movement

Question ID : **630680278402**
Option 1 ID : **6306801081968**
Option 2 ID : **6306801081965**
Option 3 ID : **6306801081966**
Option 4 ID : **6306801081967**
Status : **Not Answered**
Chosen Option : **--**

Q.5 The President nominates _____members of the Rajya Sabha.

Ans ✘ 1. 14
✔ 2. 12
✘ 3. 18
✘ 4. 16

Question ID : **630680278406**
Option 1 ID : **6306801081982**
Option 2 ID : **6306801081981**
Option 3 ID : **6306801081984**
Option 4 ID : **6306801081983**
Status : **Answered**
Chosen Option : **2**

Q.6 Who among the following leaders was not associated with the Arya Samaj, a reform movement founded by Swami Dayananda Saraswati?

Ans ✘ 1. Swami Shraddhanand
✘ 2. Pandit Lekh Ram
✘ 3. Swami Virajanand Dandeesha
✔ 4. Lala Lajpat Rai

Question ID : **630680278404**
Option 1 ID : **6306801081974**
Option 2 ID : **6306801081973**
Option 3 ID : **6306801081975**
Option 4 ID : **6306801081976**
Status : **Answered**
Chosen Option : **4**

Q.7 निम्नलिखित में से किस नदी को पुराणिक नदी के नाम से भी जाना जाता है?

Ans
✔ 1. सिंधु
✘ 2. नर्मदा
✘ 3. ब्रह्मपुत्र
✘ 4. तापी

Question ID : **630680278394**
Option 1 ID : **6306801081935**
Option 2 ID : **6306801081933**
Option 3 ID : **6306801081936**
Option 4 ID : **6306801081934**
Status : **Answered**
Chosen Option : **1**

Q.8 According to the Census 2011, which among the following states has the lowest female literacy rate?

Ans
✘ 1. Bihar
✘ 2. Telangana
✔ 3. Rajasthan
✘ 4. West Bengal

Question ID : **630680278399**
Option 1 ID : **6306801081953**
Option 2 ID : **6306801081954**
Option 3 ID : **6306801081955**
Option 4 ID : **6306801081956**
Status : **Answered**
Chosen Option : **1**

Q.9 According to the recently updated data by the World Bank in 2022, what is the poverty line level of urban areas in India?

Ans
✘ 1. Rs 1000-1100 per month
✔ 2. Rs 1200-1300 per month
✘ 3. Rs 800-900 per month
✘ 4. Rs 1500-1600 per month

Question ID : **630680278381**
Option 1 ID : **6306801081883**
Option 2 ID : **6306801081881**
Option 3 ID : **6306801081882**
Option 4 ID : **6306801081884**
Status : **Not Answered**
Chosen Option : **--**

Q.10 The Central Institute of Indian Languages was established in which year?

Ans
✘ 1. 1985
✔ 2. 1969
✘ 3. 1979
✘ 4. 1972

Question ID : **630680278391**
Option 1 ID : **6306801081923**
Option 2 ID : **6306801081922**
Option 3 ID : **6306801081924**
Option 4 ID : **6306801081921**
Status : **Not Answered**
Chosen Option : **--**

Q.11 त्रिपुरा में मनाई जाने वाली खर्ची पूजा, _____ को सम्मान देने की एक पवित्र प्रक्रिया है।

Ans
✗ 1. सूर्य
✗ 2. चंद्रमा
✓ 3. पृथ्वी
✗ 4. हवा

Question ID : **630680278388**
Option 1 ID : **6306801081910**
Option 2 ID : **6306801081911**
Option 3 ID : **6306801081909**
Option 4 ID : **6306801081912**
Status : **Answered**
Chosen Option : **1**

Q.12 निम्नलिखित में से कौन सी हवा तृतीयक हवा है?

Ans
✗ 1. पश्चिमी हवा
✗ 2. पूर्वी हवा
✓ 3. लू
✗ 4. मानसूनी हवाएँ

Question ID : **630680278396**
Option 1 ID : **6306801081943**
Option 2 ID : **6306801081942**
Option 3 ID : **6306801081944**
Option 4 ID : **6306801081941**
Status : **Answered**
Chosen Option : **2**

Q.13 निम्नलिखित में से कौन सा उष्णकटिबंधीय वर्षा वन का उदाहरण नहीं है?

Ans
✗ 1. महागनी
✗ 2. ईबोनी
✓ 3. साल
✗ 4. शीशम

Question ID : **630680278395**
Option 1 ID : **6306801081938**
Option 2 ID : **6306801081937**
Option 3 ID : **6306801081940**
Option 4 ID : **6306801081939**
Status : **Answered**
Chosen Option : **1**

Q.14 Who among the following is the fastest player to score 5000 runs in One Day International (ODI) cricket?

Ans
✗ 1. Virat Kohli
✗ 2. Hashim Amla
✓ 3. Babar Azam
✗ 4. David Warner

Question ID : **630680278384**
Option 1 ID : **6306801081895**
Option 2 ID : **6306801081893**
Option 3 ID : **6306801081894**
Option 4 ID : **6306801081896**
Status : **Answered**
Chosen Option : **4**

Q.15 निम्नलिखित में से किसे लॉरियस वर्ल्ड स्पोर्ट्समैन ऑफ द ईयर 2023 से सम्मानित किया गया है?

Ans
✗ 1. विराट कोहली
✗ 2. क्रिस्टियानो रोनाल्डो
✗ 3. शुभमन गिल
✓ 4. लियोनेल मेसी

Question ID : **630680278382**
Option 1 ID : **6306801081886**
Option 2 ID : **6306801081887**
Option 3 ID : **6306801081885**
Option 4 ID : **6306801081888**
Status : **Answered**
Chosen Option : **1**

Q.16 बढ़े हुए भूमि करों के खिलाफ एक सफल किसान आंदोलन, बारदोली सत्याग्रह का नेतृत्व किस भारतीय नेता ने किया था?

Ans
✗ 1. सुभाष चन्द्र बोस
✗ 2. जवाहरलाल नेहरू
✓ 3. सरदार वल्लभभाई पटेल
✗ 4. महात्मा गांधी

Question ID : **630680278403**
Option 1 ID : **6306801081971**
Option 2 ID : **6306801081970**
Option 3 ID : **6306801081972**
Option 4 ID : **6306801081969**
Status : **Answered**
Chosen Option : **3**

Q.17 _____ is the central recruiting agency that has detailed provisions with regard to composition appointment and removal of the member.

Ans
✗ 1. Finance Commission
✗ 2. Election Commission of India
✓ 3. Union Public Service Commission of India
✗ 4. Comptroller and Auditor General of India

Question ID : **630680278405**
Option 1 ID : **6306801081980**
Option 2 ID : **6306801081977**
Option 3 ID : **6306801081978**
Option 4 ID : **6306801081979**
Status : **Answered**
Chosen Option : **3**

Q.18 The unemployment arising from the mismatch between the jobs available in the market and the skills of the available workers in the market is called _____.

Ans
✗ 1. Disguised
✓ 2. Structural
✗ 3. Cyclical
✗ 4. Seasonal

Question ID : **630680278392**
Option 1 ID : **6306801081925**
Option 2 ID : **6306801081927**
Option 3 ID : **6306801081928**
Option 4 ID : **6306801081926**
Status : **Answered**
Chosen Option : **2**

Q.19 महावीर जयंती, जो महावीर के जन्मदिन के रूप में , _____ के महीने में मनाई जाती है।

Ans
✗ 1. जून
✓ 2. अप्रैल
✗ 3. मई
✗ 4. जुलाई

Question ID : **630680278387**
Option 1 ID : **6306801081907**
Option 2 ID : **6306801081905**
Option 3 ID : **6306801081906**
Option 4 ID : **6306801081908**
Status : **Answered**
Chosen Option : **2**

Q.20 निम्नलिखित में से किसने दिल्ली में कुव्वत अल इस्लाम मस्जिद और अजमेर में अढ़ाई-दिन-का-झोंपरा मस्जिद का निर्माण करवाया था?

Ans
✓ 1. कुतुबुद्दीन ऐबक
✗ 2. अलाउद्दीन खिलजी
✗ 3. इब्राहिम लोदी
✗ 4. इल्तुतमिश

Question ID : **630680278400**
Option 1 ID : **6306801081957**
Option 2 ID : **6306801081959**
Option 3 ID : **6306801081960**
Option 4 ID : **6306801081958**
Status : **Answered**
Chosen Option : **1**

Q.21 नवीनतम साहित्य अकादमी पुरस्कार कितनी भाषाओं में लिखे गए साहित्यिक कार्यों का विश्लेषण और मूल्यांकन करता है?

Ans
✗ 1. 20
✗ 2. 26
✗ 3. 18
✓ 4. 24

Question ID : **630680278386**
Option 1 ID : **6306801081904**
Option 2 ID : **6306801081901**
Option 3 ID : **6306801081902**
Option 4 ID : **6306801081903**
Status : **Not Answered**
Chosen Option : **--**

Q.22 _____refers to the physical or social separation of people based on characteristics such as race, ethnicity, or gender.

Ans
✗ 1. Pluralism
✓ 2. Segregation
✗ 3. Integration
✗ 4. Assimilation

Question ID : **630680278398**
Option 1 ID : **6306801081949**
Option 2 ID : **6306801081952**
Option 3 ID : **6306801081951**
Option 4 ID : **6306801081950**
Status : **Answered**
Chosen Option : **2**

Q.23 Which among the following is the first moon mission of India?

Ans
✗ 1. Chandrayan-II
✗ 2. Astrosat
✓ 3. Chandrayan-I
✗ 4. Gaganyaan-I

Question ID : **630680278408**
Option 1 ID : **6306801081990**
Option 2 ID : **6306801081989**
Option 3 ID : **6306801081991**
Option 4 ID : **6306801081992**
Status : **Marked For Review**
Chosen Option : **2**

Q.24 Which among the following Hindu festivals is dedicated to Surya, the Sun God?

Ans
✗ 1. Maghi
✗ 2. Dussehra
✓ 3. Chhath
✗ 4. Holi

Question ID : **630680278389**
Option 1 ID : **6306801081914**
Option 2 ID : **6306801081913**
Option 3 ID : **6306801081915**
Option 4 ID : **6306801081916**
Status : **Answered**
Chosen Option : **3**

Q.25 Who appoints the Chief Justice of India?

Ans
✗ 1. Prime Minister
✓ 2. President
✗ 3. Governors of states
✗ 4. Supreme Court collegium

Question ID : **630680278407**
Option 1 ID : **6306801081986**
Option 2 ID : **6306801081985**
Option 3 ID : **6306801081987**
Option 4 ID : **6306801081988**
Status : **Answered**
Chosen Option : **2**

Q.26 Which of the following languages is not considered one of the classical languages of India?

Ans
✗ 1. Kannada
✓ 2. Urdu
✗ 3. Odia
✗ 4. Malayalam

Question ID : **630680278390**
Option 1 ID : **6306801081918**
Option 2 ID : **6306801081917**
Option 3 ID : **6306801081920**
Option 4 ID : **6306801081919**
Status : **Answered**
Chosen Option : **4**

Q.27 Transparency International has released the Corruption Perceptions Index (CPI) 2021 in which India has been ranked at _____th spot.

Ans
✗ 1. 80
✗ 2. 70
✓ 3. 85
✗ 4. 75

Question ID : **630680278380**
Option 1 ID : **6306801081879**
Option 2 ID : **6306801081877**
Option 3 ID : **6306801081880**
Option 4 ID : **6306801081878**
Status : **Not Answered**
Chosen Option : **--**

Q.28 Which among the following team won the 2023 Women T20 Cricket World Cup?

Ans
✗ 1. Sri Lanka
✗ 2. India
✗ 3. South Africa
✓ 4. Australia

Question ID : **630680278383**
Option 1 ID : **6306801081889**
Option 2 ID : **6306801081892**
Option 3 ID : **6306801081890**
Option 4 ID : **6306801081891**
Status : **Answered**
Chosen Option : **2**

Q.29 According to the Census 2011, what is the population density of India?

Ans
✓ 1. 382
✗ 2. 361
✗ 3. 325
✗ 4. 353

Question ID : **630680278397**
Option 1 ID : **6306801081947**
Option 2 ID : **6306801081945**
Option 3 ID : **6306801081948**
Option 4 ID : **6306801081946**
Status : **Answered**
Chosen Option : **2**

Q.30 _____is a scheme meant to increase the Wi-fi access throughout the country.

Ans
✗ 1. Make in India
✓ 2. PM-WANI
✗ 3. Pradhan Mantri Jan Dhan Yojana
✗ 4. Swachh Bharat Abhiyan

Question ID : **630680278379**
Option 1 ID : **6306801081874**
Option 2 ID : **6306801081873**
Option 3 ID : **6306801081875**
Option 4 ID : **6306801081876**
Status : **Answered**
Chosen Option : **2**

Section : **Reasoning**

Q.1 **Two statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.**
Statements:
Some mountains are seas.
No sea is a land.
Conclusions:
I. Some mountains are land.
II. No land is a sea.

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

Question ID : **630680278433**
Option 1 ID : **6306801082092**
Option 2 ID : **6306801082089**
Option 3 ID : **6306801082090**
Option 4 ID : **6306801082091**
Status : **Answered**
Chosen Option : **3**

Q.2 Choose the figure which is different from the rest.

Ans

✗ 1. 

✓ 2. 

✗ 3. 

✗ 4. 

Question ID : **630680278437**
Option 1 ID : **6306801082105**
Option 2 ID : **6306801082107**
Option 3 ID : **6306801082106**
Option 4 ID : **6306801082108**
Status : **Answered**
Chosen Option : **2**

Q.3 **How many letters are there in the given series that are immediately preceded by a consonant and immediately followed by a consonant?**
E R A @ Y F I Q O P U # L J I W S @

Ans

✓ 1. 3

✗ 2. 4

✗ 3. 2

✗ 4. 5

Question ID : **630680278416**
Option 1 ID : **6306801082022**
Option 2 ID : **6306801082021**
Option 3 ID : **6306801082024**
Option 4 ID : **6306801082023**
Status : **Answered**
Chosen Option : **3**

Q.4 यदि 'M × N' का अर्थ है 'M, N की बहन है।'
यदि 'M + N' का अर्थ है 'M, N का भाई है।'
यदि 'M ÷ N' का अर्थ है 'N, M का पुत्र है।'
यदि 'M - N' का अर्थ है 'M, N का पति है।'
व्यंजक 'X × Y + Z - R ÷ T' में T, X से कैसे संबंधित है?

Ans
✗ 1. बेटा
✗ 2. भाई
✓ 3. भतीजा
✗ 4. भांजा

Question ID : **630680278417**
Option 1 ID : **6306801082027**
Option 2 ID : **6306801082028**
Option 3 ID : **6306801082026**
Option 4 ID : **6306801082025**
Status : **Answered**
Chosen Option : **3**

Q.5 Sunaina finds that in a row of girls, she is eighth from the right and 17th from the left. How many girls must be added to the row such that there are 30 girls in the row?

Ans
✗ 1. 3
✗ 2. 5
✓ 3. 6
✗ 4. 4

Question ID : **630680278429**
Option 1 ID : **6306801082074**
Option 2 ID : **6306801082076**
Option 3 ID : **6306801082075**
Option 4 ID : **6306801082073**
Status : **Answered**
Chosen Option : **3**

Q.6 Five boys H, I, J, K, and L are seating in a row facing north. K is seating to the immediate right of J. L is sitting exactly in between H and I. No one sits to the left of H. Who sits to the immediate right of I?

Ans
✗ 1. L
✓ 2. J
✗ 3. K
✗ 4. H

Question ID : **630680278431**
Option 1 ID : **6306801082083**
Option 2 ID : **6306801082082**
Option 3 ID : **6306801082081**
Option 4 ID : **6306801082084**
Status : **Answered**
Chosen Option : **2**

Q.7 In the question, a statement is given, followed by two conclusions, I and II. You have to decide which of the given conclusions, if any, follows from the given statement.
Statement: H < I > J, L < M = H
Conclusion I: L < J
Conclusion II: J > H

Ans
✗ 1. Only I follows
✓ 2. Neither I nor II follows
✗ 3. Only II follows
✗ 4. Both I and II follows

Question ID : **630680278419**
Option 1 ID : **6306801082033**
Option 2 ID : **6306801082036**
Option 3 ID : **6306801082034**
Option 4 ID : **6306801082035**
Status : **Answered**
Chosen Option : **4**

Q.8 Which of the following numbers will replace the question mark (?) in the given series?
1728, 2744, 4096, 5832, ?

Ans
✓ 1. 8000
✗ 2. 8324
✗ 3. 8100
✗ 4. 7856

Question ID : **630680278411**
Option 1 ID : **6306801082003**
Option 2 ID : **6306801082004**
Option 3 ID : **6306801082002**
Option 4 ID : **6306801082001**
Status : **Answered**
Chosen Option : **2**

Q.9 Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the odd letter-cluster.

Ans
✗ 1. SRT
✗ 2. IHJ
✗ 3. MLN
✓ 4. KLM

Question ID : **630680278424**
Option 1 ID : **6306801082056**
Option 2 ID : **6306801082055**
Option 3 ID : **6306801082053**
Option 4 ID : **6306801082054**
Status : **Answered**
Chosen Option : **4**

Q.10 Which of the following numbers will replace the question mark (?) in the given series?
113, ?, 226, 678, 2712

Ans
✗ 1. 187
✓ 2. 113
✗ 3. 165
✗ 4. 176

Question ID : **630680278412**
Option 1 ID : **6306801082008**
Option 2 ID : **6306801082005**
Option 3 ID : **6306801082007**
Option 4 ID : **6306801082006**
Status : **Answered**
Chosen Option : **1**

Q.11 There are eight persons A, B, C, D, E, F, G and H are sitting around a square table in such a way that four of them sit at the corners while four sit in the middle of each of the four sides. The ones who sit at the four corners face outside the centre while those who sit in the middle of the sides face inside. B sits second to the right of A. C sits third to the left of H who sits to the immediate right of A. E sits third to the left of F. C faces inside. G sits second to the left of F. Who sits opposite to B?

Ans
✓ 1. E
✗ 2. A
✗ 3. H
✗ 4. F

Question ID : **630680278432**
Option 1 ID : **6306801082086**
Option 2 ID : **6306801082087**
Option 3 ID : **6306801082088**
Option 4 ID : **6306801082085**
Status : **Answered**
Chosen Option : **4**

Q.12 Three Statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.
Statements:
Some cups are plates.
All plates are bowls.
No bowl is a spoon.
Conclusions:
I. All cups being bowls is a possibility.
II. Some cups are spoons.

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

Question ID : **630680278434**
Option 1 ID : **6306801082096**
Option 2 ID : **6306801082094**
Option 3 ID : **6306801082093**
Option 4 ID : **6306801082095**
Status : **Answered**
Chosen Option : **1**

Q.13 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.
MAT : NZG : : LOVE : ?

Ans
✔ 1. OLEV
✘ 2. PKFU
✘ 3. PLEU
✘ 4. OKFV

Question ID : **630680278421**
Option 1 ID : **6306801082041**
Option 2 ID : **6306801082042**
Option 3 ID : **6306801082044**
Option 4 ID : **6306801082043**
Status : **Answered**
Chosen Option : **1**

Q.14 चार शब्द दिए गए हैं, जिनमें से तीन किसी तरीके से समान हैं और एक भिन्न है। विषम शब्द का चयन करें।

Ans
✘ 1. आनंद
✔ 2. उदासी
✘ 3. उत्साह
✘ 4. यूफोरिया

Question ID : **630680278425**
Option 1 ID : **6306801082059**
Option 2 ID : **6306801082057**
Option 3 ID : **6306801082058**
Option 4 ID : **6306801082060**
Status : **Answered**
Chosen Option : **2**

Q.15 Calculate the sum of 6.75, 8.91, and 4.25 and round the answer to two decimal places.

Ans
✘ 1. 16.43
✘ 2. 14.67
✘ 3. 18.34
✔ 4. 19.91

Question ID : **630680278410**
Option 1 ID : **6306801081998**
Option 2 ID : **6306801081997**
Option 3 ID : **6306801081999**
Option 4 ID : **6306801082000**
Status : **Answered**
Chosen Option : **4**

Q.16 Which of the following numbers will be a number of the given series?
11, 18, 25, 32, 39, ...

Ans
✘ 1. 574
✔ 2. 347
✘ 3. 421
✘ 4. 222

Question ID : **630680278413**
Option 1 ID : **6306801082009**
Option 2 ID : **6306801082011**
Option 3 ID : **6306801082012**
Option 4 ID : **6306801082010**
Status : **Answered**
Chosen Option : **2**

Q.17 A, B, C, D और E पांच मंजिला इमारत में रहते हैं, प्रत्येक मंजिल में केवल एक फ्लैट है। सबसे निचली मंजिल की संख्या 1 है और उसके ठीक ऊपर वाली मंजिल की संख्या 2 है और इसी प्रकार B, A की मंजिल से तीन मंजिल नीचे रहता है। A शीर्ष तल पर नहीं रहता है। E, C के ठीक ऊपर वाली मंजिल पर रहता है। शीर्ष मंजिल पर कौन रहता है?

Ans
✗ 1. C
✓ 2. D
✗ 3. B
✗ 4. E

Question ID : **630680278428**
Option 1 ID : **6306801082072**
Option 2 ID : **6306801082071**
Option 3 ID : **6306801082070**
Option 4 ID : **6306801082069**
Status : **Answered**
Chosen Option : **2**

Q.18 Select the option that is related to the third word in the same way as the second word is related to the first word.
Dentist : Teeth :: Optometrist : ?

Ans
✗ 1. Mouth
✗ 2. Lungs
✗ 3. Ears
✓ 4. Eyes

Question ID : **630680278423**
Option 1 ID : **6306801082051**
Option 2 ID : **6306801082050**
Option 3 ID : **6306801082052**
Option 4 ID : **6306801082049**
Status : **Answered**
Chosen Option : **4**

Q.19 एक महिला की ओर इशारा करते हुए श्रेया ने कहा, "उसका पुत्र मेरी माता का पति है।" महिला श्रेया से कैसे संबंधित है?

Ans
✗ 1. सास
✗ 2. माता
✓ 3. दादी
✗ 4. बहन

Question ID : **630680278418**
Option 1 ID : **6306801082030**
Option 2 ID : **6306801082029**
Option 3 ID : **6306801082032**
Option 4 ID : **6306801082031**
Status : **Answered**
Chosen Option : **3**

Q.20 In the question, a statement is given, followed by two conclusions, I and II. You have to decide which of the given conclusions, if any, follows from the given statement.
Statement: A < B < C = D, D ≥ F > E
Conclusion I: A < D
Conclusion II: C ≥ F

Ans
✗ 1. Only I follows
✓ 2. Both I and II follows
✗ 3. Only II follows
✗ 4. Neither I nor II follows

Question ID : **630680278420**
Option 1 ID : **6306801082037**
Option 2 ID : **6306801082039**
Option 3 ID : **6306801082038**
Option 4 ID : **6306801082040**
Status : **Answered**
Chosen Option : **2**

Q.21 चार शब्द युग्म दिए गए हैं, जिनमें से तीन किसी तरीके से समान हैं और एक भिन्न है। विषम शब्द युग्म का चयन करें।

Ans
✗ 1. वकील : कोर्ट
✗ 2. डॉक्टर : अस्पताल
✗ 3. टीचर : स्कूल
✓ 4. पोप : मंदिर

Question ID : **630680278426**
Option 1 ID : **6306801082062**
Option 2 ID : **6306801082061**
Option 3 ID : **6306801082063**
Option 4 ID : **6306801082064**
Status : **Answered**
Chosen Option : **4**

Q.22 Which two numbers should be interchanged to make the given equation correct?
12 + 15 − 21 ÷ 3 × 2 = 17

Ans
✗ 1. 17 & 21
✗ 2. 12 & 15
✗ 3. 3 & 2
✓ 4. 15 & 17

Question ID : **630680278409**
Option 1 ID : **6306801081995**
Option 2 ID : **6306801081993**
Option 3 ID : **6306801081996**
Option 4 ID : **6306801081994**
Status : **Answered**
Chosen Option : **4**

Q.23 **Seven friends Anand, Binod, Rishi, Sameer, Gautam, Mukesh, Sanjay are sitting around a circular table facing the centre. Rishi and Gautam are not sitting next to each other. Sanjay is sitting between Binod and Mukesh. Mukesh is sitting to the immediate left of Rishi. Sameer is sitting between Anand and Gautam. Who is sitting to the immediate left of Anand?**

Ans
✔ 1. Rishi
✘ 2. Sameer
✘ 3. Binod
✘ 4. Sanjay

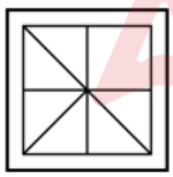
Question ID : **630680278430**
Option 1 ID : **6306801082077**
Option 2 ID : **6306801082078**
Option 3 ID : **6306801082079**
Option 4 ID : **6306801082080**
Status : **Answered**
Chosen Option : **1**

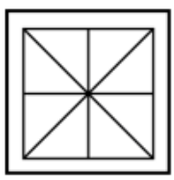
Q.24 From the given answer figures, select the one in which the question figure is embedded.

Ans

✘ 1. 

✘ 2. 

✘ 3. 

✔ 4. 

Question ID : **630680278436**
Option 1 ID : **6306801082103**
Option 2 ID : **6306801082104**
Option 3 ID : **6306801082102**
Option 4 ID : **6306801082101**
Status : **Answered**
Chosen Option : **3**

Q.25 Anil visits five cities namely Delhi, Mathura, Gurgaon, Agra, and Jaipur on different days of a week from Monday to Friday. He visits Delhi three days after visiting Mathura. He visits Agra on Tuesday and he visits Gurgaon after visiting Delhi. On which day he visits Jaipur?

Ans
✗ 1. Friday
✗ 2. Thursday
✓ 3. Wednesday
✗ 4. Monday

Question ID : **630680278427**
Option 1 ID : **6306801082067**
Option 2 ID : **6306801082066**
Option 3 ID : **6306801082068**
Option 4 ID : **6306801082065**
Status : **Answered**
Chosen Option : **3**

Q.26 दी गई श्रंखला में ऐसी कितनी संख्याएं हैं जिनके ठीक पहले एक प्रतीक है और ठीक बाद एक अन्य प्रतीक है?
#2% 5@3*$6 & 1^ ? 0 $ 3 @

Ans
✓ 1. 7
✗ 2. 9
✗ 3. 5
✗ 4. 6

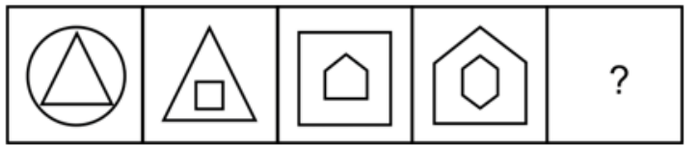
Question ID : **630680278415**
Option 1 ID : **6306801082017**
Option 2 ID : **6306801082020**
Option 3 ID : **6306801082018**
Option 4 ID : **6306801082019**
Status : **Answered**
Chosen Option : **1**

Q.27 Arrange the given words in the alphabetical order.
1. Obnoxious
2. Oblivion
3. Ostentatious
4. Opulent

Ans
✗ 1. 1423
✗ 2. 2431
✗ 3. 2314
✓ 4. 2143

Question ID : **630680278414**
Option 1 ID : **6306801082013**
Option 2 ID : **6306801082016**
Option 3 ID : **6306801082015**
Option 4 ID : **6306801082014**
Status : **Answered**
Chosen Option : **4**

Q.28 Which of the following answer figure completes the question figure?



Ans

✗ 1. 

✗ 2. 

✗ 3. 

✓ 4. 

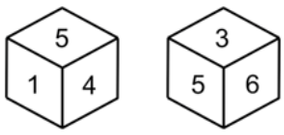
Question ID : **630680278438**
Option 1 ID : **6306801082110**
Option 2 ID : **6306801082111**
Option 3 ID : **6306801082109**
Option 4 ID : **6306801082112**
Status : **Answered**
Chosen Option : **4**

Q.29 **उस विकल्प का चयन करें जो तीसरे शब्द से उसी प्रकार से संबंधित है जिस प्रकार से दूसरा शब्द पहले शब्द से संबंधित है।**
भीतर : कैरम : : बाहर : ?

Ans
✗ 1. लूडो
✓ 2. हॉकी
✗ 3. शतरंज
✗ 4. बॉलिंग

Question ID : **630680278422**
Option 1 ID : **6306801082046**
Option 2 ID : **6306801082048**
Option 3 ID : **6306801082045**
Option 4 ID : **6306801082047**
Status : **Answered**
Chosen Option : **2**

Q.30 Two different positions of the same dice are given below. Find the number opposite of 3.



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

Question ID : **630680278435**
Option 1 ID : **6306801082097**
Option 2 ID : **6306801082099**
Option 3 ID : **6306801082098**
Option 4 ID : **6306801082100**
Status : **Answered**
Chosen Option : **2**

Section : **Domain Knowledge**

Q.1 **Which of the following is an heat exchanger which feed water is heated from heat available with exhaust gases?**

Ans
1. Economiser
2. Feed pump
3. Superheater
4. Air preheater

Question ID : **630680278208**
Option 1 ID : **6306801081191**
Option 2 ID : **6306801081192**
Option 3 ID : **6306801081189**
Option 4 ID : **6306801081190**
Status : **Answered**
Chosen Option : **1**

Q.2 **Which of the following is an incorrect assumption made in Bernoulli's equation?**

Ans
1. The viscosity of the fluid is zero
2. Rotational flow
3. Incompressible flow
4. Steady flow

Question ID : **630680278142**
Option 1 ID : **6306801080925**
Option 2 ID : **6306801080927**
Option 3 ID : **6306801080928**
Option 4 ID : **6306801080926**
Status : **Answered**
Chosen Option : **2**

Q.3 Consider the following statements:
A) For isentropic flow the gain of kinetic energy is equal to the enthalpy drop of the steam in a steam nozzle.
B)Velocity of the steam leaving the steam nozzle is given by 44.72 √(kH) m/sec.
Where K is the friction factor and H is the enthalpy drop.

Ans
✗ 1. Only B is true
✗ 2. Neither A or B is true
✓ 3. Both A and B is true
✗ 4. Only A is true

Question ID : **630680278210**
Option 1 ID : **6306801081198**
Option 2 ID : **6306801081200**
Option 3 ID : **6306801081199**
Option 4 ID : **6306801081197**
Status : **Answered**
Chosen Option : **3**

Q.4 COP of a heat pump is equal to _____.

Ans
✗ 1. 1- COP of refrigerator
✗ 2. COP of refrigerator
✓ 3. COP of refrigerator +1
✗ 4. COP of refrigerator -1

Question ID : **630680278165**
Option 1 ID : **6306801081020**
Option 2 ID : **6306801081019**
Option 3 ID : **6306801081018**
Option 4 ID : **6306801081017**
Status : **Answered**
Chosen Option : **3**

Q.5 In the performance map of an SI engine, moving from the region of highest efficiency along a line of constant bmep the brake specific fuel consumption _____.

Ans
✓ 1. increases due to increased friction at higher piston speeds.
✗ 2. decreases due to decreased friction at higher piston speeds.
✗ 3. decreases due to increased friction at higher piston speeds.
✗ 4. increases due to decreased friction at higher piston speeds.

Question ID : **630680278230**
Option 1 ID : **6306801081278**
Option 2 ID : **6306801081280**
Option 3 ID : **6306801081279**
Option 4 ID : **6306801081277**
Status : **Not Answered**
Chosen Option : **--**

Q.6 Which of the following loss of energy in a pipe is a major loss?

Ans
✗ 1. Loss of head at the entrance
✗ 2. Loss of head due to bend
✓ 3. Loss of head due to friction
✗ 4. Loss of head due to sudden enlargement

Question ID : **630680278154**
Option 1 ID : **6306801080975**
Option 2 ID : **6306801080974**
Option 3 ID : **6306801080976**
Option 4 ID : **6306801080973**
Status : **Answered**
Chosen Option : **3**

Q.7 Which of the following is A) Fire tube boiler B) Water Tube boiler?

Ans
✗ 1. A) Cochran boiler B)Lancashire boiler
✗ 2. A) Babcock-Wilcox boiler B) Stirling boiler
✓ 3. A) Cornish boiler B) La-Mont boiler
✗ 4. A) La-Mont boiler B)Benson boiler

Question ID : **630680278207**
Option 1 ID : **6306801081185**
Option 2 ID : **6306801081188**
Option 3 ID : **6306801081186**
Option 4 ID : **6306801081187**
Status : **Answered**
Chosen Option : **3**

Q.8 Consider the two statements assuming the conditions of a rigid body which is not moving at all to be in equilibrium.
A) The sum of external forces on the rigid object must be equal to zero.
B) Sum of external torques on a rigid object must be equal to zero.

Ans
✗ 1. Only B is true
✓ 2. Both A and B are true
✗ 3. Neither A nor B is true
✗ 4. Only A is true

Question ID : **630680278119**
Option 1 ID : **6306801080834**
Option 2 ID : **6306801080835**
Option 3 ID : **6306801080836**
Option 4 ID : **6306801080833**
Status : **Answered**
Chosen Option : **2**

Q.9 A Carnot engine absorbs heat from a reservoir. It absorbs 473.15J of heat at the temperature of 200° C. The heat rejected at a reservoir which is maintained at the temperature of 0° C. Find the heat rejected and work done.

Ans
✗ 1. Heat rejected = 273.16J, Work done=50J
✗ 2. Heat rejected = 0J, Work done=100J
✗ 3. Heat rejected = 373.15J, Work done=100J
✓ 4. Heat rejected = 273.15J, Work done=200J

Question ID : **630680278226**
Option 1 ID : **6306801081262**
Option 2 ID : **6306801081263**
Option 3 ID : **6306801081261**
Option 4 ID : **6306801081264**
Status : **Answered**
Chosen Option : **4**

Q.10 The _____ working compartment consists of special semi-circular shaped vanes cast into stainless steel rotor and stators.

Ans
✗ 1. prony brake dynamometer
✗ 2. rope brake dynamometer
✓ 3. hydraulic dynamometer
✗ 4. torsion dynamometer

Question ID : **630680278231**
Option 1 ID : **6306801081281**
Option 2 ID : **6306801081282**
Option 3 ID : **6306801081284**
Option 4 ID : **6306801081283**
Status : **Answered**
Chosen Option : **2**

Q.11 Consider the following statements related to IC engines:
A) If the fuel air mixture is made lean it will result in lower specific heat.
B) As the fuel air mixture gets richer both the efficiency and power output keeps on increasing.

Ans
✓ 1. Only A is true
✗ 2. Neither A nor B is true
✗ 3. Only B is true
✗ 4. Both A and B is true

Question ID : **630680278199**
Option 1 ID : **6306801081153**
Option 2 ID : **6306801081156**
Option 3 ID : **6306801081154**
Option 4 ID : **6306801081155**
Status : **Answered**
Chosen Option : **1**

Q.12 Which of the following type of impeller of a centrifugal pump is used for pumping highly contaminated slurry type liquids?

Ans
✗ 1. Constricted Impeller
✓ 2. Open Impeller
✗ 3. Semi-Open Impeller
✗ 4. Closed Impeller

Question ID : **630680278151**
Option 1 ID : **6306801080963**
Option 2 ID : **6306801080962**
Option 3 ID : **6306801080964**
Option 4 ID : **6306801080961**
Status : **Answered**
Chosen Option : **4**

Q.13 Time loss factor in an IC engine is:

Ans
✗ 1. loss of work on expansion stroke
✗ 2. loss of heat from gases to cylinder walls.
✗ 3. Leakage of fuels.
✓ 4. time required for mixing of fuel and air.

Question ID : **630680278200**
Option 1 ID : **6306801081159**
Option 2 ID : **6306801081158**
Option 3 ID : **6306801081160**
Option 4 ID : **6306801081157**
Status : **Answered**
Chosen Option : **4**

Q.14 Surging in centrifugal compressors occurs when the refrigeration load decreases to _____.

Ans
✗ 1. 40 % below the rated capacity.
✗ 2. 25 % below the rated capacity.
✗ 3. 50 % below the rated capacity.
✓ 4. 35 % below the rated capacity.

Question ID : **630680278162**
Option 1 ID : **6306801081007**
Option 2 ID : **6306801081005**
Option 3 ID : **6306801081008**
Option 4 ID : **6306801081006**
Status : **Not Answered**
Chosen Option : **--**

Q.15 Consider the following statements:
A)For a low speed engine the intake valve closes 60 degrees after bottom dead centre and for a high speed engine the intake valve closes 10 degrees after bottom dead centre.
B)In an IC engine the exhaust valve is opened 40 to 70 degrees before bottom dead centre thereby reducing the cylinder pressure to halfway before the exhaust stroke begins.

Ans
✔ 1. Only B is true
✘ 2. Only A is true
✘ 3. Both A and B is true
✘ 4. Neither A nor B is true

Question ID : **630680278235**
Option 1 ID : **6306801081298**
Option 2 ID : **6306801081297**
Option 3 ID : **6306801081299**
Option 4 ID : **6306801081300**
Status : **Not Answered**
Chosen Option : **--**

Q.16 Consider the following statements:
A)Glass has a Poisson' ratio of 0.18 - 0.3.
B) Steel is more elastic than rubber

Ans
✘ 1. Neither A or B are true
✘ 2. Only A is true
✔ 3. Both A and B are true
✘ 4. Only B is true

Question ID : **630680278171**
Option 1 ID : **6306801081044**
Option 2 ID : **6306801081041**
Option 3 ID : **6306801081043**
Option 4 ID : **6306801081042**
Status : **Answered**
Chosen Option : **4**

Q.17 Consider the following statements:

A) Horizontal line in the Mollier diagram represents isentropic process.

B) Vertical line in the Mollier diagram represents isenthalpic process.

Ans
✘ 1. Both A and B is true
✘ 2. Only A is true
✘ 3. Only B is true
✔ 4. Neither A nor B is true

Question ID : **630680278223**
Option 1 ID : **6306801081251**
Option 2 ID : **6306801081249**
Option 3 ID : **6306801081250**
Option 4 ID : **6306801081252**
Status : **Answered**
Chosen Option : **4**

Q.18 What is the maximum working head for a low lift centrifugal pumps?

Ans
✗ 1. up to 20 meters
✗ 2. up to 10 meters
✗ 3. up to 5 meters
✓ 4. up to 15 meters

Question ID : **630680278150**
Option 1 ID : **6306801080960**
Option 2 ID : **6306801080958**
Option 3 ID : **6306801080957**
Option 4 ID : **6306801080959**
Status : **Answered**
Chosen Option : **4**

Q.19 The speed of a flywheel is 420 rpm. Find the approximate radius of a flywheel whose peripheral velocity is 22 m/s.

Ans
✗ 1. 0.8 m
✗ 2. 0.6 m
✗ 3. 0.2 m
✓ 4. 0.5 m

Question ID : **630680278178**
Option 1 ID : **6306801081072**
Option 2 ID : **6306801081071**
Option 3 ID : **6306801081069**
Option 4 ID : **6306801081070**
Status : **Answered**
Chosen Option : **4**

Q.20 Which of the following components is not a part of simple air cooling system for aircrafts?

Ans
✓ 1. evaporator
✗ 2. Heat exchanger
✗ 3. gas turbine
✗ 4. cooling turbine

Question ID : **630680278164**
Option 1 ID : **6306801081014**
Option 2 ID : **6306801081013**
Option 3 ID : **6306801081016**
Option 4 ID : **6306801081015**
Status : **Answered**
Chosen Option : **2**

Q.21 Match the correct pair of combustion chambers for SI engines:
1) T-head Type :: A)One valve in the cylinder head and the other in cylinder block.
2) L-Head type:: B)Used in early stage of engine development.
3) I-Head type :: C)Two valves on the same side of the cylinder and operated by single camshaft.
4) F-head type :: D) Also known as overhead valve.

Ans
✗ 1. 1-B, 2-D, 3-C, 4-A
✗ 2. 1-A, 2-C, 3-D, 4-B
✗ 3. 1-A, 2-D, 3-C, 4-B
✓ 4. 1-B, 2-C, 3-D, 4-A

Question ID : **630680278236**
Option 1 ID : **6306801081303**
Option 2 ID : **6306801081302**
Option 3 ID : **6306801081304**
Option 4 ID : **6306801081301**
Status : **Answered**
Chosen Option : **1**

Q.22 A hydraulic press has a ram of 40 cm diameter and a plunger of 4 cm diameter. Find the weight applied to operate the press if it has to lift a weight of 100 N.

Ans
✗ 1. 3N
✓ 2. 1N
✗ 3. 4N
✗ 4. 2N

Question ID : **630680278153**
Option 1 ID : **6306801080970**
Option 2 ID : **6306801080971**
Option 3 ID : **6306801080972**
Option 4 ID : **6306801080969**
Status : **Answered**
Chosen Option : **2**

Q.23 Consider the following statements:
A) Reducing the number of piston rings in an IC engine reduces mechanical friction.
B) Friction mean effective pressure increases with increase in compression ratio in an IC engine.

Ans
✗ 1. Only A is true
✗ 2. Neither A nor B is true
✗ 3. Only B is true
✓ 4. Both A and B is true

Question ID : **630680278203**
Option 1 ID : **6306801081169**
Option 2 ID : **6306801081172**
Option 3 ID : **6306801081170**
Option 4 ID : **6306801081171**
Status : **Answered**
Chosen Option : **4**

Q.24 Vapour Absorption System uses which energy compared to Vapour Compression system?

Ans
✗ 1. Neither uses heat or mechanical energy
✓ 2. heat energy instead of mechanical energy
✗ 3. Both heat and mechanical energy
✗ 4. mechanical energy instead of heat energy

Question ID : **630680278159**
Option 1 ID : **6306801080996**
Option 2 ID : **6306801080993**
Option 3 ID : **6306801080995**
Option 4 ID : **6306801080994**
Status : **Answered**
Chosen Option : **4**

Q.25 You have given a liquid-vapour mixture where a and b are the masses of liquid and vapour respectively. What would be the dryness fraction(d) in the given scenario?

Ans
✗ 1. d = (a + b) / b
✗ 2. d = (a + b) / a
✗ 3. d = a / (a + b)
✓ 4. d = b / (a + b)

Question ID : **630680278222**
Option 1 ID : **6306801081248**
Option 2 ID : **6306801081246**
Option 3 ID : **6306801081245**
Option 4 ID : **6306801081247**
Status : **Answered**
Chosen Option : **4**

Q.26 The slope of an isobar on the h-s coordinate in a mollies chart is equal to the _____.

Ans
✗ 1. absolute volume
✗ 2. absolute pressure
✓ 3. absolute temperature.
✗ 4. absolute entropy

Question ID : **630680278188**
Option 1 ID : **6306801081111**
Option 2 ID : **6306801081110**
Option 3 ID : **6306801081109**
Option 4 ID : **6306801081112**
Status : **Answered**
Chosen Option : **3**

Q.27 The heating arrangement for a medium capacity turbine in a regenerative Rankine cycle consist of _____.

Ans
✗ 1. not more than 12 heaters
✗ 2. not more than 7-9 heaters
✓ 3. not more than 3 heaters
✗ 4. not more than 5-7 heaters

Question ID : **630680278117**
Option 1 ID : **6306801080828**
Option 2 ID : **6306801080827**
Option 3 ID : **6306801080825**
Option 4 ID : **6306801080826**
Status : **Not Answered**
Chosen Option : **--**

Q.28 Which of the following is a disadvantage of steam injector in boiler?

Ans
✔ 1. Low pumping efficiency
✘ 2. Presence of dynamic parts
✘ 3. Low thermal efficiency
✘ 4. Easy of operation

Question ID : **630680278214**
Option 1 ID : **6306801081215**
Option 2 ID : **6306801081214**
Option 3 ID : **6306801081213**
Option 4 ID : **6306801081216**
Status : **Answered**
Chosen Option : **2**

Q.29 Which of the following is a boiler mounting?

Ans
✔ 1. Water level indicator
✘ 2. Air preheater
✘ 3. Economiser
✘ 4. Superheater

Question ID : **630680278243**
Option 1 ID : **6306801081329**
Option 2 ID : **6306801081330**
Option 3 ID : **6306801081331**
Option 4 ID : **6306801081332**
Status : **Answered**
Chosen Option : **1**

Q.30 Which of the following statements is the true purpose of a boiler trial?
A) Used to determine the generating capacity of the boiler.
B)To determine the boiler power of the boiler when working at a certain pressure.
C)To prepare the heat balance sheet for the boiler.

Ans
✘ 1. A,B
✘ 2. A,B,C
✔ 3. A,C
✘ 4. B,C

Question ID : **630680278239**
Option 1 ID : **6306801081313**
Option 2 ID : **6306801081316**
Option 3 ID : **6306801081315**
Option 4 ID : **6306801081314**
Status : **Answered**
Chosen Option : **2**

Q.31 Which of the following is not an intensive property?

Ans
✔ 1. energy
✘ 2. Temperature
✘ 3. velocity
✘ 4. Pressure

Question ID : **630680278192**
Option 1 ID : **6306801081128**
Option 2 ID : **6306801081126**
Option 3 ID : **6306801081127**
Option 4 ID : **6306801081125**
Status : **Answered**
Chosen Option : **1**

Q.32 390mm लंबी एक छड़ पर विचार करें। 50 N और 80 N के दो समानांतर बल छड़ के दोनों सिरों पर कार्य करते हैं। परिणामी बल का परिमाण तथा परिणामी तथा छोटे बल के बीच की दूरी ज्ञात करें।

Ans
✗ 1. 130 N और 185 mm
✗ 2. 130 N और 120 mm
✓ 3. 130 N और 240 mm
✗ 4. 30 N और 240 mm

Question ID : **630680278121**
Option 1 ID : **6306801080841**
Option 2 ID : **6306801080842**
Option 3 ID : **6306801080844**
Option 4 ID : **6306801080843**
Status : **Answered**
Chosen Option : **3**

Q.33 The diverging angle of the venturimeter is less than the converging angle:

Ans
✗ 1. to decrease pressure in the direction of the diverging part
✗ 2. to increase velocity in the direction of the diverging part
✓ 3. to avoid flow separation
✗ 4. To generate flow separation

Question ID : **630680278143**
Option 1 ID : **6306801080931**
Option 2 ID : **6306801080930**
Option 3 ID : **6306801080932**
Option 4 ID : **6306801080929**
Status : **Answered**
Chosen Option : **3**

Q.34 A gas tungsten arc-welding operation is performed at a current of 400A and voltage of 10V. The melting factor f2 = 0.5, and the unit melting energy for the metal 'Um' = 20 J/mm^3. Determine the rate of heat generation at the weld. Heat transfer factor for gas tungsten arc welding is 0.7

Ans
✗ 1. 2100 J/s
✓ 2. 1400 J/s
✗ 3. 700 J/s
✗ 4. 2800 J/s

Question ID : **630680278108**
Option 1 ID : **6306801080791**
Option 2 ID : **6306801080790**
Option 3 ID : **6306801080789**
Option 4 ID : **6306801080792**
Status : **Not Answered**
Chosen Option : **--**

Q.35 Indian standard metric thread has an included angle of _____.

Ans
✗ 1. 50°
✗ 2. 55°
✓ 3. 60°
✗ 4. 40°

Question ID : **630680278183**
Option 1 ID : **6306801081090**
Option 2 ID : **6306801081091**
Option 3 ID : **6306801081092**
Option 4 ID : **6306801081089**
Status : **Answered**
Chosen Option : **3**

Q.36 In an open system:

Ans
✗ 1. Mass can cross the boundaries of the system but energy cannot.
✗ 2. Both mass and energy cannot cross the boundaries of the system.
✓ 3. Mass and energy can cross the boundaries of the system.
✗ 4. Energy can cross the boundaries of the system but mass cannot.

Question ID : **630680278225**
Option 1 ID : **6306801081258**
Option 2 ID : **6306801081259**
Option 3 ID : **6306801081257**
Option 4 ID : **6306801081260**
Status : **Answered**
Chosen Option : **3**

Q.37 Viscosity of liquids:

Ans
✓ 1. decreases with the increase in temperature.
✗ 2. decreases with the decrease in temperature.
✗ 3. increases with the decrease in temperature.
✗ 4. increases with the increase in temperature.

Question ID : **630680278124**
Option 1 ID : **6306801080853**
Option 2 ID : **6306801080855**
Option 3 ID : **6306801080856**
Option 4 ID : **6306801080854**
Status : **Answered**
Chosen Option : **1**

Q.38 On which theory is the diameter of the shaft designed?

Ans
✓ 1. Maximum Shear stress Theory
✗ 2. Maximum Principle stress theory
✗ 3. Maximum principle strain theory
✗ 4. Energy distortion theory

Question ID : **630680278173**
Option 1 ID : **6306801081050**
Option 2 ID : **6306801081051**
Option 3 ID : **6306801081052**
Option 4 ID : **6306801081049**
Status : **Answered**
Chosen Option : **1**

Q.39 The Reynolds number for a flow in a pipe is given by 1278. What is the Darcy-Weisbach friction factor for the pipe?

Ans
✗ 1. 0.06
✗ 2. 0.03
✗ 3. 0.04
✓ 4. 0.05

Question ID : **630680278144**
Option 1 ID : **6306801080936**
Option 2 ID : **6306801080933**
Option 3 ID : **6306801080934**
Option 4 ID : **6306801080935**
Status : **Answered**
Chosen Option : **3**

Q.40 Consider the following statements:
A) Reducing the inlet temperature of an SI engine reduces knocking.
B) Increasing the compression ratio of a CI engine reduces knocking.

Ans
✗ 1. Only B is true
✗ 2. Neither A nor B is true
✓ 3. Both A and B is true
✗ 4. Only A is true

Question ID : **630680278234**
Option 1 ID : **6306801081294**
Option 2 ID : **6306801081296**
Option 3 ID : **6306801081295**
Option 4 ID : **6306801081293**
Status : **Answered**
Chosen Option : **4**

Q.41 The mechanical efficiency of a 4-stroke single cylinder at full load is 60%. If the friction power is 47.5 kW, then calculate the brake power of the engine?

Ans
✗ 1. 70.55 kW
✗ 2. 74.25kW
✗ 3. 73.45kW
✓ 4. 71.25 kW

Question ID : **630680278196**
Option 1 ID : **6306801081141**
Option 2 ID : **6306801081144**
Option 3 ID : **6306801081143**
Option 4 ID : **6306801081142**
Status : **Not Answered**
Chosen Option : **--**

Q.42 Which of the following defines the compression ratio of an internal combustion engine? Here "Vs" is the stroke volume and "Vc" is the clearance volume.

Ans
✗ 1. Vs/(Vs+Vc)
✗ 2. Vs/Vc
✓ 3. (Vc+Vs)/Vc
✗ 4. Vc/Vs

Question ID : **630680278201**
Option 1 ID : **6306801081161**
Option 2 ID : **6306801081162**
Option 3 ID : **6306801081163**
Option 4 ID : **6306801081164**
Status : **Answered**
Chosen Option : **3**

Q.43 The cooling of air without any change in its specific humidity is called as:

Ans
✗ 1. sensible heating
✗ 2. cooling with adiabatic humidification
✓ 3. sensible cooling
✗ 4. Dehumidification

Question ID : **630680278167**
Option 1 ID : **6306801081025**
Option 2 ID : **6306801081027**
Option 3 ID : **6306801081026**
Option 4 ID : **6306801081028**
Status : **Answered**
Chosen Option : **3**

Q.44 Work input required by a pump in the actual vapour cycle will be _____ than the ideal vapour cycle.

Ans
✓ 1. Greater
✗ 2. equal
✗ 3. 0
✗ 4. lesser

Question ID : **630680278114**
Option 1 ID : **6306801080813**
Option 2 ID : **6306801080815**
Option 3 ID : **6306801080816**
Option 4 ID : **6306801080814**
Status : **Answered**
Chosen Option : **1**

Q.45 If the speed is kept constant, the variation in manometric head power and effi ciency with respect to discharge:

Ans
✓ 1. gives the operating characteristic curves for centrifugal pump.
✗ 2. gives the main characteristic curves for centrifugal pump.
✗ 3. gives the efficiency curves for centrifugal pump.
✗ 4. gives the constant head and constant discharge curves for centrifugal pump.

Question ID : **630680278148**
Option 1 ID : **6306801080949**
Option 2 ID : **6306801080950**
Option 3 ID : **6306801080951**
Option 4 ID : **6306801080952**
Status : **Answered**
Chosen Option : **2**

Q.46 Which of the following is a 50% reaction turbine?

Ans
✗ 1. Turgo Turbine
✗ 2. Francis turbine
✓ 3. Parson Turbine
✗ 4. Da-Laval Turbine

Question ID : **630680278130**
Option 1 ID : **6306801080880**
Option 2 ID : **6306801080879**
Option 3 ID : **6306801080878**
Option 4 ID : **6306801080877**
Status : **Answered**
Chosen Option : **3**

Q.47 Which of the following is a graphitizing element?

Ans
✓ 1. Copper
✗ 2. Silver
✗ 3. Sodium
✗ 4. Magnesium

Question ID : **630680278106**
Option 1 ID : **6306801080783**
Option 2 ID : **6306801080784**
Option 3 ID : **6306801080782**
Option 4 ID : **6306801080781**
Status : **Answered**
Chosen Option : **4**

Q.48 Consider the following statements:
A) Most of the friction occurs in the converging part of a convergent-divergent nozzle.
B)The effect of friction in a Nozzle is to reduce the available enthalpy drop by about 10 to 15%.
C)The critical pressure ratio is the pressure ratio which will accelerate the flow to a velocity equal to the local velocity of sound in the fluid.

Ans
✗ 1. A and C is true
✓ 2. B and C is true
✗ 3. A and B is true
✗ 4. All statements are true

Question ID : **630680278211**
Option 1 ID : **6306801081203**
Option 2 ID : **6306801081202**
Option 3 ID : **6306801081201**
Option 4 ID : **6306801081204**
Status : **Answered**
Chosen Option : **2**

Q.49 Which of the following welding processes use a non consumable electrode?

Ans
✔ 1. Carbon arc welding
✘ 2. Shielded Metal Arc welding
✘ 3. Gas Metal Arc welding
✘ 4. Flux-cored arc welding

Question ID : **630680278111**
Option 1 ID : **6306801080804**
Option 2 ID : **6306801080801**
Option 3 ID : **6306801080802**
Option 4 ID : **6306801080803**
Status : **Answered**
Chosen Option : **3**

Q.50 Which of the following advantages of multi-stage compressions over single stage compression is/are true?
A) The work done per kg of refrigerant is reduced in multistage compression with intercooler as compared to single stage compression for the same delivery pressure.
B) Multi stage compression improves volumetric efficiency for the given pressure ratio compared to single stage compression.

Ans
✘ 1. Only B is true
✘ 2. Only A is true
✔ 3. Both A and B is true
✘ 4. Neither A nor B is true

Question ID : **630680278170**
Option 1 ID : **6306801081038**
Option 2 ID : **6306801081037**
Option 3 ID : **6306801081039**
Option 4 ID : **6306801081040**
Status : **Answered**
Chosen Option : **3**

Q.51 Work done by an ideal nozzle is:

Ans
✔ 1. 0
✘ 2. high
✘ 3. cannot be determined
✘ 4. maybe high or low

Question ID : **630680278213**
Option 1 ID : **6306801081211**
Option 2 ID : **6306801081209**
Option 3 ID : **6306801081210**
Option 4 ID : **6306801081212**
Status : **Answered**
Chosen Option : **1**

Q.52 What is the velocity ratio of the belt drive with the diameter of the follower is 400mm and the diameter of the driver is 150mm and the thickness of the belt being 50mm?

Ans
✗ 1. 3
✗ 2. 0.4
✗ 3. 2.6
✓ 4. 2.25

Question ID : **630680278181**
Option 1 ID : **6306801081084**
Option 2 ID : **6306801081081**
Option 3 ID : **6306801081083**
Option 4 ID : **6306801081082**
Status : **Answered**
Chosen Option : **2**

Q.53 Consider the following statements:
A) Cold shots results from splattering during pouring, causing the formation of solid globules of metal that become entrapped in the casting.
B)Scabs is a defect consisting of a balloon-shaped gas cavity caused by release of mold gases during pouring.

Ans
✗ 1. Only B is true
✗ 2. Neither A nor B is true
✓ 3. Only A is true
✗ 4. Both A and B are true

Question ID : **630680278113**
Option 1 ID : **6306801080810**
Option 2 ID : **6306801080812**
Option 3 ID : **6306801080809**
Option 4 ID : **6306801080811**
Status : **Answered**
Chosen Option : **4**

Q.54 Moment of inertia of a solid sphere of radius R with the axis of rotation along it diameter is _____.

Ans
✗ 1. $(MR^2)/2$
✓ 2. $2/5\ (MR^2)$
✗ 3. $2/3(MR^2)$
✗ 4. MR^2

Question ID : **630680278172**
Option 1 ID : **6306801081045**
Option 2 ID : **6306801081047**
Option 3 ID : **6306801081048**
Option 4 ID : **6306801081046**
Status : **Answered**
Chosen Option : **2**

Q.55 A flywheel has a mass of 289 kg rotating at 6 rad/s. What would be its rotational kinetic energy if the radius of gyration is 1/17 m?

Ans
✗ 1. 15 J
✓ 2. 18 J
✗ 3. 24 J
✗ 4. 9 J

Question ID : **630680278185**
Option 1 ID : **6306801081098**
Option 2 ID : **6306801081099**
Option 3 ID : **6306801081100**
Option 4 ID : **6306801081097**
Status : **Answered**
Chosen Option : **2**

Q.56 A Carnot engine absorbs 1000 J of heat from a reservoir at 327 C and rejects 700 J of heat during each cycle. Calculate the temperature of the sink.

Ans
✓ 1. 147°C
✗ 2. 600°C
✗ 3. 180°C
✗ 4. 420°C

Question ID : **630680278191**
Option 1 ID : **6306801081121**
Option 2 ID : **6306801081124**
Option 3 ID : **6306801081122**
Option 4 ID : **6306801081123**
Status : **Answered**
Chosen Option : **1**

Q.57 To find the velocity at any point in a pipe by a pitot tube the following arrangement is used:
A) Pitot tube along with a vertical piezometer tube.
B) Pitot-tube and vertical piezometer connected with a differential U-tube manometer.

Ans
✗ 1. Only A is true
✓ 2. Both A and B is true
✗ 3. Neither A nor B is true
✗ 4. Only B is true

Question ID : **630680278157**
Option 1 ID : **6306801080985**
Option 2 ID : **6306801080987**
Option 3 ID : **6306801080988**
Option 4 ID : **6306801080986**
Status : **Answered**
Chosen Option : **2**

Q.58 Consider the following statements:
A) System possess energy but not heat and work.
B) Heat and work have no meaning at a state.

Ans
✗ 1. Only B is true
✗ 2. Neither A nor B is true
✓ 3. Both A and B is true
✗ 4. Only A is true

Question ID : **630680278224**
Option 1 ID : **6306801081254**
Option 2 ID : **6306801081256**
Option 3 ID : **6306801081255**
Option 4 ID : **6306801081253**
Status : **Answered**
Chosen Option : **3**

Q.59 Which of the following is a method of steam turbine governing?
A) By-pass governing

B) Throttle Governing

C) steam governing

D) Nozzle Governing

Ans
✗ 1. B,C,D
✗ 2. A,B,C, D
✗ 3. A,B,C
✓ 4. A,B,D

Question ID : **630680278218**
Option 1 ID : **6306801081231**
Option 2 ID : **6306801081232**
Option 3 ID : **6306801081229**
Option 4 ID : **6306801081230**
Status : **Answered**
Chosen Option : **4**

Q.60 The main characteristic curves of a centrifugal pump is obtained by keeping the pump at _____.

Ans
✗ 1. constant speed and varying the temperature of over desired range.
✗ 2. constant speed and varying the pressure over desired range.
✗ 3. constant discharge and varying the speed over desired range.
✓ 4. constant speed and varying the discharge over desired range.

Question ID : **630680278134**
Option 1 ID : **6306801080895**
Option 2 ID : **6306801080896**
Option 3 ID : **6306801080894**
Option 4 ID : **6306801080893**
Status : **Answered**
Chosen Option : **4**

Q.61 If high head is to be developed in a centrifugal pump then the impeller is to:

Ans
✔ 1. can be connected in series or on same shaft
✘ 2. connected in parallel
✘ 3. can be connected in series as well as parallel
✘ 4. high head cannot be developed

Question ID : **630680278137**
Option 1 ID : **6306801080908**
Option 2 ID : **6306801080907**
Option 3 ID : **6306801080906**
Option 4 ID : **6306801080905**
Status : **Answered**
Chosen Option : **1**

Q.62 Which of the following compressors is classified on the basis of method of compression?

Ans
✘ 1. Single stage compressor
✘ 2. Hermetic compressor
✘ 3. Single acting compressor
✔ 4. Centrifugal compressor

Question ID : **630680278161**
Option 1 ID : **6306801081003**
Option 2 ID : **6306801081004**
Option 3 ID : **6306801081002**
Option 4 ID : **6306801081001**
Status : **Answered**
Chosen Option : **1**

Q.63 Which of the following is an axial turbine?

Ans
✘ 1. Pelton wheel
✘ 2. Parsons turbine
✘ 3. Francis Turbine
✔ 4. Kaplan turbine

Question ID : **630680278217**
Option 1 ID : **6306801081225**
Option 2 ID : **6306801081227**
Option 3 ID : **6306801081228**
Option 4 ID : **6306801081226**
Status : **Answered**
Chosen Option : **4**

Q.64 The acceleration and retardation of the follower at the beginning and at the end of each stroke when the follower moves with uniform velocity is _____.

Ans
✘ 1. 0
✘ 2. 0.5
✘ 3. negative
✔ 4. infinity

Question ID : **630680278180**
Option 1 ID : **6306801081078**
Option 2 ID : **6306801081079**
Option 3 ID : **6306801081077**
Option 4 ID : **6306801081080**
Status : **Answered**
Chosen Option : **1**

Q.65 Which of the following is an example of Pressure compounded impulse turbine?

Ans
✗ 1. Propeller Turbine
✓ 2. Zoelly Turbine
✗ 3. Parson turbine
✗ 4. Hero's Turbine

Question ID : **630680278219**
Option 1 ID : **6306801081236**
Option 2 ID : **6306801081235**
Option 3 ID : **6306801081233**
Option 4 ID : **6306801081234**
Status : **Answered**
Chosen Option : **4**

Q.66 The condensing process in a theoretical vapour compression cycle with dry saturated vapour after compression takes place at:

Ans
✗ 1. only at constant pressure
✓ 2. constant temperature and pressure
✗ 3. only at constant entropy
✗ 4. only at constant temperature

Question ID : **630680278160**
Option 1 ID : **6306801080997**
Option 2 ID : **6306801081000**
Option 3 ID : **6306801080999**
Option 4 ID : **6306801080998**
Status : **Answered**
Chosen Option : **1**

Q.67 Which of the following statements is/are true?
A) For a vertical plane submerged surface the centre of pressure lies above the centre of gravity.
B) For a vertical plane submerged surface the distance of centre of pressure from the free surface of the liquid is dependent of the density of the liquid.

Ans
✗ 1. Both A and B is true
✓ 2. Both A and B are not True
✗ 3. Only A is true
✗ 4. Only B is true

Question ID : **630680278127**
Option 1 ID : **6306801080867**
Option 2 ID : **6306801080868**
Option 3 ID : **6306801080865**
Option 4 ID : **6306801080866**
Status : **Answered**
Chosen Option : **2**

Q.68 निम्नलिखित में से कौन सा परीक्षण IC इंजन में तुलनात्मक रूप से करना आसान है?

Ans
✔ 1. विलियन्स लाइन परीक्षण
✘ 2. ip-bp विधि
✘ 3. मंदन परीक्षण
✘ 4. मोटरिंग परीक्षण

Question ID : **630680278232**
Option 1 ID : **6306801081285**
Option 2 ID : **6306801081287**
Option 3 ID : **6306801081288**
Option 4 ID : **6306801081286**
Status : **Answered**
Chosen Option : **2**

Q.69 **Consider the following statements:**
A) In an induced boiler draught, pressure inside the flue passages is slightly less than atmospheric pressure.
2) Boiler Draught refers to the pressure difference created for the flow of gases inside the boiler.

Ans
✘ 1. Neither A nor B is true
✘ 2. Only A is true
✔ 3. Both A and B is true
✘ 4. Only B is true

Question ID : **630680278241**
Option 1 ID : **6306801081324**
Option 2 ID : **6306801081321**
Option 3 ID : **6306801081323**
Option 4 ID : **6306801081322**
Status : **Answered**
Chosen Option : **3**

Q.70 **Which of the following turbine does not have a nozzle?**

Ans
✘ 1. Francis turbine
✔ 2. Reaction Turbine
✘ 3. Da-Laval turbine
✘ 4. Impulse turbine

Question ID : **630680278216**
Option 1 ID : **6306801081223**
Option 2 ID : **6306801081221**
Option 3 ID : **6306801081224**
Option 4 ID : **6306801081222**
Status : **Answered**
Chosen Option : **3**

Q.71 Which of the following equations is used to calculate absolute pressure?

Ans
✗ 1. absolute pressure = gauge pressure- atmospheric pressure
✓ 2. absolute pressure = atmospheric pressure + gauge pressure
✗ 3. absolute pressure = atmospheric pressure - gauge pressure
✗ 4. absolute pressure = gauge pressure- vacuum pressure

Question ID : **630680278126**
Option 1 ID : **6306801080863**
Option 2 ID : **6306801080862**
Option 3 ID : **6306801080861**
Option 4 ID : **6306801080864**
Status : **Answered**
Chosen Option : **2**

Q.72 The major losses in a pipe is calculated by using which of the following equations?

Ans
✗ 1. Euler's Equation
✗ 2. Navier Stokes Equation
✗ 3. Bernoulli's Equation
✓ 4. Darcy Weisbach Equation

Question ID : **630680278129**
Option 1 ID : **6306801080876**
Option 2 ID : **6306801080873**
Option 3 ID : **6306801080874**
Option 4 ID : **6306801080875**
Status : **Answered**
Chosen Option : **4**

Q.73 Grain size obtained in normalizing are _____.

Ans
✓ 1. smaller than that obtained in annealing.
✗ 2. bigger than that obtained in annealing.
✗ 3. equal to the ones obtained in annealing.
✗ 4. can be big or small than that obtained in annealing.

Question ID : **630680278107**
Option 1 ID : **6306801080785**
Option 2 ID : **6306801080786**
Option 3 ID : **6306801080787**
Option 4 ID : **6306801080788**
Status : **Answered**
Chosen Option : **2**

Q.74 Consider a body of weight 'A' resting on a horizontal plane. What will be the least force that will move the body if the angle of friction is "x"?

Ans
✓ 1. Atanx
✗ 2. Acotx
✗ 3. Acosx
✗ 4. Asinx

Question ID : **630680278120**
Option 1 ID : **6306801080839**
Option 2 ID : **6306801080840**
Option 3 ID : **6306801080838**
Option 4 ID : **6306801080837**
Status : **Answered**
Chosen Option : **4**

Q.75 The masses of vapour and liquid is are 6 kg and 9 kg respectively. Find the dryness fraction of the liquid vapour mixture.

Ans
✔ 1. 0.4
✘ 2. 0.667
✘ 3. 0.6
✘ 4. 0.8

Question ID : **630680278187**
Option 1 ID : **6306801081105**
Option 2 ID : **6306801081107**
Option 3 ID : **6306801081106**
Option 4 ID : **6306801081108**
Status : **Answered**
Chosen Option : **1**

Q.76 Resistance spot welding is used for sheets of thickness _____.

Ans
✘ 1. 5 mm or more
✔ 2. 3 mm or less
✘ 3. 6 mm to 10 mm
✘ 4. 10 mm or less

Question ID : **630680278110**
Option 1 ID : **6306801080798**
Option 2 ID : **6306801080800**
Option 3 ID : **6306801080797**
Option 4 ID : **6306801080799**
Status : **Answered**
Chosen Option : **2**

Q.77 The hoop stress of a thin cylindrical shell is 45.76N/mm². Find the longitudinal stress of the same cylinder?

Ans
✘ 1. 91.52 N/mm²
✘ 2. 45.76N/mm²
✔ 3. 22.88 N/mm²
✘ 4. 11.4 N/mm²

Question ID : **630680278174**
Option 1 ID : **6306801081056**
Option 2 ID : **6306801081055**
Option 3 ID : **6306801081054**
Option 4 ID : **6306801081053**
Status : **Answered**
Chosen Option : **3**

Q.78 The inward force acting on the rotating balls of a governor running at steady speed is known as _____.

Ans
✘ 1. Shear force
✘ 2. Tension
✔ 3. Controlling force
✘ 4. Frictional force

Question ID : **630680278179**
Option 1 ID : **6306801081076**
Option 2 ID : **6306801081075**
Option 3 ID : **6306801081073**
Option 4 ID : **6306801081074**
Status : **Answered**
Chosen Option : **3**

Q.79 Consider the following statements:
A) Draft Tube permits a negative head to be established at the outlet of the runner and thereby increasing the net head on the turbine.
B) Francis turbine is an inward flow reaction turbine.

Ans
✗ 1. Only B is true
✗ 2. Neither A or B is true
✓ 3. Both A and B is true
✗ 4. Only A is true

Question ID : **630680278146**
Option 1 ID : **6306801080942**
Option 2 ID : **6306801080944**
Option 3 ID : **6306801080943**
Option 4 ID : **6306801080941**
Status : **Answered**
Chosen Option : **3**

Q.80 A device which increases the velocity at the expense of pressure is:

Ans
✗ 1. Diffusers
✗ 2. Turbine
✗ 3. Pump
✓ 4. Nozzles

Question ID : **630680278212**
Option 1 ID : **6306801081205**
Option 2 ID : **6306801081206**
Option 3 ID : **6306801081207**
Option 4 ID : **6306801081208**
Status : **Answered**
Chosen Option : **4**

Q.81 Which of the following will improve thermal efficiency of the Rankine cycle?
A) By regenerative feed heating.

B)By reheating of steam.

C)Increasing condenser pressure.

D)Superheating the steam.

Ans
✓ 1. A,B,D
✗ 2. B,C,D
✗ 3. A,B,C
✗ 4. A,B,C, D

Question ID : **630680278116**
Option 1 ID : **6306801080822**
Option 2 ID : **6306801080823**
Option 3 ID : **6306801080821**
Option 4 ID : **6306801080824**
Status : **Answered**
Chosen Option : **4**

Q.82 Consider the following statements:

A) Reaction turbines are suitable in cases where water flow rates are higher.

B) The reaction turbine have relatively large size compared to impulse turbine for the same power output.

C) In the reaction turbine, the pressure of water continuously decreases when it flows over the blades.

Ans
✗ 1. B and C is true
✓ 2. All statements are true
✗ 3. A and B is true
✗ 4. A and C is true

Question ID : **630680278220**
Option 1 ID : **6306801081238**
Option 2 ID : **6306801081240**
Option 3 ID : **6306801081237**
Option 4 ID : **6306801081239**
Status : **Answered**
Chosen Option : **2**

Q.83 A steel rod of 20 mm diameter and 3.14m long is subjected to an axial pull of 2000N.Determine the elongation of the rod if the elastic modulus is 2×10^5 N/mm².

Ans
✗ 1. 0.01mm
✗ 2. 1mm
✗ 3. 10mm
✓ 4. 0.1mm

Question ID : **630680278175**
Option 1 ID : **6306801081059**
Option 2 ID : **6306801081057**
Option 3 ID : **6306801081060**
Option 4 ID : **6306801081058**
Status : **Answered**
Chosen Option : **4**

Q.84 What is the relation between the specific speed and the head under which the turbine is working? (Here N is the specific speed and H is the head)

Ans
✗ 1. N∝1/H^(3/2)
✓ 2. N∝1/H^(5/4)
✗ 3. N∝1/H^(5/3)
✗ 4. N∝H^(5/2)

Question ID : **630680278131**
Option 1 ID : **6306801080884**
Option 2 ID : **6306801080883**
Option 3 ID : **6306801080882**
Option 4 ID : **6306801080881**
Status : **Answered**
Chosen Option : **2**

Q.85 The point at which saturated vapour and saturated liquid coincide with each other is called as_____.

Ans
✗ 1. melting point
✓ 2. Critical point
✗ 3. boiling point
✗ 4. triple point

Question ID : **630680278186**
Option 1 ID : **6306801081104**
Option 2 ID : **6306801081102**
Option 3 ID : **6306801081103**
Option 4 ID : **6306801081101**
Status : **Answered**
Chosen Option : **2**

Q.86 Which of the following is NOT a fusion welding process?

Ans
✗ 1. Thermit welding
✗ 2. Oxyacetylene welding
✗ 3. Electron-Beam Welding
✓ 4. Ultrasonic welding

Question ID : **630680278109**
Option 1 ID : **6306801080793**
Option 2 ID : **6306801080795**
Option 3 ID : **6306801080794**
Option 4 ID : **6306801080796**
Status : **Answered**
Chosen Option : **4**

Q.87 In velocity analysis of a Kaplan turbine the relation between the velocity of flow in the inlet (V_1) with the velocity of flow in the outlet (V_2) is _____.

Ans
✓ 1. $V_1 = V_2$
✗ 2. $V_1 = (V_2)/2$
✗ 3. $V_1 = V_2/4$
✗ 4. $V_1 = 2(V_2)$

Question ID : **630680278145**
Option 1 ID : **6306801080938**
Option 2 ID : **6306801080939**
Option 3 ID : **6306801080940**
Option 4 ID : **6306801080937**
Status : **Answered**
Chosen Option : **4**

Q.88 Friction power can be measured with high accuracy using which of the following methods?

Ans
✓ 1. measurement of brake and indicated power
✗ 2. Morse test
✗ 3. motoring test
✗ 4. Willian's Line

Question ID : **630680278197**
Option 1 ID : **6306801081148**
Option 2 ID : **6306801081147**
Option 3 ID : **6306801081146**
Option 4 ID : **6306801081145**
Status : **Answered**
Chosen Option : **2**

Q.89 **Consider the following statements:**
A) Between the same temperature limits Rankine cycle provides a higher specific work output than a Carnot cycle.
B) The efficiency of the Rankine cycle will approach that of the Carnot cycle more nearly if the superheat temperature rise is increased.

Ans
✗ 1. Both A and B are true
✗ 2. Only B is true
✗ 3. Neither A nor B is true
✓ 4. Only A is true

Question ID : **630680278118**
Option 1 ID : **6306801080831**
Option 2 ID : **6306801080830**
Option 3 ID : **6306801080832**
Option 4 ID : **6306801080829**
Status : **Answered**
Chosen Option : **2**

Q.90 **Which of the following forces in Lami's Theorem is applicable to keep an object in static equilibrium?**

Ans
✗ 1. Two coplanar, non - collinear and concurrent forces
✗ 2. Two coplanar and concurrent forces only
✗ 3. Three coplanar and concurrent forces
✓ 4. Three coplanar, non - collinear and concurrent forces

Question ID : **630680278122**
Option 1 ID : **6306801080845**
Option 2 ID : **6306801080846**
Option 3 ID : **6306801080847**
Option 4 ID : **6306801080848**
Status : **Answered**
Chosen Option : **3**

Q.91 **The efficiency of a supercritical boiler is _____.**

Ans
✗ 1. lower than subcritical boiler
✗ 2. can be higher or lower than subcritical boiler
✓ 3. higher than subcritical boiler
✗ 4. equal to subcritical boiler

Question ID : **630680278240**
Option 1 ID : **6306801081317**
Option 2 ID : **6306801081320**
Option 3 ID : **6306801081318**
Option 4 ID : **6306801081319**
Status : **Answered**
Chosen Option : **3**

Q.92 Consider the following statements:
A) The locus of points on the h-s diagram for the isentropic expansion of steam in nozzle where condensation will take place regardless of the initial temperature and pressure at the nozzle entrance is called the Wilson line.
B) The condensation of steam is delayed in a nozzle owing to the high velocities is called as supersaturation.

Ans
✗ 1. Neither A nor B is true
✓ 2. Both A and B is true
✗ 3. Only B is true
✗ 4. Only A is true

Question ID : **630680278215**
Option 1 ID : **6306801081220**
Option 2 ID : **6306801081219**
Option 3 ID : **6306801081218**
Option 4 ID : **6306801081217**
Status : **Not Answered**
Chosen Option : **--**

Q.93 A pitot tube works on the principle if velocity of flow at a point becomes zero then the pressure is _____.

Ans
✗ 1. decreased due to conversion of kinetic energy into pressure energy.
✓ 2. increased due to conversion of kinetic energy into pressure energy.
✗ 3. pressure is the same.
✗ 4. decreased due to conversion of kinetic energy into heat energy.

Question ID : **630680278128**
Option 1 ID : **6306801080871**
Option 2 ID : **6306801080869**
Option 3 ID : **6306801080872**
Option 4 ID : **6306801080870**
Status : **Answered**
Chosen Option : **2**

Q.94 Consider the following statements:
A) With Air cooling system, the design of engine becomes simpler compared to water cooling system.
B) Air cooled system have lower working temperatures compared to water cooled systems.

Ans
✗ 1. Neither A nor B is true
✓ 2. Only A is true
✗ 3. Only B is true
✗ 4. Both A and B is true

Question ID : **630680278202**
Option 1 ID : **6306801081168**
Option 2 ID : **6306801081165**
Option 3 ID : **6306801081166**
Option 4 ID : **6306801081167**
Status : **Answered**
Chosen Option : **4**

Q.95 Which of the following is an advantage of rolling contact bearings over sliding contact bearing?

Ans
✗ 1. less noisy
✓ 2. low starting friction
✗ 3. simple housing design
✗ 4. less initial cost

Question ID : **630680278182**
Option 1 ID : **6306801081086**
Option 2 ID : **6306801081085**
Option 3 ID : **6306801081088**
Option 4 ID : **6306801081087**
Status : **Answered**
Chosen Option : **2**

Q.96 At the critical point the latent heat of vaporization is _____.

Ans
✓ 1. 0
✗ 2. equal to pressure at 4.5 mm hg
✗ 3. negative
✗ 4. maximum

Question ID : **630680278221**
Option 1 ID : **6306801081241**
Option 2 ID : **6306801081243**
Option 3 ID : **6306801081242**
Option 4 ID : **6306801081244**
Status : **Answered**
Chosen Option : **1**

Q.97 In a centrifugal pump the vortex casing helps in conversion of _____.

Ans
✗ 1. kinetic energy into the potential energy.
✗ 2. kinetic energy into the mechanical energy.
✓ 3. kinetic energy into the pressure energy.
✗ 4. pressure energy into the kinetic energy.

Question ID : **630680278149**
Option 1 ID : **6306801080955**
Option 2 ID : **6306801080953**
Option 3 ID : **6306801080956**
Option 4 ID : **6306801080954**
Status : **Answered**
Chosen Option : **3**

Q.98 What is the standard feed temperature and working pressure adopted to compare two boilers ?

Ans
✗ 1. 0°C and 1.033 kg/cm²
✓ 2. 100°C and 1.033 kg/cm²
✗ 3. 200°C and 1.033 kg/cm²
✗ 4. 100°C and 0.1 kg/cm²

Question ID : **630680278204**
Option 1 ID : **6306801081173**
Option 2 ID : **6306801081174**
Option 3 ID : **6306801081176**
Option 4 ID : **6306801081175**
Status : **Answered**
Chosen Option : **2**

Q.99 Which of the following statement/s is/are true?
A) In vapour absorption system the only moving part of the entire system is a pump which has a small motor.
B) The load variations do not affect the performance of the vapour absorption system.

Ans
✔ 1. Both A and B is true
✘ 2. Only B is true
✘ 3. Only A is true
✘ 4. Neither A nor B is true

Question ID : **630680278168**
Option 1 ID : **6306801081031**
Option 2 ID : **6306801081030**
Option 3 ID : **6306801081029**
Option 4 ID : **6306801081032**
Status : **Answered**
Chosen Option : **1**

Q.100 For which of the following system internal energy is used exclusively for doing work as per the first law of thermodynamics?

Ans
✘ 1. Isothermal System
✘ 2. Isochoric System
✘ 3. Isolated system
✔ 4. Adiabatic system

Question ID : **630680278227**
Option 1 ID : **6306801081266**
Option 2 ID : **6306801081265**
Option 3 ID : **6306801081268**
Option 4 ID : **6306801081267**
Status : **Answered**
Chosen Option : **4**

Q.101 The ratio of pressure energy change inside a runner of a reaction turbine to the total energy change inside a runner is called as _____.

Ans
✔ 1. Degree of reaction
✘ 2. Flow ratio
✘ 3. turbine efficiency
✘ 4. Discharge of the turbine

Question ID : **630680278147**
Option 1 ID : **6306801080948**
Option 2 ID : **6306801080945**
Option 3 ID : **6306801080947**
Option 4 ID : **6306801080946**
Status : **Answered**
Chosen Option : **1**

Q.102 Which of the following is a dynamic pressure pump?

Ans
1. Piston Pump
2. Gear Pump
3. Centrifugal Pump
4. Vane Pump

Question ID : **630680278136**
Option 1 ID : **6306801080901**
Option 2 ID : **6306801080902**
Option 3 ID : **6306801080904**
Option 4 ID : **6306801080903**
Status : **Answered**
Chosen Option : **4**

Q.103 The right limb of a simple U-Tube manometer containing mercury is open to the atmosphere while the left limb is connected to a pipe in which a liquid of specific gravity 0.5 is flowing. The centre of the pipe is 10 cm below the level of mercury in the right limb. Find the pressure of fluid in the pipe if the difference of mercury level in the two limbs is 20 cm.

Ans
1. 2.3 N/cm^2
2. 3.5 N/cm^2
3. 2.6 N/cm^2
4. 3.8 N/cm^2

Question ID : **630680278140**
Option 1 ID : **6306801080917**
Option 2 ID : **6306801080919**
Option 3 ID : **6306801080918**
Option 4 ID : **6306801080920**
Status : **Not Answered**
Chosen Option : **--**

Q.104 The indicated power in KW is given by (where Pim is indicated mean effective pressure , n is the number of power strokes per min, k is the number of cylinders, L is the length of stroke, A is the area of the piston, Vs is the volume)

Ans
1. (PimALnk)/60000
2. (PimAnk)/60000
3. (PimVsn)/60000
4. (PimVskL)/60000

Question ID : **630680278233**
Option 1 ID : **6306801081292**
Option 2 ID : **6306801081290**
Option 3 ID : **6306801081289**
Option 4 ID : **6306801081291**
Status : **Answered**
Chosen Option : **1**

Q.105 Consider the following statements:
A) Heat and work can be stored in the system.
B) Heat transfer is the energy interaction due to temperature difference only and all other energy interaction may be termed as work transfer.

Ans
✗ 1. Only A is true
✓ 2. Only B is true
✗ 3. Both A and B are true
✗ 4. Neither A or B is true

Question ID : **630680278189**
Option 1 ID : **6306801081113**
Option 2 ID : **6306801081114**
Option 3 ID : **6306801081115**
Option 4 ID : **6306801081116**
Status : **Answered**
Chosen Option : **2**

Q.106 A hydraulic press has a ram of 20 cm diameter and a plunger of 4 cm dia. Find the weight lifted by the hydraulic press when a force of 10 N is applied.

Ans
✗ 1. 0.4N
✗ 2. 50N
✗ 3. 100N
✓ 4. 250N

Question ID : **630680278125**
Option 1 ID : **6306801080859**
Option 2 ID : **6306801080857**
Option 3 ID : **6306801080858**
Option 4 ID : **6306801080860**
Status : **Answered**
Chosen Option : **4**

Q.107 Which of the following processes are involved in Rankine cycle?

Ans
✗ 1. Two reversible adiabatic process, constant pressure process., one constant volume process.
✓ 2. Two reversible adiabatic process and two constant pressure process.
✗ 3. Two isothermal process and two constant pressure process.
✗ 4. Two reversible adiabatic process and two constant volume process.

Question ID : **630680278115**
Option 1 ID : **6306801080820**
Option 2 ID : **6306801080818**
Option 3 ID : **6306801080819**
Option 4 ID : **6306801080817**
Status : **Answered**
Chosen Option : **2**

Q.108 The forced circulation cooling system in an IC engine normally uses _____.

Ans
✗ 1. gear pump
✗ 2. vane pump
✓ 3. centrifugal pump
✗ 4. piston pump

Question ID : **630680278237**
Option 1 ID : **6306801081307**
Option 2 ID : **6306801081308**
Option 3 ID : **6306801081305**
Option 4 ID : **6306801081306**
Status : **Answered**
Chosen Option : **4**

Q.109 Consider the following statements:
A) The point on the beam where the bending moment changes its sign is known as the point of contraflexure.
B) If shear force is zero at a particular section bending moment will be at its peak in that particular section.

Ans
✗ 1. Neither A or B are true
✗ 2. Both A and B are true
✗ 3. Only B is true
✓ 4. Only A is true

Question ID : **630680278176**
Option 1 ID : **6306801081064**
Option 2 ID : **6306801081063**
Option 3 ID : **6306801081062**
Option 4 ID : **6306801081061**
Status : **Answered**
Chosen Option : **2**

Q.110 An IC engine has a brake power of 720 kW, with a fuel whose calorific value is 32 MJ/kg. The engine is expected to consume about 60 g/s. Calculate the brake thermal efficiency of the engine.

Ans
✗ 1. 0.32
✗ 2. 0.25
✓ 3. 0.375
✗ 4. 0.395

Question ID : **630680278198**
Option 1 ID : **6306801081150**
Option 2 ID : **6306801081149**
Option 3 ID : **6306801081151**
Option 4 ID : **6306801081152**
Status : **Answered**
Chosen Option : **3**

Q.111 In the expression of capillary rise, the angle of contact between water and clean glass tube is approximately equal to _____.

Ans
✗ 1. 130°
✗ 2. 90°
✗ 3. 45°
✓ 4. 0°

Question ID : **630680278152**
Option 1 ID : **6306801080968**
Option 2 ID : **6306801080967**
Option 3 ID : **6306801080966**
Option 4 ID : **6306801080965**
Status : **Answered**
Chosen Option : **4**

Q.112 Which of the following is increased due to friction in Nozzle?
A) Entropy
B)Available energy
C)Throat area
D) Velocity of flow

Ans
✓ 1. A,C
✗ 2. B,C
✗ 3. B,D
✗ 4. A,B

Question ID : **630680278245**
Option 1 ID : **6306801081338**
Option 2 ID : **6306801081339**
Option 3 ID : **6306801081340**
Option 4 ID : **6306801081337**
Status : **Answered**
Chosen Option : **3**

Q.113 Find the COP of the refrigeration system if the work input is 40kJ/kg and the refrigeration effect produced is 160KJ/kg of refrigerant flowing?

Ans
✓ 1. 4
✗ 2. 3
✗ 3. 0.5
✗ 4. 2

Question ID : **630680278166**
Option 1 ID : **6306801081024**
Option 2 ID : **6306801081023**
Option 3 ID : **6306801081022**
Option 4 ID : **6306801081021**
Status : **Answered**
Chosen Option : **1**

Q.114 Consider the following statements:
A) For a given compression ratio the Otto cycle is more effi cient that diesel cycle.
B) For an Otto cycle an increase in the compression ratio leads to an increase in the mean effective pressure but decrease in thermal effi ciency.

Ans
✔ 1. Only A is true
✘ 2. Neither A nor B is true
✘ 3. Both A and B is true
✘ 4. Only B is true

Question ID : **630680278228**
Option 1 ID : **6306801081269**
Option 2 ID : **6306801081272**
Option 3 ID : **6306801081271**
Option 4 ID : **6306801081270**
Status : **Answered**
Chosen Option : **3**

Q.115 Super heating vapour after compression in a vapour compression cycle will:

Ans
✘ 1. have no effect.
✘ 2. decrease the refrigerating effect
✔ 3. increase the work done
✘ 4. increase the coefficient of performance

Question ID : **630680278169**
Option 1 ID : **6306801081036**
Option 2 ID : **6306801081034**
Option 3 ID : **6306801081033**
Option 4 ID : **6306801081035**
Status : **Answered**
Chosen Option : **4**

Q.116 In case of mist lubricating system, the lubricating oil is mixed with the fuel the usual ratio being_____.

Ans
✘ 1. 5% to 9%
✔ 2. 3% to 6%
✘ 3. 1% to 3%
✘ 4. 7% to 9%

Question ID : **630680278238**
Option 1 ID : **6306801081311**
Option 2 ID : **6306801081310**
Option 3 ID : **6306801081309**
Option 4 ID : **6306801081312**
Status : **Not Answered**
Chosen Option : **--**

Q.117 Consider the following statements:
A) Carbon Loss results from the presence of unburned combustible materials.
B) The sensible loss is typically the largest singleboiler loss component.

Ans
✗ 1. Neither A or B is true
✗ 2. Only A is true
✗ 3. Only B is true
✓ 4. Both A and B is true

Question ID : **630680278205**
Option 1 ID : **6306801081180**
Option 2 ID : **6306801081177**
Option 3 ID : **6306801081178**
Option 4 ID : **6306801081179**
Status : **Not Answered**
Chosen Option : **--**

Q.118 In vapour compression cycle, what will be the change in the refrigeration effect when the vapour is first superheated after compression and undercooled before throttling?

Ans
✗ 1. Refrigeration effect may increase or decrease
✗ 2. Refrigeration effect decreases
✓ 3. Refrigeration effect increases
✗ 4. No change

Question ID : **630680278163**
Option 1 ID : **6306801081011**
Option 2 ID : **6306801081009**
Option 3 ID : **6306801081010**
Option 4 ID : **6306801081012**
Status : **Answered**
Chosen Option : **3**

Q.119 The draught in which pressure difference is created between the base of chimney and the air inlet point of boiler because of density difference between hot flue gases inside the chimney and fresh colder air outside the chimney is a _____.

Ans
✓ 1. Natural Draught
✗ 2. Forced Draught
✗ 3. Mechanical Draught
✗ 4. Steam Jet Draught

Question ID : **630680278206**
Option 1 ID : **6306801081181**
Option 2 ID : **6306801081184**
Option 3 ID : **6306801081182**
Option 4 ID : **6306801081183**
Status : **Answered**
Chosen Option : **1**

Q.120 The specific speed for a Francis Turbine in SI units is _____.

Ans
✗ 1. 255 to 860
✗ 2. 8.5 to 30
✗ 3. 30 to 51
✓ 4. 51 to 225

Question ID : **630680278132**
Option 1 ID : **6306801080888**
Option 2 ID : **6306801080885**
Option 3 ID : **6306801080886**
Option 4 ID : **6306801080887**
Status : **Answered**
Chosen Option : **1**

Q.121 The head loss due to exit from a pipe is given by H. What will be the head loss due to entrance of the same pipe ?

Ans
✓ 1. H/2
✗ 2. 2H
✗ 3. H
✗ 4. H^2

Question ID : **630680278158**
Option 1 ID : **6306801080990**
Option 2 ID : **6306801080991**
Option 3 ID : **6306801080989**
Option 4 ID : **6306801080992**
Status : **Not Answered**
Chosen Option : **--**

Q.122 Consider the following statements:
A) Shear stress in a solid shaft due to applied torque is zero at the centre and maximum at the circumference.
B) According to torsion equation, twisting moment is directly proportional to the length.

Ans
✗ 1. Only B is true
✓ 2. Only A is true
✗ 3. Neither A or B are true
✗ 4. Both A and B are true

Question ID : **630680278177**
Option 1 ID : **6306801081066**
Option 2 ID : **6306801081065**
Option 3 ID : **6306801081068**
Option 4 ID : **6306801081067**
Status : **Answered**
Chosen Option : **2**

Q.123 The rate of shear strain between a fixed plate and a moving plate is 24000 sec^{-1}. The viscosity of the fluid between the two plates is 5×10^{-4} poise. Find the force per unit area to maintain the speed of the moving plate.

Ans
✗ 1. 1.4 N/m^2
✗ 2. 1 N/m^2
✓ 3. 1.2 N/m^2
✗ 4. 1.6 N/m^2

Question ID : **630680278139**
Option 1 ID : **6306801080915**
Option 2 ID : **6306801080913**
Option 3 ID : **6306801080914**
Option 4 ID : **6306801080916**
Status : **Answered**
Chosen Option : **3**

Q.124 Consider the following statements:
A)The expansion of steam through a nozzle is not a free expansion, and the steam is not throttled, because it has a large velocity at the end of the expansion.
B) In a converging- diverging nozzle the super sonic region is the diverging section.

Ans
✗ 1. Only B is true
✗ 2. Only A is true
✓ 3. Both A and B is true
✗ 4. Neither A or B is true

Question ID : **630680278244**
Option 1 ID : **6306801081334**
Option 2 ID : **6306801081333**
Option 3 ID : **6306801081335**
Option 4 ID : **6306801081336**
Status : **Answered**
Chosen Option : **3**

Q.125 Determine the pressure increase (in Pascal) required to reduce the volume of water by 1.5 %, if its bulk modulus of elasticity is 2.2×10^9 Pa.

Ans
✗ 1. 7.5×10^6 Pa
✗ 2. 3.5×10^7 Pa
✗ 3. 4×10^7 Pa
✓ 4. 3.3×10^7 Pa

Question ID : **630680278123**
Option 1 ID : **6306801080850**
Option 2 ID : **6306801080851**
Option 3 ID : **6306801080852**
Option 4 ID : **6306801080849**
Status : **Answered**
Chosen Option : **4**

Q.126 Reaction turbine means that the water at the inlet possesses _____.

Ans
✗ 1. no energy
✗ 2. kinetic energy
✓ 3. kinetic and pressure energy
✗ 4. pressure energy

Question ID : **630680278133**
Option 1 ID : **6306801080891**
Option 2 ID : **6306801080890**
Option 3 ID : **6306801080892**
Option 4 ID : **6306801080889**
Status : **Answered**
Chosen Option : **2**

Q.127 Consider the following statements:

A)The major difficulty for Stirling engine to become obsolete in earlier times when otto cycle and diesel cycle came into use is due to the lack of research in heat exchangers to operate continuously at very high temperatures.

B) The mean effective pressure increases with the increase in compression ratio in an Otto cycle.

Ans
✗ 1. Only B is true
✓ 2. Both A and B is true
✗ 3. Neither A nor B is true
✗ 4. Only A is true

Question ID : **630680278193**
Option 1 ID : **6306801081130**
Option 2 ID : **6306801081131**
Option 3 ID : **6306801081132**
Option 4 ID : **6306801081129**
Status : **Answered**
Chosen Option : **2**

Q.128 The mechanical loss in an engine is mainly constituted by:

Ans
✓ 1. frictional losses
✗ 2. ventilating action of the flywheel
✗ 3. Work of charging the cylinder with fresh charge
✗ 4. power absorbed by engine auxiliaries

Question ID : **630680278195**
Option 1 ID : **6306801081139**
Option 2 ID : **6306801081138**
Option 3 ID : **6306801081140**
Option 4 ID : **6306801081137**
Status : **Answered**
Chosen Option : **1**

Q.129 Which of the following is used for periodical cleaning by discharging the water and sediments from bottom of boiler?

Ans
✗ 1. Feed check valve
✗ 2. fusible plug
✓ 3. Blow off cock
✗ 4. safety valve

Question ID : **630680278209**
Option 1 ID : **6306801081194**
Option 2 ID : **6306801081195**
Option 3 ID : **6306801081193**
Option 4 ID : **6306801081196**
Status : **Answered**
Chosen Option : **3**

Q.130 The diverging part of the venturimeter is relatively:

Ans
✗ 1. longer or shorter than the converging section
✓ 2. longer than the converging section
✗ 3. shorter than the converging section
✗ 4. equal to the converging section

Question ID : **630680278156**
Option 1 ID : **6306801080983**
Option 2 ID : **6306801080981**
Option 3 ID : **6306801080982**
Option 4 ID : **6306801080984**
Status : **Answered**
Chosen Option : **2**

Q.131 Consider the following statements:
A)The processes in an Ericsson cycle are two isothermal and two constant pressure process.
B) Diesel cycle consist of two isentropic processes and two constant volume processes.

Ans
✗ 1. Both A and B is true
✗ 2. Only B is true
✓ 3. Only A is true
✗ 4. Neither A nor B is true

Question ID : **630680278229**
Option 1 ID : **6306801081275**
Option 2 ID : **6306801081274**
Option 3 ID : **6306801081273**
Option 4 ID : **6306801081276**
Status : **Answered**
Chosen Option : **3**

Q.132 Hydrostatic Paradox is mathematically expressed as where P is the pressure at depth "h" from the surface of the liquid/fluid and h is the vertical height from the surface to the point.

Ans
✗ 1. $P \propto 1/h$
✗ 2. $1/P \propto h$
✗ 3. $P \propto h^2$
✓ 4. $P \propto h$

Question ID : **630680278155**
Option 1 ID : **6306801080978**
Option 2 ID : **6306801080979**
Option 3 ID : **6306801080980**
Option 4 ID : **6306801080977**
Status : **Answered**
Chosen Option : **4**

Q.133 Which of the following casing allows water to enter into the pump without shock?

Ans
✓ 1. Diffuser casing
✗ 2. Vortex casing
✗ 3. Single casing
✗ 4. Volute casing

Question ID : **630680278135**
Option 1 ID : **6306801080899**
Option 2 ID : **6306801080898**
Option 3 ID : **6306801080900**
Option 4 ID : **6306801080897**
Status : **Answered**
Chosen Option : **4**

Q.134 Identify the CORRECT examples listed for the following types of boilers:
1.Horizontal boilers
2.Vertical boilers

Ans
✗ 1. 1)Locomotive boiler 2)Cornish Boiler
✗ 2. 1)Cornish Boiler 2) Lancashire Boiler
✗ 3. 1)Lancashire Boiler 2) Babcock and Wilcox boiler
✓ 4. 1)Lancashire Boiler 2) Cochran Boiler

Question ID : **630680278242**
Option 1 ID : **6306801081328**
Option 2 ID : **6306801081326**
Option 3 ID : **6306801081325**
Option 4 ID : **6306801081327**
Status : **Answered**
Chosen Option : **4**

Q.135 Calculate density of 1 litre of fluid which is of weight 5N?
Take g as 10 m/sec^2

Ans
✗ 1. 600kg/m^3
✗ 2. 700kg/m^3
✗ 3. 400 Kg/m^3
✓ 4. 500kg/m^3

Question ID : **630680278138**
Option 1 ID : **6306801080912**
Option 2 ID : **6306801080911**
Option 3 ID : **6306801080909**
Option 4 ID : **6306801080910**
Status : **Answered**
Chosen Option : **4**

Q.136 What will be the equation for the loss of head due to sudden enlargement if V_1 and V_2 are the velocities of the flow before and after the enlargement in a pipe?

Ans
✓ 1. $(V_1-V_2)^2/(2g)$
✗ 2. $(V_1-V_2)/(2g)$
✗ 3. $(V_1-V_2)^2/(g)$
✗ 4. $(V_1^2-V_2^2)/(2g)$

Question ID : **630680278141**
Option 1 ID : **6306801080921**
Option 2 ID : **6306801080924**
Option 3 ID : **6306801080922**
Option 4 ID : **6306801080923**
Status : **Answered**
Chosen Option : **4**

Q.137 Consider the following statements:
A)The processes in an Stirling cycle are two isothermal and two constant volume process.
B) Otto cycle consist of two isentropic processes and two constant volume processes.

Ans
✗ 1. Only B is true
✗ 2. Neither A or B is true
✗ 3. Only A is true
✓ 4. Both A and B is true

Question ID : **630680278194**
Option 1 ID : **6306801081134**
Option 2 ID : **6306801081136**
Option 3 ID : **6306801081133**
Option 4 ID : **6306801081135**
Status : **Answered**
Chosen Option : **3**

Q.138 Consider the following statements:
A) Few factors that affect weldability are welding process, base metal and filler materials.
B) Metals with high thermal conductivity tend to transfer heat away from the weld zone, which can make them hard to weld.

Ans
✗ 1. Only B is true
✗ 2. Neither A nor B is true
✓ 3. Both A and B are true
✗ 4. Only A is true

Question ID : **630680278112**
Option 1 ID : **6306801080806**
Option 2 ID : **6306801080808**
Option 3 ID : **6306801080807**
Option 4 ID : **6306801080805**
Status : **Answered**
Chosen Option : **3**

Q.139 For which of the following processes the internal energy becomes equal to the heat transferred ($\Delta U = Q$)?

Ans
✗ 1. adiabatic process
✓ 2. isochoric process.
✗ 3. Isothermal Process
✗ 4. Isobaric process

Question ID : **630680278190**
Option 1 ID : **6306801081119**
Option 2 ID : **6306801081118**
Option 3 ID : **6306801081120**
Option 4 ID : **6306801081117**
Status : **Answered**
Chosen Option : **2**

Q.140 A spur gear has 30 teeth which are rotating at 300 rpm. Determine the circular pitch of the gear if the module of the gear is 4?

Ans
✗ 1. 6.28
✗ 2. 7.51
✗ 3. 9.42
✓ 4. 12.56

Question ID : **630680278184**
Option 1 ID : **6306801081093**
Option 2 ID : **6306801081094**
Option 3 ID : **6306801081095**
Option 4 ID : **6306801081096**
Status : **Answered**
Chosen Option : **4**