Entrance Exam

2024



QUESTION PAPER

aglasem.com

Andhra Pradesh State Council of Higher Education

Notations :

1.Options shown in green color and with ✔ icon are correct.

2.Options shown in red color and with ✖ icon are incorrect.

Question Paper Name :	Mechanical Engineering 2nd May 2024 Shift 1
Duration :	120
Total Marks :	140
Display Marks:	No
Share Answer Key With Delivery Engine :	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No

Show Progress Bar :	No
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Research Methodology

Section Id :	971036401
Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	66
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 1 Question Id : 97103628201 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The acronym MOOCS stands for

Options :

1. ✖ Modular Open Online Courses

2. ✖ Mass Online Offline Class

3. ✖ Multi-media Open Online Classes

4.

✔ Massive Open Online Courses

Question Number : 2 Question Id : 97103628202 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The idea of making students watch an education video at home and participate in discussion during the class is known as

Options :

1. ✖ Diverse class room

2. ✔ Flipped class room

3. ✖ Multi-media class room

4. ✖ Google class room

Question Number : 3 Question Id : 97103628203 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The term 'Zoom' in the context of ICT refers to

Options :

1. ✖ Learning Management System

2. ✖ Flipped class room

3. ✔ Video conferencing tool

4. ✖ Online data collection system

Question Number : 4 Question Id : 97103628204 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is a popular method of feedback in ICT based learning

Options :

1. ✖ WhatsApp web

2. ✖ Dropbox

3. ✖ Google Drive

4. ✔ Google form

Question Number : 5 Question Id : 97103628205 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A commonly used BYOD (Bring Your Own Device) in ICT supported learning process is

Options :

1. ✔ Laptop

2. ✖ Smartphone

3. ✖ Interactive white board

4. ✖ LCD projector

Question Number : 6 Question Id : 97103628206 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The method of dividing students into small groups to learn parts of a topic is known as

Options :

1. ✖ Round-Robin method

2. ✖ Numbered heads together

3. ✖ Think-pair-share method

4. ✔ Jigsaw method

Question Number : 7 Question Id : 97103628207 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Microsoft Teams is one ICT tool that supports

Options :

1. ✖ Web-based slides

2. ✔ Real time communication and collaboration

3. ✖ LMS

4. ✖ Remote Learning

Question Number : 8 Question Id : 97103628208 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which platform is widely recognized as one of the first MOOC providers?

Options :

1. ✖ Coursera

2. ✖ Udemy

3. ✖ Khan Academy

4. ✔ edX

Question Number : 9 Question Id : 97103628209 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The system of securing academic credit through optional and elective courses was made possible by

Options :

1. ✖ MOOCS

2. ✖ Semester System

3. ✔ Choice Based Credit System

4. ✖ Distance Education

Question Number : 10 Question Id : 97103628210 Display Question Number : Yes Is Questi

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following types of questions cannot be easily auto-graded by LMS software.

Options :

1. ✖ True-false type questions

2. ✔ Subjective questions

3. ✖ Multiple Choice questions

4. ✖ Matching type questions

Question Number : 11 Question Id : 97103628211 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An example of data measured on nominal scale is

Options :

1. ✖ Actual age of a person

2. ✖ Body Weight

3. ✔ Gender

4. ✖ Shoe length

Question Number : 12 Question Id : 97103628212 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Review of relevant literature is the vital step in the following stage of research

Options :

1. ✖ Data collection

2. ✔ Problem formulation stage

3. ✖ Sampling design

4. ✖ Interpretation of results

Question Number : 13 Question Id : 97103628213 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following style is commonly used in thesis writing for humanities ?

Options :

1. ✔ MLA style

2. ✖ APA style

3. ✖ IEEE style

4. ✖ Chicago style

Question Number : 14 Question Id : 97103628214 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the expansion of the acronym APA in the style of references?

Options :

1. ✖ Associated Printers Architecture

2. ✔ American Psychological Association

3. ✖ Advanced Psychological Appendix

4. ✖ Authenticated Publishing Act

Question Number : 15 Question Id : 97103628215 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Every published paper/article in a journal is expected to have completed the stage

Options :

1. ✖ Publisher's review

2. ✖ Editorial review

3. ✖ Public review

4. ✔ Peer review

Question Number : 16 Question Id : 97103628216 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The ‘bottom-up method’ approach in research is known as ‘

Options :

1. ✔ Inductive method

2. ✖ Hypothesis method

3. ✖ Pattern method

4. ✖ Interview method

Question Number : 17 Question Id : 97103628217 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruct Time : 0

The audio-visual communication among researchers across the globe using ICT is called

Options :

1. ✖ Web hosting

2. ✖ Podcasting

3. ✔ Tele-conferencing

4. ✖ Telecasting

Question Number : 18 Question Id : 97103628218 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is a powerful tool to seek content on a topic from internet resources

Options :

1. ✖ GPS

2. ✖ Alta Vista

3. ✔ ChatGPT

4. ✖ Skype

Question Number : 19 Question Id : 97103628219 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The acronym CARE in UGC-CARE stands for

Options :

1. ✖ Committee on Academic Research Ethics

2. ✔ Consortium for Academic Research and Ethics

3. ✖ Consortium for Academic Regulatory Ethics

4. ✖ Core Academic Research Ethics

Question Number : 20 Question Id : 97103628220 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

By group discussion one can evaluate the ability of a participant to

Options :

1. ✖ Dominate others

2. ✖ Control other participants

3. ✔ Confer with other participants

4. ✖ Lead over others

Is Section Default? : null

Question Id : 97103628221 Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (21 to 25)

Read the following passage and answer the questions below:

According to the World Health Organization cancer is the second leading cause of death globally. The cancer burden continues to grow globally. However, survival rates are improving with the help of advanced diagnosis and treatment. Regular screenings and early detection are two main key factors that help improve survival rates. "Lung, prostate, colorectal, stomach and liver cancer are the most common types of cancer in men, while breast, colorectal, lung, cervical and thyroid cancer are the most common among women," mentions the WHO website. Tobacco use alone accounts for around one-third of deaths from cancers. Other risk factors include high body mass index, alcohol consumption, family history, some health conditions, environment, infections by certain viruses and more. Common treatment options include surgery, chemotherapy, radiation therapy, bone marrow transplant, targeted drug therapy and more.

Sub questions

Question Number : 21 Question Id : 97103628222 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which among the following is not the treatment options for Cancer ?

Options :

1. ✖ Chemotherapy

2. ✖ Radiation therapy

3. ✔ PRP

4. ✖ Bone marrow transplant

Question Number : 22 Question Id : 97103628223 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Survival rate of cancer increases with

Options :

1. ✖ Stomach and live cancer

2. ✔ Regular screening and early detection

3. ✖ Tobacco use

4. ✖ Infections by certain viruses

Question Number : 23 Question Id : 97103628224 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is not commonly found cancer specific to women

Options :

1. ✖ Lung

2. ✖ Cervical

3.

✔ Prostate

4. ✖ Colorectal

Question Number : 24 Question Id : 97103628225 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The following is not known risk factor for cancer

Options :

1. ✖ High body mass index

2. ✔ High glucose levels

3. ✖ Alcohol consumption

4. ✖ Chewing tobacco

Question Number : 25 Question Id : 97103628226 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Common therapy to treat cancer includes

Options :

1. ✖ Physiotherapy

2. ✖ Laser therapy

3. ✖ Palliative care

4. ✔ Chemotherapy

Is Section Default? : null

Question Number : 26 Question Id : 97103628227 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is an element of evaluation in the Choice Based Credit System (CBCS)?

Options :

1. ✔ Continuous assessment

2. ✖ Multiple-choice questions

3. ✖ Final exams only

4. ✖ No grading system

Question Number : 27 Question Id : 97103628228 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

During lecturing the class room teacher shall be highly cognizant about

Options :

1. ✖ Fixed posture

2. ✖ Proximity

3. ✖ Frequent pausing

4. ✔ Voice modulation

Question Number : 28 Question Id : 97103628229 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A majority of communication problems arise due to

Options :

1. ✔ Poor oral communication

2. ✖ Physical appearance

3. ✖ Facial expressions

4.

✖ Body language

Question Number : 29 Question Id : 97103628230 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The following is an example of non-verbal communication

Options :

1. ✖ Question paper

2. ✖ Google form

3. ✖ SMS on mobile

4. ✔ Facial expression

Question Number : 30 Question Id : 97103628231 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

India's largest public sector broadcasting agency is

Options :

1. ✖ Doordarshan

2. ✖ PTI

3. ✔ Prasar Bharathi

4. ✖ TRAI

Question Number : 31 Question Id : 97103628232 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Among the options below, which one is not primarily used as a social networking platform

Options :

1. ✔ Dropbox

2. ✖ X

3. ✖ Reddit

4. ✖ Pinterest

Question Number : 32 Question Id : 97103628233 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The process of creating knowledge by transforming experiences is known as

Options :

1. ✖ Abstraction

2. ✖ Conceptualization

3. ✔ Learning

4. ✖ Experimentation

Question Number : 33 Question Id : 97103628234 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An assertive communication (either written or spoken) will be powerful when it is given as ____

Options :

1. ✔ 'I' message

2. ✖ 'We' message

3. ✖ 'You' message

4. ✖ 'They' message

Question Number : 34 Question Id : 97103628235 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Two numbers are respectively 20% and 50% more than a third number.

The ratio of the two numbers is

Options :

1. ✔ 4:5

2. ✖ 2:5

3. ✖ 3:5

4. ✖ 6:7

Question Number : 35 Question Id : 97103628236 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The cost price of 25 articles is the same as the selling price of x articles. If the profit is 30%, then the value of x is

Options :

1. ✖ 15

2. ✔ 20

3. ✖ 18

4. ✖ 25

Question Number : 36 Question Id : 97103628237 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A fruit seller sold 40% of watermelons available with him and still left with 420 fruits. How many fruits had he originally ?

Options :

1. ✖ 588

2. ✖ 600

3. ✖ 143

4. ✔ 700

Question Number : 37 Question Id : 97103628238 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Suppose the simple average of 20 numbers is zero. How many of these numbers can be greater than zero?

Options :

1. ✖ 0

2. ✖ 20

3. ✖ 10

4. ✔ 19

Question Number : 38 Question Id : 97103628239 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A man purchased a cow for Rs. 3000 and sold it the same day for Rs. 3600, allowing the buyer credit for 2 years. If the rate of interest is 10% per annum, then the man has a gain of

Options :

1. ✔ 0%

2. ✖ 5%

3. ✖ 7.5%

4. ✖ 10%

Question Number : 39 Question Id : 97103628240 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. At what speed it should travel in order to cover the same distance in 2 hours ?

Options :

1. ✖ 300 Kmph

2. ✖ 360 Kmph

3. ✖ 720 Kmph

4. ✔ 600 Kmph

Question Number : 40 Question Id : 97103628241 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What decimal of an hour is a second?

Options :

1. ✖ 0.0025

2. ✖ 0.0256

3. ✔ 0.00027

4. ✖ 0.0002

Question Number : 41 Question Id : 97103628242 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The process of drawing general conclusions from a set of specific observations is called

Options :

1. ✔ Inductive logic

2. ✖ Analogy

3. ✖ Speculative logic

4. ✖ Evidence-based logic

Question Number : 42 Question Id : 97103628243 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Reasoning is an instrument whose purpose is to

Options :

1. ✖ Spread knowledge

Live in imaginary world

2. ✖

Anticipate unknown things

3. ✖

Grasp the unknown from the known

4. ✔

Question Number : 43 Question Id : 97103628244 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A statement that asserts all or some members of one category are included in the other category is called

Options :

Speculative statement

1. ✖

Predictive statement

2. ✖

Categorical statement

3. ✔

Non-deniable statement

4. ✖

Question Number : 44 Question Id : 97103628245 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.
Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

What is the average amount of interest per year which the company had to pay during this period?

Options :

1. ✖ 32.43

2. ✖ 33.72

3. ✖ 34.18

4. ✔ 36.66

Question Number : 45 Question Id : 97103628246 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.
Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

Options :

1. ✖ 0.10

2. ✖ 0.50

3. ✔ 1.0

4. ✖ 1.25

Question Number : 46 Question Id : 97103628247 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.
Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

Options :

1. ✖ 62

2. ✖ 66

3. ✔ 69

4. ✖ 71

Question Number : 47 Question Id : 97103628248 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.
Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

The total expenditure of the company over these items during the year 2000 is?

Options :

1. ✔ 544.44

2. ✖ 501.11

3. ✖ 446.46

4. ✖ 478.87

Question Number : 48 Question Id : 97103628249 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following table and answer the questions based on it.
Expenditures of a Company (in Lakh Rupees) per Annum Over the given Years.

Year	Item of Expenditure (in Rs. lakhs)				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

The ratio between the total expenditure on Taxes for all the years and the total expenditure on Fuel and Transport for all the years respectively is approximately?

Options :

1. ✖ 4:7

2. ✔ 10:13

3. ✖ 15:18

4. ✖ 5:8

Question Number : 49 Question Id : 97103628250 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is not a search engine

Options :

1. ✖ Google

2. ✖ Yahoo

3. ✔ One-drive

4. ✖ Bing

Question Number : 50 Question Id : 97103628251 Display Question Number : Yes Is Questi

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The standard protocol for internet is

Options :

1. ✖ Java

2. ✖ HTML

3. ✖ FTTP

4. ✔ TCP/IP

Question Number : 51 Question Id : 97103628252 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A popular term related to the design of a digital learning environment is

Options :

1. ✖ LMS

2. ✔ E-kalpa

3. ✖ E-commerce

4. ✖ E-tendering

Question Number : 52 Question Id : 97103628253 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Government of India created an initiative to encourage scientific temper among students, known as ATL, whose full expansion is

Options :

1. ✖ Atal Technology Lab

2. ✔ Atal Tinkering Lab

3.

✖ Applied Techno Lab

4. ✖ Applied Technology Lab

Question Number : 53 Question Id : 97103628254 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is a web browser

Options :

1. ✖ Microsoft Windows

2. ✖ Google Drive

3. ✔ Google Chrome

4. ✖ HTML

Question Number : 54 Question Id : 97103628255 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Online courses through NPTEL platform are offered by

Options :

1. ✖ NITs

2. ✖ IIPA

3. ✖ IIMs

4. ✔ Jointly IITs and IISc

Question Number : 55 Question Id : 97103628256 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The chief objective of the PARAM Shavak of the Government of India is to provide

Options :

1. ✖ MOOCs in all subjects

2. ✖ Database of theses and dissertations

3. ✔ Affordable supercomputing facilities for research

4. ✖ Knowledge base for start-ups

Question Number : 56 Question Id : 97103628257 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The movement of topsoil and litter from one place to another is known as

Options :

1. ✔ Soil erosion

2. ✖ Soil submersion

3. ✖ Soil pollution

4. ✖ Soil pulling

Question Number : 57 Question Id : 97103628258 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The hearing sensitivity of human ear is

Options :

1. ✖ 3-6 kHz

2. ✔ 2-5 kHz

3. ✖ 10-50 kHz

4. ✖ 50-100 kHz

Question Number : 58 Question Id : 97103628259 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The organic material in solid waste is decomposed by

Options :

1. ✖ Soil particles

2. ✖ Oxidation

3. ✖ Flow of water

4. ✔ The action of microorganisms

Question Number : 59 Question Id : 97103628260 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The oldest commonly followed method to dump solid waste is

Options :

1. ✔ Landfill

2. ✖ Burning

3. ✖ River flow

4. ✖ Drying in open air

Question Number : 60 Question Id : 97103628261 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The harmful pollutant released by petrol/diesel vehicles is

Options :

1. ✖ Carbon Dioxide

2. ✖ Ozone

3. ✔ Carbon Monoxide

4. ✖ Nitrogen Oxide

Question Number : 61 Question Id : 97103628262 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One of the following is not a result of global warming

Options :

1. ✖ Melting glaciers

2. ✔ Population growth

3. ✖ Raising sea levels

Heat waves

4. ✖

Question Number : 62 Question Id : 97103628263 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is mostly responsible to global warming?

Options :

1. ✖ Deforestation

2. ✖ Erosion of sea coasts

3. ✔ Fossil fuel combustion

4. ✖ Agriculture

Question Number : 63 Question Id : 97103628264 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Sort the following countries in the decreasing order of carbon dioxide emissions

A. North America

B. Africa

C. Europe

D. Asia

Options :

1. ✖ DBCA

2. ✖ ADCB

3. ✔ DACB

4. ✖ BADC

Question Number : 64 Question Id : 97103628265 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The international agreement on reducing greenhouse emissions, is known as

Options :

1. ✖ NATO

2. ✖ COP 21 agreement

3. ✔ Convention on Biological Diversity

4. ✖ Montreal agreement

Question Number : 65 Question Id : 97103628266 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Montreal Protocol on ozone layer protection came into effect in the year

Options :

1. ✔ 1989

2. ✖ 1998

3. ✖ 1978

4. ✖ 1987

Question Number : 66 Question Id : 97103628267 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The first earth summit on biological diversity was held in

Options :

1. ✖

India

2. ✖ USA

3. ✖ South Africa

4. ✔ Brazil

Question Number : 67 Question Id : 97103628268 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is a conventional learning programme in India?

Options :

1. ✖ Yoga

2. ✔ Agriculture

3. ✖ Journalism

4. ✖ Artificial Intelligence

Question Number : 68 Question Id : 97103628269 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The 24-hour educational programme launched in 2020 and telecast in India is termed as

Options :

1. ✔ Gyan Darshan

2. ✖ NPTEL

3. ✖ SASTRA

4. ✖ SWAYAM

Question Number : 69 Question Id : 97103628270 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The quality of Technical and Management education in India is monitored by

Options :

1. ✖ ICMR

2. ✖ NAAC

3. ✖ UGC

4. ✔ AICTE

Question Number : 70 Question Id : 97103628271 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Medical Council of India is recently renamed as

Options :

1. ✖ Indian Medical Association

2. ✖ ICMR

3. ✔ National Medical Commission

4. ✖ Pharmacy Council of India

Mechanical Engineering

Section Id :	971036402
Section Number :	2
Mandatory or Optional :	Mandatory
Number of Questions :	70
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes

Maximum Instruction Time : 0

Is Section Default? : null

Question Number : 71 Question Id : 97103628272 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Eigen values of matrix $A_{3\times3}$ are 0, -1, -1, then which of the following cannot be found ?

Options :

1. ✖ Trace of A

2. ✖ Determinant of A

3. ✔ Rank of A

4. ✖ Eigen values of A^T

Question Number : 72 Question Id : 97103628273 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Using which mean value theorem, we can calculate approximately value of $65^{1/5}$

Options :

1. ✖ Cauchy's Mean theorem

2. ✖ Rolle's Theorem

3. ✔

Lagrange Theorem

4. ✖ Generalized Mean theorem

Question Number : 73 Question Id : 97103628274 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

$\lim_{x\to\infty} \frac{x+2}{9x^2+1}$

Options :

1. ✔ 0

2. ✖ $\frac{1}{9}$

3. ✖ $\frac{3}{9}$

4. ✖ ∞

Question Number : 74 Question Id : 97103628275 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The value of 'x' so that $\frac{f(b)-f(a)}{b-a}=f'(x)$ when a<x<b given $f(x)=\frac{1}{x^2}$, a=1, b=4 is

Options :

1. ✖ $\frac{3}{4}$

2. ✖ $\frac{1}{2}$

3. ✔ $\frac{9}{4}$

4. ✖ $\frac{1}{4}$

Question Number : 75 Question Id : 97103628276 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If Mdx+Ndy =0 is an exact differential equation, then

Options :

1. ✖ $\frac{\partial M}{\partial x} = \frac{\partial N}{\partial y}$

2. ✔ $\frac{\partial M}{\partial y} = \frac{\partial N}{\partial x}$

3. ✖ $\frac{\partial M}{\partial x} = -\frac{\partial N}{\partial y}$

4. ✖ $\frac{\partial M}{\partial y} = -\frac{\partial N}{\partial x}$

Question Number : 76 Question Id : 97103628277 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The P.I of $(D^2+4)y=\sin 2x$ is y =

Options :

1. ✔ $-\frac{x\cos 2x}{4}$

2. ✖ $x\frac{\cos 2x}{4}$

3. ✖ $x\frac{\sin 2x}{4}$

4. ✖ $-x\frac{\sin 2x}{4}$

Question Number : 77 Question Id : 97103628278 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A point at which f(z) fails to be analytic is called

Options :

1. ✖ Constant Point

2. ✔ Singular Point

3. ✖ Normal Point

4. ✖ Homogeneous point

Question Number : 78 Question Id : 97103628279 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The probability of impossible event is

Options :

1. ✖ 1

2. ✖ ½

3. ✔ 0

4. ✖ 0.8

Question Number : 79 Question Id : 97103628280 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Conditional probability P(A/B)=

Options :

1. ✖ $\frac{P(A \cap B)}{P(A)}$

2. ✔ $\frac{P(A \cap B)}{P(B)}$

3. ✖ $\frac{P(AUB)}{P(A)}$

4. ✖ $\frac{P(AUB)}{P(B)}$

Question Number : 80 Question Id : 97103628281 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The order of convergence in Newton Raphson method is

Options :

1. ✔ 2

2. ✖ 1

3. ✖ 0

4. ✖ 3

Question Number : 81 Question Id : 97103628282 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Impulse is obtained from the

Options :

1. ✖ Velocity –time diagram

2. ✖ Force-displacement diagram

3. ✖ Velocity – displacement diagram

4. ✔ Force- time diagram

Question Number : 82 Question Id : 97103628283 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A body of mass 10 kg moving with a velocity of 1 m/s is acted upon by a force of 50 N for two seconds. The final velocity is

Options :

1. ✖ 22 m/s

2. ✖ 1 m/s

3. ✔ 11 m/s

4. ✖ 21 m/s

Question Number : 83 Question Id : 97103628284 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A particle starts from rest and moves in a straight line whose equation of motion is given by $S= 2t^3 – t^2 -1$. The acceleration of the particle after one second will be

Options :

1. ✔ $10\ m/s^2$

2. ✖ $4\ m/s^2$

3. ✖ $6\ m/s^2$

4. ✖ $10\ m/s^2$

Question Number : 84 Question Id : 97103628285 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a cantilever of length l carrying a load whose intensity varies uniformly from zero at the free end to w per unit run at the fixed end, the maximum bending moment is

Options :

1. ✖ $\frac{wl}{3}$

2. ✖ $\frac{wl^2}{3}$

3. ✔ $\frac{wl^2}{6}$

4. ✖ $\frac{wl^2}{24}$

Question Number : 85 Question Id : 97103628286 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The temperature strain in a bar is proportional to _____

Options :

1. ✔ The change in temperature

2. ✖ The length of the bar

3. ✖ The initial temperature of the bar

4. ✖ The material of the bar

Question Number : 86 Question Id : 97103628287 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The strength of the beam mainly depends on

Options :

1. ✖ Bending moment

2. ✖ Center of gravity of the section

3. ✔ Section modulus

4. ✖ Its weight

Question Number : 87 Question Id : 97103628288 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A cantilver of length l is carrying a uniformly distributed load of w per unit run over the whole span. The deflection at the free end is given as

Options :

1. ✖ $\frac{wl^3}{4EI}$

2. ✖ $\frac{wl^2}{4EI}$

3. ✔ $\frac{wl^4}{8EI}$

4. ✖ $\frac{wl^4}{16EI}$

Question Number : 88 Question Id : 97103628289 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For the same material, length and given torque a hollow shaft weighs _____as solid shaft

Options :

1. ✔ Less than

2. ✖ More than

3. ✖ Equal to

4. ✖ Not equal to

Question Number : 89 Question Id : 97103628290 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruct Time : 0

In a mechanism, if a link is rotating with uniform angular velocity, any point on the link will have

Options :

1. ✖ No acceleration

2. ✖ Both centripetal and tangential accelerations

3. ✖ Only tangential acceleration

4. ✔ Only centripetal acceleration

Question Number : 90 Question Id : 97103628291 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a radial cam, the follower moves

Options :

1. ✔ In a direction perpendicular to the cam axis

2. ✖ In a direction parallel to the cam axis

3. ✖ In any direction irrespective of the cam axis

4. ✖ Along the cam axis

Question Number : 91 Question Id : 97103628292 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The ratio of the maximum fluctuation of speed to the mean speed is called

Options :

1. ✖ Min Fluctuation of speed

2. ✖ Maximum fluctuation of speed

3. ✔ Coefficient of fluctuation of speed

4. ✖ Change in fluctuation of speed

Question Number : 92 Question Id : 97103628293 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

With increase in stability, the sensitivity of governor ----------

Options :

1. ✖ Increases

2. ✔ Decreases

3. ✖ Does not depend

4. ✖ Initially increases then decreases

Question Number : 93 Question Id : 97103628294 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Longitudinal vibrations are said to occur when the particles of a body moves

Options :

1. ✖ Perpendicular to its axis

2. ✔ Parallel to its axis

3. ✖ In a circle about its axis

4. ✖ Away from axis

Question Number : 94 Question Id : 97103628295 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The factor which affects the critical speed of a shaft is

Options :

1. ✖ Length of disc

2. ✖ Angular velocity

3. ✖ Angular acceleration

4. ✔ Diameter of the disc

Question Number : 95 Question Id : 97103628296 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a static loading, the effect of stress concentration is more serious in case of

Options :

1. ✔ Components made of brittle materials

2. ✖ Components made of ductile materials

3. ✖ Components made of brittle as well as ductile materials

4. ✖ High strength materials

Question Number : 96 Question Id : 97103628297 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which property of steel gets enhanced when carbon steel is heated above high critical point and is cooled immediately?

Options :

1. ✖ Malleability

2. ✖ Ductility

3. ✖ Elasticity

4. ✔ Hardness

Question Number : 97 Question Id : 97103628298 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The spring index is

Options :

1. ✖ Ratio of wire diameter to mean coil diameter

2. ✖ Force per unit cross sectional area of spring

3. ✔ Ratio of mean coil diameter to wire diameter

4. ✖ Force required to produce unit deflection

Question Number : 98 Question Id : 97103628299 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The brake used in most of the automobile vehicles are

Options :

1. ✔ Internal expanding shoe brake

2. ✖ Block brake

3. ✖ Band brake

4. ✖ Disc brake

Question Number : 99 Question Id : 97103628300 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The friction radius of new clutch compared to worn out clutch will be

Options :

1. ✔ Larger in new clutch

2. ✖ Smaller in new clutch

3. ✖ Equal in both clutches

4. ✖ Unpredictable and depends on usage

Question Number : 100 Question Id : 97103628301 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Elasticity of fluids is measured in terms of

Options :

1. ✖ Young's modulus of elasticity

2. ✖ Shear modulus of elasticity

3. ✔ Bulk modulus of elasticity

4. ✖ Elastic modulus

Question Number : 101 Question Id : 97103628302 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If a body does not return to its original position from the slightly displaced angular position and heels farther away, when given a small angular displacement such an equilibrium is called

Options :

1. ✖ Stable equilibrium

2. ✔ Unstable equilibrium

3. ✖ Neutral equilibrium

4. ✖ Only Equilibrium

Question Number : 102 Question Id : 97103628303 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The changing moment of momentum of fluid due to flow along a curved path results in

Options :

1. ✖ A change in pressure

2. ✔ Torque

3. ✖ A change in the total energy

4. ✖ A change in temperature

Question Number : 103 Question Id : 97103628304 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

_____ is the ratio of the inertia force to the viscous force

Options :

1. ✖ Froude's number

2. ✖ Weber's number

3. ✔ Reynolds number

4. ✖ Mach's number

Question Number : 104 Question Id : 97103628305 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Conduction is the process of heat transfer

Options :

1. ✔ From one particle of the body to another without the actual motion of the particles.

2. ✖ From one particle of the body to the another by the actual motion of the headed particles.

3. ✖ From a hot body to a cold body, in a straight line, without affecting the intervening medium.

4. ✖ From a hot body to a cold body, in a straight line, with affecting the intervening medium.

Question Number : 105 Question Id : 97103628306 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Fourier's law of heat conduction gives the heat flow for

Options :

1. ✖ Irregular surfaces

2. ✖ Non-uniform temperature surfaces

3. ✔ One dimensional case only

4. ✖ Two dimensional cases only

Question Number : 106 Question Id : 97103628307 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruct

Time : 0

The critical thickness of insulation for a sphere is

Options :

1. ✖ k / h_0

2. ✔ $2k / h_0$

3. ✖ h_0 / k

4. ✖ $h_0 / 2k$

Question Number : 107 Question Id : 97103628308 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Up to the critical radius of insulation

Options :

1. ✔ Added insulation will increase heat loss

2. ✖ Added insulation will decrease heat loss

3. ✖ Convective heat loss will be less than conductive heat loss

4. ✖ Heat flux will decrease

Question Number : 108 Question Id : 97103628309 Display Question Number : Yes Is Quest

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Inspite of large heat transfer coefficients in boiling liquids, cavities are used advantageously when the entire surface is exposed to

Options :

1. ✔ Nucleate boiling

2. ✖ Film boiling

3. ✖ Transition boiling

4. ✖ Pool boiling

Question Number : 109 Question Id : 97103628310 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Hot coffee stored in a well-insulated flask is an example of

Options :

1. ✔ Isolated system

2. ✖ Closed system

3. ✖ Open system

4. ✖ Non-flow adiabatic system

Question Number : 110 Question Id : 97103628311 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The displacement work done by a system is given by $\int pdv$. It is valid for

Options :

1. ✖ Any process

2. ✔ A quasi static process

3. ✖ An isentropic process

4. ✖ A non quasi -static process

Question Number : 111 Question Id : 97103628312 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which thermodynamic law predicts correctly, the degree of completion of chemical reaction?

Options :

1. ✖ Zeroth law

2. ✖ First law

3. ✔ Second law

4. ✖ Third law

Question Number : 112 Question Id : 97103628313 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following processes are irreversible?

(i) Heat transfer through a finite temperature difference

(ii) Free expansion

(iii) Transfer of electricity through a resistor

Options :

1. ✔ 1, 2 and 3

2. ✖ 1 and 2 only

3. ✖ 2 and 3 only

4. ✖ 1 and 3 only

Question Number : 113 Question Id : 97103628314 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Clausius – Clapeyron equation gives the 'slope' of a curve in

Options :

1. ✖ P-V diagram

2. ✖ P-h diagram

3. ✔ P-T diagram

4. ✖ T-s diagram

Question Number : 114 Question Id : 97103628315 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Euler equation for water turbine is derived on the basis of

Options :

1. ✖ Conservation of mass

2. ✔ Rate of change of angular momentum

3. ✖ Rate of change of linear momentum

4. ✖ Rate of change of velocity

Question Number : 115 Question Id : 97103628316 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

One ton of refrigeration is equivalent to

Options :

1. ✔ 3.5 KW

2. ✖ 35 kJ/s

3. ✖ 350 J/min

4. ✖ 3500 KJ/min

Question Number : 116 Question Id : 97103628317 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

At 100% relative humidity, the wet bulb temperature is

Options :

1. ✖ More than dew point temperature.

2.

✔ Same as dew point temperature

3. ✖ Less than dew point temperature

4. ✖ Equal to ambient temperature

Question Number : 117 Question Id : 97103628318 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For a heat engine working on an air-standard Diesel cycle the efficiency will

Options :

1. ✖ Increase as the fuel cut-off ratio is increased

2. ✖ Not change as the fuel cut-off ratio is increased

3. ✔ Decrease as the fuel cut-off ratio is increased

4. ✖ Change as the fuel cut-off ratio is increased

Question Number : 118 Question Id : 97103628319 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which among the following is the main component of the gas turbine plant?

Options :

1. ✖ Condenser

2. ✔ Compressor

3. ✖ Boiler

4. ✖ Reheater

Question Number : 119 Question Id : 97103628320 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the process of normalizing of steel the steel is heated above its upper critical temperature vary from

Options :

1. ✔ 30 ^{0}C to 50 ^{0}C

2. ✖ 150 ^{0}C to 200 ^{0}C

3. ✖ 50 ^{0}C to 100 ^{0}C

4. ✖ 100 ^{0}C to 150 ^{0}C

Question Number : 120 Question Id : 97103628321 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The eutectic percentage of carbon in iron is

Options :

1. ✖ 0.025%

2. ✖ 0.15 %

3. ✖ 2.03%

4. ✔ 4.33%

Question Number : 121 Question Id : 97103628322 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a tensile test, the stresses are in the material beyond elastic limit, the tensile strain _____ as compared to the stress.

Options :

1. ✖ Decreases slowly

2. ✖ Increases slowly

3. ✖ Decreases more quickly

4. ✔ Increases more quickly

Question Number : 122 Question Id : 97103628323 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If there is no melting of the edges of the base metal at the root face or on the side face or between the weld runs, it is known as _____.

Options :

1. ✖ Lack of penetration

2. ✔ Lack of fusion

3. ✖ Burn through

4. ✖ Excessive penetration

Question Number : 123 Question Id : 97103628324 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The distance from the joint root to the toe of the weld is called _____.

Options :

1. ✔ Leg

2. ✖ Face

3. ✖ Throat

4. ✖ Actual throat

Question Number : 124 Question Id : 97103628325 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Ornamental waves are made by

Options :

1. ✔ Embossing

2. ✖ Spinning

3. ✖ Bending

4. ✖ Drawing

Question Number : 125 Question Id : 97103628326 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruct

Time : 0

Draft on a pattern for casting is provided for

Options :

1. ✖ Shrinkage allowance

2. ✖ Identification

3. ✔ Taper to facilitate removal of mould

4. ✖ Machining allowance

Question Number : 126 Question Id : 97103628327 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In order to stop the debris from going in to the main casting _____ is used

Options :

1. ✔ Skim bob

2. ✖ Gate

3. ✖ Sprue

4. ✖ Pouring basin

Question Number : 127 Question Id : 97103628328 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruct

Time : 0

Cold working of metal is accomplished at

Options :

1. ✔ Below recrystallization temperature

2. ✖ Above room temperature

3. ✖ Above recrystallization temperature

4. ✖ Below melting temperature

Question Number : 128 Question Id : 97103628329 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a single point cutting tool, the angle between the surface of the flank immediately below the point and a line drawn from the point perpendicular to the base, is known as

Options :

1. ✖ Side relief angle

2. ✔ End relief angle

3. ✖ Back rake angle

4. ✖ Side rake angle

Question Number : 129 Question Id : 97103628330 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The relation between tool life (T) and cutting speed (V) is VT^n= constant. In these relations the value of n largely depends upon

Options :

1. ✖ Work material

2. ✔ Tool material

3. ✖ Working condition

4. ✖ Type of chip produced

Question Number : 130 Question Id : 97103628331 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Crater wear mainly due to the phenomenon is known as

Options :

1. ✖ Adhesion of material

2. ✖ Oxidation of material

3. ✔ Diffusion of material

4. ✖ Cohesion of material

Question Number : 131 Question Id : 97103628332 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The floating position of the holding fixture in a rotary transfer device is used to

Options :

1. ✖ Improve the accuracy of location

2. ✖ Reduce the tendency of over index

3. ✖ Improve upon the acceleration and deceleration characteristics

4. ✔ Reduce the cycle time

Question Number : 132 Question Id : 97103628333 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which type of tolerance provided in drilling mostly?

Options :

1. ✖ Bilateral

2. ✔ Unilateral

3. ✖ Trilateral

4. ✖ Allowance

Question Number : 133 Question Id : 97103628334 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Why are shallow grooves provided in larger flats?

Options :

1. ✔ To minimize the possibilities of uneven hardening

2. ✖ For design purpose

3. ✖ To maintain high accuracy for a longer period

4. ✖ To make them lighter

Question Number : 134 Question Id : 97103628335 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Feeler gauge is used for

Options :

1. ✔ Measuring gap width

2. ✖ Measuring thickness of workpiece

3. ✖ Checking straightness

4. ✖ Checking flatness

Question Number : 135 Question Id : 97103628336 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A technique for displaying applications where complex 3D geometric are required for the exterior sheet of a product is called?

Options :

1. ✖ 2D Modelling

2. ✖ Solid Modelling

3. ✖ 3D Modelling

4. ✔ Surface Modelling

Question Number : 136 Question Id : 97103628337 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which one of the following software packages is used for plant layout?

Options :

1. ✖ SIM SCRIPT

2. ✖ DYNAMO

3. ✔ CRAFT

4. ✖ MRP

Question Number : 137 Question Id : 97103628338 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The solution for an LPP with two exact constraints and no inequality constraints will be?

Options :

1. ✖ Infeasible

2. ✖ Unbounded

3. ✖ Multiple optimal

4. ✔ Unique solution

Question Number : 138 Question Id : 97103628339 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the operating characteristics of a queue are dependent on time, it is said to be

Options :

1. ✖ Steady state

2. ✔ Transient state

3. ✖ Busy period

4. ✖ Explosive state

Question Number : 139 Question Id : 97103628340 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is assumed to be constant in deterministic inventory models?

Options :

1. ✔ Annual demand

2. ✖ Annual ordering cost

3. ✖ Annual carrying cost

4. ✖ Annual shortage cost

Question Number : 140 Question Id : 97103628341 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The stock maintained to withstand unknown demand changes is known as ____inventory

Options :

1. ✖ De-coupling

2. ✖ Pipeline

3. ✔ Buffer

4. ✖ Anticipatory

Entrance Exams

- Agricultural Entrance Exams
- Architecture Entrance Exam
- Arts and Humanities Entrance Exams
- Commerce Entrance Examinations
- Common Entrance Examinations
- Computer Application Entrance Exams
- Design Entrance Exams
- Education Entrance Exams
- Engineering Entrance Exams
- Hotel Management Entrance Exams
- Law Entrance Exams
- MBA Entrance Exams
- Media & Journalism Entrance Exams
- Medical Entrance Exams
- Nursing Entrance Exams
- Pharmacy Entrance Exams
- Science Entrance Exams
- Diploma & Polytechnic
- Lateral Entry