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Mechanical Engineering

Group Number :	1
Group Id :	57996517
Group Maximum Duration :	0
Group Minimum Duration :	150
Revisit allowed for view? :	No
Revisit allowed for edit? :	No
Break time:	0
Mandatory Break time:	No
Group Marks:	150

Mechanical Engineering

Section Id :	57996517
Section Number :	1
Section type :	Online
Mandatory or Optional:	Mandatory
Number of Questions:	150
Number of Questions to be attempted:	150
Section Marks:	150
Display Number Panel:	Yes
Group All Questions:	No

Sub-Section Number:	1
Sub-Section Id:	57996529
Question Shuffling Allowed :	No

**Question Number : 1 Question Id : 5799652430 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
 Single Line Question Option : No Option Orientation : Vertical**

Correct : 1 Wrong : 0

No liquid can exist as a liquid at

Options :

0°C temperature

200°C temperature

Zero pressure

Zero Viscosity

Question Number : 2 Question Id : 5799652431 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Gibb's free energy G is defined as

Options :

$$G = H - TS$$

$$G = H + TS$$

$$G = U - TS$$

$$G = U + TS$$

Question Number : 3 Question Id : 5799652432 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The efficiency of Carnot Engine is 0.75. If cycle is reversed, C.O.P of reversed Carnot cycle will be

Options :

1.25

1.33

1.75

1.95

Question Number : 4 Question Id : 5799652433 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Sublimation is the process of

Options :

Changing from gas state to solid state

Changing from solid state to gas state

Changing from liquid to vapour state

Existence of solids, liquids and gases simultaneously

Question Number : 5 Question Id : 5799652434 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Thermal efficiency of Otto cycle _____ that of Brayton cycle for the given same compression process

Options :

same as

less than

greater than

not comparable to

Question Number : 6 Question Id : 5799652435 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The substance which is homogeneous and invariable in chemical composition throughout its mass is called as _____.

Options :

- ideal substance
- pure substance
- solid substance
- gas substance

Question Number : 7 Question Id : 5799652436 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The efficiency of Diesel cycle approaches to Otto cycle efficiency when

Options :

- cut-off is increased
- cut-off is decreased
- cut-off is zero
- cut-off is constant

Question Number : 8 Question Id : 5799652437 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An ideal gas can be taken from point K to point N in three different paths: $K \rightarrow L \rightarrow N$, $K \rightarrow N$, $K \rightarrow M \rightarrow N$. Which of the following is a true statement?



Options :

- The same work is done during each process.
- The same amount of heat is added to the gas during each process
- The same change in internal energy during each process
- The same entropy generated during each process

Question Number : 9 Question Id : 5799652438 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Increase in entropy of a system represents

Options :

- Decrease of temperature
- Increase of Pressure

Increase of temperature

Degradation of energy

Question Number : 10 Question Id : 5799652439 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The more effective way of increasing efficiency of Carnot Engine is

Options :

Increase of Source temperature

Decrease of Source temperature

Increase of Sink temperature

Decrease of Sink temperature

Question Number : 11 Question Id : 5799652440 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The absolute zero pressure will be

Options :

when the molecular momentum of the system becomes zero

at sea level

at the temperature of -273 K

at the centre of the earth

Question Number : 12 Question Id : 5799652441 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The behaviour of superheated vapour is similar to that of

Options :

perfect gas

steam

air

ordinary gas

Question Number : 13 Question Id : 5799652442 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The efficiency of Stirling cycle is _____ Carnot cycle for the same temperature limits.

Options :

Greater than

Less than

Equal to

Cannot compare

Question Number : 14 Question Id : 5799652443 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The irreversibility associated with the process is defined as

Options :

Loss of qualitative energy

Loss of energy

Loss of enthalpy

Loss of entropy

Question Number : 15 Question Id : 5799652444 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The exergy of the system will depend on

Options :

Entropy generation

Surrounding temperature

Surrounding pressure

All The Given Answers

Question Number : 16 Question Id : 5799652445 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The specific heat of an ideal gas depend on its _____ alone.

Options :

Pressure

Volume

Entropy

Temperature

Question Number : 17 Question Id : 5799652446 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For effective working of fins, the thickness of the fins should be

Options :

large

small

thickness of fin does not affect fin effectiveness

unpredictable

Question Number : 18 Question Id : 5799652447 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In free convective heat transfer transition from laminar to turbulent flow is governed by the critical value of the

Options :

Reynolds number and Grashoff's number

Reynolds number

Grashoff's number

Prandtl number and Grashoff's number

Question Number : 19 Question Id : 5799652448 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

When is arithmetic mean temperature difference used instead of LMTD in heat exchanger?

Options :

When temperature profiles of two fluids of heat exchanger are sloping downward with curve

When the temperature profiles of two fluids of heat exchanger are sloping upward with curve

When the temperature profiles of two fluids of heat exchanger are straight

When one of the temperature profile for the fluid is straight

Question Number : 20 Question Id : 5799652449 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Nusselt number / (Reynolds number X Prandtl number) is equal to

Options :

Weber Number

Stanton Number

Biot Number

Mach Number

Question Number : 21 Question Id : 5799652450 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The rate of heat flow through a hollow sphere of inner radius 0.25 m and outer radius 0.35m, whose thermal conductivity is 5 W/m K, maintained at temperatures of 400°C and 300°C respectively equal to

Options :

2425 W

5495 W

2747.5 W

4850 W

Question Number : 22 Question Id : 5799652451 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

By which of the following modes of heat transfer, Heat is mainly transferred from an insulated pipe to the surrounding still air.

Options :

conduction

Radiation

forced convection

natural convection

Question Number : 23 Question Id : 5799652452 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Newmann boundary condition on heat transfer surface means,

Options :

$$q/A = -k\partial T/\partial x \text{ at } w = 0$$

$$k\partial T/\partial x = 0 \text{ at } w = 0$$

$$k\partial T/\partial x = h [T_w - T_\infty] \text{ at } w = 0$$

$$k\partial T/\partial x = \sigma [T_1^4 - T_2^4] \text{ at } w = 0$$

Question Number : 24 Question Id : 5799652453 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The maximum temperature raised in the solid sphere with internal heat generation is given by

Options :

$$T_w + Q_g R^2 / 6K$$

$$T_w - Q_g R^2 / 6K$$

$$T_w + Q_g / 6K$$

$$T_w - Q_g / 6K$$

Question Number : 25 Question Id : 5799652454 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

It is desired to increase the heat dissipation rate from the surface of an electronic device of spherical shape of 5 mm radius exposed to convection with $h=10 \text{ W/m}^2 \text{ K}$, by encasing it in a spherical sheath of conductivity 0.04 W/m K . For maximum heat flow, the diameter of sheath should be

Options :

18 mm

12 mm

8 mm

16 mm

Question Number : 26 Question Id : 5799652455 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The capillary tube is not used in large capacity refrigeration systems because

Options :

Cost is too high

Capacity control is not possible
It is made of copper
Required pressure drop cannot be achieved

Question Number : 27 Question Id : 5799652456 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Bell Coleman cycle used for air refrigeration system is a

Options :

Reversed Carnot cycle
Reversed Otto cycle
Reversed Joule cycle
Reversed Rankine cycle

Question Number : 28 Question Id : 5799652457 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

In the compression process of vapour compression refrigeration system

Options :

Enthalpy before compression is same as enthalpy after the compression
Internal energy before compression is same after the compression
Temperature before compression is same as temperature after the compression
Entropy before compression is same as entropy after the compression

Question Number : 29 Question Id : 5799652458 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

In an aqua ammonia vapour absorption refrigeration system, the refrigerant and absorbent respectively are

Options :

water and water
water and lithium bromide
ammonia and lithium bromide
ammonia and water

Question Number : 30 Question Id : 5799652459 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The leakage in a refrigeration system using ammonia is detected by

Options :

halide torch
sulphur sticks
soap solution
hot water

Question Number : 31 Question Id : 5799652460 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the degree of saturation of air is zero, the air is said to be

Options :

- superheated air
- unsaturated air
- saturated air
- atmospheric air

Question Number : 32 Question Id : 5799652461 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The constant partial pressure lines on the psychrometric chart are

Options :

- horizontal lines
- vertical lines
- inclined lines
- curved lines

Question Number : 33 Question Id : 5799652462 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following components of reaction turbine increases the head on the turbine by an amount equal to the height of runner outlet above the tail race?

Options :

- Draft tube
- Guide vanes
- Scroll casing
- Moving blades

Question Number : 34 Question Id : 5799652463 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The Euler equation for turbo machine is derived on the basis of

Options :

- Rate of change of mass
- Rate of change of angular momentum
- Rate of change of linear momentum
- Rate of change of velocity

Question Number : 35 Question Id : 5799652464 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The mass flow rate of air compressed in axial flow compressor is _____ centrifugal compressor.

Options :

- Less than

Equal to
Greater than
Unpredictable

Question Number : 36 Question Id : 5799652465 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What should be the ratio of blade speed of jet speed for the maximum efficiency of a Pelton wheel?

Options :

0.25

0.50

0.75

1.00

Question Number : 37 Question Id : 5799652466 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which one of the following pumps is NOT a positive displacement pump?

Options :

Reciprocating Pump

Centrifugal Pump

Lobe Pump

Vane Pump

Question Number : 38 Question Id : 5799652467 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a Parson's turbine stage, the blade velocity is 320 m/s at the mean radius and the rotor blade exit angle is 30° . For minimum kinetic energy of the steam leaving the stage, the steam velocity at the exit of the rotor will be

Options :

$160/\sqrt{3}$ m/s

$320/\sqrt{3}$ m/s

$640/\sqrt{3}$ m/s

640 m/s

Question Number : 39 Question Id : 5799652468 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The volumetric efficiency of a compressor can be given by the equation in terms of clearance ratio K, pressure ratio p_2/p_1 is

Options :

$1 - K + K(p_2/p_1)^{(1/n)}$

$1 + K - K(p_2/p_1)^{(1/n)}$

$1 - K - K(p_2/p_1)^{(1/n)}$

$$1 + K + K(p_2/p_1)^{1/n}$$

Question Number : 40 Question Id : 5799652469 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The specific speed of a hydraulic pump is the speed of geometrically similar pump working against a unit head and

Options :

Delivering unit quantity of water

Consuming unit power

Having unit velocity of flow

Having unit radial velocity

Question Number : 41 Question Id : 5799652470 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What is the need of air vessel used in a reciprocating pump?

Options :

To obtain a continuous supply of water at uniform rate

To reduce suction head

To increase the delivery head

To reduce Cavitation

Question Number : 42 Question Id : 5799652471 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Cavitation in a hydraulic turbine is most likely to occur at the turbine

Options :

Entry

Exit

Stator exit

Rotor exit

Question Number : 43 Question Id : 5799652472 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The linear velocity of a body rotating at ω rad/s along a circular path of radius r is

Options :

$\omega \cdot r$

ω/r

$\omega^2 \cdot r$

ω^2/r

Question Number : 44 Question Id : 5799652473 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The coefficient of restitution for inelastic bodies is

Options :

- zero
- between zero and one
- one
- more than one

Question Number : 45 Question Id : 5799652474 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The relation between number of links and number of lower pairs is given as $n = 2p - 4$. If L.H.S is less than R.H.S of this equation then the chain is

Options :

- constrained
- locked
- structure
- unconstrained

Question Number : 46 Question Id : 5799652475 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The cam and follower without a spring forms a

Options :

- Lower pair
- Higher pair
- self closed pair
- forced closed pair

Question Number : 47 Question Id : 5799652476 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The cam follower extensively used in air-craft engine is

Options :

- knife edge follower
- flat faced follower
- spherical face follower
- roller follower

Question Number : 48 Question Id : 5799652477 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The two links OA and OB are connected by a pin joint at O. If the link OA turns with angular velocity ω_1 rad/s in the clockwise direction and the link OB turns with angular velocity ω_2 rad/s in the anti clockwise direction, then the rubbing velocity at the pin O is

Options :

- $\omega_1 \cdot \omega_2 \cdot r$
- $(\omega_1 - \omega_2) \cdot r$
- $(\omega_1 + \omega_2) \cdot r$
- $(\omega_1 - \omega_2) \cdot 2r$

Question Number : 49 Question Id : 5799652478 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The efficiency of screw jack is given by

Options :

- $\frac{\tan(\alpha + \phi)}{\tan \alpha}$
- $\frac{\tan(\alpha - \phi)}{\tan \alpha}$
- $\frac{\tan(\alpha + \phi)}{\tan \alpha}$
- $\frac{\tan(\alpha - \phi)}{\tan \alpha}$

Question Number : 50 Question Id : 5799652479 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a cone pulley, If the sum of the radii of the pulleys on the driving and driven shafts is constant, then

Options :

- open belt drive is recommended
- both open and closed belt drive are recommended
- closed belt drive is recommended
- drive is recommended depending upon torque

Question Number : 51 Question Id : 5799652480 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In under damped vibrating system, if x_1 and x_2 are the successive values of the amplitude on the same side of the mean position, then the logarithmic decrement is equal to

Options :

- $\frac{x_1}{x_2}$
- $\log\left(\frac{x_1}{x_2}\right)$
- $\log_e\left(\frac{x_2}{x_1}\right)$
- $\log(x_1 \cdot x_2)$

Question Number : 52 Question Id : 5799652481 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a locomotive, The maximum magnitude of the unbalanced force acting along the perpendicular to the line of stroke is

Options :

tractive force

swaying force

hammer blow

None of the given answers

Question Number : 53 Question Id : 5799652482 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a slider crank mechanism for l/r ratio of 4, the percentage of stroke converted by piston corresponding to 90° movement of crank from top dead centre will be

Options :

0 %

less than 50%

greater than 50%

100 %

Question Number : 54 Question Id : 5799652483 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Coriolis component of acceleration exists whenever a point moves along a path that has

Options :

local acceleration

gravitational acceleration

tangential acceleration

centripetal acceleration

Question Number : 55 Question Id : 5799652484 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

According to the law of gearing

Options :

common normal at the point of contact always passes through a fixed point on the line joining the centres of rotation

The gears should be cut with the cutter having same module

the interference should be avoided

clearance should be minimized

Question Number : 56 Question Id : 5799652485 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The locus of a point on the circumference of a circle which rolls without slipping on a fixed straight line is known as

Options :

- Cycloid
- Involute
- Hypocycloid
- Epicycloid

Question Number : 57 Question Id : 5799652486 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A 0.5 kg weight attached to a light spring elongates by 0.981 mm. The natural frequency of the system should be

Options :

- 6 Hz
- 16 Hz
- 26 Hz
- 32 Hz

Question Number : 58 Question Id : 5799652487 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A vibrating system with unity as damping factor will be

Options :

- critically damped
- damped to safe limits
- partly damped
- free from vibrations.

Question Number : 59 Question Id : 5799652488 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

High pressure angle of gear results in

Options :

- weaker teeth
- bigger size teeth
- wider base and stronger teeth
- narrow base and weaker teeth

Question Number : 60 Question Id : 5799652489 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a flat belt pulley drive, the rim of the pulley is slightly crowned to

Options :

- increase the strength of the pulley
- increase the stiffness of the pulley

keep the belt running centrally on the pulley rim
increase the power transmitted

Question Number : 61 Question Id : 5799652490 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Herringbone gear is a type of

Options :

spiral bevel gear

crossed helical gear

hypoid gear

double-helical gear with no groove in between the left and right inclinations

Question Number : 62 Question Id : 5799652491 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A shaft transmits power of 30 kW. According to maximum principle stress theory and shear theory diameter of shaft is 70 mm and 73 mm respectively. Tensile stress acting on the shaft is 50 MPa. What will be the shaft diameter to transmit power?

Options :

60 mm

65 mm

73 mm

82 mm

Question Number : 63 Question Id : 5799652492 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The property of a material which enables it to resist fracture due to high impact loads is known as

Options :

Brittleness

Ductility

Toughness

Hardness

Question Number : 64 Question Id : 5799652493 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Two mating spur gears have 40 and 120 teeth respectively. The pinion rotates at 1200 rpm and transmits a torque of 20 Nm. The torque transmitted by the gear is

Options :

10 N –m

20 N – m

40 N – m

60 N – m

Question Number : 65 Question Id : 5799652494 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Square key of side " $d/4$ " each and length l is used to transmit torque " T " from the shaft of diameter " d " to the hub of a pulley. Assuming the length of the key to be equal to the thickness of the pulley, the average shear stress developed in the key is given by

Options :

$4T/ld$

$16T/ld^2$

$8T/ld^2$

$16T/\pi d^3$

Question Number : 66 Question Id : 5799652495 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A beam strongest in flexural is one which has

Options :

maximum bending stress

maximum area of cross section

maximum section modulus

maximum moment of inertia

Question Number : 67 Question Id : 5799652496 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The factor of safety considered for Euler's formula for crippling load is

Options :

1

3

5

6

Question Number : 68 Question Id : 5799652497 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following assumption in the theory of pure torsion is false

Options :

All radii get twisted due to torsion

the twist is uniform along the length

the shaft is uniform circular section through out

cross section plane before torsion remain plane after torsion.

Question Number : 69 Question Id : 5799652498 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

When a closely coiled helical spring of mean diameter $\{D\}$ is subjected to an axial load (W) , the stiffness of the spring is given by

Options :

Cd^4/D^3n

$Cd^4/2D^3n$

$Cd^4/4D^3n$

$Cd^4/8D^3n$

Question Number : 70 Question Id : 5799652499 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A composite shaft consisting of two stepped portions having spring constant k_1 and k_2 is held between two rigid supports at the ends. Its equivalent spring constant is

Options :

$(k_1 + k_2)/2$

$(k_1 + k_2)/k_1k_2$

$k_1k_2/(k_1 + k_2)$

$(k_1 + k_2)$

Question Number : 71 Question Id : 5799652500 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a thin cylindrical shell subjected to an internal pressure p , the ratio of longitudinal stress to the hoop stress is

Options :

0.5

0.75

1

1.5

Question Number : 72 Question Id : 5799652501 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

According to Euler's column theory, the crippling load of a column of length (l) , with one end is fixed and the other end is hinged is

Options :

$\pi^2 EI / l^2$

$\pi^2 EI / 4 l^2$

$2\pi^2 EI / l^2$

$4 \pi^2 EI / l^2$

Question Number : 73 Question Id : 5799652502 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The eye bolts are used for

Options :

transmission of power

lifting and transporting heavy machines

absorbing shocks and vibrations

locking devices

Question Number : 74 Question Id : 5799652503 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following welded joints is designed for shear strength?

Options :

transverse fillet welded joint

parallel fillet welded joint

butt welded joint

transverse butt weld joint

Question Number : 75 Question Id : 5799652504 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A plate with a circular hole in the centre is subjected to a pull of P . The maximum stress induced at the edge of the hole is (if the normal stress is ' f ')

Options :

$3f$

$2f$

$f/2$

$f/3$

Question Number : 76 Question Id : 5799652505 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The angle of an ACME thread is _____ degrees.

Options :

19

29

49

69

Question Number : 77 Question Id : 5799652506 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a butt or half-lap coupling, the sleeve is normally fitted to the shafts by means of _____.

Options :

Saddle key

Feather key

Woodruff key

Sunk key

Question Number : 78 Question Id : 5799652507 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Hatching lines are drawn at an angle of ___ to the axis or to the main outline of sections.

Options :

90°

60°

45°

30°

Question Number : 79 Question Id : 5799652508 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The efficiency of a power screw is maximum when the lead angle is.....(
where ϕ is friction angle)

Options :

$\pi/2 - \phi/2$

$\pi/2 - \phi$

$\pi/4 - \phi/4$

$\pi/4 - \phi/2$

Question Number : 80 Question Id : 5799652509 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The pistons are usually given coating such as tin plating in order to

Options :

Reduce weight

Reduce friction

Reduce possibility of scoring

Increase lubrication effect

Question Number : 81 Question Id : 5799652510 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Surface endurance limit of gear material is dependent upon its

Options :

Brinell Hardness number

Elastic Strength

Toughness

Yield Strength

Question Number : 82 Question Id : 5799652511 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A decomposition method in which the cells which are used to model an object need not have the same shape and size is

Options :

Octree model

Part programming

Voxel based model

Cell decomposition

Question Number : 83 Question Id : 5799652512 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following is not a CAPP approach

Options :

Variant approach

Generative approach

Hybrid approach

Expert system approach

Question Number : 84 Question Id : 5799652513 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Backlash is

Options :

Sum of the clearances of pinion and gear teeth

The amount by which the width of a tooth space exceeds the thickness of meshing tooth on pitch circle

Difference between dedendum and addendum of gear tooth

Difference between the pitch circles of meshing gears

Question Number : 85 Question Id : 5799652514 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Internal gears can be manufactured by

Options :

Shaping with rack cutter

Shaping with pinion cutter

milling

Hobbing

Question Number : 86 Question Id : 5799652515 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

What causes transformation of deformed martensite into austenite phase?

Options :

Heating

Cooling

both cooling and heating

partial cooling

Question Number : 87 Question Id : 5799652516 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which type of materials are used as bridges between human tissues and metals?

Options :

Polymeric biomaterials

Ceramic biomaterials

Metallic biomaterials

Polymarised plastic materials

Question Number : 88 Question Id : 5799652517 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Body centered cubic structure has an atomic packing factor equal to

Options :

0.74

0.68

0.52

0.94

Question Number : 89 Question Id : 5799652518 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which among the following is the characteristics of polymers?

Options :

High tensile strength

High coefficient of friction

Low density

Higher viscosity

Question Number : 90 Question Id : 5799652519 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A bearing material should not possess the characteristic of high _____.

Options :

coefficient of friction

hardness

melting point

thermal conductivity

Question Number : 91 Question Id : 5799652520 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In which of the following methods, surface of a steel component becomes hard due to phase transformation austenite to Martensite?

Options :

- Carbonitriding
- Flame hardening
- Nitriding
- Ionisation

Question Number : 92 Question Id : 5799652521 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In Muntz metal, if 1% of tin is added it forms _____

Options :

- admiralty brass
- naval brass
- Bronze
- Silver

Question Number : 93 Question Id : 5799652522 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

According to Indian standard specifications, SG 400/15 means

Options :

- Spheroidal graphite cast iron with B.H.N. 400 and minimum tensile strength 15 MPa
- Spheroidal graphite cast iron with minimum tensile strength 400 MPa and 15 % elongation
- Spheroidal graphite cast iron with minimum compressive strength 400 MPa and 15 % reduction in area
- Spheroidal graphite caston with maximum tensile strength 400 MPa with 15 % elongation.

Question Number : 94 Question Id : 5799652523 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A fit on a hole shaft system is specified as H7-s6. The type of fit is

Options :

- Clearance fit
- Running fit
- Transition fit
- Interference fit

Question Number : 95 Question Id : 5799652524 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The crystal structure of Austenite is

Options :

- Body centered tetragonal
- Hexagonal closed packed
- Face centred cubic
- Body Centered Cubic

Question Number : 96 Question Id : 5799652525 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

An allotropic material has

Options :

- Atoms distributed in random patterns
- Atoms distributed in fixed pattern
- Different crystal structure at different temperatures
- fixed structure at all temperatures

Question Number : 97 Question Id : 5799652526 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

If the steel at room temperature is magnetic, the presence of which constituent can be ruled out

Options :

- Austenite
- Ferrite
- Cementite
- Pearlite

Question Number : 98 Question Id : 5799652527 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In a _____, the molten metal is poured and allowed to solidify while the mould is revolving.

Options :

- Die casting method
- Slush casting method
- Permanent mould casting method
- Centrifugal casting method

Question Number : 99 Question Id : 5799652528 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Shift is a casting defect which

Options :

- Results in a mismatching of the top and bottom parts of a casting
- Results in general enlargement of a casting
- Occurs near the ingrates as rough lumps on the surface of a casting
- Occurs as sand patches on the upper surface of a casting.

Question Number : 100 Question Id : 5799652529 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The lead screw of a lath with nut forms a

Options :

- sliding pair
- rolling pair
- screw pair
- turning pair

Question Number : 101 Question Id : 5799652530 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The welding process by Metal Inert-Gas (MIG) welding is

Options :

- slower than the welding process by Tungsten Inert-Gas (TIG) welding
- faster than the welding process by Tungsten Inert-Gas (TIG) welding
- at same speed as the welding process by Tungsten Inert-Gas (TIG) welding
- at unpredictable speed

Question Number : 102 Question Id : 5799652531 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In metal cutting operation, maximum heat (i.e. 80-85%) is generated in

Options :

- the shear zone
- the chip-tool interface zone
- the tool-work interface zone
- On the tool surface

Question Number : 103 Question Id : 5799652532 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In which process the material is removed due to the action of abrasive grains?

Options :

- Electro-Chemical Grinding (ECG)
- Ultrasonic Machining (USM)
- Laser Beam Machining (LBM)
- Electrical Discharge Machining (EDM)

Question Number : 104 Question Id : 5799652533 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

On increasing the value of rake angle, the strength of tool

Options :

- increases
- decreases
- remains constant
- is unpredictable

Question Number : 105 Question Id : 5799652534 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The productivity of honing operation is

Options :

- less than the productivity of lapping operation
- more than the productivity of lapping operation
- equal to the productivity of lapping operation for the same work piece
- unpredictable

Question Number : 106 Question Id : 5799652535 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In hole basis system, basic size is equal to

Options :

- maximum hole size
- Lower deviation is zero
- upper deviation is zero
- minimum hole size

Question Number : 107 Question Id : 5799652536 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A non consumable electrode is used in

Options :

- Gas welding
- DC Arc welding
- AC Arc welding
- Argon arc welding

Question Number : 108 Question Id : 5799652537 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following laser source can give the highest power density?

Options :

- Plasma Arc

Electron beam
Laser continuous
laser pulsed

Question Number : 109 Question Id : 5799652538 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The bonding of a rubber sheet with a metal is done by

Options :

Welding
High frequency die electric heating
Induction welding
Adhesive bonding

Question Number : 110 Question Id : 5799652539 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Tungston carbide tipped drill bits are used for

Options :

slow drilling
smooth surface
drilling without coolant
drilling on glass

Question Number : 111 Question Id : 5799652540 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The following hardening process is generally free from scale formation.

Options :

flame hardening
cyaniding
nitriding
induction hardening

Question Number : 112 Question Id : 5799652541 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In metal cutting use of low feed and high cutting speed is desired when the objective is

Options :

High metal removal rate
Dry Machining
Use of soft cutting tool
Surface finish

Question Number : 113 Question Id : 5799652542 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A Zinc diffusion process is called

Options :

Galvanizing

Parkerizing

Shearadizing

Anodizing

Question Number : 114 Question Id : 5799652543 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The factor responsible for the formation of discontinuous chips is

Options :

Low cutting speed and small rake

High cutting speed and small rake angle

High cutting speed and large rake angle

Low cutting speed and large rake angle

Question Number : 115 Question Id : 5799652544 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Dye penetration inspection is generally used to locate

Options :

Temporary defects

Surface breaking defects

Artificial defects

Core defects

Question Number : 116 Question Id : 5799652545 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Friction at the tool chip interface can be reduced by

Options :

Decreasing the rake angle

Increasing the depth of cut

Decreasing the cutting speed

Increasing the cutting speed

Question Number : 117 Question Id : 5799652546 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which among the following tool bits are made by powder metallurgy process

Options :

Carbon steel tool bits

Tungsten carbide tool bits

Stellite tool bits

HSS tool bits

Question Number : 118 Question Id : 5799652547 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

While machining copper alloys by Electro chemical Machining the electrolyte used is

Options :

Common salt

Sodium sulphate

Sodium Chlorate

Sodium Nitrate

Question Number : 119 Question Id : 5799652548 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Brazing changes to soldering at which temperature

Options :

230 °C

325 °C

450 °C

575 °C

Question Number : 120 Question Id : 5799652549 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Metal Forming process used for making shallow and also for straightening parts is

Options :

Peen forming

Magnetic Pulse forming

Stamping

Stretch forming

Question Number : 121 Question Id : 5799652550 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The machine members which are used to gradually transmit motion of a driving member to another member at rest, without shock, are termed as

Options :

bearings

couplings

clutches

cotters

Question Number : 122 Question Id : 5799652551 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Group technology brings together and organizes

Options :

Automation and tool production

Documentation and analysis

Common parts, problems and tasks

Parts and simulation analysis

Question Number : 123 Question Id : 5799652552 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Machining of complex shapes on CNC machines requires

Options :

Simultaneous control of x, y and z axes

Simultaneous control of x and y axes

Independent control of x, y and z axes

Independent control of x, y and z axes

Question Number : 124 Question Id : 5799652553 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The interpolator in a CNC machine controls

Options :

Spindle speed

Coolant flow

Feed rate

Tool change

Question Number : 125 Question Id : 5799652554 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Flexible manufacturing allows for

Options :

Tool design and tool production

Quick and inexpensive product changes

Automated design

Factory management

Question Number : 126 Question Id : 5799652555 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

NC contouring is an example of

Options :

Continuous path positioning

Point to point positioning

Absolute positioning

Incremental positioning

Question Number : 127 Question Id : 5799652556 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In Concurrent Engineering, design and manufacturing are

Options :

Sequentially considered

Separately considered

Simultaneously considered

Independently considered

Question Number : 128 Question Id : 5799652557 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Gantt chart provides information about the

Options :

Material Handling

Utilization of manpower

Production schedule

Working of machine

Question Number : 129 Question Id : 5799652558 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In time study the rating factor is applied to determine

Options :

Standard time of job

Merit rating of the work

Normal time of working

Fixation of incentive rate

Question Number : 130 Question Id : 5799652559 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The determination of standard time in a complex job system is best done through a

Options :

Group timing technique

Analysis of micro motion

Stop watch time and study

Analysis standard data system

Question Number : 131 Question Id : 5799652560 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Speed and direction of workers movements can be better recorded by which one of the following

Options :

- Flow chart
- Chronocycle graph
- Chronometer
- String Diagram

Question Number : 132 Question Id : 5799652561 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The most important objective behind plant layout is

Options :

- Overall simplification, safety of integration
- Economy in space
- Maximum travel time in plant
- To provide conveniently located shops

Question Number : 133 Question Id : 5799652562 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Quality improvement planning is related to which category of cost?

Options :

- Cost of failure
- Cost of appraisal
- Cost of prevention
- Cost of loss

Question Number : 134 Question Id : 5799652563 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Line balancing problem is concerned with

Options :

- Process layout
- Product layout
- Fixed position layout
- cellular manufacturing

Question Number : 135 Question Id : 5799652564 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

A master production schedule contains information about

Options :

Quantities and required delivery data of all final products
Quantities and required delivery data of all sub assemblies
Inventory on hand for each sub assembly
Inventory on hand for each final project

Question Number : 136 Question Id : 5799652565 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Values for the probabilistic inputs to a simulation are

Options :
controlled by decision maker
calculated by fixed mathematical formula
randomly generated based on historical information
selected by the decision maker

Question Number : 137 Question Id : 5799652566 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

A simulation model uses the mathematical expressions and logical relationships
of the

Options :
Estimated inferences
Performance measures
Computer model
Real system

Question Number : 138 Question Id : 5799652567 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

The acronym DMAIC stands for

Options :
Develop, make, analyze, improve, control
Define, measure, analyze, implement, control
Define, make, analyze, import, control
Derive, measure, analyze, implement, create

Question Number : 139 Question Id : 5799652568 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

Productivity of a production system is analogous to the

Options :
output of a machine
input to a machine
efficiency of a machine

efficiency of labour

Question Number : 140 Question Id : 5799652569 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Production of large turbo generators is an example for

Options :

- job order production
- batch order production
- continuous production
- selective production

Question Number : 141 Question Id : 5799652570 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Combining together of two business parties is termed as

Options :

- joint stock company
- amalgamation
- public limited company
- private limited company

Question Number : 142 Question Id : 5799652571 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Reheating in a gas turbine

Options :

- increases the compressor work
- increases the turbine work
- decreases the thermal efficiency
- increases the thermal efficiency

Question Number : 143 Question Id : 5799652572 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

The process of super-charging in I.C. engines is meant for

Options :

- raising the exhaust pressure
- increasing the density of intake air
- increasing quality of fuel going into the cylinder
- decreasing the density of air

Question Number : 144 Question Id : 5799652573 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In perpetual inventory control, the material is checked as it reaches its ___ value

Options :

- maximum
- average
- alarming
- minimum

Question Number : 145 Question Id : 5799652574 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Free trade zone means

Options :

- two countries without tariff
- two manufacturers without tax liability
- manufacturer and consumer
- manufacturer and wholesaler

Question Number : 146 Question Id : 5799652575 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

For resistance welding, the

Options :

- voltage is low and current is high
- voltage is high and current is low
- both voltage and current are low
- both voltage and current are high

Question Number : 147 Question Id : 5799652576 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Which of the following tests can be used to detect surface cracks in the welding of non-magnetic alloys?

Options :

- Gamma ray test
- X-ray test
- Flourescent test
- Magnaflux test

Question Number : 148 Question Id : 5799652577 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In petrol engines, advancing the spark timing will

Options :

- Decrease
- Not effect
- Increase the knocking tendency
- Unpredictable

Question Number : 149 Question Id : 5799652578 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

Ignition lag is

Options :

Time before actual fuel injection and the pump plunger starts to pump fuel

Time corresponding to actual ignition

Time corresponding to actual injection and TDC

Time taken by fuel after injection (before TDC) to reach up to auto ignition temperature

Question Number : 150 Question Id : 5799652579 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes
Single Line Question Option : No Option Orientation : Vertical

Correct : 1 Wrong : 0

In C.I. Engine, the function air swirl is

Options :

Haphazard motion of air in the cylinder

rotary motion of the air for proper distribution of fuel in the cylinder

radial motion of air in the cylinder

Mixing of air and fuel.