SSC
JE

Previous Year Paper
(Mechanical) Paper-II
06 Nov, 2024

Junior Engineer Civil Mechanical and Electrical Examination 2024 Paper II 6th Nov 2024

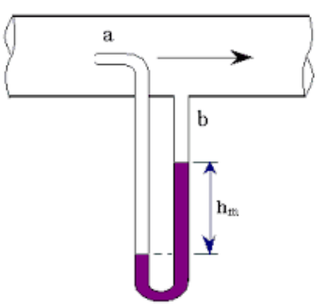
Exam Date	06/11/2024
Exam Time	9:00 AM - 11:00 AM
Subject	Junior Engineer 2024 Paper II Mechanical

Section : **General Engineering Mechanical**

Q.1 While deaerating the steam, when water is heated to 100°C, another steam is introduced known as _____.

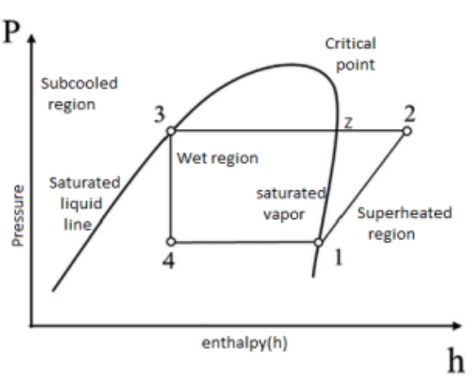
Ans
✗ 1. scorching steam
✓ 2. pegging steam
✗ 3. charging steam
✗ 4. monochrome steam

Q.2 Identify the measuring set-up shown in the following figure.



Ans
✓ 1. Pitot tube
✗ 2. Diaphragm gauge
✗ 3. Bernoulli's tube
✗ 4. Switch gauge

Q.3 Identify the cycle on the basis of its P-h diagram.



Ans
✗ 1. Stirling cycle
✓ 2. Vapour compression refrigerant cycle
✗ 3. Brayton cycle
✗ 4. Mollier cycle

Q.4 Identify the correct option based on the given assertion and reason.

Assertion (A): While tensile testing of gold, necking phenomenon occurred.

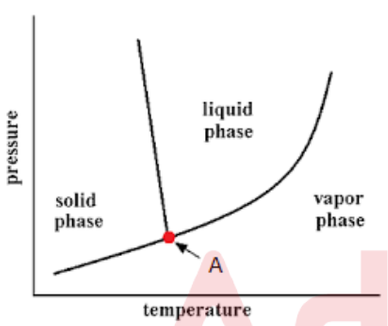
Reason (R): Gold is a brittle material.

Ans
1. A is true but R is false
2. Both A and R are true
3. A is false but R is true
4. Both A and R are false

Q.5 Thermo-siphon type of IC engine cooling system _____.

Ans
1. does not use a pump for water circulation
2. uses a condenser for cooling
3. uses grease as working fluid
4. uses a compressor for water circulation

Q.6 Identify Point A in the given figure.



Ans
1. Triple point
2. Saturation point
3. Critical point
4. Superheated point

Q.7 Identify the correct pair from the following.

Ans
1. Otto cycle → Petrol engines
2. Diesel engines → Electric vehicles
3. Carnot cycle → Compressors
4. Brayton cycle → Chillers

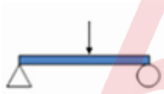
Q.8 Which of the following statements related to the efficiency of a roots blower is correct?

Ans
✗ 1. It is a ratio of actual work done to ideal work done.
✗ 2. It is a ratio of actual volume to ideal volume required.
✗ 3. It is a ratio of ideal volume to actual volume required.
✓ 4. It is a ratio of isentropic work done to actual work done.

Q.9 Which of the following is NOT a safety valve used in a boiler?

Ans
✓ 1. Pin safety valve
✗ 2. Dead weight safety valve
✗ 3. Lever safety valve
✗ 4. Spring loaded safety valve

Q.10 Match the columns.

Column A (Beam)	Column B (Shear force diagram)
A. 	1. 
B. 	2. 
C. 	3. 

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

Q.11 Identify the correct pair from the following.

Ans
✗ 1. Secondary refrigerant → R12
✗ 2. Secondary refrigerant → R1150
✓ 3. Secondary refrigerant → Brine
✗ 4. Secondary refrigerant → R11

Q.12 Relative density is also termed as ____.

Ans
✗ 1. buoyancy
✗ 2. floatability
✗ 3. acceleration
✓ 4. specific gravity

Q.13 Tensile forces on the arms of a flywheel are due to the _____.

Ans
✗ 1. kinetic forces
✗ 2. lateral deviation
✗ 3. longitudinal variation
✓ 4. centrifugal forces

Q.14 Which of the following statements is correct with respect to the Cochran boiler?

Ans
✗ 1. It has high rate of steam generation.
✗ 2. It requires high floor area.
✓ 3. High room head is required for its installation due to the vertical design.
✗ 4. It has high initial installation cost.

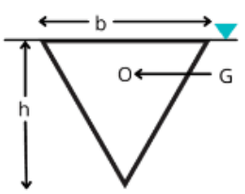
Q.15 Coefficient of performance for vapour compression refrigeration is ____ proportional to evaporator temperature and ____ proportional to condenser temperature.

Ans
✗ 1. inversely, inversely
✗ 2. directly, directly
✓ 3. directly, inversely
✗ 4. inversely, directly

Q.16 Identify the correct pair in terms of type of process and the temperatures they are carried out from the following options.

Ans
✗ 1. Brazing → Below 300°C
✗ 2. Soldering → Above 1500°C
✗ 3. Brazing → Above 1500°C
✓ 4. Soldering → Below 300°C

Q.17 Calculate the depth of the centre of pressure for the following body submerged in water.



Ans
1. h/4
2. h/3
3. h
4. h/2

Q.18 Identify the correct option based on following statements pertaining to steam.

A: At a given pressure, the capacity of superheated steam to do work will be comparatively higher.

B: Dryness fraction is a term related to quality of steam.

C: Wet steam does not exists.

Ans
1. Both A and B are true
2. Only C is true
3. Only A is true
4. Both A and C are true

Q.19 Steam tables are available either on ____ or _____ basis.

Ans
1. temperature, velocity
2. pressure, dryness
3. pressure, temperature
4. velocity, dryness

Q.20 Natural draught for exhaust gases is provided during the working of a steam generator by ____.

Ans
1. feed valves
2. chimneys
3. conductors
4. compressors

Q.21 Match the given stages of the valve timing diagram for four-stroke petrol engines with their respective positions.

Column A (Stages)	Column B (Position)
A. Exhaust valve opens	1. 10°-20° before top dead centre
B. Exhaust valve closes	2. 30°-50° before bottom dead centre
C. Inlet valve opens	3. 10°-15° after top dead centre

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

Q.22 Which of the following statements is correct with respect to definition of sensible heat factor?

Ans
✓ 1. It is a ratio of sensible heat to total heat of the system.
✗ 2. It is a ratio of total heat to usable heat of the system.
✗ 3. It is a ratio of total heat to sensible heat of the system.
✗ 4. It is a ratio of total heat to available heat of the system.

Q.23 Identify the correct expression from the following options.

Ans
✗ 1. Brake power = Indicated power + Friction power
✗ 2. Brake power = Indicated power / Friction power
✗ 3. Brake power = Indicated power * Friction power
✓ 4. Brake power = Indicated power – Friction power

Q.24 _____ is a vertical boiler.

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

Q.25 _____ is also known as the principle of transmission of fluid pressure.

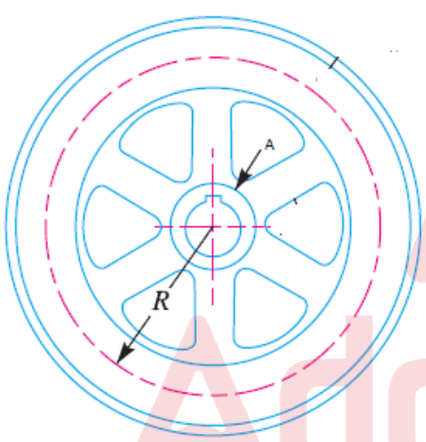
Ans
✗ 1. Buoyancy law
✓ 2. Pascal's law
✗ 3. Newton's law
✗ 4. Archimedes' principle

Q.26 Match the columns.

Column A (Compressor)	Column B (Feature)
A. Screw compressor	1. Compressor and motor operate on same shaft
B. Hermetically sealed compressor	2. Uses piston assembly
C. Reciprocating compressor	3. Rotary type

Ans
✔ 1. A-3; B-1; C-2
✗ 2. A-2; B-3; C-1
✗ 3. A-2; B-1; C-3
✗ 4. A-1; B-3; C-2

Q.27 Identify the part of the flywheel indicated as 'A' in the following figure.



Ans
✔ 1. Hub
✗ 2. Frame
✗ 3. Spoke
✗ 4. Rim

Q.28 According to the Darcy-Weisbach equation for flow through pipe, head loss due to friction is inversely proportional to which of the following pipe parameters?

Ans
✔ 1. Diameter of the pipe
✗ 2. Material type of the pipe
✗ 3. Colour of the pipe
✗ 4. Weight of the pipe

Q.29 Identify the correct statement with respect to centrifugal pumps.

Ans
✔ 1. Forward curved vanes can handle high flow rates.
✘ 2. Forward curved vanes have concave side of curvature facing direction of fluid flow.
✘ 3. In radial vanes, the fluid does not flow radially outward/inward from centre of rotation.
✘ 4. Backward curved vanes can handle high flow rates.

Q.30 The temperature at which liquid droplets just appear when moist air is cooled continuously is called _____.

Ans
✘ 1. flash point temperature
✘ 2. fire temperature
✘ 3. pour point temperature
✔ 4. dew point temperature

Q.31 Identify whether the given statements related to IC engines are true or false.

Statements:

A) SI engine does not consist of a spark plug.

B) CI engine does not consist of a spark plug.

Ans
✘ 1. Both statements are true
✔ 2. Statement B is true but Statement A is false
✘ 3. Both statements are false
✘ 4. Statement A is true but Statement B is false

Q.32 Match column A with column B.

Column A (Boiler)	Column B (Pressure)
A. Cochran boiler	1. Medium pressure
B. Babcock and Wilcox boiler	2. Low pressure
C. Locomotive	3. High pressure boilers

Ans
✔ 1. A-2; B-3; C-1
✘ 2. A-1; B-2; C-3
✘ 3. A-2; B-1; C-3
✘ 4. A-1; B-3; C-2

Q.33 Barometric pressure is also known as ____.

Ans
1. fluid pressure
2. volumetric pressure
3. atmospheric pressure
4. density

Q.34 Identify which of the given statements related to IC engines is/are correct.

Statements:

A) Mechanical efficiency of a single-cylinder four-stroke engine is the ratio of brake power to indicated power.

B) Volumetric efficiency of SI engine is generally less than 30%.

C) Volumetric efficiency of CI engine is generally less than 30%.

Ans
1. Only Statement C
2. Only Statement A
3. Only Statement B
4. Only Statements B and C

Q.35 Two types of radiators used for IC engine systems are _____ and ____.

Ans
1. tubular core type, cellular core type
2. tubular core type, reciprocating core type
3. reciprocating core type, rotating core type
4. rotating core type, cellular core type

Q.36 Which of the following efficiencies is NOT related to turbines?

Ans
1. Mechanical efficiency
2. Hydraulic efficiency
3. Machine efficiency
4. Volumetric efficiency

Q.37 Identify the correct option based on the given assertion and reason.

Assertion (A): Hot tea kept in a thermos flask remains hot for a longer duration.

Reason (R): A thermos flask is an example of a closed system.

Ans
1. Both A and R are true
2. A is false but R is true
3. Both A and R are false
4. A is true but R is false

Q.38 Identify the INCORRECT statement from the following options.

Ans
✗ 1. Stainless steels are a type of alloy steels.
✗ 2. Stainless steel contains chromium.
✓ 3. Stainless steels are a type of non-ferrous steels.
✗ 4. Stainless steels are resistant to corrosion.

Q.39 Velocity potential function is a/an _____.

Ans
✗ 1. infinite quantity
✗ 2. vector quantity
✗ 3. elemental quantity
✓ 4. scalar quantity

Q.40 Identify whether the given statements are true or false.

Statements:

A) In a double acting compressor, suction and expansion take place in two different strokes.

B) In single acting compressors, both suction and expansion stroke take place in two different strokes.

Ans
✗ 1. Both statements are false
✓ 2. Statement B is true but Statement A is false
✗ 3. Statement A is true but Statement B is false
✗ 4. Both statements are true

Q.41 Which of the following is NOT a minor energy (head) loss?

Ans
✗ 1. Loss due to enlargement
✗ 2. Loss due to obstruction in pipe
✓ 3. Loss due to friction
✗ 4. Loss due to contraction

Q.42 The graphical representation of transformation of 1 kg of ice into 1 kg of superheated steam at constant pressure is known as ____.

Ans
✗ 1. u-v diagram
✗ 2. h-s diagram
✗ 3. p-v diagram
✓ 4. t-h diagram

Q.43 Loss of head occurring due to bend in pipe during fluid flow is considered as ____.

Ans
✔ 1. minor loss
✘ 2. resultant loss
✘ 3. recording loss
✘ 4. major loss

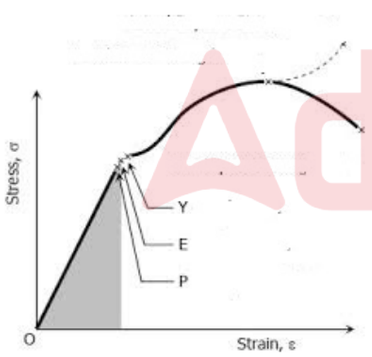
Q.44 Identify the correct statement with reference to definition of coefficient of discharge for a steam nozzle.

Ans
✔ 1. Ratio of actual discharge to theoretical discharge.
✘ 2. Ratio of total discharge to leaked discharge.
✘ 3. Ratio of theoretical discharge to total discharge.
✘ 4. Ratio of theoretical discharge to actual discharge.

Q.45 The work of a compressor in a vapour compression refrigeration system is to _____.

Ans
✘ 1. increase the volume of the refrigerant at constant entropy
✔ 2. increase the temperature of the refrigerant at constant entropy
✘ 3. increase the pressure of the refrigerant at constant entropy
✘ 4. increase the velocity of the refrigerant at constant entropy

Q.46 Which of the following statements based on the given figure is/are correct?



Statements:

A) Point Y represents rupture strength.

B) Point E represents elastic limit.

C) Point P represents proportional limit.

Ans
✔ 1. Only Statements B and C
✘ 2. Only Statement A
✘ 3. Only Statement C
✘ 4. Only Statement B

Q.47 An oil of specific gravity 0.9 flows through a 0.1 m diameter pipe under a pressure of 100 kPa. The centre line of the pipe is 5 m above the datum line and the total energy with respect to the datum is 0.04 kJ/N. Then the discharge of the oil through the pipe in litre per second is

Ans
✔ 1. 170
✘ 2. 340
✘ 3. 85
✘ 4. 677

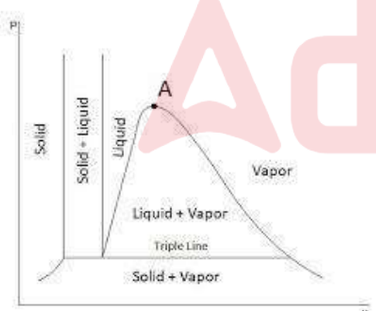
Q.48 In a rotameter, the float position indicates ____.

Ans
✘ 1. weight
✘ 2. viscosity
✘ 3. density
✔ 4. flow rate

Q.49 In case of liquids, ____ can be seen as cohesive forces between molecules of liquid.

Ans
✘ 1. adaptability
✘ 2. transferability
✘ 3. permeability
✔ 4. viscosity

Q.50 Identify point A in the following figure.



Ans
✔ 1. Critical point
✘ 2. Triple point
✘ 3. Saturation point
✘ 4. Superheated point

Q.51 Archimedes principle discusses ____.

Ans
✘ 1. viscosity
✘ 2. illuminance
✘ 3. potency
✔ 4. buoyancy

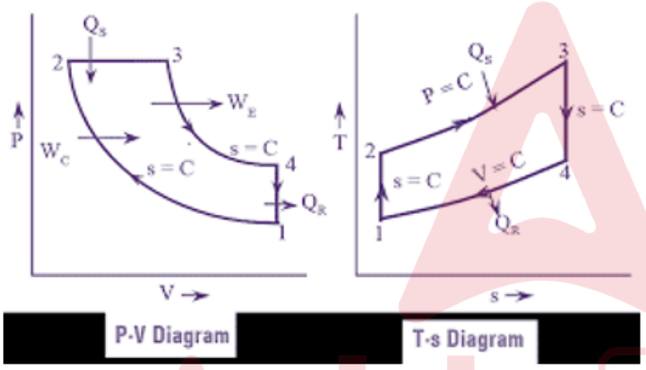
Q.52 The value of static friction is between _____ and limiting friction.

Ans
1. 10
2. 0
3. 15
4. 5

Q.53 In order to grind material with high tensile strength ____ abrasive is predominantly used on abrasive wheels.

Ans
1. aluminium oxide
2. sodium chloride
3. manganese
4. copper

Q.54 Based on the following P-V and T-s diagrams, identify the IC engine cycle.



Ans
1. Brayton cycle
2. Diesel cycle
3. Otto cycle
4. Stirling cycle

Q.55 Match column A with column B.

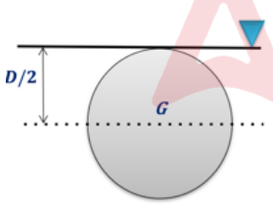
Column A (Law of Thermodynamics)	Column B (Concept)
A. Zeroth law	1. Conservation of energy
B. First law	2. Entropy
C. Second law	3. Thermal equilibrium

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

Q.56 A _____ is provided to remove the water from a steam-water mixture in a boiler.

Ans
1. lever valve
2. pin check
3. fusible plug
4. steam trap

Q.57 Calculate the depth of centre of pressure for the following body (circular plate) submerged in water (where *D* is diameter and *G* is centre of gravity).



Ans
1. D/2
2. D/3
3. 5D/8
4. 5D/4

Q.58 Identify whether the given statements are true or false.

Statements:

A) Work done by a system on its surroundings is treated as a negative quantity.

B) Energy transfer as heat to a system from its surroundings is treated as a positive quantity.

Ans
✗ 1. Both A and B are true
✗ 2. A is true but B is false
✓ 3. A is false but B is true
✗ 4. Both A and B are false

Q.59 Which of the following is NOT a type of lathe machine?

Ans
✗ 1. Turret lathe
✗ 2. Tool room lathe
✓ 3. Boiler room lathe
✗ 4. Bench lathe

Q.60 Which of the following is a 100% reaction turbine?

Ans
✓ 1. Hero's turbine
✗ 2. Rateau turbine
✗ 3. Curtis turbine
✗ 4. De-Laval turbine

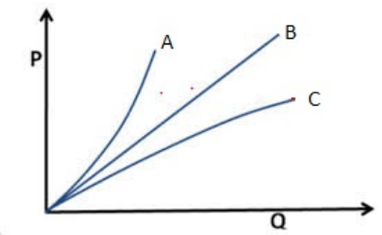
Q.61 Given in the options are terminologies related to the valve timing diagram of an IC engine and their full forms. Identify the full form that is correctly paired with its short form.

Ans
✗ 1. FVO → First valve operation
✓ 2. TDC → Top dead centre
✗ 3. BDC → Burden dead core
✗ 4. IVC → Intake valve corrosion

Q.62 In _____ compressors, the compressor and the motor work on the same shaft and are housed in the same casing.

Ans
✓ 1. hermetically sealed
✗ 2. common cased
✗ 3. ergonomically tabulated
✗ 4. hydrophobically crafted

Q.63 Refer to the given figure which shows Power (P) versus Discharge (Q) for a centrifugal pump and match the columns accordingly.



Column A (Curve)	Column B (Type of vane)
A. Curve B	1. Forward vane
B. Curve A	2. Backward vane
C. Curve C	3. Radial vane

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

Q.64 Cochran boiler is a _____, _____ and _____ type of boiler.

Ans
✓ 1. fire tube; vertical; low pressure
✗ 2. fire tube; horizontal; low pressure
✗ 3. water tube; horizontal; high pressure
✗ 4. water tube; vertical; high pressure

Q.65 Which of the following fuels is LEAST/NEVER used in a boiler?

Ans
✗ 1. Gas
✓ 2. Mercury
✗ 3. Oil
✗ 4. Coal

Q.66 Identify the correct option based on the following statements.

A: Refrigerant should be affected by moisture.

B: Refrigerants should be non-toxic.

C: Refrigerants should be non-corrosive.

Ans
✔ 1. Only B and C are true

✘ 2. Only A and C are true

✘ 3. All A, B and C are true

✘ 4. Both A and B are true

Q.67 Bernoulli's equation is applied on _____.

Ans
✘ 1. tachometer

✘ 2. manometer

✘ 3. sine bar

✔ 4. orifice meter

Q.68 Match column A with column B.

Column A (Property)	Column B (Definition)
A. Flash point	1. Temperature at which vapours are given off from oil
B. Pour point	2. Temperature at which lubricant is able to flow
C. Fire point	3. Temperature at which oil catches fire

Ans
✔ 1. A-1; B-2; C-3

✘ 2. A-2; B-3; C-1

✘ 3. A-2; B-1; C-3

✘ 4. A-3; B-1; C-2

Q.69 Identify the correct statement with respect to hydroelectric power plant.

Ans
✘ 1. Net head is the water level before tail race.

✔ 2. Net head or effective head is the head available at the inlet of the turbine.

✘ 3. Gross head is the effective head after the water is delivered.

✘ 4. Gross head is the water level before head race.

Q.70 Identify the correct option based on the given statements.

A: Clearance ratio for a single stage reciprocating compressor is the ratio of clearance volume to swept volume.

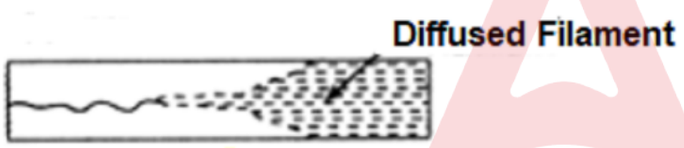
B: Clearance ratio for single stage reciprocating compressor is generally in the range of 2 to 10%.

Ans
✗ 1. Both A and B are false
✗ 2. A is true, but B is false
✓ 3. Both A and B are true
✗ 4. A is false, but B is true

Q.71 Coefficient of friction depends on _____.

Ans
✗ 1. Density of the fluid
✓ 2. Surface roughness
✗ 3. Colour of the fluid
✗ 4. Weight of the fluid

Q.72 In a glass tube with water flowing, a liquid dye with the same specific weight is introduced. The resulting dye filament pattern is observed as shown in the figure. Identify the type of flow from the following options.



Ans
✗ 1. Laminar flow
✗ 2. Recoil flow
✗ 3. Transient flow
✓ 4. Turbulent flow

Q.73 Identify the correct pair in terms of type of welding and the electrode used from the following options.

Ans
✓ 1. Tungsten electrode → TIG welding
✗ 2. Aluminium electrode → Laser welding
✗ 3. Monel electrode → Friction stir welding
✗ 4. Titanium electrode → Friction welding

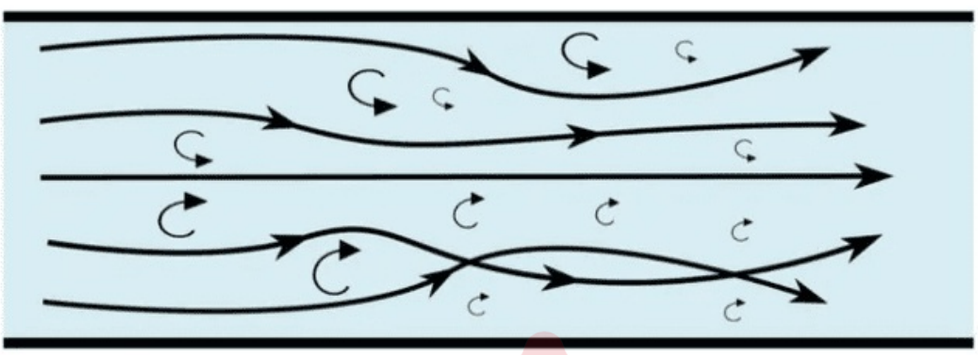
Q.74 _____ is a part of gas turbine fuel injector.

Ans
✗ 1. Plug
✗ 2. Screw gauge
✗ 3. Gun
✓ 4. Vaporiser

Q.75 Which of the following is NOT a type of cam when classified according to follower movement?

Ans
1. Dwell-Rise-Dwell-Return-Dwell
2. Rise-Rise-Rise
3. Rise-Return-Rise
4. Dwell-Rise-Return-Dwell

Q.76 Identify the flow shown in the following figure.



Ans
1. Turbulent flow
2. Laminar flow
3. Recoil flow
4. Transient flow

Q.77 Which of the following is NOT an assumption made for Euler's equation of motion?

Ans
1. Frictional losses are zero.
2. Velocity of flow varies across the cross section.
3. Fluid is non-viscous.
4. Fluid is incompressible.

Q.78 Which of the following is NOT a component used in steam generation?

Ans
1. Evaporator
2. Governor
3. Boiler
4. Superheater

Q.79 Which of the following is NOT a type of clutch?

Ans
1. Cone clutch
2. Dry clutch
3. Cycloid clutch
4. Plate clutch

Q.80 Which of the following options is NOT true about viscosity?

Ans
✗ 1. It is caused by friction within a fluid.
✗ 2. Its unit is N-s/m^2.
✓ 3. It is the same as specific gravity.
✗ 4. It is an defined as the fluid's resistance to deformation at a given flow.

Q.81 Which of the following is true for stage efficiency for the steam turbines?

Ans
✓ 1. It is the product of blade efficiency and nozzle efficiency.
✗ 2. It is the addition of blade efficiency and nozzle efficiency.
✗ 3. It is the ratio of blade efficiency to nozzle efficiency.
✗ 4. It is the square of blade efficiency.

Q.82 For which of the instrument out of given below, the coefficient of discharge is minimum?

Ans
✗ 1. Venturimeter
✓ 2. Orifice meter
✗ 3. Pirani gauge
✗ 4. Nozzle meter

Q.83 Identify the correct option based on the following statements pertaining to steam.

A: Condenser is a component of the refrigeration cycle.

B: Throttling device is not a component of the refrigeration cycle.

C: A compressor is a device of the refrigeration cycle.

Ans
✗ 1. Only B and C are true
✓ 2. Only A and C are true
✗ 3. Both A and B are true
✗ 4. All A, B and C are true

Q.84 Negative gauge pressure is also known as _____.

Ans
✗ 1. barometric pressure
✗ 2. atmospheric pressure
✓ 3. vacuum pressure
✗ 4. mercury pressure

Q.85 Identify the correct statement with respect to air standard cycle assumptions.

Ans
✗ 1. Water is a working fluid.
✗ 2. All processes in power cycles are internally irreversible.
✓ 3. Air is considered an ideal gas.
✗ 4. Steam is supplied at lower temperatures.

Q.86 _____ is done for keeping the steam turbine speed fairly same in-spite of load.

Ans
✗ 1. Positioning
✗ 2. Steering
✗ 3. Parting
✓ 4. Governing

Q.87 Which of the following is NOT a classification of orifices?

Ans
✗ 1. Free discharging orifices
✗ 2. Drowned orifices
✗ 3. Submerged orifices
✓ 4. Blocked orifices

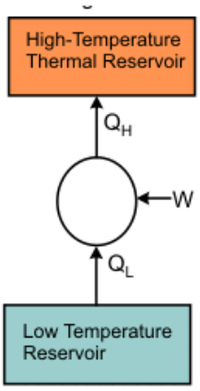
Q.88 Identify the correct pair on basis of types of components.

Ans
✗ 1. Venturimeter → Volume fan
✓ 2. Casing → Volute casing
✗ 3. Motor → Friction blades
✗ 4. Piston → Forward flow

Q.89 An air preheater is essentially a/an ____.

Ans
✓ 1. heat exchanger
✗ 2. cooler
✗ 3. expander
✗ 4. chiller

Q.90 Identify the thermodynamic device shown here.



Ans
✔ 1. Refrigerator
✘ 2. Condenser
✘ 3. Compressor
✘ 4. Boiler

Q.91 Identify which of the given statements are correct.

Statements:

A) A refrigerant should have high boiling point.

B) A refrigerant should have high latent heat value.

C) A refrigerant should have low freezing point.

Ans
✘ 1. All A, B and C
✘ 2. Only A and C
✔ 3. Only B and C
✘ 4. Both A and B

Q.92 Which of the following is NOT a type of boiler on the basis of its position?

Ans
✔ 1. Prone position boiler
✘ 2. Horizontal boiler
✘ 3. Inclined boiler
✘ 4. Vertical boiler

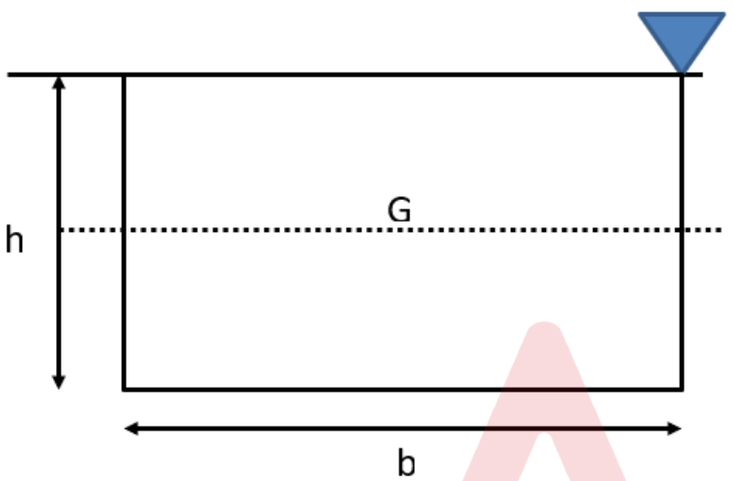
Q.93 The efficiency of Carnot cycle is expressed as ____.

Ans
✔ 1. ratio of work done to amount of heat given
✘ 2. ratio of volume compressed to amount of heat given
✘ 3. ratio of work supplied to amount of work done
✘ 4. ratio of work done to pressure released

Q.94 In _____, water flows parallel to the axis of the rotation of shaft.

Ans
✗ 1. old Francis turbine
✗ 2. Francis turbine
✓ 3. Kaplan turbine
✗ 4. Pelton wheel

Q.95 Calculate the depth of centre of pressure for the following body submerged in water.



Ans
✓ 1. (2h)/3
✗ 2. (4h)/3
✗ 3. h/3
✗ 4. (5h)/3

Q.96 Identify the correct option based on the given assertion and reason.

Assertion (A): Steam turbines operate at fairly the same speed regardless of the load due to governing.

Reason (R): Throttle governing is often done in small steam turbines.

Ans
✗ 1. A is true but R is false
✓ 2. Both A and R are true
✗ 3. Both A and R are false
✗ 4. A is false but R is true

Q.97 Which of the following turbines is correctly paired with its type?

Ans
✓ 1. Mixed flow turbine → Francis turbine
✗ 2. Radial flow turbine→ Kaplan turbine
✗ 3. Reaction turbine→ Pelton wheel turbine
✗ 4. Inward flow turbine → Fourneyron turbine

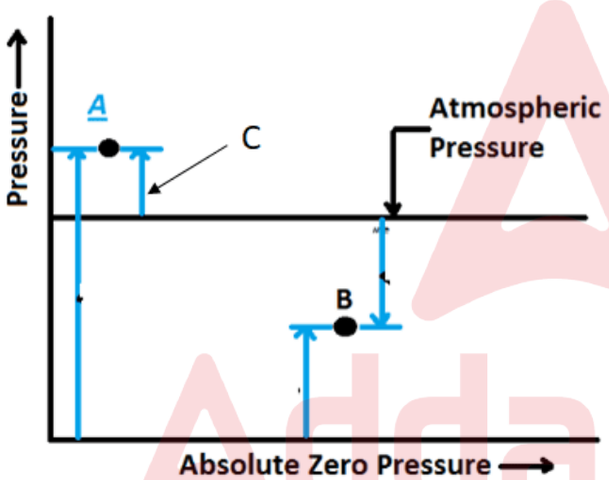
Q.98 Which of the following processes DOES NOT constitute in the Carnot cycle?

Ans
✗ 1. Reversible Isothermal Heat Addition
✗ 2. Reversible Adiabatic Expansion
✓ 3. Reversible Isobaric Condensation
✗ 4. Reversible Isothermal Heat Rejection

Q.99 The SI unit of couple is:

Ans
✗ 1. Kg-S
✗ 2. N-S
✗ 3. Pa-m
✓ 4. N-m

Q.100 Identify the pressure indicated by C in the following figure.



Ans
✗ 1. Vacuum pressure
✗ 2. Absolute pressure
✓ 3. Gauge pressure
✗ 4. Barometric pressure