

Railway Recruitment Board

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Junior Engineer

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Junior Engineer

Section Id : 45
Section Number : 1
Section type : Online
Mandatory or Optional: Mandatory
Number of Questions: 150
Number of Questions to be attempted: 150
Section Marks: 150.0

Sub-Section Number: 1
Sub-Section Id: 45
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 8101 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

For a simple closed system of constant composition, the difference between the heat and work interactions is identifiable as change in

- a. Enthalpy
- b. Entropy
- c. Flow energy
- d. Internal energy

Question Number : 2 Question Id : 8102 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

This process is one in which there is only work interaction between the system and the surroundings

- a. Diabatic process
- b. Adiabatic process
- c. Isothermal process
- d. Quasi-static process

Question Number : 3 Question Id : 8103 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Isentropic flow is

- a. Irreversible adiabatic flow
- b. Reversible adiabatic flow
- c. Ideal fluid flow
- d. Frictionless reversible flow

Question Number : 4 Question Id : 8104 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Fins are made as thin as possible to

- a. Reduce the total weight
- b. Accommodate more number of fins
- c. Increase the width for the same profile area
- d. Improve flow of coolant around the fin

Question Number : 5 Question Id : 8105 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Fraction of radiative energy leaving one surface that strikes the other surface is called

- a. Radiative flux
- b. Emissive power of the first surface
- c. View factor
- d. Re-radiation flux

Question Number : 6 Question Id : 8106 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which one of the following types of swirls is generated by a precombustion chamber in the diesel engine?

- a. Squish
- b. Compression swirl
- c. Induction swirl
- d. Combustion induced swirl

Question Number : 7 Question Id : 8107 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In spark ignition engines knocking can be reduced by

- a. Increasing the compression ratio
- b. Increasing the cooling water temperature
- c. Retarding the spark advance
- d. Increasing the inlet air temperature

Question Number : 8 Question Id : 8108 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Shell moulding can be used for

- a. Producing milling cutters
- b. Making gold ornaments
- c. Producing heavy and thick walled casting
- d. Producing thin casting

Question Number : 9 Question Id : 8109 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A forging method for reducing the diameter of a bar, and in the process making it longer, is termed as

- a. Fullering
- b. Punching
- c. Upsetting
- d. Extruding

Question Number : 10 Question Id : 8110 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The process of removing the burrs or flash from a forged component in drop forging is called

- a. Swaging
- b. Perforating
- c. Trimming
- d. Fettling

Question Number : 11 Question Id : 8111 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Arc stability is better with

- a. AC welding
- b. DC welding
- c. Both AC and DC welding
- d. Specially designed wave forms

Question Number : 12 Question Id : 8112 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The acetylene cylinder is filled with a material saturated with

- a. Calcium carbide
- b. Calcium oxide
- c. Acetone
- d. Acetylene

Question Number : 13 Question Id : 8113 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which one of the following processes results in the best accuracy of the hole made?

- a. Drilling
- b. Reaming
- c. Broaching
- d. Boring

Question Number : 14 Question Id : 8114 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The most important function of the cutting fluid is to

- a. Provide lubrication
- b. Cool the tool and work piece
- c. Wash away the chips
- d. Improve surface finish

Question Number : 15 Question Id : 8115 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A capacitor is basically constructed of

- a. Conductor and Semiconductor
- b. Conductor and Dielectric
- c. Two conductors separated by a dielectric
- d. Two dielectric separated by a conductor

Options :

Question Number : 16 Question Id : 8116 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Electron Volt is a unit of

- a. Voltage
- b. Charge
- c. Momentum
- d. Energy

Options :

Question Number : 17 Question Id : 8117 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

No winding resistance means

- a. Primary windings have constant resistance
- b. Secondary windings have infinite resistance
- c. No ohmic power loss
- d. Infinite resistive voltage drop

Options :

Question Number : 18 Question Id : 8118 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Short circuit test on transformer is also known as

- a. Capacitance Test
- b. Impedance Test
- c. Inductance Test
- d. Current Test

Options :

Question Number : 19 Question Id : 8119 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Distribution transformers have the rating of

- a. up to 50 kVA
- b. up to 100 kVA
- c. up to 150 kVA
- d. up to 200 kVA

Options :

Question Number : 20 Question Id : 8120 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Frequency of a generator when the number of poles are 8 and speed is 750 rpm will be

- a. 50 Hz
- b. 52 Hz
- c. 60 Hz
- d. 65 Hz

Options :

Question Number : 21 Question Id : 8121 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The yoke of small DC machine is made up of

- a. Cast iron
- b. Aluminium
- c. Stainless steel
- d. Copper

Options :

Question Number : 22 Question Id : 8122 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The field of self-excited generator is excited by

- a. AC
- b. DC
- c. by its own current
- d. either AC or DC

Options :

Question Number : 23 Question Id : 8123 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Electric heater utilizes _____ effect of current.

- a. chemical
- b. heating
- c. mechanical
- d. field

Options :

Question Number : 24 Question Id : 8124 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

One B.O.T is:

- a. 1 kWh
- b. 0.1 kWh
- c. 0.01 kWh
- d. 0.001 kWh

Options :

Question Number : 25 Question Id : 8125 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The bond formed by sharing of electrons by two or more atoms is called

- a. Ionic Bond
- b. Metallic Bond
- c. Covalent Bond
- d. Coordinate Bond

Options :

Question Number : 26 Question Id : 8126 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The number of atoms in a face centred cubic unit cell is

- a. 1
- b. 2
- c. 3
- d. 4

Options :

Question Number : 27 Question Id : 8127 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In semiconductors, a donor may be

- a. a trivalent impurity
- b. a tetravalent impurity
- c. a pentavalent impurity
- d. a noble gas

Options :

Question Number : 28 Question Id : 8128 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

PIN diode in reverse bias condition offers

- a. zero resistance
- b. unit resistance
- c. finite resistance
- d. infinite resistance

Options :

Question Number : 29 Question Id : 8129 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following is ultra high switching speed diode

- a. Zener diode
- b. Photo diode
- c. Fast Recovery diode
- d. Tunnel diode

Options :

Question Number : 30 Question Id : 8130 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

For normal operation of a transistor, the collector-base junction is

- a. always reverse biased
- b. always forward biased
- c. is grounded
- d. unbiased

Options :

Question Number : 31 Question Id : 8131 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Pulsating output of a rectifier is converted into a steady DC level by

- a. Amplifier
- b. Modulator
- c. Filter Circuit
- d. Transistor

Options :

Question Number : 32 Question Id : 8132 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following is not a type of filter

- a. low pass
- b. high pass
- c. band pass
- d. frequency pass

Options :

Question Number : 33 Question Id : 8133 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Hexadecimal equivalent of binary number 1010 is

- a. A
- b. B
- c. C
- d. D

Options :

Question Number : 34 Question Id : 8134 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

$A + A'B$ gives

- a. 1
- b. A
- c. B
- d. $A + B$

Options :

Question Number : 35 Question Id : 8135 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Mercury is considered as a superior barometric fluid chiefly due to its

- a. Negligible small vapour pressure
- b. High specific heat
- c. High specific gravity
- d. Convex meniscus

Options :

Question Number : 36 Question Id : 8136 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Bourdon gauge measures

- a. Absolute pressure
- b. Gauge pressure
- c. Local atmospheric pressure
- d. Standard atmospheric pressure

Options :

Question Number : 37 Question Id : 8137 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The cost associated with defective products produced is called, cost of_____?

- a. Internal failure
- b. External failure
- c. Cost of prevention
- d. Cost of appraisal

Options :

Question Number : 38 Question Id : 8138 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Simo charts are used for

- a. Inspection of part
- b. Operator movements
- c. Work done at one place
- d. Simulation of models

Options :

Question Number : 39 Question Id : 8139 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Hydrographic survey deals with the mapping of

- a. Larger water bodies
- b. Rainfall data
- c. Wave movement
- d. Hilly areas

Options :

Question Number : 40 Question Id : 8140 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Metallic tapes are made of

- a. Steel
- b. Invar
- c. Cloth and wires
- d. Nickel

Options :

Question Number : 41 Question Id : 8141 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The dry density of which sample is expected to be highest

- a. Stiff clay
- b. Bentonite
- c. Organic clay
- d. Dense sand

Options :

Question Number : 42 Question Id : 8142 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The liquid and plastic limit exist in

- a. Sandy soils
- b. Silty soils
- c. Gravel soils
- d. Clay soils

Options :

Question Number : 43 Question Id : 8143 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The structure made of rigid curved surfaces are known as

- a. Surface structure
- b. Frame structure
- c. Shell structure
- d. Space structure

Options :

Question Number : 44 Question Id : 8144 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The failure of column depends upon

- a. Weight of column
- b. Length of column
- c. Slenderness ratio
- d. Cross sectional area of column

Options :

Question Number : 45 Question Id : 8145 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The coarseness of the grains of a mineral is known as

- a. Fracture
- b. Texture
- c. Structure
- d. Lustre

Options :

Question Number : 46 Question Id : 8146 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The right time of deforestation from plain areas is

- a. summer season
- b. winter season
- c. rainy season
- d. spring season

Options :

Question Number : 47 Question Id : 8147 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Error due to improper zero adjustment is classified as

- a. Environmental error
- b. Instrument error
- c. Random error
- d. Operator error

Options :

Question Number : 48 Question Id : 8148 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which instrument is not categorized as secondary instrument?

- a. Absolute
- b. Digital
- c. Analog
- d. Moving

Options :

Question Number : 49 Question Id : 8149 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which device is not used for extending the range of Instrument?

- a. Shunt
- b. Multiplier
- c. Current Transformer
- d. Switch board

Options :

Question Number : 50 Question Id : 8150 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following voltmeters has least power consumption?

- a. Induction type
- b. Electrostatic
- c. Hot-wire
- d. Moving iron

Options :

Question Number : 51 Question Id : 8151 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In a 3 phase power measurement using two wattmeter method, if one wattmeter read negative, it means

- a. power factor is unity
- b. power factor is greater than 0.5 lagging
- c. power factor is less than 0.5
- d. power factor is less than 0.5 lagging

Options :

Question Number : 52 Question Id : 8152 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The cyclic exchange of nutrient material between the living organisms and their non-living environment is called

- a. physico-chemical cycle
- b. biogeochemical cycle
- c. biological cycle
- d. bio-decomposition

Options :

Question Number : 53 Question Id : 8153 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The minimum concentration levels of iron and manganese that may cause colour problem in water are

- a. 0.5 mg/l and 0.05 mg/l
- b. 0.5 mg/l and 0.03 mg/l
- c. 0.3 mg/l and 0.05 mg/l
- d. 0.3 mg/l and 0.03 mg/l

Options :

Question Number : 54 Question Id : 8154 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The taste and odour in surface water may be controlled by

- a. Disinfection of water
- b. Reverse osmosis
- c. Coagulation and flocculation
- d. Aeration

Options :

Question Number : 55 Question Id : 8155 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The exposure of high concentration of nitrogen dioxide may cause

- a. coughing, choking and breathing problems
- b. acute bronchitis
- c. irritation to nasal cavity
- d. suffocation and headache

Options :

Question Number : 56 Question Id : 8156 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Identify the incorrect statement/option: The psychological effect of noise pollution is

- a. Insomnia as a result of lack of undisturbed and refreshing sleep
- b. emotional disturbance
- c. decrease in heart output and pain in heart
- d. depression and fatigue

Options :

Question Number : 57 Question Id : 8157 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Identify the incorrect statement/option: The ill-effect of depletion of the ozone layer is

- a. skin melanoma
- b. damage to the immune system
- c. eye ailment such as cataract
- d. to make the aquatic ecosystem sterile

Options :

Question Number : 58 Question Id : 8158 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following characteristics of computers makes them free from monotony, tiredness, and lack of concentration?

- a. Speed
- b. Accuracy
- c. Diligence
- d. Versatility

Options :

Question Number : 59 Question Id : 8159 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following input device converts bitmap images of characters to equivalent ASCII codes?

- a. OCR
- b. OMR
- c. Scanner
- d. Touch Screen

Options :

Question Number : 60 Question Id : 8160 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following is a non-impact printer?

- a. Dot-Matrix printer
- b. Inkjet printer
- c. Drum printer
- d. Chain/Band printer

Options :

Question Number : 61 Question Id : 8161 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following categories of systems uses multiple CPUs to process either instructions from different and independent programs or different instructions from the same program simultaneously?

- a. Multiprogramming system
- b. Multitasking system
- c. Multiprocessing system
- d. Multithreading system

Options :

Question Number : 62 Question Id : 8162 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

If $(101)_n = 65$, where n represents the base of the respective number system, then the value of n is

- a. 2
- b. 4
- c. 8
- d. 16

Options :

Question Number : 63 Question Id : 8163 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Considering X and Y as binary variables, the Boolean expression $XY' + X'Y'$ is equivalent to

- a. X
- b. X'
- c. Y
- d. Y'

Options :

Question Number : 64 Question Id : 8164 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In Binary Coded Decimal (BCD) systems, the decimal number 81 is represented as

- a. 10000001
- b. 10100010
- c. 01010001
- d. 00011000

Options :

Question Number : 65 Question Id : 8165 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following tasks can't be performed using MS-Word?

- a. Charts creation
- b. Nested tables creation
- c. Review
- d. Matrix inverse calculation

Options :

Question Number : 66 Question Id : 8166 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In Class-B IP addresses, number of bits used to identify class is

- a. 1
- b. 2
- c. 3
- d. 4

Options :

Question Number : 67 Question Id : 8167 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following is not an antivirus software?

- a. iOS
- b. Kaspersky
- c. AVG
- d. McAfee

Options :

Question Number : 68 Question Id : 8168 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In a “first angle” orthographic projection, the distance of a point lying on the object being projected, from HP will be visible in:

- a. “Front view”
- b. “Top view”
- c. “Front view” and “side view”
- d. All the three views

Options :

Question Number : 69 Question Id : 8169 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A “socket and spigot” joint:

- a. is a “rigid joint”,
- b. permits only oscillation about the joint,
- c. permits only displacement about the joint,
- d. permits oscillation and displacement both.

Options :

Question Number : 70 Question Id : 8170 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A scale is to read in “metre” and “decimetre”. The first “major division” of the scale shall be divided into:

- a. five equal parts,
- b. ten equal parts,
- c. twenty five equal parts,
- d. hundred equal parts.

Options :

Question Number : 71 Question Id : 8171 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The eccentricity of an ellipse is:

- a. ratio of distances of a point, lying on the ellipse, from focus to directrix,
- b. ratio of distances of a point, lying on the ellipse, from directrix to focus,
- c. product of distances of a point, lying on the ellipse, from focus to directrix,
- d. sum of distances of a point, lying on the ellipse, from focus to directrix

Options :

Question Number : 72 Question Id : 8172 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A circle is represented as a “top view”, “front view” and “side view”. If all these views are converted into isometric views then:

- a. All the three isometric view shall be same,
- b. Isometric views of “front view” and “side view” shall be same,
- c. “top view” and “front view” shall be same,
- d. Neither the “top view”, “front view” or “side view” shall be the same.

Options :

Question Number : 73 Question Id : 8173 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A bullet of mass m kg is fired horizontally with a velocity v m/s from a pistol of mass M kg. The recoil velocity of the pistol is

- a. $(m/M) v$ m/s
- b. $-(m/M) v$ m/s
- c. v m/s
- d. $-(M/m) v$ m/s.

Options :

Question Number : 74 Question Id : 8174 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The acceleration due to gravity, g

- a. decreases as we go up the earth
- b. increases as we go up the earth
- c. Increases as we go down the earth
- d. Is less at poles than at equator.

Options :

Question Number : 75 Question Id : 8175 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A ball of mass m is raised to height h and then dropped to the ground. When the ball reaches the ground, the velocity of the ball is (neglecting air resistance), where g is the acceleration due to gravity.

- a. $\sqrt{g h}$
- b. $\sqrt{2g h}$
- c. $\sqrt{g h/2}$
- d. $2\sqrt{g h}$

Options :

Question Number : 76 Question Id : 8176 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The pitch of a sound is basically determined by its

- a. amplitude
- b. frequency
- c. speed
- d. speed and amplitude.

Options :

Question Number : 77 Question Id : 8177 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A ray of light travelling in a glass slab is incident on the surface separating glass from air. Part of it is reflected and part is refracted. Let i , r and s be the angle of incidence, angle of reflection and angle of refraction. Which one of the following is correct?

- a. $i = r = s$
- b. $i \neq r \neq s$
- c. $i = r$ and $s < i$
- d. $i = r$ and $s > i$.

Options :

Question Number : 78 Question Id : 8178 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A conducting wire of length l and resistance R is cut into four equal parts. The four parts are then connected in parallel. The resistance of the combination is

- a. $R/4$
- b. $R/8$
- c. $R/16$
- d. $4R$

Options :

Question Number : 79 Question Id : 8179 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The number of water molecules present in 36 grams of water is

- a. 3.023×10^{23}
- b. 6.046×10^{23}
- c. 3.023×10^{46}
- d. 6.046×10^{46}

Options :

Question Number : 80 Question Id : 8180 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A substance is said to be oxidised if it

- a. gains oxygen
- b. loses oxygen
- c. gains hydrogen
- d. gains electrons

Options :

Question Number : 81 Question Id : 8181 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

An aqueous solution of a substance turns red litmus blue. The substance is

- a. Acetic acid
- b. Copper sulphate
- c. Sodium carbonate
- d. Sodium chloride

Options :

Question Number : 82 Question Id : 8182 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which one of the following element is **NOT** lustrous?

- a. Copper
- b. Aluminium
- c. Iodine
- d. Sulphur

Options :

Question Number : 83 Question Id : 8183 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A molecule of propyne has

- a. 06 single bonds and 01 double bond
- b. 05 single bonds and 01 triple bond
- c. 08 single bonds
- d. 04 single bonds and 02 double bonds

Options :

Question Number : 84 Question Id : 8184 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In a modern periodic table, the metallic character of elements

- (i) increases as we move from left to right in a period.
- (ii) decreases as we move from left to right in a period.
- (iii) decreases as we move from top to bottom in a group.
- (iv) increases as we move from top to bottom in a group.

- a. (i) & (iii)
- b. (ii) & (iii)
- c. (i) & (iv)
- d. (ii) & (iv)

Options :

Question Number : 85 Question Id : 8185 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Roses reproduce through vegetative propagation. You wanted to grow roses in your garden, so your mother got you

- a. Rose seeds
- b. Rose buds
- c. Rose flowers
- d. Cuttings from rose plant

Options :

Question Number : 86 Question Id : 8186 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Like other insects, a butterfly has

- a. two legs
- b. three legs
- c. two pairs of legs
- d. three pairs of legs

Options :

Question Number : 87 Question Id : 8187 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In a cell, genes are present

- a. below the cell membrane
- b. in the cytoplasm along with other organelles
- c. on the chromosomes in the nucleus
- d. between nucleus and the surrounding cytoplasm

Options :

Question Number : 88 Question Id : 8188 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

What does the following word diagram depict?

Algae → Shrimps → Small Fish → Large Fish

- a. Aquatic living beings
- b. Food chain
- c. Food web
- d. Food pyramid

Options :

Question Number : 89 Question Id : 8189 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A teacher asked her students to name the organs that form the human excretory system. One student mentioned an **incorrect** organ. Identify the wrong organ.

- a. Testis
- b. Urinary bladder
- c. Urethra
- d. Kidney

Options :

Question Number : 90 Question Id : 8190 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

. Which part of the cells mentioned below is found in plant cells but not in animal cells.

- a. Cell membrane
- b. Cell wall
- c. Nucleus
- d. Mitochondria

Options :

Question Number : 91 Question Id : 8191 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Let N be the largest number that will divide 1305, 4665 and 6905, leaving the same remainder in each case. Then sum of the digits in N is

- a. 4
- b. 5
- c. 6
- d. 8

Options :

Question Number : 92 Question Id : 8192 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If the sum of two numbers is 55 and the HCF and LCM of these numbers are 5 and 120 respectively, then the sum of the reciprocals of the numbers is equal to

- a. $55/601$
- b. $601/55$
- c. $11/120$
- d. $120/11$

Options :

Question Number : 93 Question Id : 8193 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A batsmen in his 17th innings makes a score of 85, and thereby increases his average by 3. What is his average after the 17th innings? He had never been 'not out'

- a. 47
- b. 37
- c. 39
- d. 43

Options :

Question Number : 94 Question Id : 8194 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The sum of three numbers is 98. If the ratio between first and second is 2:3 and that between second and third is 5:8, then the second number is

- a. 30
- b. 20
- c. 58
- d. 48

Options :

Question Number : 95 Question Id : 8195 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Divide Rs. 680 among A,B and C such that A gets $\frac{2}{3}$ of what B gets and B gets $\frac{1}{4}$ th of what C gets. Now the share of C is

- a. Rs. 480
- b. Rs. 300
- c. Rs. 420
- d. Rs. 360

Options :

Question Number : 96 Question Id : 8196 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The students in three batches at Delhi Public School are in the ratio 2:3:5. If 20 students are increased in each batch, the ratio change to 4:5:7. The total number of students in the three batches before the increase were

- a. 10
- b. 90
- c. 100
- d. 150

Options :

Question Number : 97 Question Id : 8197 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Nakul wanted to subtract 5 from a number. Unfortunately he added 5 instead of subtracting. Find the percentage change in the result.

- a. 300 %
- b. 66.66 %
- c. 50 %
- d. Cannot be determined

Options :

Question Number : 98 Question Id : 8198 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Cost of 3 cricket balls = cost of 2 pairs of leg pads. Cost of 3 pairs of leg pads = cost of 2 pairs of gloves. Cost of 3 pairs of gloves = cost of 2 cricket bats. If a cricket bat costs Rs. 54, what is the cost of a cricket ball?

- a. RS. 12
- b. Rs. 14
- c. Rs. 16
- d. Rs. 18

Options :

Question Number : 99 Question Id : 8199 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

When a commodity is sold for Rs. 34.80, there is a loss of 25 %. What is the cost price of the commodity?

- a. Rs. 46.40
- b. Rs. 26.10
- c. Rs. 43
- d. Rs. 43.20

Options :

Question Number : 100 Question Id : 8200 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A man invested $\frac{1}{3}$ of his capital at 7 %, $\frac{1}{4}$ at 8 % and the remainder at 10 %. If the annual income is Rs. 561, the capital is

- a. 4400
- b. 5500
- c. 6600
- d. 5800

Options :

Question Number : 101 Question Id : 8201 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A lends Rs. 2500 to B and a certain sum to C at the same time at 7 % per annum simple interest. If after 4 years , A altogether receives Rs. 1120 as interest from B and C, then the sum lent to C is

- a. Rs. 700
- b. Rs. 1500
- c. Rs. 4000
- d. Rs. 6500

Options :

Question Number : 102 Question Id : 8202 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The simplified value of $(\sec A - \cos A)^2 + (\operatorname{cosec} A - \sin A)^2 - (\cot A - \tan A)^2$ is

- a. 0
- b. $\frac{1}{2}$
- c. 1
- d. 2

Options :

Question Number : 103 Question Id : 8203 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A person has 60 pens. He sells some of these at a profit of 12 % and the rest at 8 % loss. On the whole, he gets a profit of 11 %. How many pens were sold at 12 % profit?

- a. 60
- b. 51
- c. 57
- d. 54

Options :

Question Number : 104 Question Id : 8204 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Tea worth Rs. 126/kg and Rs. 135/kg are mixed with a third variety in the ratio 1:1:2. If the mixture is worth Rs. 153/kg, the price of the third variety/kg will be

- a. Rs. 169.50
- b. Rs. 170
- c. Rs. 175.50
- d. Rs. 180

Options :

Question Number : 105 Question Id : 8205 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The HCF of (x^2-4) , (x^2-5x-6) and (x^2+x-6)

- a. 1
- b. $(x-2)$
- c. $(x+2)$
- d. (x^2+x-6)

Options :

Question Number : 106 Question Id : 8206 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If Polynomial $2x^3 + ax^2 + 3x - 5$ and $x^3 + x^2 - 2x + a$ are divided by $(x-2)$, the same remainder are obtained. Find the value of a

- a. 3
- b. -9
- c. -3
- d. -5

Options :

Question Number : 107 Question Id : 8207 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The angle of elevation of the sun, when the length of the shadow of a tree is $\sqrt{3}$ times the height of the tree, is

- a. 30°
- b. 45°
- c. 60°
- d. 90°

Options :

Question Number : 108 Question Id : 8208 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The sum of three numbers of a GP is 14 and the sum of their squares is 84. Find the largest number

- a. 8
- b. 6
- c. 4
- d. 2

Options :

Question Number : 109 Question Id : 8209 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Two number A and B are such that their GM is 20 % lower than their AM. Find the ratio between the numbers.

- a. 3:2
- b. 4:1
- c. 2:1
- d. 3:1

Options :

Question Number : 110 Question Id : 8210 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

4 men and 6 women can complete a job in 8 days, while 3 men and 7 women can complete it in 10 days. In how many days will 10 women complete it

- a. 35
- b. 40
- c. 45
- d. 50

Options :

Question Number : 111 Question Id : 8211 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day

- a. 12 days
- b. 15 days
- c. 16 days
- d. 18 days

Options :

Question Number : 112 Question Id : 8212 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A thief is spotted by a policeman from a distance of 200 metres. When the policeman started to catch the thief he also started running. Assume the speed of the thief to be 10 km/h and that of a policeman 12 km/h, how far will the thief run before he is overtaken by the policeman.

- a. 1 km
- b. 2 km
- c. 3 km
- d. 4 km

Options :

Question Number : 113 Question Id : 8213 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A person has to cover a distance of 6 km in 45 minutes. If he covers one-half of the distance in two-third of the total time, to cover the remaining distance in the remaining time, his speed (in km/h) must be

- a. 6
- b. 8
- c. 12
- d. 15

Options :

Question Number : 114 Question Id : 8214 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The surface area of a pipe, open at both ends is equal to 628 m^2 . Difference between its radius and its length is 15 m. If the pipe was closed at one end, what amount of water can it hold

- a. 1750 m^3
- b. 7150 m^3
- c. 1570 m^3
- d. 7510 m^3

Options :

Question Number : 115 Question Id : 8215 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Find the value of $x^3 - (1/x^3)$ when $x - (1/x) = a$

- a. $a^3 - 3a$
- b. $3a^3 - a$
- c. $a^3 + 3a$
- d. $3a^3 + a$

Options :

Question Number : 116 Question Id : 8216 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which city of our country is called Pink city?

- a. Jaipur
- b. Udaipur
- c. Bilaspur
- d. Kanpur

Options :

Question Number : 117 Question Id : 8217 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which pair won the Wimbledon 2015 mixed double championship?

- a. Leander Paes & Sania Mirza
- b. Leander Paes & Martina Hingis
- c. Leander Paes & Serena Williams
- d. Leander Paes & Venus Williams

Options :

Question Number : 118 Question Id : 8218 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Burning of dry leaves is not permitted because it produces Carbon di oxide which is

- a. a greenhouse gas and causes global warming
- b. a gas responsible for ozone hole
- c. poisonous and kills living things
- d. a gas that irritates the eyes

Options :

Question Number : 119 Question Id : 8219 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which concept was given by India to the world?

- a. Concept of Zero
- b. Pythagoras theorem
- c. Invention of the wheel
- d. Scientific naming of living things

Options :

Question Number : 120 Question Id : 8220 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Animals that eat other animals are called

- a. Herbivores
- b. Carnivores
- c. Insectivores
- d. Omnivores

Options :

Question Number : 121 Question Id : 8221 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The smallest bone in the body is in the

- a. Skull
- b. Vertebral column
- c. Ear
- d. Knee

Options :

Question Number : 122 Question Id : 8222 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Our national anthem Jana Gana Mana is written by

- a. Iqbal
- b. Rabindra Nath Tagore
- c. Gulzar
- d. Subhadra Kumari Chauhan

Options :

Question Number : 123 Question Id : 8223 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Over which states of India does the Thar Desert spread?

- a. Madhya Pradesh and Gujarat
- b. Gujarat and Rajasthan
- c. Rajasthan and Uttar Pradesh
- d. Uttar Pradesh and Madhya Pradesh

Options :

Question Number : 124 Question Id : 8224 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

One of the following is not a matching pair of parts of plants and its function. Identify?

- a. Flower -Reproduction
- b. Leaf-Photosynthesis
- c. Stem-Anchoring plant to soil
- d. Root-Absorption of water and minerals

Options :

Question Number : 125 Question Id : 8225 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The pH of water is

- a. 5
- b. 6
- c. 7
- d. 8

Options :

Question Number : 126 Question Id : 8226 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Thin foils of which metal are used for packaging food?

- a. Aluminium
- b. Zinc
- c. Nickel
- d. Copper

Options :

Question Number : 127 Question Id : 8227 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The nucleus of an atom contains

- a. Only protons
- b. Only neutrons
- c. Only electrons
- d. Protons and neutrons

Options :

Question Number : 128 Question Id : 8228 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Indian flag is called 'Tiranga' as it has three colours. Which colour stands for prosperity and life?

- a. Orange
- b. White
- c. Green
- d. Blue

Options :

Question Number : 129 Question Id : 8229 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Out of the following, which day is not declared as a 'National Holiday'?

- a. Republic Day
- b. Netaji Subhash Chandra Bose's birthday
- c. Independence Day
- d. Mahatma Gandhi's birthday

Options :

Question Number : 130 Question Id : 8230 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In which game is the term 'maiden over' used?

- a. Hockey
- b. Football
- c. Cricket
- d. Golf

Options :

Question Number : 131 Question Id : 8231 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The country which hosted the first Asian games was

- a. India
- b. China
- c. Indonesia
- d. Japan

Options :

Question Number : 132 Question Id : 8232 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Who founded the 'Arya Samaj'?

- a. Ram Mohan Roy
- b. Swami Dayanand Saraswati
- c. Swami Vivekananda
- d. Ishwar Chandra Vidyasagar

Options :

Question Number : 133 Question Id : 8233 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Where in the ancient world, dead bodies were preserved as mummies?

- a. Babylon
- b. Greece
- c. Egypt
- d. China

Options :

Question Number : 134 Question Id : 8234 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Ramakrishna Missions were established in many countries and many parts of India by

- a. Ramakrishna Paramahansa
- b. Ma Sarada mai
- c. Raja Ram Mohan Roy
- d. Swami Vivekananda

Options :

Question Number : 135 Question Id : 8235 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The Total national income divided by the number of people in the nation is

- a. GDP
- b. National Income
- c. Per Capita Income
- d. Human Development Index

Options :

Question Number : 136 Question Id : 8236 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Development that meets the needs of the present without compromising ability of future generations to meet their own needs is

- a. Sustainable development
- b. Social development
- c. Economic development
- d. Regional development

Options :

Question Number : 137 Question Id : 8237 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

What does National Literacy Mission or NLM aim at

- a. Making all children of the country literate
- b. Imparting functional literacy to adult non-literates
- c. Educating the semi-literates
- d. Giving vocational training to the educated

Options :

Question Number : 138 Question Id : 8238 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The filament of incandescent bulbs is made of

- a. Nichrome
- b. Copper
- c. Iron
- d. Tungsten

Options :

Question Number : 139 Question Id : 8239 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

What does the voltmeter measure?

- a. Strength of current
- b. Potential difference between two points
- c. Resistance
- d. Energy consumed

Options :

Question Number : 140 Question Id : 8240 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

We see an identical image of the object in the mirror because of

- a. Reflection
- b. Refraction
- c. Dispersion
- d. Diffraction

Options :

Question Number : 141 Question Id : 8241 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Introducing the doctor, a woman said, 'This is the son of the brother of my mother.' How is the doctor related to the woman?

- a. Brother
- b. Uncle
- c. Nephew
- d. Cousin

Options :

Question Number : 142 Question Id : 8242 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

$$7 : 5040 = 6 : \dots = 5 : 120$$

- a. 720
- b. 1440
- c. 2520
- d. 1260

Options :

Question Number : 143 Question Id : 8243 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Dictionary : Words = ... : Date

- a. Day
- b. Girlfriend
- c. Almanac
- d. Palm

Options :

Question Number : 144 Question Id : 8244 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Alice wants to show off her birthday gift – a bicycle – to her friend Esther who lives 12 kms away. Aided by the wind, she reaches Esther in half an hour, but it takes her one full hour to pedal back because the wind is against her. How long does she take to cycle 1 km when there is no wind?

- a. 3 min 45 sec
- b. 3 min 20 sec
- c. 3 min
- d. 2 min 40 sec

Options :

Question Number : 145 Question Id : 8245 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Find the odd number-pair in the following list:

49 – 343, 16 – 64, 25 – 125, 121 – 1321, 81 – 729

- a. 121 – 1321
- b. 49 - 343
- c. 81 – 729
- d. 25 – 125

Options :

Question Number : 146 Question Id : 8246 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Find the odd number-pair from among the following: MEAL – LAME, PEARL – PALER, MEDICAL – DECIMAL, PARADE – DRAPED, PASTEL – PLATES

- a. PASTEL - PLATES
- b. MEAL - LAME
- c. PARADE – DRAPED
- d. PEARL - PALER

Options :

Question Number : 147 Question Id : 8247 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If the code for the date 14 Aug 2015 is 40301628, what would be the code for 25 Dec 1947?

- a. 943838942450
- b. 498342450
- c. 38944205
- d. 38942450

Options :

Question Number : 148 Question Id : 8248 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If MISERLY is coded as LMRSYEI, how will IRON be coded as?

- a. NORI
- b. NRIO
- c. ROIN
- d. NOIR

Options :

Question Number : 149 Question Id : 8249 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

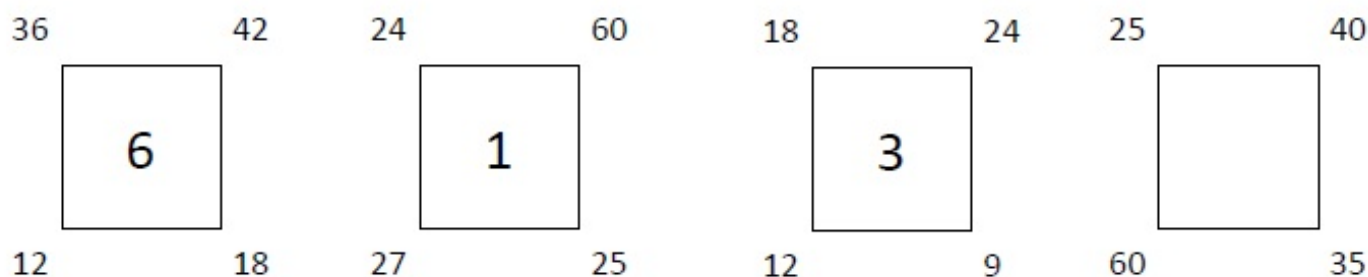
After leaving her home, Evelyn walks to the West, takes a bus going in the direction to her left. After proceeding a kilometre, the bus takes a left turn and heads straight for the school. The bus then takes a right turn to go to the garage. The garage is to the ... of the school.

- a. South
- b. West
- c. North
- d. East

Options :

Question Number : 150 Question Id : 8250 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

What number should come in the fourth square?



- a. 21
- b. 210
- c. 4200
- d. 5

Options :