



# Railway Recruitment Board

## Notations :

- 1.Options shown in **green** color and with  icon are correct.
- 2.Options shown in **red** color and with  icon are incorrect.

**Question Paper Name:** Junior Engineer 29th Aug Shift 1 Actual  
**Subject Name:** Junior Engineer  
**Creation Date:** 2015-08-18 12:41:41.0  
**Cut Off:** 0  
**Duration:** 120  
**Number of Questions:** 150  
**Total Marks:** 150.0

## Junior Engineer

Group Number : 1  
Group Id : 10  
Group Maximum Duration : 0  
Group Minimum Duration : 120  
Revisit allowed for view? : No  
Revisit allowed for edit? : No  
Break time: 0  
Group Marks: 150.0

## Junior Engineer

Section Id : 10  
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: 10  
Question Shuffling Allowed : Yes

**Question Number : 1 Question Id : 1801 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33**

Which one of the following thermodynamics process approximates the steaming of food in a pressure cooker?

- a. Isenthalpic
- b. Isobaric
- c. Isochoric
- d. Isothermal

Options :

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

Question Number : 2 Question Id : 1802 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Ice kept in a well-insulated thermoflask is an example of which system?

- a. Closed system
- b. Isolated system
- c. Open system
- d. Non-flow adiabatic system

Options :

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

Question Number : 3 Question Id : 1803 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The two reference fuels used for cetane rating are

- a. Cetane and iso-octane
- b. Cetane and tetraethyl lead
- c. Cetane and n-heptane
- d. Cetane and  $\alpha$ -methyl naphthalene

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 4 Question Id : 1804 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

In some carburettors, meter rod and economiser device are used for

- a. Cold starting
- b. Idling
- c. Power enrichment
- d. Acceleration

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 5 Question Id : 1805 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Where does mixing of fuel and air take place in case of diesel engine?

- a. Injection pump
- b. Injector
- c. Engine cylinder
- d. Inlet manifold

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 6 Question Id : 1806 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Heat pipe is widely used now a days, because

- a. It acts as an insulator
- b. It acts as conductor and insulator
- c. It acts as a superconductor
- d. It acts as a fin

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 7 Question Id : 1807 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Ice is very close to a

- a. Gray body
- b. Black body
- c. White body
- d. Specular body

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 8 Question Id : 1808 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Misrun is a casting defect which occurs due to

- a. Very high pouring temperature of the metal
- b. Insufficient fluidity of the molten metal
- c. Absorption of gases by the liquid metal
- d. Improper alignment of the mould flasks

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 9 Question Id : 1809 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In which of the following are metal moulds used

- a. Green sand mould
- b. Dry sand mould
- c. Die casting process
- d. Loam moulding

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c

4. ✘ d

Question Number : 10 Question Id : 1810 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which one of the following is an advantage of forging ?

- a. Good surface finish
- b. Low tooling cost
- c. Close tolerance
- d. Improved physical property

Options :

1. ✘ a

2. ✘ b

3. ✘ c

4. ✔ d

Question Number : 11 Question Id : 1811 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In the forging operation, fullering is done to

- a. Draw out the material
- b. Bend the material
- c. Upset the material
- d. Extrude the material

Options :

1. ✔ a

2. ✘ b

3. ✘ c

4. ✘ d

Question Number : 12 Question Id : 1812 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In oxy-acetylene gas welding, for complete combustion, the volume of oxygen required per unit of acetylene is

- a. 1
- b. 1.5
- c. 2
- d. 2.5

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 13 Question Id : 1813 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Oxyacetylene reducing flame is used while carrying out the welding on

- a. Mild steel
- b. High carbon steel
- c. Gray cast iron
- d. Alloy steels

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 14 Question Id : 1814 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Crater wear is predominant in

- a. Carbon steel tools
- b. Tungsten carbide tools
- c. High speed steel tools
- d. Ceramic tools

Options :

- 1. ✘ a
- 2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 15 Question Id : 1815 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

An ideal current source has

- a. large value of voltage
- b. large value of current
- c. infinite internal resistance
- d. zero internal resistance

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 16 Question Id : 1816 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Mesh analysis is based on

- a. Kirchhoff's Voltage law
- b. Kirchhoff's Current law
- c. Law of Conservation of Momentum
- d. Law of Conservation of Energy

Options :

1. ✔ a

2. ✘ b

3. ✘ c

4. ✘ d

Question Number : 17 Question Id : 1817 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The RMS value of a sine wave is 100 A. Its peak value is

- a. 70.7 A
- b. 141 A
- c. 63.6 A
- d. 126 A

Options :

1. ✘ a

2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 18 Question Id : 1818 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

In a transformer, electric power is transferred from primary coil to secondary

- a. through air
- b. by electric field
- c. through insulating medium
- d. by magnetic flux

Options :

1. ✘ a

2. ✘ b

3. ✘ c

4. ✔ d

Question Number : 19 Question Id : 1819 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which part of transformer is subjected to maximum heating

- a. frame
- b. core
- c. oil
- d. winding

Options :

1. ✘ a

2. ✘ b

3. ✘ c

4. ✔ d

Question Number : 20 Question Id : 1820 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Armature coil of a DC machine is usually made up of

- a. mica
- b. copper
- c. brass
- d. graphite



Options :

1. ✘ a
2. ✔ b
3. ✘ c
4. ✘ d

Question Number : 21 Question Id : 1821 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The output power of any electric motor is taken from

- a. frame
- b. commutator
- c. coupling mounted on shaft
- d. armature

Options :

1. ✘ a
2. ✘ b
3. ✔ c
4. ✘ d

Question Number : 22 Question Id : 1822 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The type of DC generator used for arc welding is

- a. Series generator
- b. Shunt generator
- c. Cumulative Compound generator
- d. Differential Compound generator

Options :

1. ✘ a
2. ✘ b
3. ✘ c
4. ✔ d

Question Number : 23 Question Id : 1823 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

A metal bar may be heated electronically by

- a. Emission heating
- b. Dielectric heating
- c. Induction heating
- d. Conductive heating

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 24 Question Id : 1824 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Diesel engines used in power plants are usually

- a. Air cooled
- b. Supercharged
- c. Horizontal
- d. High Speed

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 25 Question Id : 1825 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Conduction electrons have more mobility than holes because they

- a. are lighter
- b. have negative charge
- c. need less energy to move them
- d. experience collision frequency

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c

4. ✘ d

Question Number : 26 Question Id : 1826 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Valency of silicon is

a. 4

b. 3

c. 5

d. 2

Options :

1. ✔ a

2. ✘ b

3. ✘ c

4. ✘ d

Question Number : 27 Question Id : 1827 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The PN junction diode is a

a. passive device

b. vacuum tube

c. unilateral device

d. bilateral device

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 28 Question Id : 1828 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Reverse saturation current in germanium diode, is of the order of

a. 1 nano Ampere

b. 1 micro Ampere

c. 1 milli Ampere

d. 10 milli Ampere

Options :

1. ✘ a
2. ✔ b
3. ✘ c
4. ✘ d

Question Number : 29 Question Id : 1829 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

A PIN diode is frequently used as a

- a. peak clipper
- b. voltage regulator
- c. harmonic generator
- d. switching diode for frequencies upto GHz range

Options :

1. ✘ a
2. ✘ b
3. ✘ c
4. ✔ d

Question Number : 30 Question Id : 1830 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Lowest output resistance is obtained in the configuration

- a. CE
- b. CB
- c. CC
- d. CC and CE both equally

Options :

1. ✘ a
2. ✘ b
3. ✔ c
4. ✘ d

Question Number : 31 Question Id : 1831 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Ripple factor of a full wave rectifier without filter will be

- a. 0.2
- b. 0.48
- c. 0.24
- d. 1.21

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 32 Question Id : 1832 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The decimal equivalent of hexadecimal number BAD is

- a. 111013
- b. 5929
- c. 3416
- d. 2989

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 33 Question Id : 1833 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The system on which digital system usually operates is

- a. binary
- b. decimal
- c. octal
- d. hexa decimal

Options :

- 1. ✔ a
- 2. ✘ b

3. ✘ c

4. ✘ d

Question Number : 34 Question Id : 1834 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A+AB gets simplified to

a. A+B

b. AB

c. A

d. B

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 35 Question Id : 1835 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A clay sample has a void ratio 0.54 in dry state. The specific gravity of soil solids is 2.7. What is the shrinkage limit of the soil?

a. 8.5%

b. 10.0%

c. 17.0%

d. 20.0%

Options :

1. ✘ a

2. ✘ b

3. ✘ c

4. ✔ d

Question Number : 36 Question Id : 1836 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Among the clay minerals, the one having the maximum swelling tendency is

- a. Kaolinite
- b. Illite
- c. Montmorillonite
- d. halloysite

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 37 Question Id : 1837 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The reinforced concrete beam curved in plane is designed for

- a. Bending moment and shear
- b. Bending moment and torsion
- c. Bending moment
- d. Bending moment, shear and torsion

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 38 Question Id : 1838 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The type of stress induced in the foundation bolts fixing a column to its footing is

- a. Pure compression
- b. Bearing
- c. Pure tension
- d. Bending

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c

4. ✘ d

Question Number : 39 Question Id : 1839 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following tape is least affected by temperature changes and is highly precise

- a. Linen tape
- b. Metallic tape
- c. Steel tape
- d. Invar tape

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 40 Question Id : 1840 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A series of closely spaced contour lines represents a

- a. Steep slope
- b. Gentle slope
- c. Uniform slope
- d. Plane slope

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 41 Question Id : 1841 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The process of inspiring the subordinates to do a work or achieve an objective is called as

- a. Management
- b. Supervision
- c. Motivation
- d. Communication



Options :

1. ✘ a
2. ✘ b
3. ✔ c
4. ✘ d

Question Number : 42 Question Id : 1842 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

As per IS specification, the maximum final setting time for ordinary portland cement should be

- a. 30 minutes
- b. 1 hour
- c. 6 hours
- d. 10 hours

Options :

1. ✘ a
2. ✘ b
3. ✘ c
4. ✔ d

Question Number : 43 Question Id : 1843 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Bleeding of concrete is said to occur when

- a. Finer particles settle down at the bottom
- b. Coarser particles get separated
- c. Cement paste rises to the surface of concrete
- d. Finer particles collect in isolated pockets

Options :

1. ✘ a
2. ✘ b
3. ✔ c
4. ✘ d

Question Number : 44 Question Id : 1844 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The capillary rise at 20°C in clean glass tube of 1 mm diameter, containing water is

- a. 15 mm
- b. 50 mm
- c. 20 mm
- d. 30 mm

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 45 Question Id : 1845 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Newton's law of viscosity depends upon the

- a. Stress and strain in the fluid
- b. Shear stress, pressure and velocity
- c. Shear stress and rate of strain
- d. Viscosity and shear stress

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 46 Question Id : 1846 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which one of the following is defined as force per unit length

- a. Surface tension
- b. Compressibility
- c. Capillarity
- d. Viscosity

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c

4. ✘ d

Question Number : 47 Question Id : 1847 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following are needed both for protection and metering?

- a. Wattmeters
- b. Instrument transformers
- c. Energy meters
- d. Power factor meters

Options :

1. ✘ a

2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 48 Question Id : 1848 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In a thermocouple temperature transducer, the output voltage is usually measured by

- a. high resistance ammeter
- b. high resistance voltmeter
- c. high resistance milli-voltmeter
- d. Low resistance voltmeter/ammeter

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 49 Question Id : 1849 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A moving iron instrument gives correct reading when used at

- a. low frequency
- b. high frequency
- c. only one frequency
- d. all frequencies up to a certain value

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 50 Question Id : 1850 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Induction wattmeter can be used in

- a. AC circuit only
- b. DC circuit only
- c. both AC and DC circuit
- d. AC 3 phase only

Options :

- 1. ✓ a
- 2. ✗ b
- 3. ✗ c
- 4. ✗ d

Question Number : 51 Question Id : 1851 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

. Assertion (A): Shunt of an ammeter has a low resistance.

Reason (R): Shunt may be connected in series or in parallel with ammeter.

- a. Both A and R are true and R is correct explanation of A
- b. Both A and R are true, but R is not correct explanation of A
- c. A is true, R is false
- d. A is false, R is true

Options :

- 1. ✗ a
- 2. ✗ b
- 3. ✓ c
- 4. ✗ d

Question Number : 52 Question Id : 1852 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The prescribed water consumption for restaurants is

- a. 100 litres per seat per day
- b. 125 litres per seat per day
- c. 70 litres per seat per day
- d. 50 litres per seat per day

Options :

- 1. ✗ a
- 2. ✗ b
- 3. ✓ c
- 4. ✗ d

Question Number : 53 Question Id : 1853 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The permissible/desirable drinking water standard for total dissolved solids is

- a. 600 mg/l
- b. 500 mg/l
- c. 400 mg/l
- d. 1000 mg/l

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 54 Question Id : 1854 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

In BOD<sub>3</sub> determination of sewage, the initial dissolved oxygen is measured to be 8.9 mg/l, however, after 3 day incubation at 27°C temperature, the dissolved oxygen is found to be 1.9 mg/l. If the dilution factor is 1:50, the BOD<sub>5</sub> of the sewage would be

- a. 350 mg/l
- b. 35 mg/l
- c. cannot be determined
- d. 7.0 mg/l

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 55 Question Id : 1855 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The continuous exposure of pollutant benzo (a) pyrene may cause

- a. damage of trachea
- b. swelling in bronchus
- c. respiratory system failure
- d. lung cancer

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 56 Question Id : 1856 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The noise level of 10 dB is how many times more powerful than the noise level of 1 dB

- a. 100 times
- b. 10 times
- c. 1000 times
- d. 10000 times

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 57 Question Id : 1857 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The green house gases as per their decreasing order of effectiveness are

- a. CFC, N<sub>2</sub>O, CO<sub>2</sub>, CH<sub>4</sub>
- b. CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and CFC
- c. CH<sub>4</sub>, CO<sub>2</sub>, N<sub>2</sub>O and CFC
- d. CFC, CH<sub>4</sub>, CO<sub>2</sub>, and N<sub>2</sub>O

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

For the above question, User had specified 'ignore' during keys upload.

Question Number : 58 Question Id : 1858 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which of the following acts as the central nervous system for other components of the computer system?

- a. Registers
- b. Primary memory
- c. Arithmetic and logic unit
- d. Control unit

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 59 Question Id : 1859 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which of the following is not a pointing device?

- a. Mouse
- b. Trackball
- c. Joystick
- d. Keyboard

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 60 Question Id : 1860 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which of the following is not a valid property to characterize storage unit?

- a. Storage capacity
- b. Size
- c. Access time
- d. Cost per bit of storage

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 61 Question Id : 1861 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The time elapsed between the submission of a job and obtaining the results is known as

- a. Seek time
- b. Latency
- c. Turnaround time
- d. Execution time

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 62 Question Id : 1862 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33



The binary representation of the decimal number 45.25 is

- a.  $(101101.01)_2$
- b.  $(101101.10)_2$
- c.  $(101010.01)_2$
- d.  $(101010.10)_2$

Options :

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

Question Number : 63 Question Id : 1863 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Considering X and Y as binary variables, the Boolean expression  $X + Y + 1$  is equivalent to

- a. X
- b. 1
- c. 0
- d. Y

Options :

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

Question Number : 64 Question Id : 1864 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In assembly language \_\_\_\_\_ are used to represent operation codes.

- a. Alphabets
- b. Pseudo codes
- c. Mnemonics
- d. Symbols

Options :

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

Question Number : 65 Question Id : 1865 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33



Which of the following is not a word processor?

- a. MS-Word
- b. Notepad
- c. Wordpad
- d. Wordpress

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 66 Question Id : 1866 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The length of an IPv4 address is

- a. 8 bits
- b. 16 bits
- c. 32 bits
- d. 64 bits

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 67 Question Id : 1867 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Internet Explorer is a

- a. Web browser
- b. Web search engine
- c. Hypertext transfer protocol
- d. Web data store

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 68 Question Id : 1868 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A square shaped plane rests on HP with its plane lying on HP. Its front view would appear as a:

- a. square of reduced size
- b. square of equal size
- c. rhombus
- d. straight line

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 69 Question Id : 1869 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

A joint that facilitates rotation about axis but arrests displacement is a:

- a. cotter joint
- b. knuckle joint
- c. spigot joint
- d. socket joint

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 70 Question Id : 1870 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

A one metre distance is to be measured in decimetre, centimetre and millimetre units. Which type of scale do you suggest?

- a. plain scale
- b. comparative scale
- c. diagonal scale
- d. Either plain scale or diagonal scale will serve the purpose

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 71 Question Id : 1871 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

A circle rolls without slipping on a flat surface. The path traced by a point, lying on circle's periphery during its rolling is:

- a. Involute
- b. Hyperbola
- c. Epicycloid
- d. Cycloid

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 72 Question Id : 1872 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Vertical edges of an object appear in its isometric view as:

- a. Vertical
- b. Inclined at  $30^\circ$  clockwise
- c. Inclined at  $30^\circ$  counter clockwise
- d. Inclined at  $15^\circ$

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 73 Question Id : 1873 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

An object of mass  $m$  at rest is acted upon by a force. The velocity- time graph (velocity on y-axis and time on x-axis) is found to be a straight line passing through origin and inclined to x-axis with a slope  $c$ .

The force acting on the object is

- a. 0
- b.  $m/c$
- c.  $m c$
- d.  $2m c$

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 74 Question Id : 1874 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The SI unit of gravitational constant,  $G$ , is

- a.  $\text{Nm}^2\text{kg}^{-2}$
- b.  $\text{Nm}^{-2}\text{kg}^{-2}$
- c.  $\text{Nkg}^2\text{m}^{-2}$
- d.  $\text{m}^2\text{kg}^{-1}\text{s}^{-2}$ .

Options :

- 1. ✓ a
- 2. ✗ b
- 3. ✗ c
- 4. ✗ d

Question Number : 75 Question Id : 1875 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A force acting on an object of mass  $m$  changes its velocity during its course of motion. In which of the following cases, the work done by the force is maximum?

- a. When velocity of the object changes from 0 to  $v$  m/s
- b. When velocity of the object changes from  $v$  m/s to  $2v$  m/s
- c. When velocity of the object changes from  $2v$  m/s to  $3v$  m/s
- d. When velocity of the object changes from  $3v$  m/s to  $4v$  m/s

Options :

- 1. ✗ a
- 2. ✗ b
- 3. ✗ c
- 4. ✓ d

Question Number : 76 Question Id : 1876 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In a longitudinal sound wave, the particles of the medium move

- a. about their position of rest in a direction parallel to the direction of propagation of disturbance
- b. about their position of rest in a direction perpendicular to the direction of propagation of disturbance
- c. from one place to another in a direction parallel to the direction of propagation of disturbance
- d. From one place to another in a direction perpendicular to the direction of propagation of disturbance

Options :

- 1. ✓ a
- 2. ✗ b
- 3. ✗ c
- 4. ✗ d

Question Number : 77 Question Id : 1877 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Rays of light are evident on a concave mirror parallel to the principal axis. After reflection, they meet at

- a. Infinity
- b. the centre of curvature
- c. at focus
- d. At a point half way to the focus

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 78 Question Id : 1878 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

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

- a.  $R/2$
- b.  $R/4$
- c.  $R$
- d.  $2R$

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 79 Question Id : 1879 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A student heats a beaker containing water continuously and measures the temperature as a function of time. She found that the temperature of water increases with time. After sometime, it becomes constant in spite of heat being supplied. The temperature remains constant up to a certain stage. The value of the constant temperature of water is

- a.  $25^{\circ}\text{C}$
- b.  $45^{\circ}\text{c}$
- c.  $85^{\circ}\text{c}$
- d.  $100^{\circ}\text{c}$

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 80 Question Id : 1880 Question Type : MCQ Option Shuffling : No



Correct : 1.0 Wrong : 0.33

Which one of the following is correct regarding the electrolytic refining of impure copper?

- a. Impure copper is taken as the cathode.
- b. Pure copper is deposited at the anode.
- c. Pure copper is deposited at the cathode.
- d. Impurities are settled as the cathode mud.

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 81 Question Id : 1881 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

On heating with an alkaline solution of  $\text{KMnO}_4$ , ethanol produces

- a. Ethanoic acid
- b. Ethanol
- c. Methanol
- d. Methanoic acid

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 82 Question Id : 1882 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A triatomic oxide of an element 'X' reacts with hydrochloric acid to produce the solution of a diatomic salt and water. Which of the following is correct about the formula of the oxide and its chemical nature?

- a. The formula is  $\text{XO}$  and it is acidic in nature.
- b. The formula is  $\text{XO}$  and it is basic in nature.
- c. The formula is  $\text{X}_2\text{O}$  and it is acidic in nature.
- d. The formula is  $\text{X}_2\text{O}$  and it is basic in nature.

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 83 Question Id : 1883 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Lime water turns milky on passing through it. On passing excess of carbon dioxide gas, milkiness disappears. It is due to the formation of

- a.  $\text{CaCO}_3$
- b.  $\text{CaHCO}_3$
- c.  $\text{Ca}(\text{HCO}_3)_2$
- d.  $\text{Ca}(\text{OH})_2$

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 84 Question Id : 1884 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Eka-aluminium predicted by Mendeleev was found to have properties similar to

- a. Scandium
- b. gallium
- c. Germanium
- d. Thallium

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 85 Question Id : 1885 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

One of the causes of death of marine birds is

- a. Leaked oil from ships
- b. Overfishing by human beings
- c. Oceanic waves
- d. Wet feathers

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 86 Question Id : 1886 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which is the reproductive organ of Angiosperms?

- a. Root hairs
- b. Nodes of branches
- c. Flower
- d. Fruit

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 87 Question Id : 1887 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Bt Cotton is

- a. Hybrid Cotton
- b. a new species of Cotton
- c. a wild species of Cotton
- d. Genetically modified Cotton

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 88 Question Id : 1888 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

One feature of mammals common to all mammals without exception is

- a. presence of hair
- b. presence of mammary glands
- c. giving birth to babies (viviparity)
- d. seven vertebrae in the neck

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 89 Question Id : 1889 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33



When a scientific name is written, the names of genus and species are

- a. both begun with small letters
- b. both begun with capital letters
- c. genus name is begun with capital letter and species name with small letter
- d. genus name is begun with small letter and species name with capital letter

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 90 Question Id : 1890 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

When you chew bread it begins to taste sweet because

- a. saliva is sweet to taste
- b. saliva releases the sugar in bread
- c. saliva turns starch in bread into sugar
- d. saliva turns the protein in bread into amino acids

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 91 Question Id : 1891 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Let  $x$  be the greatest number that divides 55, 127 and 175 leaving the same remainder in each case. The remainder in each case is

- a. 3
- b. 5
- c. 7
- d. 9

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 92 Question Id : 1892 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

LCM of the numbers a, b, c, and d, where  $a = 2^5 \times 11^3 \times 13^4$ ,  $b = 2^4 \times 11^4 \times 13^5$ ,  $c = 2^4 \times 11^5 \times 13^3$  and  $d = 2^3 \times 11^4 \times 13^4$  is

- a.  $(2 \times 11 \times 13)^5$
- b.  $2^5 \times 11^4 \times 13^5$
- c.  $(2 \times 11 \times 13)^4$
- d.  $2^4 \times 11^5 \times 13^4$

Options :

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

Question Number : 93 Question Id : 1893 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In an examination, a student secured 30% marks and failed by 42 marks and another student who secured 50% marks, got 42 more marks than the minimum marks to pass. The pass percentage is

- a. 33
- b. 35
- c. 38
- d. 40

Options :

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

Question Number : 94 Question Id : 1894 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If  $A : B = 2 : 3$ ,  $5B = 4C$  and  $2C = 5D$ , then  $A : B : C : D$  is

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

Options :

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

Question Number : 95 Question Id : 1895 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Ratio of monthly incomes of A and B is 4:3 and that of their expenditures is 3:2. If each of them saves Rs 5000 per month, then the sum of monthly incomes of A and B in Rs is

- a. 21000
- b. 28000
- c. 35000
- d. 42000

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 96 Question Id : 1896 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Two equal jars are filled with the solutions of spirit and water. In the first jars, the ratio of spirit and water is 5:7 and that in the second is 7:13. The contents of the jars are then emptied into a single container. The ratio of spirit and water in it is

- a. 23:37
- b. 37:23
- c. 35:33
- d. 3:4

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 97 Question Id : 1897 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

150 grams of an alloy of copper and zinc contains 60% copper (by weight). The quantity of copper (in grams) must be mixed up with this alloy so as to get another alloy containing 70% copper is

- a. 60
- b. 55
- c. 50
- d. 45

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 98 Question Id : 1898 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A shopkeeper sells an article for Rs 96 and earns double the profit than he would have earned had he sold it for Rs 88. If he sells the article at Rs 110, his percent profit is

- a. 20
- b. 25
- c. 37.5
- d. 34.1

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 99 Question Id : 1899 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The marked price of a TV is Rs 32500. After allowing a discount of 20% to a customer, a shopkeeper still makes a profit of 30%. If he sells the TV at the marked price, his profit percent is

- a. 50
- b. 56.8
- c. 62.5
- d. 70

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 100 Question Id : 1900 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A boat moves down stream at the rate of 1 km in  $7\frac{1}{2}$  minutes and upstream at the rate of 5 km an hour. The speed of the boat (in km/hour) in still water is

- a. 3
- b.  $4\frac{1}{2}$
- c. 5
- d.  $6\frac{1}{2}$

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 101 Question Id : 1901 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A man takes 6 hours 15 minutes in walking to a certain place and riding back. He would have gained 2 hours 40 minutes by riding both ways. How long would he take to walk both ways?

- a. 8 hours 35 minutes
- b. 8 hours 55 minutes
- c. 9 hours 55 minutes
- d. 10 hours 35 minutes

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 102 Question Id : 1902 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

. A loan has to be returned in two equal annual installments. If the rate of interest is 16% per annum compounded annually and each installment is of Rs 3364, then the loan is of Rs

- a. Rs 5328
- b. Rs 5400
- c. Rs 5700
- d. Rs 6728

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 103 Question Id : 1903 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

. Simple interest on a certain sum is  $\frac{1}{16}$  of the principal. If the numbers representing the rate of interest in percent per annum and time in years be equal, then the rate of interest is

- a. 2.5
- b. 3
- c. 3.5
- d. 4

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 104 Question Id : 1904 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A and B can do a piece of work in 18 days, B and C in 24 days and A and C in 36 days. In what time (in days) can A do it alone?

- a.  $28\frac{2}{3}$
- b. 48
- c. 54
- d.  $56\frac{3}{5}$

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 105 Question Id : 1905 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Two pipes A and B can fill a cistern in 10 and 24 minutes respectively. Both pipes having being opened at the same time. When should the first pipe be turned off so that the cistern may be completely filled in 9 minutes

- a. 6 minutes 15 seconds
- b. 5 minutes 30 seconds
- c. 3 minutes 45 seconds
- d. 4 minutes 45 seconds

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 106 Question Id : 1906 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If the sum of five consecutive positive integers is 40, then the average of first and last integers is

- a. 6
- b. 8
- c. 9
- d. 10

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 107 Question Id : 1907 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33



Five years ago, the average age of A , B and C was 20 years. Four years ago, the average age of A and B was 19 years. C's present age (in years)

- a. 23
- b. 25
- c. 27
- d. 29

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 108 Question Id : 1908 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The values of a, for which the equation

$x^2 - (3a - 1)x + 2a^2 + 2a - 11 = 0$  will have equal roots are

- a. 4,5
- b. 5,6
- c. 6,9
- d. 5,9

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 109 Question Id : 1909 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The quadratic equation, whose roots are reciprocal of the roots of

$$3x^2 - 7x + 8 = 0, \text{ is}$$

- a.  $8x^2 - 7x + 3 = 0$
- b.  $8x^2 + 7x - 3 = 0$
- c.  $8x^2 - 7x - 3 = 0$
- d.  $8x^2 + 7x + 3 = 0$

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 110 Question Id : 1910 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

One of the factors of  $(x + 2)(x - 3)(x + 4)(x - 5) + 40$  is

- a.  $x^2 + x - 16$
- b.  $x^2 - x - 16$
- c.  $x^2 + x - 10$
- d.  $x^2 - x + 10$

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 111 Question Id : 1911 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Factorization of  $x^4 - 5x^3 + 14x^2 - 20x + 16$  is

- a.  $(x^2 - 2x + 4)(x^2 - 3x + 4)$
- b.  $(x^2 - 2x - 4)(x^2 - 3x - 4)$
- c.  $(x^2 + 2x + 4)(x^2 - 3x + 4)$
- d.  $(x^2 + 2x - 4)(x^2 - 3x - 4)$

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 112 Question Id : 1912 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If the sums of first  $n$  terms of two arithmetic progressions are in the ratio  $(2n+1):(n+1)$ , then the ratio of their 10th terms is

- a. 39:20
- b. 37:22
- c. 37:19
- d. 21:11

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 113 Question Id : 1913 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The sum of the infinite geometric series  $10+8+6\frac{2}{5} + \dots$  is

- a. 42
- b. 48
- c. 50
- d. 52



Options :

1. ✘ a
2. ✘ b
3. ✔ c
4. ✘ d

Question Number : 114 Question Id : 1914 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The value of  $\tan 10^\circ \tan 25^\circ \tan 45^\circ \tan 65^\circ \tan 80^\circ / (\sin^2 69^\circ + \sin^2 21^\circ) + (\cos^2 51^\circ + \cos^2 39^\circ)$  is

- a. 2
- b. 1
- c.  $\frac{1}{2}$
- d.  $\frac{1}{4}$

Options :

1. ✘ a
2. ✘ b
3. ✔ c
4. ✘ d

Question Number : 115 Question Id : 1915 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

An observer 1.5 m tall is 45 m away from a tower. The angle of elevation of the top of the tower from his eyes is  $30^\circ$ . The height (in m) of the tower is approximately

- a. 25.9
- b. 27.5
- c. 27.8
- d. 29.9

Options :

1. ✔ a
2. ✘ b
3. ✘ c
4. ✘ d

For the above question, User had specified 'ignore' during keys upload.

Question Number : 116 Question Id : 1916 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Match List 1 with List 2 and select the correct answer from the codes given below in the list

**List 1(King)**

- A. Pradyota
- B. Udayana
- C. Prasenjita
- D. Ajatsatru

**List 2(Kingdom)**

- 1. Magadha
- 2. Vatsa
- 3. Avanthi
- 4. Kosala

- |    |      |      |      |      |
|----|------|------|------|------|
| a. | A- 1 | B- 4 | C- 2 | D- 3 |
| b. | A-2  | B-3  | C-1  | D- 4 |
| c. | A-3  | B-2  | C-4  | D-1  |
| d. | A-4  | B-1  | C-3  | D-2  |

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 117 Question Id : 1917 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Who among the following was the first Bhakti saint to use Hindi for propagation of his message?

- a. Dadu
- b. Kabir
- c. Ramananda
- d. Tulsidas

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 118 Question Id : 1918 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Who was the first Indian native ruler to accept the system of Subsidiary Alliance?

- a. Scindia of Gwalior
- b. Nizam of Hyderabad
- c. Dalip Singh of Punjab
- d. Gaikwad of Baroda

Options :

- 1. ✘ a
- 2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 119 Question Id : 1919 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following is not correctly matched?

(Country-Capital)

- a. Indonesia-Jakarta
- b. Maldives-Mali
- c. North Korea-Seoul
- d. Zimbabwe-Harare

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 120 Question Id : 1920 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If a small raindrop falls through air,

- a. Its velocity goes on decreasing
- b. Its velocity goes on increasing
- c. Its value goes on increasing for some time and then becomes constant
- d. It falls with constant speed for some time and then its velocity increases

Options :

1. ✔ a

2. ✘ b

3. ✘ c

4. ✘ d

For the above question, User had specified 'ignore' during keys upload.

Question Number : 121 Question Id : 1921 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Neap tides occur during which of the following phases of moon

- a. First quarter only
- b. First and Third quarter
- c. Second and third quarter
- d. Fourth quarter

Options :

1. ✘ a

2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 122 Question Id : 1922 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If a moving body doubles its velocity, then its kinetic energy becomes

- a. double
- b. four times
- c. same
- d. three times

Options :

1. ✘ a

2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 123 Question Id : 1923 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The blackboard seems black because it

- a. reflects every colour
- b. does not reflect any colour
- c. absorbs black colour
- d. reflects black colour

Options :

1. ✘ a

2. ✔ b

3. ✘ c

4. ✘ d

Question Number : 124 Question Id : 1924 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The magnetic lines of force produced through a bar magnet

- a. cross inside the magnetic body
- b. only cross across the neutral point of the magnet
- c. only cross across the north pole and south pole
- d. does not cross anywhere in the magnet

Options :

1. ✘ a

2. ✘ b

3. ✘ c

4. ✔ d

Question Number : 125 Question Id : 1925 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The schedule of the Constitution of India which contains specific provisions for the administration and control of scheduled areas in several states?

- a. Third
- b. Fifth
- c. Seventh
- d. Ninth

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 126 Question Id : 1926 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Who among the following Prime Ministers resigned before facing a vote of no-confidence in the Lok Sabha?

- a. Chandra Sekhar
- b. Morarji Desai
- c. Chaudhary Charan Singh
- d. V.P. Singh

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 127 Question Id : 1927 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

When was the Jawahar Rojgar Yojana launched?

- a. 1985
- b. 1987
- c. 1989
- d. 1991

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 128 Question Id : 1928 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

National Agricultural Insurance Scheme replacing Comprehensive Corp Insurance Scheme was introduced in the year?

- a. 1997
- b. 1998
- c. 1999
- d. 2000

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 129 Question Id : 1929 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Which of the following pairs are correctly matched

Enterprise		Industrial Group
1.VSNL	.....	Bharati Group
2.Mundra SEZ	.....	Adani Group
3.CMC Ltd	.....	Tata Group
4.IPCL	.....	Reliance Group

Select the correct answer using the codes given below

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

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 130 Question Id : 1930 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Merdeka cup is associated with

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

Options :

1. ✘ a
2. ✔ b
3. ✘ c
4. ✘ d

Question Number : 131 Question Id : 1931 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The five intertwined rings or circles on the Olympic flag made of which colours (from left to right)

- a. Blue ,yellow,black green and red
- b. Yellow, red, green ,black and blue
- c. Red, green, black, yellow and blue
- d. Yellow, green ,black, blue and red

Options :

1. ✔ a
2. ✘ b
3. ✘ c
4. ✘ d

Question Number : 132 Question Id : 1932 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Maximum amount of energy (ATP) is liberated on oxidation of

- a. Fats
- b. Protein
- c. Starch
- d. Vitamin

Options :

1. ✔ a
2. ✘ b
3. ✘ c
4. ✘ d

Question Number : 133 Question Id : 1933 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The scientist who studied about wheat rust problem

- a. H.C.Bose
- b. K.C.Mehta
- c. Birbal Shani
- d. D.D.Pant

Options :

1. ✘ a
2. ✔ b
3. ✘ c



4. ✘ d

Question Number : 134 Question Id : 1934 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Ornithology is the study of

- a. Mammal
- b. Birds
- c. Fishes
- d. Bat

Options :

1. ✔ a

2. ✘ b

3. ✘ c

4. ✘ d

For the above question, User had specified 'ignore' during keys upload.

Question Number : 135 Question Id : 1935 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which one of the following was used as a chemical weapon in the First World War

- a. Carbon mono-oxide
- b. Hydrogen cyanide
- c. Mustard gas
- d. Water gas

Options :

1. ✘ a

2. ✘ b

3. ✔ c

4. ✘ d

Question Number : 136 Question Id : 1936 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following is used in making ointment for curing skin disease?

- a.  $ZnCO_3$
- b.  $ZnSO_4$
- c.  $ZnO$
- d.  $ZnS$

Options :

1. ✔ a

2. ✘ b

3. ✘ c

4. ✘ d

Question Number : 137 Question Id : 1937 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33



The characteristic odour of garlic is due to

- a. A chloro compound
- b. A sulphur compound
- c. A fluorine compound
- d. Acetic acid

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 138 Question Id : 1938 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Who was presented the Man Booker international Prize for 2015 in London on May 20 ,2015?

- a. George Szirtes
- b. Lesley Nneka Arimah
- c. Laszlo Krasznahorkai
- d. Kevin Jared Hosein

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 139 Question Id : 1939 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Maharashtra's first Indian Institute of Information Technology (IIIT) will be setup in which city?

- a. Nagpur
- b. Aurangabad
- c. Navi Mumbai
- d. Pune

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

For the above question, User had specified 'ignore' during keys upload.

Question Number : 140 Question Id : 1940 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

French director Jacques Audiard won the Palme d'or , the top honour of the 68th Cannes film festival on May 24, 2015 for which film?

- a. Son of soul
- b. Dheepan
- c. The Lobster
- d. The Measure of a Man

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 141 Question Id : 1941 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

Pointing to a lady, Shabnam said, "She is the daughter of the mother of my brother's father." Who is the lady to Shabnam?

- a. Granddaughter
- b. Daughter
- c. Sister
- d. Aunt

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 142 Question Id : 1942 Question Type : MCQ Option Shuffling : No  
Correct : 1.0 Wrong : 0.33

The first two numbers on the left of the sign '::' are related in a certain way. The same relationship holds for the second pair of numbers on the right side of the sign '::' of which one is missing. Find the missing one from the alternatives.

27 : 9 : 125 : ?

- a. 5
- b. 12
- c. 25
- d. 45

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 143 Question Id : 1943 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Touch is related to feel in the same way as Hear is related to:

- a. Listen
- b. Noise
- c. Loudness
- d. Vibrate

Options :

- 1. ✓ a
- 2. ✗ b
- 3. ✗ c
- 4. ✗ d

Question Number : 144 Question Id : 1944 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Among five friends, A, B, C, D and E, B is elder to C while D and A are elder to E. If in terms of age, A is between C and E, which of the following is necessarily true?

- a. B is younger to D
- b. D is elder to C
- c. C and D are of the same age
- d. C is elder to E

Options :

- 1. ✗ a
- 2. ✗ b
- 3. ✗ c
- 4. ✓ d

Question Number : 145 Question Id : 1945 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Arrange the following words in a meaningful logical sequence and choose the appropriate number sequence from the alternatives.

1. Rainbow 2. Happy 3. Cloud 4. Rain 5. Children 6. Sun

- a. 2, 5, 6, 4, 1, 3
- b. 3, 4, 6, 1, 5, 2
- c. 3, 4, 1, 6, 5, 2
- d. 4, 3, 6, 1, 5, 2

Options :

- 1. ✗ a
- 2. ✓ b
- 3. ✗ c

4. ✘ d

Question Number : 146 Question Id : 1946 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

One term in the following number series is wrong. Find out the wrong term.

344, 217, 126, 66, 28, 9

- a. 217
- b. 126
- c. 66
- d. 28

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d

Question Number : 147 Question Id : 1947 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If BET = 27 and HEAD = 18, then LOAD will be equal to:

- a. 32
- b. 42
- c. 22
- d. 20

Options :

- 1. ✔ a
- 2. ✘ b
- 3. ✘ c
- 4. ✘ d

Question Number : 148 Question Id : 1948 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If 'THUMPING' is coded as 'MUHTGNIP', then 'PERCEIVE' would be coded as:

- a. EVIECREP
- b. CREPEVIE
- c. EPCRIEEV
- d. CREPEIEV

Options :

- 1. ✘ a
- 2. ✔ b
- 3. ✘ c
- 4. ✘ d

Question Number : 149 Question Id : 1949 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Sonali's school bus picks her from her house, takes one right turn and then two successive left turns to reach her school. If the bus is facing South when it reaches the school, which direction was the bus facing when it left Sonali's house?

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

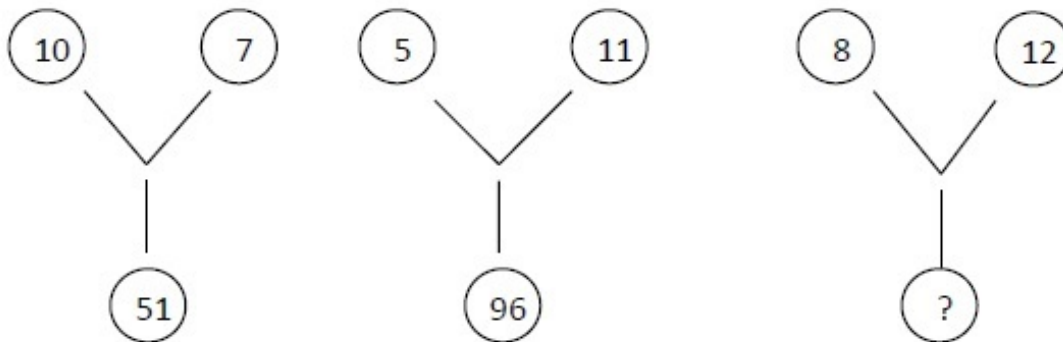
Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✘ c
- 4. ✔ d

Question Number : 150 Question Id : 1950 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The numbers in the following figures follow a pattern. Which number would replace the question mark?



- a. 65
- b. 70
- c. 80
- d. 110

Options :

- 1. ✘ a
- 2. ✘ b
- 3. ✔ c
- 4. ✘ d