Railway Recruitment Board

Notations:

1.Options shown in green color and with icon are com

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:0Duration:120Number of Questions:150Total Marks:150.0

Junior Engineer

Group Number:	1
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Group Maximum Duration:	0
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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

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:







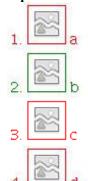
 $Question\ Number: 2\ \ Question\ Id: 1802\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

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

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

Options:



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 α-methyl naphthalene

Options:

- 1. 🎇 a
- 2. 🌄 b
- З. Ж с
- 4. **火** d

Question Number: 4 Question Id: 1804 Question Type: MCQ Option Shuffling: No

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. ✔ с
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 afin
Options:
1. * a
2. * b
3. У с
4. * d

 $\label{eq:Question Number: 7} Question \ Id: 1807 \ Question \ Type: MCQ \ Option \ Shuffling: No \\ Correct: 1.0 \ Wrong: 0.33$

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. 38 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. Ж с
- 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. 38 b
- 3. Ж с
- 4. 3 d

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

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
3. ₩ C 4. % d
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:
. 60
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

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

Options:

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. ¾ 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. Ж с 4. 38 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. vaccum tube c. unilateral device d. bilateral device **Options:** 1. 🗱 a 2. × b 3. ❤ с 4. 3 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:

2. • 0
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
$eq:Question Number: 30 Question Id: 1830 Question Type: MCQ Option Shuffling: No Correct: 1.0 \ Wrong: 0.33$
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

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

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

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. 🗸 с 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. Ж с 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

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

3. **√** c 4. **×** d

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. № с
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
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?

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

Options:

- 1. 🎇 a
- 2. 🖋 b
- 3. Ж с
- 4. 38 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

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

Options:

- 1. 🗱 a
- 2. × b
- 3. 🗸 с
- 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. 38 d

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

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
- з. Ж с
- 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.

- 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. 🗸 с
- 4. 38 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
- 70 litres per seat per day
- d. 50 litres per seat per day

Options:

- 1. 🎇 a
- 2. × b
- 3. 🗸 с
- 4. * d

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

The permissible/desirable drinking water standard for total dissolved solids is 600 mg/1 a. b. 500 mg/1 c. 400 mg/1 1000 mg/1 **Options:** 1. 🎇 a 2. 🗸 b 3. Ж с 4. * d Question Number: 54 Question Id: 1854 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33 In BOD3 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 BOD5 of the sewage would be 350 mg/1 $35 \, \text{mg/l}$ b. cannot be determined $7.0 \, \text{mg/l}$ d. **Options:** 1. × a 2. × b 3. 🗸 c 4. 38 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 damage of trachea b. swelling in bronchus c. respiratory system failure d. lung cancer

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

Options:

1. * a

2. * b

3. * c

4. * d

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. X a
- 2. 🗸 b
- 3. Ж с
- 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

- CFC, N₂O, CO₂, CH₄
- b. CO₂, CH₄, N₂O and CFC
- c. CH4, CO2, N2O and CFC
- d. CFC, CH₄, CO₂, and N₂O

Options:

- 1. 🗸 a
- 2. 🏶 b
- 3. Ж с
- 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. Ж с
- 4. 🗸 d

Question Number: 59 Question Id: 1859 Question Type: MCQ Option Shuffling: No

Which of the following is not a pointing device? Mouse a. b. Trackball c. Joystick d. Keyboard **Options:** 1. X a 2. × b 3. Ж с 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? Storage capacity a. b. Size c. Access time d. Cost per bit of storage **Options:** 1. 🎇 a 2. 🖋 b 3. Ж с 4. 3 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. 3 d

 $Question\ Number: 62\ \ Question\ Id: 1862\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

The binary representation of the decimal number 43.23 is
a. (101101.01) ₂
ь. (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
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

Question Number: 65 Question Id: 1865 Question Type: MCQ Option Shuffling: 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
- з. Ж с
- 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. 🗸 с
- 4. 38 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. 38 b
- 3. Ж с
- 4. * d

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

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. Ж с
- 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. Ж с
- 4. 38 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. X a
- 2. × b
- 3. 🗸 с
- 4. 3 d

Question Number: 71 Question Id: 1871 Question Type: MCQ Option Shuffling: No

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. Ж с 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° clockwise c. Inclined at 30° counter clockwise d. Inclined at 15° **Options:** 1. 🗸 a 2. × b 3. Ж с 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 be a straight line passing through origin and inclined to x-axis with a slope c. The force acting on the object is 0 a. b. m/c c. mc d. 2mc. **Options:** 1. 🎇 a 2. × b 3. 🗸 с 4. * d

 $\label{eq:Question Number: 74 Question Id: 1874 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33$

The SI unit of gravitational constant, G, is

- a. N m2kg-2
- b. Nm-2 kg-2
- c. N kg² m⁻²
- d. m² kg⁻¹ s⁻².

Options:

- 1. 🗸 a
- 2. 🗱 b
- з. Ж с
- 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 2 v m/s
- c. When velocity of the object changes from 2 v m/s to 3 v m/s
- d. When velocity of the object changes from 3 v m/s to 4 v m/s

Options:

- 1. 🎇 a
- 2. × b
- 3. Ж с
- 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
- 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
- From one place to another in a direction perpendicular to the direction of propagation of disturbance

Options:

- 1. 🖋 a
- 2. × b
- 3. Ж с
- 4. × d

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

Rays of 1	ight are evident on a concave mirror parallel to the principal axis. After reflection, they meet
at	
a. Infin	ity
b. the c	entre of curvature
c. at fo	cus
d. Ata	point half way to the focus
Options :	
1. 🍀 a	
2. 🏶 b	
3. 🗸 с	
4. 🗱 d	
-	umber: 78 Question Id: 1878 Question Type: MCQ Option Shuffling: No .0 Wrong: 0.33
	ucting wire of length 1 and resistance R is cut into two equal parts. The two parts are then
	d in parallel. The resistance of the combination is
a. R/2	
b. R/4	
c. R	
d. 2 R.	
Options:	
1. 🏁 a	
2. 🗸 b	
3. 🏶 с	
4. 风 d	
	umber: 79 Question Id: 1879 Question Type: MCQ Option Shuffling: No .0 Wrong: 0.33
. A studen	t heats a beaker containing water continuously and measures the temperature as a function of
time. She	e found that the temperature of water increases with time. After sometime, it becomes constant
in spite o	of heat being supplied. The temperature remains constant up to a certain stage. The value of
the cons	tant temperature of water is
a.	25°C
b.	45°c
c.	85°c
d.	100°c
Options :	
1. * a	
2. % b	

3. **%** c 4. **✓** d

Correct : 1.0 Wrong : 0.33

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

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

Options:

- 1. 🗱 a
- 2. × b
- 3. 🗸 с
- 4. 38 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 KMnO4, ethanol produces

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

Options:

- 1. 🗸 a
- 2. 🏶 b
- 3. Ж с
- 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 XO and it is acidic in nature.
- The formula is XO and it is basic in nature.
- The formula is X₂O and it is acidic in nature.
- The formula is X₂O and it is basic in nature.

Options:

- 1. 🎇 a
- 2. × b
- З. Ж с
- 4. 🗸 d

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

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. CaCO₃ b. CaHCO₃ c. Ca (HCO₃)₂ Ca(OH)₂ d. **Options:** 1. 🎇 a 2. × b 3. 🗸 с 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 Thallium **Options:** 1. 🎇 a 2. 🖋 b 3. Ж с 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

Oceanic waves

d. Wet feathers

Options:

- 1. 🗸 a
- 2. × b
- 3. Ж с
- 4. 38 d

Question Number: 86 Question Id: 1886 Question Type: MCQ Option Shuffling: No

Which is the reproductive organ of Angiosperms? a. Root hairs b. Nodes of branches c. Flower d. Fruit **Options:** 1. 🎇 a 2. × b 3. 🗸 с 4. 38 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 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. Ж с

4. * d

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

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. 🗸 с
- 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. 🗸 с
- 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

LCM of the numbers a, b, c, and d, where $a = 2^5x11^3x13^4$, $b = 2^4x11^4x13^5$, $c = 2^4x11^5x13^3$ and d= 23x114x134 is a. (2x11x13)⁵ b. 25x114x135 c. (2x11x13)⁴ 24x115x134 **Options:** 1. 🖋 a 2. * b 3. Ж с 4. 3 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. Ж с 4. * d

Question Number: 95 Question Id: 1895 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33

Ra	tio of monthly incomes of A and B is 4:3 and that of their expenditures is 3:2. If each of them saves
	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. 🗸 с
- 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. ❤ с
- 4. 38 d

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

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. 🗸 с 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. 🗸 с 4. 3 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-minutes and upstream at the rate of 5 km an hour. The speed of the boat (in km/hour) in still water is b. $4\frac{1}{2}$ c. 5 d. 6-

Options:

1. 🎇 a

2. × b

3. Ж с

.

4. 🖋 d

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

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. Ж с
- 4. 38 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. Ж с
- 4. 38 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. 3 b
- 3. Ж с
- 4. 🗱 d

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

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. Ж с 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 cistem 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. 38 b 3. Ж с 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 b. 8 c. 9 d. 10 **Options:**

1. 🎇 a

2. 🖋 b

3. Ж с

4. * d

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

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. Ж с
- 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

$$3x^2 - 7x + 8 = 0$$
, 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

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. Ж с
- 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. 3 b
- з. Ж с
- 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
- З. Ж с
- 4. 3 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 $10+8+6\frac{2}{5}+\cdots \dots \dots$ 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 $tan10^{\circ} tan25^{\circ} tan45^{\circ} tan65^{\circ} tan80^{\circ} / (Sin^269^{\circ} + Sin^221^{\circ}) + (Cos^251^{\circ} + Cos^239^{\circ})$ is

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

Options:

- 1. 🎇 a
- 2. 🏶 b
- 3. 🗸 с
- 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 300. 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.

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

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

List 2(Kingdom) List 1(King) A. Pradyota 1. Magadha 2. Vatsa B. Udayana C. Prasenjita 3.Avanthi 4. Kosala D.Ajatsatru C-2 D-3 A-1 B- 4 a. A-2 B-3 C-1 D-4 b. A-3 B-2 C-4 D-1 C.

B-1

Options:

d.

- 1. 🎇 a
- 2. 🏶 b
- 3. 🖋 с
- 4. * d

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

C-3

Correct : 1.0 Wrong : 0.33

A-4

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

D-2

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

Options:

- 1. 🎇 a
- 2. × b
- 3. 🗸 с
- 4. 3 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. **%** (

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. Maldive-Mali
- c. North Korea-Seoul
- d. Zimbabwe-Harare

Options:

- 1. 🎏 a
- 2. × b
- 3. 🗸 с
- 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,

- 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. 3 b
- 3. Ж с
- 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

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

Options:

- 1. 🎇 a
- 2. 🖋 b
- 3. **%** c

4. 3 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 four times c. same d. three times **Options:** 1. 🎇 a 2. 🖋 b 3. Ж с 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 reflects every colour does not reflect any colour c. absorbs black colour d. reflects black colour **Options:** 1. 🎇 a 2. 🗸 b 3. Ж с 4. 3 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 does not cross anywhere in the magnet **Options:** 1. 🎇 a 2. × b 3. Ж с

Question Number: 125 Question Id: 1925 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33

4. 🖋 d

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

Question Number: 128 Question Id: 1928 Question Type: MCQ Option Shuffling: No

3. ***** c 4. ***** d

National Agricultural	Insurance Scheme rep	placing Comprehensive Corp Insurance Scheme was		
introduced in the year?	?			
a. 1997				
ь. 1998				
c. 1999				
d. 2000				
Options:				
1. 🏶 a				
2. % b				
3. ✔ с				
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		
15000000 * 1500 F		•		
1.VSNL	(4	Bharati Group		
2.Mundra SEZ	550550000000000000000000000000000000000	Adani Group		
3.CMC Ltd		Tata Group		
4.IPCL	·	Reliance Group		
Select the correct answ	wer using the codes g	iven 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				
		on Type: MCQ Option Shuffling: No		
Correct: 1.0 Wrong: 0.33 Merdeka cup is associ				
HARAMICAD AS	accu with			
a. Cricket				

Options:

b. Footballc. Rugbyd. Hockey

	×
	V
З.	×
4.	×
Qι	iest
Co	rre
T	he

a b c 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. Ж с
- 4. 38 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. Ж с
- 4. 38 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. X a
- 2. 🖋 b
- з. Ж с

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 Mammal Birds c. Fishes Bat **Options:** 1. 🗸 a 2. **%** b 3. Ж с 4. 3 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 Hydrogen cyanide b. Mustard gas C. Water gas **Options:** 1. 🎇 a 2. × b 3. 🗸 с 4. 38 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. ZnCO₃ b. ZnSO₄ c. ZnO

3. **%** c 4. **%** d

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

Correct : 1.0 Wrong : 0.33

d. ZnS

Options:
1. ✓ a
2. ※ b

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. Ж с
- 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. 38 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. 3 d

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

Question Number: 140 Question Id: 1940 Question Type: MCQ Option Shuffling: No

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 The Lobster d. The Measure of a Man **Options:** 1. 🎇 a 2. 🖋 b 3. Ж с 4. 3 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? Granddaughter b. Daughter c. Sister d. Aunt **Options:** 1. 🗱 a 2. × b 3. Ж с 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: Listen b. Noise Loudness d. Vibrate **Options:** 1. 🗸 a 2. × b 3. 🍀 c. 4. 3 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. Ж с 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. 5. Children 6. Sun 1. Rainbow 2. Happy 3. Cloud 4. Rain 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. **¾** a 2. **√** b 3. **¾** 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 ь. 126 c. 66 d. 28 **Options:** 1. 🎇 a 2. 🎏 b 3. 🗸 с 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. 3 b 3. Ж с 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: EVIECREP b. CREPEVIE EPCRIEEV d. CREPEIEV **Options:** 1. 🎇 a 2. 🖋 b 3. 🏶 с 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

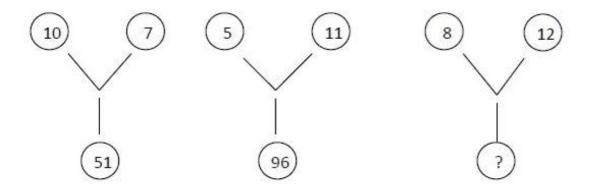
Options:

- 1. 🎏 a
- 2. 🏶 b
- З. Ж с
- 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
- З. 🗸 с
- 4. * d

Railway Recruitment Board

Notations:

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

Question Paper Name: Junior Engineer 29th Aug Shift 2 Actual

Subject Name: Junior Engineer

Creation Date: 2015-08-18 12:40:43.0

Cut Off:0Duration:120Number of Questions:150Total Marks:150.0

Junior Engineer

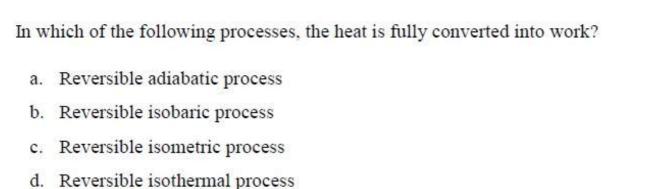
Group Number :	1
Group Id:	11
Group Maximum Duration:	0
Group Minimum Duration :	120
Revisit allowed for view?:	No
Revisit allowed for edit?:	No
Break time:	0
Group Marks:	150.0

Junior Engineer

Section Id:	11
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:1Sub-Section Id:11Question Shuffling Allowed:Yes

Question Number: 1 Question Id: 1951 Question Type: MCQ Option Shuffling: No



Options:

- 1. 🏶 a
- 2. 🏶 b
- з. 🗱 с
- 4. 🖋 d

Question Number: 2 Question Id: 1952 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33

Which one of the following represents open thermodynamic system?

- a. Manual ice cream freezer
- b. Centrifugal pump
- c. Pressure cooker
- d. Bomb calorimeter

Options:

- 1. 🎇 a
- 2. 🖋 b
- 3. Ж с
- 4. 38 d

Question Number: 3 Question Id: 1953 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33

Pistons of diesel engine are usually cooled by

- a. Air
- b. Water
- c. Lubricating oil
- d. Fuel oil

Options:

- 1. 🎇 a
- 2. 3 b
- 3. 🗸 с

4. 38 d

Question Number: 4 Question Id: 1954 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Air injection in IC engine refers to injection of

- a. Air only
- b. Liquid fuel only
- c. Liquid fuel and air
- d. Supercharging air

Options:

- 1. 🗱 a
- 2. **%** b
- 3. 🗸 с
- 4. 🗱 d

Question Number: 5 Question Id: 1955 Question Type: MCQ Option Shuffling: No Correct: 1.0 Wrong: 0.33

By higher octane number of SI fuel, it is meant that the fuel has

- a. Higher heating value
- b. Higher flash point
- c. Lower volatility
- d. Longer ignition delay

Options:

- 1. 🎇 a
- 2. 🏶 b
- 3. Ж с
- 4. 🖋 d

Question Number: 6 Question Id: 1956 Question Type: MCQ Option Shuffling: No

In which one of the following materials is the heat propagation minimum due to conduction heat transfer?

- a. Lead
- b. Copper
- c. Water
- d. Air

Options:

- 1. 🎏 a
- 2. **%** b
- 3. Ж с
- 4. 🖋 d

Question Number: 7 Question Id: 1957 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A satellite floats in deep space with very high velocity. It will continuously lose heat by

- a. Convection
- b. Conduction and convection
- c. Radiation
- d. Radiation and convection

Options:

- 1. 🎇 a
- 2. 🏶 b
- 3. 🗸 с
- 4. * d

Question Number: 8 Question Id: 1958 Question Type: MCQ Option Shuffling: No

Which one of the following is the correct statement?

Gate is provided in moulds to

- a. Feed the casting at constant rate
- b. Give passage to gases
- c. Compensate for shrinkage
- d. Avoid cavities

Options:

- 1. 🗸 a
- 2. **%** b
- 3. Ж с
- 4. * d

 $Question\ Number: 9\ \ Question\ Id: 1959\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

The method of casting for producing ornamental pieces are

- a. Slush and gravity casting
- b. Pressed and slush casting
- c. Gravity and semi-permanent mould casting
- d. Semi-permanent mould and pressed casting

Options:

- 1. 🗱 a
- 2. 🖋 b
- 3. **%** c
- 4. 38 d

Question Number: 10 Question Id: 1960 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which one of following lubricants is most suitable for drawing mild steel wires?

- a. Sodium stearate
- b. Water
- c. Lime-water
- d. Kerosene

Options:

- 1. 🎇 a
- 2. 🗱 b
- 3. **⋖** c
- 4. * d

 $Question\ Number: 11\ \ Question\ Id: 1961\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

What is the major problem in hot extrusion?

- a. Design of punch
- b. Design of die
- c. Wear and tear of die
- d. Wear of punch

Options:

- 1. 🏶 a
- 2. 🖋 b
- 3. Ж с
- 4. * d

Question Number: 12 Question Id: 1962 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Arc blow is more common in

- a. A.C. welding
- b. D.C. welding with straight polarity
- c. D.C. welding with bare electrodes
- d. A.C. welding with bare electrodes

Options:

- 1. 🎇 a
- 2. 🖋 b
- 3. Ж с
- 4. 38 d

Question Number: 13 Question Id: 1963 Question Type: MCQ Option Shuffling: No

In MIG welding, the metal is transferred into the form of which one of the following?

- a. A fine spray of metal
- b. Molten drops
- c. Weld pool
- d. Molecules

Options:

- 1. 🎇 a
- 2. 🗸 b
- 3. Ж с
- 4. * d

 $Question \ Number: 14 \ \ Question \ Id: 1964 \ \ Question \ Type: MCQ \ \ Option \ Shuffling: No$

Correct : 1.0 Wrong : 0.33

Soft material cannot be economically grounded due to

- a. The high temperature involved
- b. Frequent wheel clogging
- c. Rapid wheel wear
- d. Low work piece stiffness

Options:

- 1. 🎇 a
- 2. 🖋 b
- 3. Ж с
- 4. * d

Question Number: 15 Question Id: 1965 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Another name for the coal used in power plant is

- a. Charcoal
- b. Coke
- c. Steam coal
- d. Wet coal

Options:

1. 🎇 a

2. 🏁 b

3. 🗸 с

4. 38 d

Question Number: 16 Question Id: 1966 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

In a fluorescent tube circuit, choke is used as a

a. Starter

b. Power factor improving device

c. Source of heat

d. Current limiting device

Options:

1. 🏶 a

2. × b





Question Number: 17 Question Id: 1967 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

When a dynamo converts electrical energy into mechanical energy, it is called

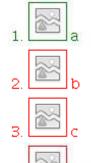
a. motor

b. generator

c. productor

d. inverter

Options:

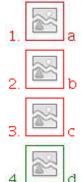


Question Number: 18 Question Id: 1968 Question Type: MCQ Option Shuffling: No

The terminal voltage of a DC shunt generator on loading

- a. increases slightly
- b. increases sharply
- c. remains constant
- d. decreases slightly

Options:



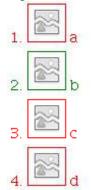
 $Question\ Number: 19\ \ Question\ Id: 1969\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

The value of flux involved in the emf equation of transformer is

- a. instantaneous
- b. maximum
- c. average
- d. rms

Options:



Question Number: 20 Question Id: 1970 Question Type: MCQ Option Shuffling: No

For maximum efficiency operation of a transformer, iron losses equals

- a. copper losses
- b. hysteresis losses
- c. eddy current losses
- d. humming losses

Options:



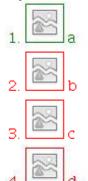
Question Number: 21 Question Id: 1971 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Nodal analysis is based on

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

Options:

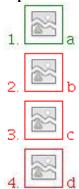


Question Number: 22 Question Id: 1972 Question Type: MCQ Option Shuffling: No

Which of the following is an active element in a circuit

- a. current source
- b. resistance
- c. inductance
- d. capacitance

Options:



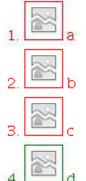
Question Number: 23 Question Id: 1973 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The generator which gives DC supply to the rotor is called

- Convertor
- b. Exciter
- c. Rectifier
- d. Inverter

Options:

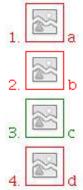


Question Number: 24 Question Id: 1974 Question Type: MCQ Option Shuffling: No

Which of the following is an example of a non-ohmic resistance

- a. Copper wire
- b. Carbon resistance
- c. Diode
- d. Tungsten wire

Options:



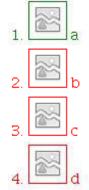
Question Number: 25 Question Id: 1975 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which of the following Boolean expression is NOT TRUE?

- a. A+1=A
- b. A+A'=1
- c. A.A=A
- d. A.A'=0

Options:

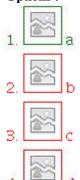


Question Number: 26 Question Id: 1976 Question Type: MCQ Option Shuffling: No

The octal equivalent of decimal number 66 is

- a. 102
- b. 104
- c. 84
- d. 82

Options:



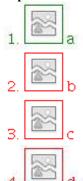
Question Number: 27 Question Id: 1977 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which of the following is a universal gate

- a. NOR
- b. AND
- c. OR
- d. NOT

Options:

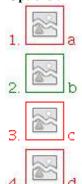


Question Number: 28 Question Id: 1978 Question Type: MCQ Option Shuffling: No

The transistor configuration producing highest output resistance is

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

Options:



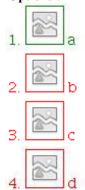
Question Number: 29 Question Id: 1979 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The Schottky-barrier diode has

- a. no PN junction
- b. one PN junction
- c. two PN junctions
- d. three PN junction

Options:

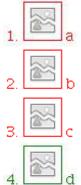


 $Question\ Number: 30\ \ Question\ Id: 1980\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

The diode that can be used for harmonic generation is

- a. backward diode
- b. PN junction diode
- c. tunnel diode
- d. varactor diode

Options:



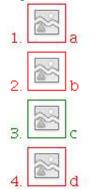
Question Number: 31 Question Id: 1981 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The temperature coefficient of intrinsic semiconductors is

- a. zero
- b. positive
- c. negative
- d. same as that of metals

Options:

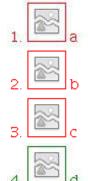


Question Number: 32 Question Id: 1982 Question Type: MCQ Option Shuffling: No

Mobility of electrons is highest in

- a. Si
- b. GeAs
- c. C
- d. Ge

Options:



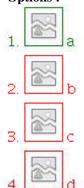
Question Number: 33 Question Id: 1983 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Tunnel diode is made of the semiconductors which are

- a. highly doped
- b. sparsely doped
- c. intrinsic
- d. normally doped

Options:

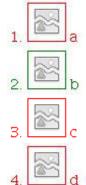


Question Number: 34 Question Id: 1984 Question Type: MCQ Option Shuffling: No

A+A' has the logic value

- a. 0
- b. 1
- c. A
- d. A'

Options:



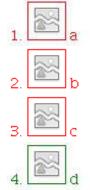
Question Number: 35 Question Id: 1985 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The specific gravity of water is taken as

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

Options:

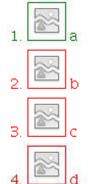


 $Question\ Number: 36\ \ Question\ Id: 1986\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Falling drops of water become spheres due to the property of

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

Options:



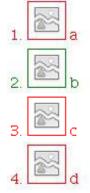
Question Number: 37 Question Id: 1987 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The liquid used in manometer should have

- a. Low density
- b. High density
- c. Low surface tension
- d. High surface tension

Options:

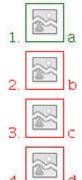


Question Number: 38 Question Id: 1988 Question Type: MCQ Option Shuffling: No

A soil has a liquid limit of 40% and plasticity index of 20% . The plastic limit of the soil will be

- a. 20%
- b. 30%
- c. 40%
- d. 60%

Options:



 $Question\ Number: 39\ \ Question\ Id: 1989\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

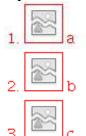
In a particular soil sample, laboratory analysis has yielded the following results:

- A. Sand 20%
- B. Silt 30%
- C. Clay 50%

Without using the textural chart, the correct textural classification of the soil would be

- a. Loam
- b. Sandy soil
- c. Silty loam
- d. Clay

Options:





 $Question\ Number: 40\ \ Question\ Id: 1990\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

Permissible shear stress in concrete is a function of

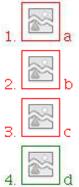
a. Grade of concrete

b. Grade of steel

c. Percentage of steel reinforcement

d. Percentage of steel reinforcement and grade of concrete

Options:



 $Question\ Number: 41\ \ Question\ Id: 1991\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

In which of the following case we avoid bolted connection

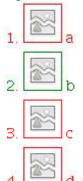
a. Connection subjected to fire

b. Connection subjected to frequent earthquake load

c. Connection subjected to snow load

d. Connection subjected to corrosion problem

Options:

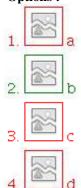


 $Question\ Number: 42\ \ Question\ Id: 1992\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

For a well conditional triangle, no angle should be less than

- a. 20°
- b. 30°
- c. 45°
- d. 60°

Options:



Question Number: 43 Question Id: 1993 Question Type: MCQ Option Shuffling: No

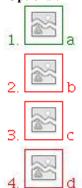
Correct: 1.0 Wrong: 0.33

What is the magnetic declination at a place if the magnetic bearing of the sun

at noon is 184°?

- a. 4°W
- b. 4°E
- c. 176°W
- d. 176°E

Options:

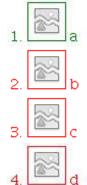


Question Number: 44 Question Id: 1994 Question Type: MCQ Option Shuffling: No

Slack represents the difference between the

- a. Earliest completion time and latest allowable time
- b. Latest allowable time and earliest completion time
- c. Earliest completion time and normal expected time
- d. Latest allowable time and normal allowable time

Options:



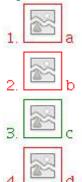
Question Number: 45 Question Id: 1995 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The setting and hardening of cement after addition of water is due to

- a. The presence of gypsum
- b. Binding action of water
- c. Hydration of some of the constituent compounds of cement
- d. Evaporation of water

Options:

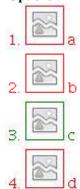


Question Number: 46 Question Id: 1996 Question Type: MCQ Option Shuffling: No

Grading of aggregate in a concrete mix is necessary to achieve

- a. Adequate workability
- b. Higher density
- c. Reduction in voids
- d. Better durability

Options:



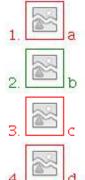
 $Question\ Number: 47\ \ Question\ Id: 1997\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

LVDT is a

- a. pressure transducer
- b. displacement transducer
- c. velocity transducer
- d. acceleration transducer

Options:



Question Number: 48 Question Id: 1998 Question Type: MCQ Option Shuffling: No

The dimensions of EMF are

- a. $ML^2I^{-1}T^{-3}$
- b. M⁻¹T⁻³
- c. ML²I-2T-3
- d. ML³I⁻¹T⁻³

Options:









Question Number: 49 Question Id: 1999 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Magnetic field intensity has the dimensions

- a. IL
- b. I²L
- c. IL-1
- d. IL⁻²

Options:







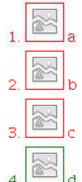


Question Number: 50 Question Id: 2000 Question Type: MCQ Option Shuffling: No

When measuring phase angle between two waves using a CRO, the time base generator is connected to

- a. X plate
- b. Y plate
- c. both X and Y plate
- d. neither X nor Y plates

Options:



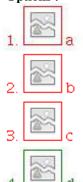
Question Number: 51 Question Id: 2001 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which of the following is not correct?

- a. Voltmeter should have a very high resistance
- b. An ammeter should have a very low resistance
- c. A shunt should have a very low resistance
- d. An electronic voltmeter draws appreciable current from source

Options:

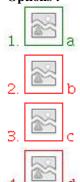


Question Number: 52 Question Id: 2002 Question Type: MCQ Option Shuffling: No

The prescribed per capita water demand for small towns and city is

- a. 135 lpcd
- b. 100 lpcd
- c. 200 lpcd
- d. 180 lpcd

Options:



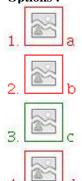
Question Number: 53 Question Id: 2003 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The spacing between two bars in fine screen is

- a. 20 mm
- b. 30 mm
- c. 10 mm
- d. 5 mm

Options:

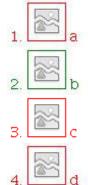


 $Question\ Number: 54\ \ Question\ Id: 2004\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

In villages, to disinfect the well water, the most common disinfectant used is

- a. silver and bromine
- b. potassium permanganate
- c. iodine solution
- d. chlorine and bromine

Options:



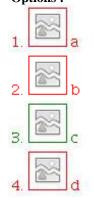
Question Number: 55 Question Id: 2005 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The carbon monoxide causes

- a. coughing and choking problem in respiratory system
- b. broncho-constriction
- c. headache, vomiting, slurring of speech, convulsions, coma and death
- d. chronic bronchitis followed by asthma

Options:

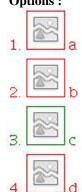


Question Number: 56 Question Id: 2006 Question Type: MCQ Option Shuffling: No

An octave band is a frequency band with upper and lower cut-off frequencies having a ratio of

- a. 3
- b. 4
- c. 2
- d. 5

Options:



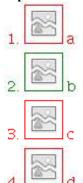
Question Number: 57 Question Id: 2007 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The CO₂ concentration in the atmosphere was 355 ppm in 1990 that is increasing at a rate of

- a. 1.00 ppm
- b. 1.5 ppm
- c. 0.50 ppm
- d. 0.20 ppm

Options:

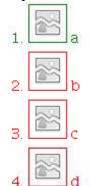


Question Number: 58 Question Id: 2008 Question Type: MCQ Option Shuffling: No

gave stored program concept in which program and data to be processed are stored in the same memory.

- a. John Von Neumann
- b. Alan Turing
- c. Charles Babbage
- d. Bill Gates

Options:



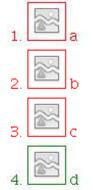
Question Number: 59 Question Id: 2009 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which of the following is the most simple, intuitive, and easiest to use of all input devices?

- a. Mouse
- b. Trackball
- c. Keyboard
- d. Touch screen

Options:

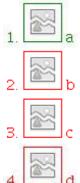


Question Number: 60 Question Id: 2010 Question Type: MCQ Option Shuffling: No

Both RAM and ROM are

- a. Random access memory
- b. Sequential access memory
- c. Read and write memory
- d. Read only memory

Options:



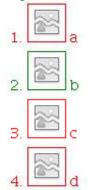
Question Number: 61 Question Id: 2011 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Unix is a operating system.

- a. Single-user and time-sharing
- b. Multi-user and time-sharing
- c. Multi-user and distributed
- d. Real-time

Options:



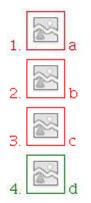
 $Question\ Number: 62\ \ Question\ Id: 2012\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

The decimal representation of the binary number (101010.011)2 is

- a. 42.25
- b. 24.25
- c. 24.375
- d. 42.375

Options:



Question Number: 63 Question Id: 2013 Question Type: MCQ Option Shuffling: No

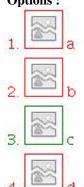
Correct : 1.0 Wrong : 0.33

Considering X and Y as binary variables, the Boolean expression X.Y.0 is equivalent

to

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

Options:



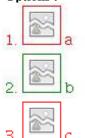
Question Number: 64 Question Id: 2014 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Assembly language is a

- a. Machine independent language
- b. Machine dependent language
- c. High-level language
- d. Language which requires interpreter

Options:





Question Number: 65 Question Id: 2015 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Mail-merge is a component of

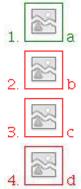
a. MS-Word

b. WordPress

c. MS-Excel

d. MS-Access

Options:



Question Number: 66 Question Id: 2016 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Internet is a

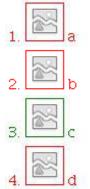
a. Local Area Network (LAN)

b. Metropolitan Area Network (MAN)

c. Wide Area Network (WAN)

d. Storage Area Network (SAN)

Options:

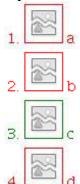


Question Number: 67 Question Id: 2017 Question Type: MCQ Option Shuffling: No

Google Chrome is a

- a. Application layer protocol
- b. Web search engine
- c. Web browser
- d. Web data store

Options:



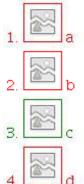
Question Number: 68 Question Id: 2018 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The "front view" and "top view" of a line are represented below and above the XY line respectively. The projections are drawn in:

- a. First angle
- b. Second angle
- c. Third angle
- d. It's an orthographic projection

Options:

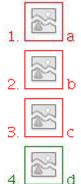


Question Number: 69 Question Id: 2019 Question Type: MCQ Option Shuffling: No

Which of the following is not a type of bearing:

- a. Thrust bearing
- b. Journal Bearing
- c. Ball bearing
- d. Pulley.

Options:



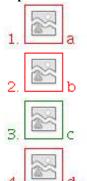
Question Number: 70 Question Id: 2020 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Very small parts of a wrist watch are to be represented on drawings. Which type of scale do you suggest?

- a. Reducing scales
- b. full size scales
- enlarging scales,
- d. Scales with R.F.=1:1

Options:

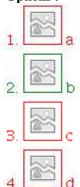


Question Number: 71 Question Id: 2021 Question Type: MCQ Option Shuffling: No

Major axis and Minor Axis are found in:

- a. Circle
- b. Ellipse
- c. Cycloid
- d. Involute.

Options:



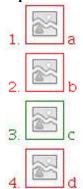
Question Number: 72 Question Id: 2022 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The size of vertical and horizontal edges on an object appear in its isometric projection as

- a. shortened by 81%
- b. shortened by 30%
- c. shortened by 19%
- d. shortened by 29%

Options:

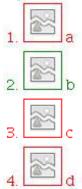


 $Question\ Number: 73\ \ Question\ Id: 2023\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

A ball is rolled on a floor. Moving in straight line, it stops after some time due to frictional force exerted by the floor. Which of the following statements about acceleration and force during the motion of the ball is correct?

- a. Both acceleration and force are positive
- b. Both acceleration and force are negative
- c. Acceleration is positive but force is negative
- d. Acceleration is negative but force is positive.

Options:



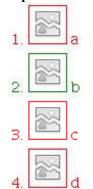
Question Number: 74 Question Id: 2024 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Let g be the acceleration due to gravity at a place on earth (mass M and radius R). The ratio g/G at the place is given by (G - Universal gravitational constant)

- a. M/R
- b. M/R²
- c. MR
- d. MR².

Options:



Question Number: 75 Question Id: 2025 Question Type: MCQ Option Shuffling: No

A ball of mass m is raised to height h and then dropped to the ground. When the ball has fallen half of the height, 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. $2\sqrt{gh}$

Options:









Question Number: 76 Question Id: 2026 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Three tuning forks (of different frequencies) are used to produce sound in a science Laboratory. Which of the following statements is correct?

- The wavelength of sound produced by the tuning fork of highest frequency is smallest
- The wavelength of sound produced by the tuning fork of highest frequency is largest
- c. The velocities of sound produced by the three tuning forks are different
- The pitch of sound produced by the tuning fork of lowest frequency is highest.

Options:









Question Number: 77 Question Id: 2027 Question Type: MCQ Option Shuffling: No

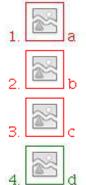
Correct : 1.0 Wrong : 0.33

An image of an object is seen in a plane mirror. The image is

a. real and inverted

- b. real and erect
- c. virtual and inverted
- d. virtual and erect

Options:



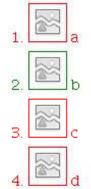
Question Number: 78 Question Id: 2028 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A current of 1A flows towards right in a conductor. The number of electrons passing per second through any cross section of the conductor and their direction is about

- a. 6 x 1018 towards right
- b. 6 x 1018 towards left
- c. 6 x 1016 towards right
- d. 6 x 1016 towards left.

Options:

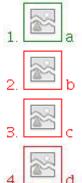


Question Number: 79 Question Id: 2029 Question Type: MCQ Option Shuffling: No

The oxide of an element 'A' can react separately with an acid and a base to produce salt and water.

- a. The element 'A' is metallic and the oxide is amphoteric.
- b. The element 'A' is metallic and the oxide is basic.
- c. The element 'A' is non metallic and the oxide is acidic.
- d. The element 'A' is non metallic and the oxide is amphoteric.

Options:

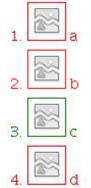


Question Number: 80 Question Id: 2030 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

- . Which one of the following sets of conditions favours the liquefaction of gases?
 - a. Low pressure and low temperature
 - b. High pressure and high temperature
 - c. High pressure and low temperature
 - d. Low pressure and high temperature

Options:

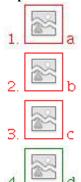


Question Number: 81 Question Id: 2031 Question Type: MCQ Option Shuffling: No

What is the value of the coefficient 'A' in the following chemical equation?

- a. 3
- b. 4
- c. 5
- d. 6

Options:



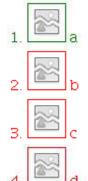
Question Number: 82 Question Id: 2032 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

On hydration, a hydrocarbon 'X' produces a compound 'Y' with molecular formula C₂H₆O. 'X' forms a dibromo compound with bromine. The compound 'Y' produces a carboxylic acid on oxidation with acidified K₂Cr₂O₇. The hydrocarbon 'X' is

- a. Ethene
- b. Ethane
- c. Propane
- d. Propene

Options:

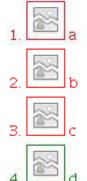


Question Number: 83 Question Id: 2033 Question Type: MCQ Option Shuffling: No

Which one of the following is the greatest in atomic size?

- a. Aluminum
- b. Magnesium
- c. Sodium
- d. potassium

Options:



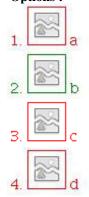
Question Number: 84 Question Id: 2034 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

An acid solution is completely neutralized by a base. The pH of the salt solution so produced is

- a. 14
- b. 7
- c. 5
- d. 0

Options:

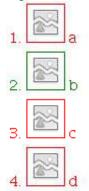


Question Number: 85 Question Id: 2035 Question Type: MCQ Option Shuffling: No

. Cousins were discussing amongst themselves as to whose features resemble those of which elder in the family. Which subject can explain their conclusions?

- a. Evolution
- b. Genetics
- c. Adaptation
- d. Physiology

Options:



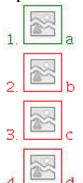
Question Number: 86 Question Id: 2036 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Roots absorb water from soil but which plant tissue reaches the water to the leaves for Photosynthesis?

- a. Xylem
- b. Phloem
- c. Parenchyma
- d. Collenchyma

Options:

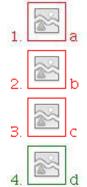


Question Number: 87 Question Id: 2037 Question Type: MCQ Option Shuffling: No

Which human activity alone has caused many wild animals to become extinct?

- a. Hunting
- b. Mining
- c. Electrification
- d. Deforestation

Options:



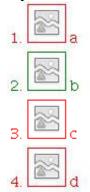
Question Number: 88 Question Id: 2038 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

A plant and an animal cell were focused under the microscope. Which features helped students to differentiate the two

- a. Plant cell and animal cell both had nuclei
- b. Plant cell had a cell wall but animal cell did not.
- c. Animal cell had a cell membrane but plant cell did not
- d. Animal cell had a large vacuole but plant cell did not

Options:

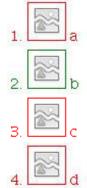


Question Number: 89 Question Id: 2039 Question Type: MCQ Option Shuffling: No

If both kidneys of a patient fail, an artificial kidney can help the patient live on through the process of

- a. Electrolysis
- b. Dialysis
- c. Blood Transfusion
- d. Gene therapy

Options:



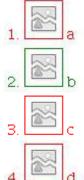
Question Number: 90 Question Id: 2040 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The term "Biodiversity" means

- a. all kinds of plants and animals in the forests
- b. all the various species of organisms living on earth
- c. various types of animals living on earth
- d. the five kingdoms of life except thermo bacteria

Options:

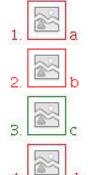


Question Number: 91 Question Id: 2041 Question Type: MCQ Option Shuffling: No

Let x be the greatest number that divides 952, 1165 and 1591 leaving the same remainder in each case. The sum of digits of x is

- a. 4
- b. 5
- c. 6
- d. 7

Options:



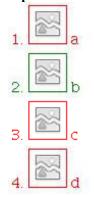
Question Number: 92 Question Id: 2042 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Let $x=5^4$ x 7^3 x 19^3 , $y=5^3$ x 7^4 x 19^3 , $z=5^5$ x 7^5 x 19^3 and $w=5^3$ x 7^5 x 19^4 The LCM of x, y, z and w is

- a. 5⁵ x7⁴x19⁴
- b. (35)⁵ x 19⁴
- c. (35)⁴ x19
- d. $5^4 \times 7^5 \times 19^4$

Options:



Question Number: 93 Question Id: 2043 Question Type: MCQ Option Shuffling: No

A's income is 10% below C's income and B's income is 20% above C's income. What percent is B's income of A's income.

- a. 75
- b. $109\frac{1}{11}$
- c. 130
- d. $133\frac{1}{3}$

Options:









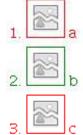
Question Number: 94 Question Id: 2044 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

If A: B=2:3, 7B=9C and 15C=14D, then A: D is

- a. 5:4
- b. 4:5
- c. 12:35
- d. 1:7

Options:



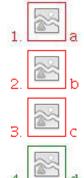


Question Number: 95 Question Id: 2045 Question Type: MCQ Option Shuffling: No

The ratio of two numbers is 15:13. If each number is increase by 3, then their ratio becomes 8:7. The sum of the numbers is

- a. 28
- b. 42
- c. 56
- d. 84

Options:



Question Number: 96 Question Id: 2046 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

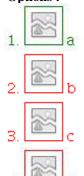
In one alloy the ratio of zinc and copper is 2:11 whereas in the other one, this ratio is

5:21. In what ratio the two be mixed so that the ratio of zinc and copper in the new alloy is

1:5?

- a. 2:1
- b. 3:2
- c. 4:3
- d. 5:3

Options:

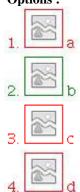


Question Number: 97 Question Id: 2047 Question Type: MCQ Option Shuffling: No

A jar was full of a mixture containing 40% spirit. A part of this mixture was replaced by another mixture containing 19% spirit. If the percentage of spirit was found to be 26, what part of the jar was replaced by another mixture?

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

Options:



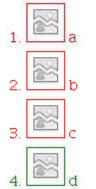
 $Question\ Number: 98\ \ Question\ Id: 2048\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

A loan of Rs.25500 is to be paid back in two equal annual instalments. If the rate of interest charged is 4% per annum, compounded annually. Then each instalment will be of Rs.

- a. 12750
- b. 13250
- c. 13320
- d. 13520

Options:



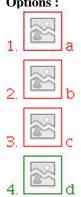
Question Number: 99 Question Id: 2049 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

A sum of Rs.20000 is lent partly at 8 % and remaining at 10% per annum. If the average yearly rate of interest is 9.4 %, then the sum lent at 10 % is

- a. Rs.6000
- b. Rs.8000
- c. Rs.12000
- d. Rs.14000





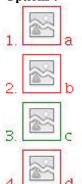
Question Number: 100 Question Id: 2050 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A trader marks his goods 20% above the cost price but allows the customer a discount of 5% on it. If he further gives 5% discount for cash payment, then his profit percent in this case is

- a. 10
- b. 9.2
- c. 8.3
- d. 8.1

Options:

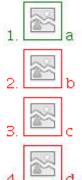


Question Number: 101 Question Id: 2051 Question Type: MCQ Option Shuffling: No

A person buys goods for Rs.96000. He sells $\frac{2}{5}$ of it at a loss of 6 %. At what gain percent should he sell the remaining part to gain 10% on the whole?

- a. $20\frac{2}{3}$
- b. $19\frac{1}{3}$
- c. 15
- d. 16

Options:



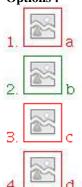
Question Number: 102 Question Id: 2052 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A Scooterist travels for 10 hours, the first half distance at 21 km/hour and the rest at 24 km/hour. The distance (in km) travelled is

- a. 225
- b. 224
- c. 220
- d. 180

Options:

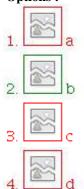


Question Number: 103 Question Id: 2053 Question Type: MCQ Option Shuffling: No

A man rows upstream 13 km and downstream 28 km taking 5 hours each time. The speed (in km per hour) of the current is

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

Options:



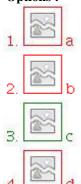
Question Number: 104 Question Id: 2054 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A can do a piece of work in 40 days. He worked for 5 days, then B finished it in 21 days. A and B together can finish the work in

- a. 24 days
- b. 20 days
- c. 15 days
- d. 12 days

Options:

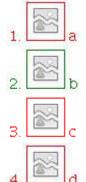


 $Question\ Number: 105\ \ Question\ Id: 2055\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

A certain number of persons can do a piece of work in 40 days, but if there were 8 persons more, it would have been finished 10 days earlier. How many persons were there in the beginning?

- a. 28
- b. 24
- c. 20
- d. 18

Options:



 $Question\ Number: 106\ \ Question\ Id: 2056\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

Five years ago, the average age of A and B was 18 years. The average age of A, B, C and D today is 24 years. The average age of D and C after 8 years from today will be

- a. 21
- b. 29
- c. 30
- d. 33

Options:



Question Number: 107 Question Id: 2057 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The average of five consecutive odd numbers is 27. The average of first three of them, when arranged in ascending order, is

- a. 25
- b. 26
- c. 27
- d. 23

Options:



2.





Question Number: 108 Question Id: 2058 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

If α and β are the roots of the equation $ax^2+bx+c=0$, then the roots of the equation $cx^2+bx+a=0$ are

- a. -α,-β
- b. $\frac{1}{\alpha}, \frac{1}{\beta}$
- c. $\frac{1}{\alpha}$, α
- d. $\frac{1}{\beta}$, α

Options:









 $Question\ Number: 109\ \ Question\ Id: 2059\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

If the equation $(n+1) x^2 - 4(n+2)x + 25 = 0$ has equal roots, then the values of n are

- a. $\frac{-3}{4}, \frac{3}{4}$
- b. 3, -3
- c. $3, \frac{-3}{4}$
- d. $-3, \frac{4}{3}$

Options:









 $Question\ Number: 110\ \ Question\ Id: 2060\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

One of the factors of (x+1)(x+3)(x+5)(x+7)-9 is

- a. $x^2 + 8x + 6$
- b. $x^2+8x+10$
- c. x2+8x+9
- d. x^2+8x+8

Options:









 $Question\ Number: 111\ \ Question\ Id: 2061\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

Factorisation of $x^4 - 9x^2 + 20$ is

- a. $(x-4)(x+1)(x^2-5)$
- b. $(x-2)(x-2)(x^2+5)$
- c. $(x+4)(x+1)(x^2-5)$
- d. $(x-2)(x+2)(x^2-5)$

Options:







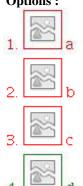


Question Number: 112 Question Id: 2062 Question Type: MCQ Option Shuffling: No

If (p+2)th term of an arithmetic series is 5p+6, then the sum of its first five terms is

- a. 44
- b. 49
- c. 54
- d. 55

Options:



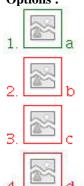
Question Number: 113 Question Id: 2063 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

If the sum of an infinite number of terms of a geometric series is 20, and sum of their squares is 100, then the common ratio of the original series is

- a.

Options:

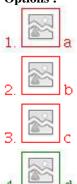


Question Number: 114 Question Id: 2064 Question Type: MCQ Option Shuffling: No

The value of $\cos\theta . \cot\theta \left[\frac{1}{\cos \theta - 1} + \frac{1}{\cos \theta + 1} \right]$ is

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

Options:



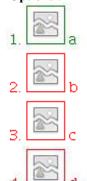
 $Question\ Number: 115\ \ Question\ Id: 2065\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

A tower of height 40m stands vertically on the ground. From a point on the ground which is x m away from the foot of the tower, the angle of elevation of its top is found to be 60° . If y is the distance (in m) of the point from the top of the tower, then the value of (x+y) is

- a. $40\sqrt{3}$ m
- b. $\frac{80\sqrt{3} m}{3}$
- c. $80\sqrt{3}$ m
- d. $120\sqrt{3} \text{ m}$

Options:

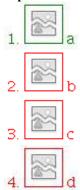


Question Number: 116 Question Id: 2066 Question Type: MCQ Option Shuffling: No

With which of the following centres of learning, Chanakya, the famous teacher of Chandragupta Maurya was associated?

- a. Takshashila
- b. Nalanda
- vikramsila
- d. Vaishali

Options:



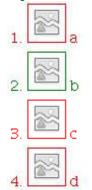
Question Number: 117 Question Id: 2067 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The famous battle of Takkolam of South India was fought between

- a. Cholas and North Chalukyas
- b. Cholas and Rashtrakutas
- c. Cholas and Hoyasals
- d. Cholas and Pandyas

Options:

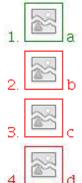


Question Number: 118 Question Id: 2068 Question Type: MCQ Option Shuffling: No

Which Congress President negotiated with both Cripps Mission and Lord Wavell?

- a. Abul Kalam Azad
- b. Jawahar Lal Nehru
- c. JB Kriplani
- d. C.Rajgopalachari

Options:



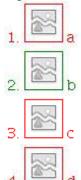
Question Number: 119 Question Id: 2069 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Because of which one of the following reason, clouds do not precipitate in deserts?

- Low Pressure
- b. Low Humidity
- c. High wind velocity
- d. High temperature

Options:

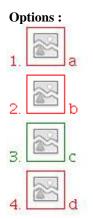


Question Number: 120 Question Id: 2070 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The atmospheric layer which reflects radio waves is called

- Exosphere
- b. Stratosphere
- c. Ionosphere
- d. Thermosphere



Question Number: 121 Question Id: 2071 Question Type: MCQ Option Shuffling: No

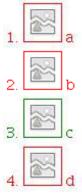
Correct: 1.0 Wrong: 0.33

In the interior of Earth,

a. temperature falls with increasing depth

- b. pressure falls with increasing depth
- c. temperature rises with increasing depth
- d. both temperature and pressure fall with increasing depth

Options:



Question Number: 122 Question Id: 2072 Question Type: MCQ Option Shuffling: No

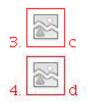
Correct: 1.0 Wrong: 0.33

If an object is placed at the centre of curvature of a concave mirror, the position of image is

- a. at the principal focus
- b. between the principal focus and the centre of curvature
- c. at centre of curvature
- d. beyond centre of curvature

Options:





 $Question\ Number: 123\ \ Question\ Id: 2073\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

In which of the following, speed of sound is maximum

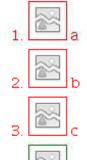
a. air at 0°C

b. air at 100°C

c. in the water

d. in the wood

Options:



Question Number: 124 Question Id: 2074 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Microwave oven consumes less power due to

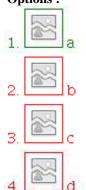
a. small frequency of radiation

b. short wavelength of radiation

c. large frequency as well as wavelength of radiation

d. small frequency as well as wavelength of radiation

Options:



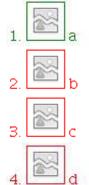
Question Number: 125 Question Id: 2075 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which Amendment to the Constitution inserted a new Article 21 A providing rights to education in the Constitution?

- a. 86th Amendment
- b. 87th Amendment
- c. 88th Amendment
- d. 89th Amendment

Options:



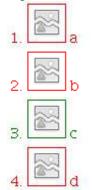
Question Number: 126 Question Id: 2076 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which one of the following subjects comes under the common jurisdiction of the Supreme Court and the high court?

- a. Mutual disputes among states
- b. Dispute between centre and states
- c. Protection of the fundamental rights
- d. protection from the violation of the constitution.

Options:

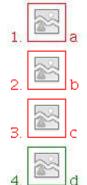


 $Question\ Number: 127\ \ Question\ Id: 2077\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Which of the following is the name of the organisation, created to provide full employment and self-reliance to the women folk in India

- a. OECD
- b. ROSCA
- c. USO
- d. SEWA

Options:



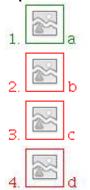
 $Question\ Number: 128\ \ Question\ Id: 2078\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

Which one of the following committees recommended the abolition of reservation of items for small scale sector in industry

- a. Abid Hussain Committee
- b. Narasimhan Committee
- c. Nayak Committee
- d. Rakesh Mohan Committee

Options:

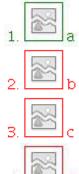


Question Number: 129 Question Id: 2079 Question Type: MCQ Option Shuffling: No

Shilling is the currency of

- a. Kenya
- b. South Korea
- c. Israel
- d. Ghana

Options:



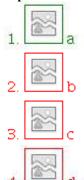
Question Number: 130 Question Id: 2080 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which one of the following is the oldest Grand Slam of the World

- a. Wimbledon
- b. French Open
- c. Australian Open
- d. US Open

Options:



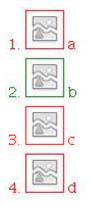
Question Number: 131 Question Id: 2081 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The Dronacharya award for sports coaches was instituted in the year .

- a. 1984
- b. 1985
- c. 1987
- d. 1988

Options:



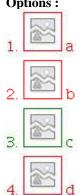
Question Number: 132 Question Id: 2082 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Number of chamber found in the heart of whale is

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

Options:



Question Number: 133 Question Id: 2083 Question Type: MCQ Option Shuffling: No

Match the hormone in list 1 with list 2 and select the correct answer using codes given below

list-1

list-2

A. Adrenaline

1. Anger, fear, danger

B. Estrogen

2. Attracting partners through sense of smell

C. Insulin

3. Females

D. Pheromones

4.Glucose

a. A-3

B-1

C-4

D-2

b. A-1

B-3

C-2

D-4

c. A-1

B-3

C-4

D-2

d. A-3

B-1

C-2

D-4

Options:









 $Question\ Number: 134\ \ Question\ Id: 2084\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

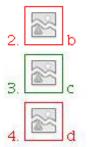
Correct : 1.0 Wrong : 0.33

For a colour blind person, red colour appears as

- a. Yellow
- b. Blue
- c. Green
- d. Violet

Options:





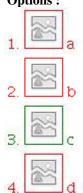
Question Number: 135 Question Id: 2085 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The catalyst used in the manufacture of the sulphuric acid by contact process is

- a. Al₂O₃
- b. Cr₂O₃
- c. V₂O₅
- d. MnO₂

Options:



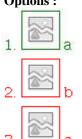
Question Number: 136 Question Id: 2086 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which one of the following pairs of materials serves as electrodes in chargeable batteries commonly used in devices such as torch lights, electric shavers etc?

- a. Nickel and cadmium
- b. Zinc and carbon
- c. lead peroxide and lead
- d. Iron and cadmium

Options:





 $Question\ Number: 137\ \ Question\ Id: 2087\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

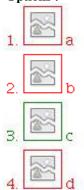
Correct : 1.0 Wrong : 0.33

Which one of the following vitamins is essential for coagulation of blood?

a. Vitamin A

- b. Vitamin B₁₂
- c. VitaminK
- d. Vitamin D

Options:



 $Question\ Number: 138\ \ Question\ Id: 2088\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

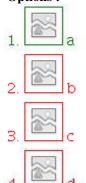
Correct: 1.0 Wrong: 0.33

Which three districts have been included into the national capital Region on June

09,2015?

- a. Jind, Karnal, Muzaffarnagar
- b. Jind, karnal, rohtak
- c. Palwal, karnal, Muzaffarnagar
- d. Bhiwani, Rohtak, karnal

Options:

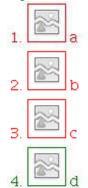


Question Number: 139 Question Id: 2089 Question Type: MCQ Option Shuffling: No

The sixth Petersberg climate dialogue to decide on a negotiation draft for the UN Climate change conference in Paris held in which city on may 18-19,2015

- a. Tokyo
- b. Shanghai
- c. Kyoto
- d. Berlin

Options:



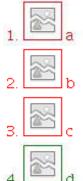
 $Question\ Number: 140\ \ Question\ Id: 2090\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

The state, which signed \$400 million loan pact with WTO on june 4, 2015 is......

- a. Andhra pradesh
- b. Telangana
- c. kerala
- d. Tamil nadu

Options:

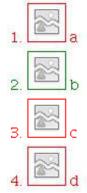


 $Question\ Number: 141\ \ Question\ Id: 2091\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Pointing to a photograph, a lady said, "He is the husband of my husband's father's daughter." How is the person in the photograph related to the lady?

- a. Brother
- b. Brother-in-Law
- c. Cousin
- d. Son-in-Law

Options:



Question Number: 142 Question Id: 2092 Question Type: MCQ Option Shuffling: No

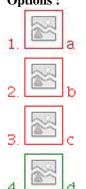
Correct: 1.0 Wrong: 0.33

Three of the four number-pairs in the alternatives have numbers which hold the same relationship as the numbers in the number-pair given below. Find out the number-pair in which the two numbers do not hold the same relationship as the two numbers in the number-pair below.

63:8

- a. 48:7
- b. 35:6
- c. 15:4
- d. 79:9

Options:



Question Number: 143 Question Id: 2093 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

'Book' is related to 'Chapter' in the same way as 'School' is related to

- Classrooms
- b. Village
- c. Education
- d. Boundary

Options:



Question Number: 144 Question Id: 2094 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

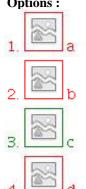
In a six member panel sitting in a row, R is to the right of Q and O is to the right of P.

S is not sitting close to P. N is between Q and O.

Which two persons are sitting in the middle?

- a. NO
- b. QR
- c. QN
- d. RS

Options:



Question Number: 145 Question Id: 2095 Question Type: MCQ Option Shuffling: No

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

2. Income

1.Child

- 3. Birth 4. Employment 5. Education 6. Infant

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

Options:







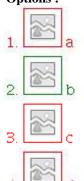
Question Number: 146 Question Id: 2096 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

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

- 2, 4, 6, 10, 14, 20, 26
 - a. 6
 - b. 10
 - c. 14
 - d. 20

Options:

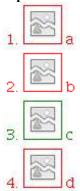


Question Number: 147 Question Id: 2097 Question Type: MCQ Option Shuffling: No

In a certain code, '327' means 'girls are beautiful'; '952' means 'leaves are green' and '639' means 'green is beautiful'. Which digit means 'leaves' in that code?

- a. 9
- b. 6
- c. 5
- d. 2

Options:



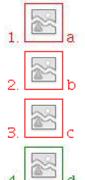
Question Number: 148 Question Id: 2098 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

In a certain language, 'POPULAR' is coded as 'RPAOLPU', then in that language, 'CENTRAL' would be coded as:

- a. LCARTNE
- b. LCEARNT
- c. CLEANRT
- d. LCAERNT

Options:

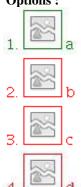


Question Number: 149 Question Id: 2099 Question Type: MCQ Option Shuffling: No

Ravi cycled 7 km Southwards, tumed right and covered 4 km. Then he tumed right again and moved 10 km. How far is he from the starting point by shortest distance?

- a. 5 km
- b. 4 km
- c. 6km
- d. 7 km

Options:



Question Number: 150 Question Id: 2100 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The numbers in the following figures follow a pattern. Find the number which will replace the question mark.

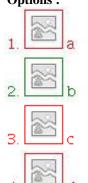
	4	
6	36	3
	5	

7	
44	4
6	
	44

	9	
4	?	3
	7	32.
		8

- a. 66
- b. 69
- c. 52
- d. 112

Options:



Railway Recruitment Board

Notations:

1.Options shown in green color and with Licon are cor

2.Options shown in red color and with

icon are incorrect

Question Paper Name: Junior Engineer 29th Aug Shift 3 Actual

Subject Name: Junior Engineer
Creation Date: 2015-08-18 12:39:44.0

Cut Off:0Duration:120Number of Questions:150Total Marks:150.0

Junior Engineer

1
12
0
120
No
No
0
150.0
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Junior Engineer

Section Id: 12
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

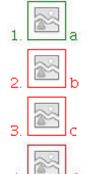
Sub-Section Number: 1
Sub-Section Id: 12
Question Shuffling Allowed: Yes

Question Number: 1 Question Id: 2101 Question Type: MCQ Option Shuffling: No

An adiabatic wall is one which

- a. prevents thermal interaction
- b. permits thermal interaction
- c. encourage thermal interaction
- d. discourage thermal interaction

Options:



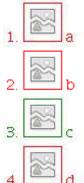
Question Number: 2 Question Id: 2102 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

An ideal gas at 27°C is heated at constant pressure till the volume becomes three times. The temperature of the gas will then be

- a. 81°C
- b. 900°C
- c. 627°C
- d. 927°C

Options:

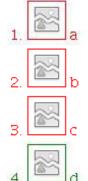


Question Number: 3 Question Id: 2103 Question Type: MCQ Option Shuffling: No

The unit of a following parameter is not m²/s

- a. Thermal diffusivity
- b. Kinematic viscosity
- c. Mass diffusivity
- d. Dynamic viscosity

Options:



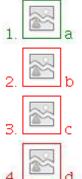
Question Number: 4 Question Id: 2104 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The effectiveness of a fin will be maximum in an environment with

- a. Free convection
- b. Forced convection
- c. Radiation
- d. Convection and radiation

Options:

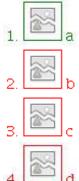


Question Number: 5 Question Id: 2105 Question Type: MCQ Option Shuffling: No

In SI engine for higher thermal efficiency

- a. Compression ratio should be high
- b. Heat liberation during combustion should be maximum
- c. Surface to volume ratio should be high
- d. Long flame travel distance





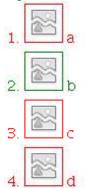
Question Number: 6 Question Id: 2106 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The stoichiometric air-fuel ratio by volume for combustion of carbon monoxide in air is

- a. 1.19
- b. 2.38
- c. 3.57
- d. 4.76

Options:

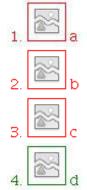


Question Number: 7 Question Id: 2107 Question Type: MCQ Option Shuffling: No

Increase in entropy of a system represents

- a. Increase in availability of energy
- b. Increase in temperature
- c. Decrease in pressure
- d. Degradation of energy

Options:



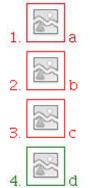
Question Number: 8 Question Id: 2108 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The main purpose of chaplets is

- a. To ensure directional solidification
- b. To provide efficient venting
- c. For aligning the mould boxes
- d. To support the cores

Options:

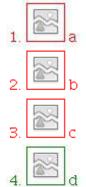


Question Number: 9 Question Id: 2109 Question Type: MCQ Option Shuffling: No

In wire drawing process, the bright shining surface on the wire is obtained if one

- a. Is not using a lubricant
- b. Is using Low tooling cost
- c. Uses thick paste lubricant
- d. Use thin fluid lubricant

Options:



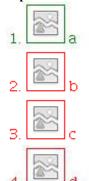
Question Number: 10 Question Id: 2110 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

In the rolling process, roll separating force can be decreased by

- a. Reducing the roll diameter
- b. Increasing the roll diameter
- c. Providing backup rolls
- d. Increasing the friction between the rolls and the metal

Options:

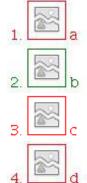


Question Number: 11 Question Id: 2111 Question Type: MCQ Option Shuffling: No

Pinch effect in welding is the result of

- a. Expansion of gases in the arc
- b. Electromagnetic forces
- c. Electric force
- d. Surface tension of the molten metal

Options:



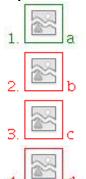
Question Number: 12 Question Id: 2112 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

In arc welding D.C. reverse polarity is used to bear greater advantage in

- a. Overhead welding
- b. Flat welding of lap joints
- c. Edge welding
- d. Flat welding of butt joints

Options:

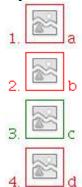


Question Number: 13 Question Id: 2113 Question Type: MCQ Option Shuffling: No

The straight grades of cemented carbide cutting tool materials contain

- a. Tungsten carbide only
- b. Tungsten carbide and titanium carbide
- c. Tungsten carbide and cobalt
- d. Tungsten carbide and coal carbide

Options:



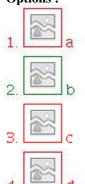
Question Number: 14 Question Id: 2114 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Gear cutting on a milling machine using an involute profile cutter is a

- a. Gear forming process
- b. Gear generating process
- c. Gear shaping process
- d. Highly accurate gear producing process

Options:

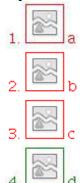


Question Number: 15 Question Id: 2115 Question Type: MCQ Option Shuffling: No

A body containing electrons less than its normal number, it is said to be

- a. neutral
- b. atom
- c. negatively charged
- d. positively charged

Options:



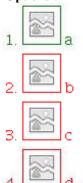
Question Number: 16 Question Id: 2116 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

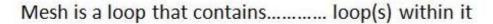
Electric current may be defined as

- a. Rate of transfer of electric charge
- b. Velocity of charge
- c. Capacity to store charges
- d. Charging of Battery

Options:

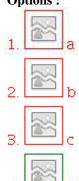


Question Number: 17 Question Id: 2117 Question Type: MCQ Option Shuffling: No



- a. 1
- b. 2
- c. 4
- d. no

Options:



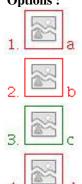
 $Question\ Number: 18\ \ Question\ Id: 2118\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

The emf per turn of a single phase 2200/220 V, 50 Hz transformer is 10 V. The number of primary turns are

- a. 22
- b. 10
- c. 220
- d. 50

Options:

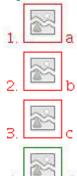


Question Number: 19 Question Id: 2119 Question Type: MCQ Option Shuffling: No

Transformer on "No-Load" means

- a. there is no weight of transformer
- b. there are no losses in transformer
- c. there is no load on primary
- d. there is no load on secondary

Options:



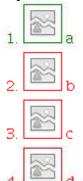
 $Question\ Number: 20\ \ Question\ Id: 2120\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

In electric machines, copper losses occur

- a. in rotor and stator windings
- b. in commutator
- c. due to high speed
- d. due to flux distortion

Options:

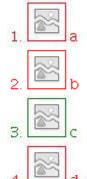


Question Number: 21 Question Id: 2121 Question Type: MCQ Option Shuffling: No

Armature is the Part of machine

- a. reciprocating
- b. static
- c. rotating
- d. vibrating

Options:



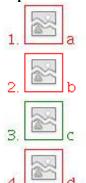
Question Number: 22 Question Id: 2122 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Good commutation means

- a. good sparking at the brushes
- b. excessive sparking at the brushes
- c. no sparking at the brushes
- d. half the normal sparking at the brushes

Options:

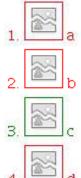


Question Number: 23 Question Id: 2123 Question Type: MCQ Option Shuffling: No

The operation of an induction motor is based on

- a. Lenz's Law
- b. Ampere's Law
- c. principle of mutual induction
- d. principle of self induction

Options:



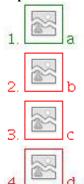
Question Number: 24 Question Id: 2124 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The starter is used to

- a. produce back emf
- b. protect against overload
- c. limit the starting current
- d. limit the speed

Options:



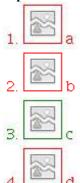
For the above question, User had specified 'ignore' during keys upload.

Question Number: 25 Question Id: 2125 Question Type: MCQ Option Shuffling: No

In Exclusive-OR gate, when output is zero, the inputs are

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

Options:



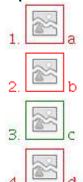
Question Number: 26 Question Id: 2126 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The semiconductors behave as..... at 0 K.

- a. semiconductor
- b. superconductor
- c. insulator
- d. conductor

Options:

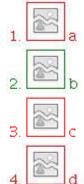


Question Number: 27 Question Id: 2127 Question Type: MCQ Option Shuffling: No

The flow of electrons caused by variation in concentration is known as

- a. drift current
- b. diffusion current
- c. conventional current
- d. non-conventional current

Options:



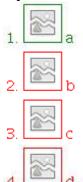
Question Number: 28 Question Id: 2128 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

With the increase in junction temperature, reverse current of the P-N junction

- a. increases
- b. decreases
- c. remains same
- d. decreases upto a limit and then becomes constant

Options:

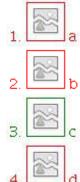


Question Number: 29 Question Id: 2129 Question Type: MCQ Option Shuffling: No

The doping of a tunnel diode is approximatelytimes higher than a conventional diode

- a. 200
- b. 500
- c. 1000
- d. 2000

Options:



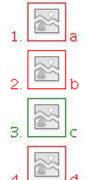
Question Number: 30 Question Id: 2130 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Transistors are analogous to

- a. Vaccum diode
- b. Varactor diode
- c. Vaccum triode
- d. tunnel diode

Options:

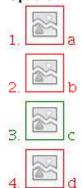


Question Number: 31 Question Id: 2131 Question Type: MCQ Option Shuffling: No

What is the ripple 2 V on average of 50 V

- a. 0.02
- b. 100
- c. 0.04
- d. 25

Options:



Question Number: 32 Question Id: 2132 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Electric networks which permit unatteneuated transmission of signals are called

- a. Rectifier
- b. Diode
- c. Transistor
- d. Filter

Options:



Question Number: 33 Question Id: 2133 Question Type: MCQ Option Shuffling: No

The conversion of decimal 0.0625 into its binary equivalent will be

- a. 0.001
- b. 0.1010
- c. 0.1011
- d. 0.0001

Options:









Question Number: 34 Question Id: 2134 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Commutative law states

- a. A.B= B.A
- b. A.(B.C)= (A.B).C
- c. A+(B+C)=(A+B)+C
- d. A.(B+C) = A.B + A.C

Options:





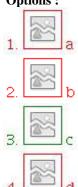


 $Question\ Number: 35\ \ Question\ Id: 2135\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

If the dynamic viscosity of a fluid is 0.5 poise and specific gravity is 0.5, then kinematic viscosity of that fluid in strokes is

- a. 0.25
- b. 0.50
- c. 1.0
- d. 2.0

Options:



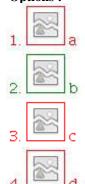
Question Number: 36 Question Id: 2136 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The variation in the volume of a liquid with the variation of pressure is called its

- a. surface tension
- b. compressibility
- c. capillarity
- d. viscosity

Options:



Question Number: 37 Question Id: 2137 Question Type: MCQ Option Shuffling: No

Which of the following is not a PERT event

- a. Site investigation started
- b. Sessional work completed
- c. Bus starts from Jaipur
- d. Class is being attended

Options:



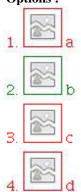
Question Number: 38 Question Id: 2138 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The ratio between void ratio (e), degree of saturation (s), water content (w), and specific gravity of solids (G), is given by

- a. e+s=w+G
- b. exs=wxG
- c. e/s = w/G
- d. (s+e)/w = (G+e)/s

Options:

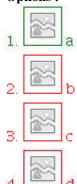


Question Number: 39 Question Id: 2139 Question Type: MCQ Option Shuffling: No

The fundamental principle of surveying is to work from the

- a. whole to the part
- b. part to the whole
- c. lower level to higher level
- d. higher level to lower level





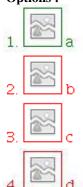
Question Number: 40 Question Id: 2140 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The error in measured length due to sag of chain or tape is known as

- a. positive error
- b. negative error
- c. compensating error
- d. instrumental error

Options:



Question Number: 41 Question Id: 2141 Question Type: MCQ Option Shuffling: No

The coefficient of volume compressibility is

- a. directly proportional to the void ratio
- b. inversely proportional to the void ratio
- c. directly proportional to the coefficient of compressibility
- d. inversely proportional to the coefficient of compressibility

Options:

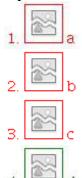
Question Number: 42 Question Id: 2142 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The ratio of transverse strain to the longitudinal strain under an axial load is known as

- a. tangent modulus of elasticity
- b. bulk modulus of elasticity
- c. modulus of rigidity
- d. Poisson's ratio

Options:

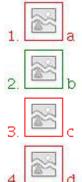


Question Number: 43 Question Id: 2143 Question Type: MCQ Option Shuffling: No

In the conventional pre-stressing, the diagonal tension in concrete

- a. increases
- b. decreases
- c. does not change
- d. may increase or decrease

Options:



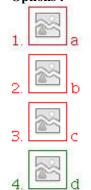
Question Number: 44 Question Id: 2144 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A channel section consists of

- a. two webs
- b. two flanges
- c. two webs and two flanges
- d. one web and two flanges

Options:

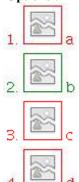


Question Number: 45 Question Id: 2145 Question Type: MCQ Option Shuffling: No

For making spiral staircases, ideal material is

- a. pig iron
- b. cast iron
- c. wrought iron
- d. steel

Options:



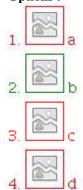
Question Number: 46 Question Id: 2146 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

On the basis of durability test, Forest Research Institute of India, Dehradun, a tree is highly durable if its average life is more than

- a. 5 years
- b. 10 years
- c. 15 years
- d. 20 years

Options:

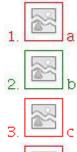


Question Number: 47 Question Id: 2147 Question Type: MCQ Option Shuffling: No

Current density has the dimensions

- a. IL
- b. IL-2
- c. IL-3
- d. I²L⁻²

Options:



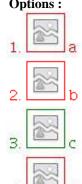
Question Number: 48 Question Id: 2148 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which one of the following effects is used in measuring power?

- a. Seeback
- b. Ferrari
- c. Induction
- d. Hall

Options:

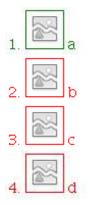


Question Number: 49 Question Id: 2149 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Insertion of a dielectric material between the plates of an air capacitor

- a. increases the capacitance
- b. decreases capacitance
- c. has no effect an capacitance
- d. increases breakdown voltage



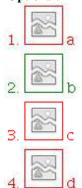
Question Number: 50 Question Id: 2150 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The current through the coil of an electromagnet is doubled. The magnetic field around the coil

- a. is halved
- b. is doubled
- c. becomes four times
- d. remains the same

Options:

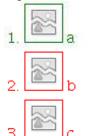


Question Number: 51 Question Id: 2151 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The function of shunt in an ammeter is to

- a. by pass the current
- b. increase sensitivity of meter
- c. increase resistance of meter
- d. It has no use





Question Number: 52 Question Id: 2152 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

In surface waters, the presence of taste and odour due to dissolved gases may be removed by

CI.

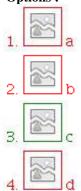
a. filteration

b. coagulation

c. aeration

d. disinfection

Options:



Question Number: 53 Question Id: 2153 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

In the determination of alkalinity, 1 ml of 0.02 N sulphuric acid will neutralize

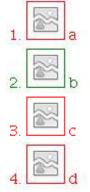
a. 10 mg of alkalinity as CaCO3

b. 1 mg of alkalinity as CaCO3

c. 0.1 mg of alkalinity as CaCO₃

d. 0.01 mg of alkalinity as CaCO₃

Options:

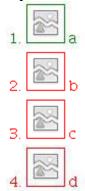


Question Number: 54 Question Id: 2154 Question Type: MCQ Option Shuffling: No

The amount of oxygen required to decompose the organics under strong acidic conditions is called

- a. chemical oxygen demand
- b. biochemical oxygen demand
- c. biological oxygen demand
- d. theoretical oxygen demand

Options:



Question Number: 55 Question Id: 2155 Question Type: MCQ Option Shuffling: No

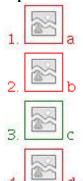
Correct: 1.0 Wrong: 0.33

The photochemical smog is

a. criteria pollutant

- b. primary pollutant
- c. secondary pollutant
- d. carcinogenic pollutant

Options:

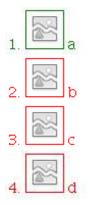


Question Number: 56 Question Id: 2156 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The A - weighted scale covers sounds of frequencies from

- a. 800 to 3000 HZ
- 500 to 2000 HZ
- c. 1000 to 3000 HZ
- d. 1200 to 4000 HZ



Question Number: 57 Question Id: 2157 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The rain water turned acidic when its pH falls below

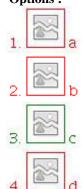
a. 7.0

b. 6.5

c. 5.6

d. 5.2

Options:



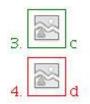
Question Number: 58 Question Id: 2158 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

If a symbol is erased from a memory cell as a consequence of reading, then the readout is said to be

- a. Non-volatile
- b. Volatile
- c. Destructive
- d. Non-destructive





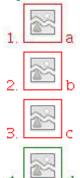
Question Number: 59 Question Id: 2159 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which of the following device is used to recognize a prespecified type of mark made by pencil or pen?

- a. Bar-Code Reader
- b. OCR
- c. Scanner
- d. OMR

Options:

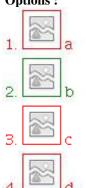


Question Number: 60 Question Id: 2160 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Both EPROM and EEPROM are

- a. Sequential access memory
- b. Random access memory
- c. Volatile memory
- d. Destructive memory



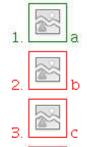
Question Number: 61 Question Id: 2161 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The Unix operating system is written in

- a. C
- b. C++
- c. Pascal
- d. Fortran

Options:



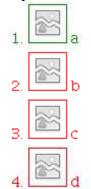
Question Number: 62 Question Id: 2162 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The octal representation of the binary number (1101010.01)2 is

- a. (152.2)₈
- b. (152.1)₈
- c. (650.2)₈
- d. (650.1)₈

Options:

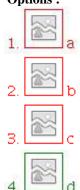


Question Number: 63 Question Id: 2163 Question Type: MCQ Option Shuffling: No

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

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

Options:



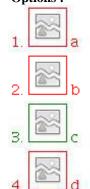
Question Number: 64 Question Id: 2164 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which of the following takes one statement of a high-level language program at a time and translate it into machine instruction, which is immediately executed?

- a. Assembler
- b. Compiler
- c. Interpreter
- d. Loader

Options:

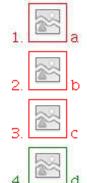


Question Number: 65 Question Id: 2165 Question Type: MCQ Option Shuffling: No

Which of the following is a database management system?

- a. MS-Word
- b. MS-Excel
- c. MS-PowerPoint
- d. MS-Access

Options:



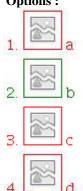
Question Number: 66 Question Id: 2166 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which of the following is not an application layer protocol?

- a. HTTP
- b. IP
- c. TELNET
- d. FTP

Options:

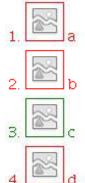


Question Number: 67 Question Id: 2167 Question Type: MCQ Option Shuffling: No

Netscape Navigator is a

- a. Network layer protocol
- b. Presentation layer protocol
- c. Web browser
- d. Web search engine

Options:



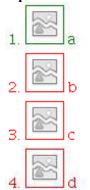
Question Number: 68 Question Id: 2168 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Top view of a triangular plane appears as a line and its front view as triangle of original size. The plane is:

- a. perpendicular to HP and parallel to VP,
- b. perpendicular to VP and parallel to HP,
- c. Parallel to HP and VP both and perpendicular to PP,
- d. Inclined to HP and VP both.

Options:



Question Number: 69 Question Id: 2169 Question Type: MCQ Option Shuffling: No

The bolt shown in the following figure represents a:



- a. Square bolt,
- b. T-headed bolt,
- c. Hook bolt,
- d. Eye bolt.

Options:









Question Number: 70 Question Id: 2170 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

On a drawing 10 cm length represents an actual distance of 1 m. The R.F. of the scale is:

- a. 10
- b. 100
- c. $\frac{1}{10}$
- d. $\frac{1}{100}$







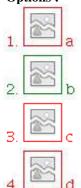


Correct : 1.0 Wrong : 0.33

A string is wound over a circular disc. It is now unwound with its "free end" keeping it remain tight and tangent to the disc. The curve traced by the "free end" is

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

Options:



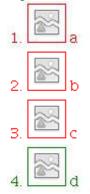
Question Number: 72 Question Id: 2172 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

An isometric projection plane is one which is inclined to the three orthogonal planes at:

- a. 300
- b. 60°
- c. 150
- d. equally

Options:

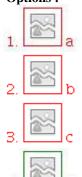


Question Number: 73 Question Id: 2173 Question Type: MCQ Option Shuffling: No

A bullet of mass m kg is fired horizontally with a velocity v m/s from a gun of mass 100 m kg. The recoil velocity of the gun is

- a. v m/s
- b. v m/s
- c. (v/100) m/s
- d. -(v/100) m/s.

Options:



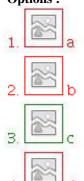
Question Number: 74 Question Id: 2174 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Let g m/s² be the acceleration due to gravity at a place. If mass and radius of the earth are reduced to half of its value, the weight of 1 kg object will become

- a. 0.5 gN
- b. 1gN
- c. 2gN
- d. 4 gN

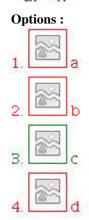
Options:



Question Number: 75 Question Id: 2175 Question Type: MCQ Option Shuffling: No

The kinetic energy of an object of mass m is twice the kinetic energy of object B of mass 2 m. Let v_A and v_B represent the velocity of object A and B, respectively. Then v_A/v_B is

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



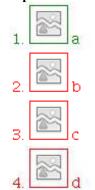
Question Number: 76 Question Id: 2176 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

. When a sound wave travels in a medium, it creates

- a. compressions and rarefactions alternatively
- b. compressions only
- c. rarefactions only
- d. few successive regions of compressions and then few successive regions of rarefactions.

Options:

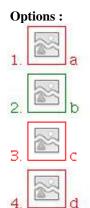


Question Number: 77 Question Id: 2177 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

An object is placed before a convex mirror. The image is

- a. real
- b. virtual
- c. may be real or virtual depending upon distance of the object from the mirror.
- d. magnified.



Question Number: 78 Question Id: 2178 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

A current of 0.1 A flows towards left in a conductor. The number of electrons passing per second through any cross section of the conductor and their direction is about

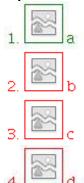
a. 6 x 1017 towards right

b. 6 x 1017 towards left

c. 6 x 1018 towards right

d. 6 x 10¹⁸ towards left.

Options:



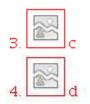
Question Number: 79 Question Id: 2179 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which one of the following is correct concerning the reaction?

- a. H2S is reduced
- b. H₂S is oxidized
- c. SO₂ is a reducing agent
- d. H2S is an oxidizing agent





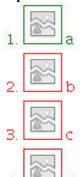
Question Number: 80 Question Id: 2180 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Conversion of a solid directly to a gaseous state is known as

- a. Sublimation
- b. Evaporation
- c. Diffusion
- d. Liquefaction

Options:



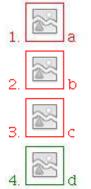
Question Number: 81 Question Id: 2181 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The solution of a substance 'A' turns red litmus blue. Which one of the following is the most appropriate pH range in which the substance 'A' will be found?

- a. 0 -less than 6
- b. 6-less than 12
- c. 7 less than 13
- d. 7-less than 14

Options:

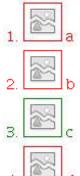


Question Number: 82 Question Id: 2182 Question Type: MCQ Option Shuffling: No

Which one of the following sets of elements is arranged in correct order of their increasing electro negativity?

- a. S O N P
- b. S P Si Al
- c. I Br Cl F
- d. Mg Na K Ca

Options:



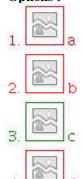
Question Number: 83 Question Id: 2183 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Which one of the following is the molecular formula of n- hexyne?

- a. C₆H₁₄
- b. C6H12
- c. C₆H₁₀
- d. C6H8

Options:

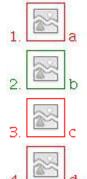


Question Number: 84 Question Id: 2184 Question Type: MCQ Option Shuffling: No

Malleability is the property of metals

- a. to be drawn into wires
- b. to be converted into sheets
- c. to conduct electricity
- d. to conduct heat

Options:



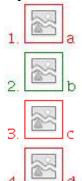
Question Number: 85 Question Id: 2185 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

HIV, the cause of AIDS is

- a. a bacterium
- b. a virus
- c. a protozoan
- d. a poisonous bug

Options:



Question Number: 86 Question Id: 2186 Question Type: MCQ Option Shuffling: No

In a quiz, the requirements for photosynthesis were mentioned as

A) Solar radiation B) A Pigment C) An Atmospheric gas D) A pH neutral chemical compound

Which out of A, B,C,D meant Chloroplast and Water?

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

Options:









Question Number: 87 Question Id: 2187 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

In human beings, exchange of gases occurs between lungs and blood at

- a. Trachea
- b. Bronchi
- c. Alveoli
- d. Pleura

Options:









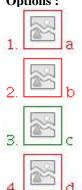
 $Question\ Number: 88\ \ Question\ Id: 2188\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

In the food chain given below at which Trophic level is the Secondary consumer?

Grass → Grasshopper → Frog → Snake → Hawk

- a. First
- b. Second
- c. Third
- d. Fourth

Options:



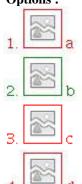
Question Number: 89 Question Id: 2189 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Once mosquitoes were eradicated by DDT. Now they are resistant to DDT. This is an example of

- a. Adaptation
- b. Natural Selection
- c. Recombination
- d. Mutation

Options:

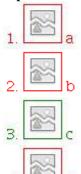


Question Number: 90 Question Id: 2190 Question Type: MCQ Option Shuffling: No

Deficiency of a hormone causes the disorder Diabetes mellitus. Which endocrine gland secretes this hormone?

- a. Thyroid
- b. Pituitary
- c. Pancreas
- d. Adrenal

Options:



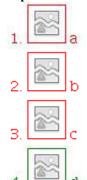
Question Number: 91 Question Id: 2191 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Let x be the greatest number that divides 3739, 2270 and 6677 leaving the same remainder in each case. The sum of digits of x is

- a. 9
- b. 12
- c. 18
- d. 20

Options:



Question Number: 92 Question Id: 2192 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

Let $a=2^5 \times 7^4 \times (13)^5$, $b=2^4 \times 7^5 \times (13)^4$, $c=2^6 \times 7^3 \times (13)^4$ and $d=2^7 \times 7^2 \times (13)^6$

Then LCM of a, b, c and d is

- a. 26 x(91)5
- b. 52 x (182)⁵
- c. $(13)^6 \times (14)^7$
- d. 52 x (182)4

Options:









Question Number: 93 Question Id: 2193 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The tax on a commodity is diminished by 20% and thereby the consumption increase by 25%. The increase or decrease percent in the revenue derived from it is

a. 5 % decrease

b. 5 % increase

c. 2 % increase

d. no increase or decrease

Options:









Question Number: 94 Question Id: 2194 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

A: B = $\frac{1}{2}$: $\frac{1}{3}$, B: C = $\frac{1}{4}$: $\frac{1}{5}$ and C: D $\frac{1}{6}$: $\frac{1}{7}$, then A: D is

a. 7:2

b. 35:16

c. 7:6

d. 3:2









Question Number: 95 Question Id: 2195 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The ratio of two numbers is 4:3. If each number is increase by 6, then their ratio becomes 5:4. The sum of the numbers exceeds their difference by

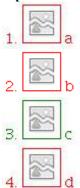
a. 24

b. 30

c. 36

d. 42

Options:



Question Number: 96 Question Id: 2196 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The capacities of two vessels are in the ratio 3:5. The first vessel contains acid and water in the ratio 5:1 whereas the other one contains acid and water in the ratio of 4:1. If the contents of these vessels are emptied into another vessel, the ratio of acid and water in it will be

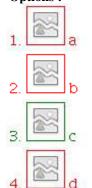
a. 12:7

b. 12:5

c. 13:3

d. 13:5

Options:

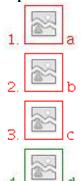


 $Question\ Number: 97\ \ Question\ Id: 2197\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

A mixture of 180 litres of spirit and water contains 25 % water. How much water must be added to it to increase the percentage of water to 40?

- a. 15
- b. 18
- c. 20
- d. 45

Options:



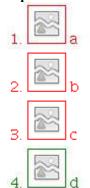
Question Number: 98 Question Id: 2198 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A sum of Rs.61800 is to be paid back in two equal annual instalments. How much is each instalment, if the rate charged is 6 % per annum, compounded annually?

- a. Rs.30900
- b. Rs.31800
- c. Rs.32908
- d. Rs.33708

Options:

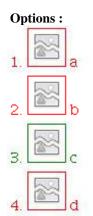


 $Question\ Number: 99\ \ Question\ Id: 2199\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

Two equal sums are lent at the same time at 6% and 5% simple interest respectively. The first is received 2 years earlier than the second, and the amount in each case is Rs.4800. Each sum is of Rs.

- a. 2000
- b. 2500
- c. 3000
- d. 4000



Question Number: 100 Question Id: 2200 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The marked price of a bed is Rs. 9575.A shopkeeper allows a discount of 12 % on its marked price and still gains 10%. The difference (in Rs.) of the marked price and cost price of the bed is

- 1915
- b. 1820
- c. 1718
- d. 866

Options:



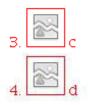
Question Number: 101 Question Id: 2201 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Anu bought two articles for Rs.2150 each. She sold one at a loss of 8 % . If she had a gain of Rs.1230 on the whole transaction, the selling price of second article is Rs.x more than the selling price of the first one. The value of x is

- 1478
- b. 1574
- 2150
- d. 1978





Question Number: 102 Question Id: 2202 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

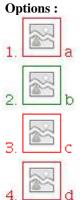
A steamer goes downstream and covers the distance between two ports in 4 hours while it covers the same distance upstream is 5 hours. If the speed of the stream is 2 km/hour, the speed of the steamer in still water, in km/h, is

a. 16

b. 18

c. 20

d. 22



Question Number: 103 Question Id: 2203 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

A person has to cover a distance of 160 km in 8 hours. If he covers half of the journey in $\frac{3}{4}$ of the time, what must be his speed (km/hour) to cover the remaining distance in the remaining time?

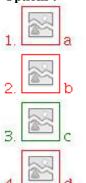
a. 30

b. 35

c. 40

d. 42

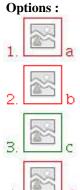
Options:



Question Number: 104 Question Id: 2204 Question Type: MCQ Option Shuffling: No

A can do a piece of work in 15 days. He did it for 3 days and was then joined by B. The work lasted for 11 days altogether. In how many days could B alone do the same work?

- a. 14
- b. 28
- c. 30
- d. 32



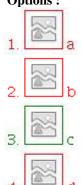
Question Number: 105 Question Id: 2205 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

6 men and 8 women can do a piece of work in 10 days while 26 men and 48 women can do the same work in 2 days. 15 men and 20 women will do the same work in days

- a. 2
- c. 4
- d. 5

Options:

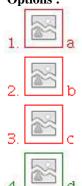


Question Number: 106 Question Id: 2206 Question Type: MCQ Option Shuffling: No

Visitors to a show were charged Rs.150 each on the first day, Rs.75 each on the second day and Rs.50 each on the third day. Total attendance on those three days were in the ratio of 3:4:13, The average charge per person for the whole show was

- a. Rs.90.16
- b. Rs.80.50
- c. Rs.75
- d. Rs.70

Options:



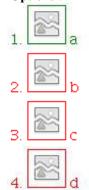
Question Number: 107 Question Id: 2207 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The average age of 20 boys and x girls is 11.6 years. The average age of boys is 11 years and that of girls is 12 years. The ratio of the number of girls to that of boys is

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

Options:



Question Number: 108 Question Id: 2208 Question Type: MCQ Option Shuffling: No

If the equation (k-12) $x^2 + 2(k-12) x + 2 = 0$ has real and equal roots, then the sum of the possible values of k is

- a. 12
- b. 14
- c. 22
- d. 26

Options:



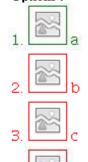
 $Question\ Number: 109\ \ Question\ Id: 2209\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

The ratio of the sum and product of the roots of $ax^2 - 2bx + c=0$, (a,b,c>0) is

- a. 2b:c
- b. 2c:b
- c. 2a:b
- d. 2b:a

Options:



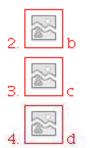
Question Number: 110 Question Id: 2210 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The expression x4+2x3-6x2-14x-7 is factored as

- a. $(x+1)(x+1)(x^2-7)$
- b. $(x-1)(x-1)(x^2+7)$
- c. $(x-1)(x+1)(x^2+7)$
- d. $(x-1)(x-1)(x^2-7)$





Question Number: 111 Question Id: 2211 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

One of the factors of x(3x+2)(x-2)(3x-4)-21 is

- a. 3x+7
- b. x-1
- c. 3x-7
- d. $3x^2+4x+3$

Options:









Question Number: 112 Question Id: 2212 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

If the sum of first n terms of an arithmetic progression is $3n^2 + 2n$, then its 10^{th} term is

- a. 45
- b. 59
- c. 110
- d. 320

Options:









Question Number: 113 Question Id: 2213 Question Type: MCQ Option Shuffling: No

Fourth term of an infinite geometric series is $\frac{4}{49}$ and common ratio is $\frac{1}{7}$. The sum of this series is

- a. $32\frac{2}{3}$
- b. $30\frac{1}{3}$
- c. 19
- d. 24

Options:









Question Number: 114 Question Id: 2214 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

 $Tan^4\theta$ +tan^2 θ =1 , then the value of $\frac{\cos^2\theta\,(1+\cos^2\theta)}{2}$ is

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

Options:







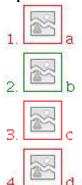


Question Number: 115 Question Id: 2215 Question Type: MCQ Option Shuffling: No

At a point 100m away from the base of a tree, a surveyor measures the angle of elevation to the top of a tree to be 30°. The sum of the distance from the point to the top of the tree and the height of the tree is

- a. $\frac{200\sqrt{3}}{3}$
- b. 100√3 m
- c. 200√3
- d. 300√3 m

Options:



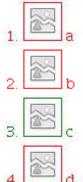
Question Number: 116 Question Id: 2216 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which one of the following propounded that 'destiny determines everything, man is powerless'

- a. Jains
- b. Buddhists
- c. Ajivakas
- d. Mimansakas

Options:



Question Number: 117 Question Id: 2217 Question Type: MCQ Option Shuffling: No

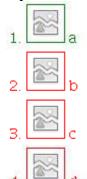
Arrange the following battles of the Mughal period in Chronological order-

1. Battle of Ghagara 2. Battle of Khanwa 3. Battle of Chausa 4. Battle of Samugarh

Select the answer from the following codes

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

Options:



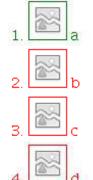
Question Number: 118 Question Id: 2218 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

During the period of Indian freedom struggle, who amongst the following started the Central Hindu School

- a. Annie Besant
- b. Bhikaji Cama
- c. MG Ranade
- d. Madan Mohan Malviya

Options:

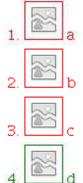


Question Number: 119 Question Id: 2219 Question Type: MCQ Option Shuffling: No

The difference in the duration of day and night increases as one moves from

- a. West to East
- b. East and West of Prime Meridian
- c. Poles to Equator
- d. Equator to Poles

Options:



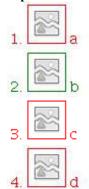
Question Number: 120 Question Id: 2220 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which of the following is called 'Gateway of Pacific'

- a. Suez Canal
- b. Panama Canal
- c. Bering Sea
- d. Gulf of Alaska

Options:



Question Number: 121 Question Id: 2221 Question Type: MCQ Option Shuffling: No

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

List 1(Steel Plants)

- A. Bhilai
- B. Rourkela
- C. Durgapur
- D. Burnpur
- a. A-3
- 1000
 - 24 V214

A-4

- . A- 2
- d. A-2
- B- 1

B-3

B-3

B-4

- C- 4
- C-2
 - =
- C- 4 C- 1
- D-3

D-2

D- 1

D-1

List 2(Countries/Co. Associated)

- 1. Indian Iron and Steel Co.
- 2. Russia
- 3. Germany
- 4. Great Britain

Options:

b.









 $Question\ Number: 122\ \ Question\ Id: 2222\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

An endoscope, used by doctors for examine the inside of patient's stomach, works on the principle of

- a. Reflection of light
- b. Dispersion of light
- c. Refraction of light
- d. Total internal reflection of light

Options:





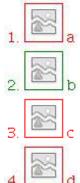


Question Number: 123 Question Id: 2223 Question Type: MCQ Option Shuffling: No

The coil in a heater is made up of

- a. Chromium
- b. Nichrome
- c. Tungsten
- d. Nickel

Options:



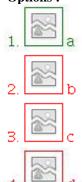
Question Number: 124 Question Id: 2224 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

When a body moves in a simple harmonic motion, then the phase difference (in degrees) between velocity and acceleration is

- a. 90
- b. 180
- c. 0
- d. 270

Options:



Question Number: 125 Question Id: 2225 Question Type: MCQ Option Shuffling: No

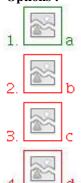
What is the correct chronological order in which the following states of the Indian union were created or granted full statehood?

- 1. Andhra Pradesh
- 2. Maharashtra
- 3. Nagaland
- 4. Haryana

Select the correct answer using the code given below-

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

Options:



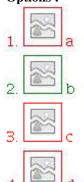
Question Number: 126 Question Id: 2226 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

"Equal pay for equal work" has been insured in the Indian constitution as one of the

- a. Fundamental rights
- b. Directive principles of state policy
- c. Fundamental duties
- d. Economic rights

Options:

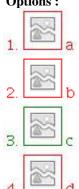


Question Number: 127 Question Id: 2227 Question Type: MCQ Option Shuffling: No

Which one of the following pairs is NOT correctly matched

Scheme Commencement Year a. TRYSEM August, 1979 b. NREP October, 1980 c. JRY April, 1995 d. SGSY April, 1999

Options:



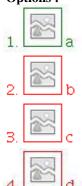
Question Number: 128 Question Id: 2228 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Commercial paper is a source of credit for which one of the following

- a. Corporate Industry
- b. Small Scale Industries
- c. Commercial Banks
- d. Foreign Banks

Options:

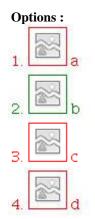


Question Number: 129 Question Id: 2229 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Who amongst the following has decided to withdraw its nominee directors from the boards of the private sector banks

- a. Registrar of Companies
- b. Reserve Bank of India
- Registrar of Co-operative Societies
- d. State Governments



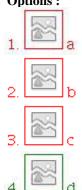
Question Number: 130 Question Id: 2230 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

The Olympics Games in 2016 will be held in

- a. London
- b. Russia
- c. Germany
- d. Brazil

Options:

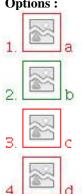


Question Number: 131 Question Id: 2231 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which of the following pairs is not correct

- Rangaswamy cup -hockey
- b. Federation cup-badminton
- c. Deodhar trophy- cricket
- d. Rovers cup- Football

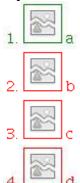


Correct: 1.0 Wrong: 0.33

Bats can fly during the night because they produce

- a. Ultrasonic waves
- b. Sound waves
- c. Ultra violet waves
- d. Infra-red waves

Options:



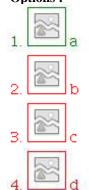
Question Number: 133 Question Id: 2233 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The tracking of people by trained dogs is based on the recognition of which of the following compounds in the sweat from feet

- a. Carboxylic acids
- b. Uric acid
- c. Sugar
- d. Salt

Options:

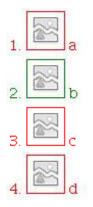


Question Number: 134 Question Id: 2234 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

A person with 'AB' blood group is sometimes called a universal recipient because of the

- a. Lack of antigens in his blood
- b. Lack of antibodies in his blood
- c. Lack of both antigen and antibodies in his blood
- d. Presence of antibodies in his blood



Question Number: 135 Question Id: 2235 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which one of the following sequence of the chemical elements is correct in terms of the descending order of atomic radius

- a. B-C-N-O
- b. C-B-O-N
- c. N-O-B-C
- d. O-N-C-B

Options:







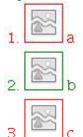


 $Question\ Number: 136\ \ Question\ Id: 2236\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct : 1.0 Wrong : 0.33

Which one of the following is known as salt peter?

- a. NaCl
- b. KNO₃
- c. Na₂ CO₃
- d. NaHCO₃

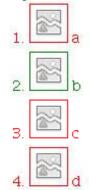


Correct: 1.0 Wrong: 0.33

In which among the following molecules is the distance between two adjacent carbon atoms largest

- a. Benzene
- b. Ethane
- c. Ethene
- d. Ethyene

Options:



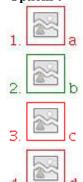
Question Number: 138 Question Id: 2238 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Pawan Hans launched helicopter services in June 2015 in

- a. Jammu & Kashmir
- b. Nagaland
- c. Arunachal Pradesh
- d. Sikkim

Options:



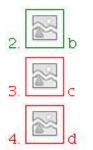
Question Number: 139 Question Id: 2239 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Which public enterprise got the status of miniratna (Category-I) in June ,2015

- a. EIL
- b. IREDA
- c. NHPC
- d. Bridge & Roof





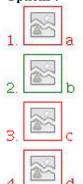
Question Number: 140 Question Id: 2240 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

On 15 June 2015 India signed a motor vehicle agreement with three SAARC nations named

- Bangladesh, Srilanka, Maldives
- b. Bangladesh, Nepal, Bhutan
- c. Bangladesh ,Pakistan, Srilanka
- d. Nepal, Srilanka, Maldives

Options:



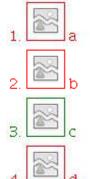
 $Question\ Number: 141\ \ Question\ Id: 2241\ \ Question\ Type: MCQ\ \ Option\ Shuffling: No$

Correct: 1.0 Wrong: 0.33

E is the sister of D. B is the sister of the father of E. Who is B to D?

- a. Cousin
- b. Sister-in-law
- c. Aunt
- d. Niece

Options:



Question Number: 142 Question Id: 2242 Question Type: MCQ Option Shuffling: No

Three of the four number-pairs in the alternatives have numbers which hold the same relationship as the numbers in the number-pair given below. Find out the number-pair in which the two numbers do not hold the same relationship as the two numbers in the number-pair below.

12:21

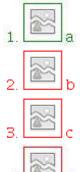
20:32 a.

28:49

36:63 C.

d. 8:14

Options:



Question Number: 143 Question Id: 2243 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

'Fatigue' is related to 'Race' the same way as 'Appetite' is related to

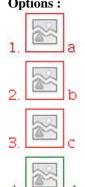
Food

Dish b.

Poverty C.

d. Fast

Options:

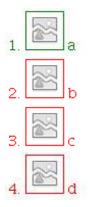


Question Number: 144 Question Id: 2244 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

Among six tourist spots, A is 2 km to the West of C and 1 km to the South of D. F is 3 km to the East of E which is 5 km to the South of B. If B is 3 km to the West of D, which three tourist spots lie in a straight line?

- ADF a.
- ACD b.
- CEF c.
- d. BDE



Question Number: 145 Question Id: 2245 Question Type: MCQ Option Shuffling: No

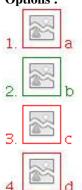
Correct: 1.0 Wrong: 0.33

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

1. Punishment 2. Arrest 3. Prison 4. Crime 5. Judgment 6. Court

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

Options:



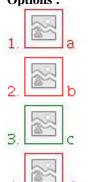
Question Number: 146 Question Id: 2246 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

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

2, 5, 11, 23, 49, 95, 191

- a. 11
- b. 23
- c. 49
- d. 95



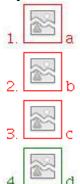
Question Number: 147 Question Id: 2247 Question Type: MCQ Option Shuffling: No

Correct: 1.0 Wrong: 0.33

In a certain code, '739' means 'mangoes are fruits'; '643' means 'they like mangoes' and '826' means 'mothers like sons'. Which digit means 'they' in that code?

- 3 a.
- 6 b.
- 8 c.
- d.

Options:



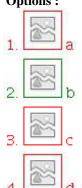
Question Number: 148 Question Id: 2248 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

In a certain language, 'FATHER' is coded as 'TAFREH', then in that language, 'GAMBLE' would be coded as:

- ELBMAG
- MAGELB
- AGBMEL
- d. MAGLBE

Options:

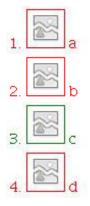


Question Number: 149 Question Id: 2249 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

A man is facing East. He turns 45° in clockwise direction and another 90° in the same direction. Finally, he turns 180° in anticlockwise direction. Which direction is he facing now?

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



Question Number: 150 Question Id: 2250 Question Type: MCQ Option Shuffling: No

Correct : 1.0 Wrong : 0.33

The numbers in the matrix given below follow a certain trend row-wise and and/or column wise. Study the trend and choose the number which will replace the question mark.

5	20	8
7	42	12
10	?	14

- a. 46
- b. 60
- c. 50
- d. 70







