

Railway Recruitment Board

Notations :

- Options shown in green color and with ✓ icon are correct.
- Options shown in red color and with ✗ icon are incorrect.

Question Paper Name: Junior Engineer 27th Aug Shift 1 Actual
Subject Name: Junior Engineer
Creation Date: 2015-08-18 11:48:48.0
Cut Off: 0
Duration: 120
Number of Questions: 150
Total Marks: 150.0

Junior Engineer

Group Number : 1
Group Id : 4
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 : 4
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: 4
Question Shuffling Allowed : Yes

**Question Number : 1 Question Id : 601 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33**

Control volume refers to

Options :

- ✓ A fixed region in space

✗ A specified mass

3. An isolated system
4. A reversible process only

Question Number : 2 Question Id : 602 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

All of the following are intensive properties EXCEPT

Options :

1. Mass
2. Density
3. Pressure
4. Temperature

Question Number : 3 Question Id : 603 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Fourier's law of heat conduction gives the heat flow for

Options :

1. Irregular surfaces
2. Non-uniform temperature surfaces
3. One dimensional cases only
4. Two dimensional cases only

Question Number : 4 Question Id : 604 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Absorptivity of a body is equal to its emissivity

Options :

1. For a polished body
2. Under thermal equilibrium
3. At one particular temperature
4. At shorter wave lengths

Question Number : 5 Question Id : 605 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A two stroke engine can be identified by

Options :

1. Cooling system

3. ✓ Absence of valves

4. ✘ Piston size

Question Number : 6 Question Id : 606 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A four stroke, four cylinder SI engine has a swept volume of 450 CC and compression ratio is

8. The clearance volume of each cylinder is equal to

Options :

1. ✘ 48 CC

2. ✘ 55 CC

3. ✓ 65 CC

4. ✘ 70 CC

Question Number : 7 Question Id : 607 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Piston rings are usually made of

Options :

1. ✓ Cast iron

2. ✘ Aluminium

3. ✘ Babbitt

4. ✘ Carbon steel

Question Number : 8 Question Id : 608 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In submerged arc welding, an arc is produced between a

Options :

1. ✘ Carbon electrode and the work

2. ✘ Metal electrode and the work

3. ✓ Bare metal electrode and the work

4. ✘ Two tungsten electrodes and the work

Question Number : 9 Question Id : 609 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Weld spatter is

Options :



1. A flux
2. A filler material used in gas welding
3. A filler material used in soldering
4. A welding defect

Question Number : 10 Question Id : 610 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Investment casting uses pattern made of

Options :

1. Metal
2. Wood
3. Plastic
4. Wax

Question Number : 11 Question Id : 611 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Slag inclusion in casting is a

Options :

1. Internal defect
2. Moulding defect
3. Surface defect
4. Superficial defect

Question Number : 12 Question Id : 612 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Knurling is an operation

Options :

1. of cutting smooth collars
2. of under cutting
3. done without use of coolant
4. of generally roughing the surface for hand grip

Question Number : 13 Question Id : 613 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The process in which the edge of the sheet is folded over itself to increase the stiffness of the part, is called

Options :

1. Dimpling
2. Hemming
3. Spinning
4. Peen forming

Question Number : 14 Question Id : 614 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The usual value of the helix angle of a drill is

Options :

1. 20°
2. 30°
3. 45°
4. 60°

Question Number : 15 Question Id : 615 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Effective resistance of two wires when connected in series and in parallel are 25 ohms and 6 ohms respectively. The resistances of two wires is

Options :

1. 10 ohms and 15 ohms
2. 20 ohms and 30 ohms
3. 5 ohms and 10 ohms
4. 10 ohms and 20 ohms

Question Number : 16 Question Id : 616 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A closed path made by several branches of network is known as

Options :

1. branch
2. loop
3. circuit

junction

4.

Question Number : 17 Question Id : 617 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Brushes of DC machines are usually made up of

Options :

1. carbon
2. mild steel
3. cast iron
4. aluminium

Question Number : 18 Question Id : 618 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Small DC motors having upto 5 H.P. usually have

Options :

1. 2 poles
2. 4 poles
3. 6 poles
4. 8 poles

Question Number : 19 Question Id : 619 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Humming sound produced in a transformer is usually due to

Options :

1. load fluctuations
2. oil used in the transformer
3. magnetostriction
4. mechanical vibrations

Question Number : 20 Question Id : 620 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following is a widely used insulating and cooling transformer liquid?

Options :

1. mineral oil
2. water

3. heavy water

4. mercury

Question Number : 21 Question Id : 621 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The difference between synchronous speed and actual speed of a motor is called

Options :

1. lag

2. regulation

3. slip

4. backlash

Question Number : 22 Question Id : 622 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which of the following motor is self starting?

Options :

1. Split motor

2. Shaded pole motor

3. Reluctance motor

4. Hysterisis motor

Question Number : 23 Question Id : 623 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Water hammer pressure is relieved by

Options :

1. penstock

2. draft tube

3. turbine

4. surge tank

Question Number : 24 Question Id : 624 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

TIG Welding stands for

Options :

1. Temperature Insulated Gas Welding

2. Tungsten Inert Gas Welding
3. Thermally Induced Gas Welding
4. Tungsten Insulated Gas Welding

Question Number : 25 Question Id : 625 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The type of modulation used in the T.V picture transmission is

Options :

1. amplitude modulation
2. phase modulation
3. frequency modulation
4. modulation is not needed

Question Number : 26 Question Id : 626 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The process of extracting the signal from the modulated wave is called

Options :

1. modulation
2. detection
3. amplification
4. resonance

Question Number : 27 Question Id : 627 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

An OR gate has 4 inputs. One input is high and the other three are low. The output

Options :

1. is high
2. is low
3. is alternately high and low
4. may be high or low depending on inputs

Question Number : 28 Question Id : 628 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Decimal 43 in hexadecimal is

1. 2B
2. B2
3. 2C
4. C2

Question Number : 29 Question Id : 629 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A JFET is

Options :

1. a current controlled device
2. a low input resistance
3. a voltage controlled device
4. is always forward biased

Question Number : 30 Question Id : 630 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which type of gain is achieved using CB configuration

Options :

1. current
2. voltage
3. resistance
4. power

Question Number : 31 Question Id : 631 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In a vacuum diode, emission of electrons happens due to

Options :

1. electric field
2. magnetic field
3. heating
4. electron bombardment

Question Number : 32 Question Id : 632 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following cannot actually move?



- free electrons
- ions
- holes
- majority carriers

Question Number : 33 Question Id : 633 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The mean value of half wave rectified sine wave is

Options :

- 0.707 I
- 0.637 I
- 0.5 I
- 0.318 I

Question Number : 34 Question Id : 634 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A silicon controlled rectifier is a

Options :

- Unijunction device
- Device with two junctions
- Device with three junctions
- Device with four junctions

Question Number : 35 Question Id : 635 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The unit of elastic modulus is the same as those of

Options :

- Stress, shear modulus and pressure
- Strain, shear modulus and force
- Shear modulus, stress and force
- Stress, strain and pressure

Question Number : 36 Question Id : 636 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Relative density of a compacted dense sand is approximately equal to

Options :

- 2. 0.95
- 3. 0.50
- 4. 1.10

Question Number : 37 Question Id : 637 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which one of the following is the mode of failure in a fillet weld material?

Options :

- 1. Tension
- 2. Shear
- 3. Bearing
- 4. Crushing

Question Number : 38 Question Id : 638 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Kinematic viscosity of gases on increase of temperature

Options :

- 1. Decreases
- 2. Increases
- 3. Remains the same
- 4. First decreases then increases

Question Number : 39 Question Id : 639 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Benchmark is established by

Options :

- 1. Hypsometry
- 2. Barometric levelling
- 3. Spirit levelling
- 4. Trigonometrical levelling

Question Number : 40 Question Id : 640 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A critical path has

Options :

- 1. Zero float
- 2. Minimum float

- 3. Maximum float
- 4. Infinite float

Question Number : 41 Question Id : 641 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A sample of cement is said to be sound when it does not contain free

Options :

- 1. Lime
- 2. Silica
- 3. Iron oxide
- 4. Alumina

Question Number : 42 Question Id : 642 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The tensile strength of concrete is approximately what percent of compressive strength of concrete

Options :

- 1. 50%
- 2. 20%
- 3. 10%
- 4. 5%

Question Number : 43 Question Id : 643 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The eddy viscosity for turbulent flow is

Options :

- 1. A function of temperature only
- 2. A physical property of the fluid
- 3. Dependent on the flow
- 4. Independent of the flow

Question Number : 44 Question Id : 644 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The type of surveying which requires least office work is

Options :

- 1. Tacheometry
- 2. Trigonometrical levelling

3. ✓ Plane table surveying

4. ✘ Theodolite surveying

Question Number : 45 Question Id : 645 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The ratio of volume of voids to the total volume of soil mass is called

Options :

1. ✘ Air content

2. ✓ Porosity

3. ✘ Percentage air voids

4. ✘ Voids ratio

Question Number : 46 Question Id : 646 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which is the purest form of iron?

Options :

1. ✘ Cast iron

2. ✓ Wrought iron

3. ✘ Mild steel

4. ✘ High carbon steel

Question Number : 47 Question Id : 647 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Commonly used instruments in power system measurement are

Options :

1. ✓ induction

2. ✘ moving coil or iron

3. ✘ rectifier

4. ✘ electrostatic

Question Number : 48 Question Id : 648 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Damping of the Ballistic galvanometer is made small to

Options :

1. ✓ get first deflection large

2. ✘ make the system oscillatory

3. ✘ make the system critically damped

4. ✘ get minimum overshoot

Question Number : 49 Question Id : 649 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The rectifier instrument is not free from

Options :

- temperature error
- wave shape error
- frequency error
- both wave and frequency error

Question Number : 50 Question Id : 650 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Alternating current is measured by

Options :

- induction ammeter
- permanent magnet type ammeter
- electrostatic ammeter
- moving iron repulsion type voltmeter

Question Number : 51 Question Id : 651 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Most sensitive galvanometer is

Options :

- elastic galvanometer
- vibration galvanometer
- Duddell galvanometer
- spot ballistic galvanometer

Question Number : 52 Question Id : 652 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The suspended solids present in surface water can be determined by

Options :

- gravimetric test
- colourimetric test
- titrimetric test
- spectrophotometric test

Question Number : 53 Question Id : 653 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The disease caused by mercury is known as

Options :

1. itai – itai
2. blue baby disease
3. minimata
4. skin disease

Question Number : 54 Question Id : 654 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Length to width ratio of rectangular sedimentation tank should be

Options :

1. 3 : 4
2. 3 : 1
3. 4 : 1
4. 1 : 5

Question Number : 55 Question Id : 655 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The average concentration of ozone in troposphere is

Options :

1. 0.3 ppm
2. 0.05 ppm
3. 0.5 ppm
4. 0.1 ppm

Question Number : 56 Question Id : 656 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

A condition of sudden permanent aural damage resulting from an intense short term exposure of noise is called

Options :

1. acoustic trauma
2. annoyance
3. temporary threshold shift
4. permanent threshold shift

Question Number : 57 Question Id : 657 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The acidity in the atmosphere is basically caused due to emission of SO_x and NO_x. The percentage contribution of SO_x and NO_x in the formation of acidity is

- 80 % and 20 % respectively
- 70 % and 30 % respectively
- 50 % and 50 % respectively
- 60 % and 40 % respectively

Question Number : 58 Question Id : 658 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following is not a valid category of impact printers?

Options :

- Chain printers
- Line printers
- Band printers
- Ink-jet printers

Question Number : 59 Question Id : 659 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following is not true about PROM?

Options :

- Random access memory
- Programmable read only memory
- Non-volatile memory
- Sequential access memory

Question Number : 60 Question Id : 660 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following components of CPU is responsible to direct the system to execute instructions?

Options :

- Arithmetic and Logic Unit (ALU)
- Control Unit (CU)
- Registers
- Random Access Memory (RAM)

Question Number : 61 Question Id : 661 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

BCD stands for _____

Options :

1. Binary Coded Decimal
2. Binary Code Display
3. Bidirectional Coded Data
4. Binary Coded Data

Question Number : 62 Question Id : 662 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The binary representation of 144.5 is _____

Options :

1. $(10010000.01)_2$
2. $(10010001.11)_2$
3. $(10010000.10)_2$
4. $(10011001.11)_2$

Question Number : 63 Question Id : 663 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Considering X as a binary variable, the Boolean expression $X.0$ is equivalent to

Options :

1. X
2. 1
3. 0
4. X'

Question Number : 64 Question Id : 664 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The 2's complement of the binary number $(10000000)_2$ is

Options :

1. $(01111111)_2$
2. $(10101010)_2$
3. $(10000000)_2$
4. $(01010101)_2$

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

Question Number : 65 Question Id : 665 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Linux is a/an _____

Options :

1. Application software
2. Word processor
3. Database management

4. ✓ System software

Question Number : 66 Question Id : 666 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Class 'B' IP addresses use _____ bits for Host ID.

Options :

1. ✘ 8
2. ✓ 16
3. ✘ 24
4. ✘ 32

Question Number : 67 Question Id : 667 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following is not a Web browser?

Options :

1. ✘ Netscape Navigator
2. ✘ Safari
3. ✓ HTML
4. ✘ Chrome

Question Number : 68 Question Id : 668 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

The meaning of R.F. is

Options :

1. ✘ Reducing fraction
2. ✓ Representative fraction
3. ✘ Reduction factor
4. ✘ Representative factor

Question Number : 69 Question Id : 669 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

If a line is parallel to both H.P. and V.P., its true length will be seen in

Options :

1. ✓ Both front and top views
2. ✘ only in side view
3. ✘ only in front view
4. ✘ only in top view

Question Number : 70 Question Id : 670 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Planes which are inclined to both the horizontal and vertical planes are known as

Options :

1. ✘ auxiliary planes

2. profile planes
3. reference planes
4. oblique planes

Question Number : 71 Question Id : 671 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In first - angle projection system, the right hand side view of an object is drawn

Options :

1. right of the elevation
2. above the elevation
3. left of the elevation
4. below the elevation

Question Number : 72 Question Id : 672 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A square lamina is perpendicular to the H.P. and parallel to V.P.. Its horizontal trace will be

Options :

1. perpendicular to the reference line
2. parallel to the reference line
3. inclined to the reference line
4. a point

Question Number : 73 Question Id : 673 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A 0.5 kg ball is accelerated from rest to 12 m/s in 0.30 s. The force applied on the ball during its motion is

Options :

1. 20 N
2. 6.0 N
3. 40 N
4. 3.6 N.

Question Number : 74 Question Id : 674 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The acceleration due to gravity near the surface of Earth (radius R) is proportional to

Options :

1. R
2. $1/R$
3. R^2

4. ✓ $1/R^2$.

Question Number : 75 Question Id : 675 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A ball of mass 10 kg is moving with a velocity 5 m/s. The kinetic energy of the ball is

Options :

1. ✘ 50 J
2. ✓ 125 J
3. ✘ 250 J
4. ✘ 25 J.

Question Number : 76 Question Id : 676 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The end of a string is vibrated up and down once every 1.5 s and waves propagate at 6 m/s along the string. The wavelength of the waves is

Options :

1. ✘ 4.0 m
2. ✓ 9.0 m
3. ✘ 0.25 m
4. ✘ 1.5 m.

Question Number : 77 Question Id : 677 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

An object is placed somewhere between the focus and centre of curvature of a concave mirror.

Which of the following best describes the image formed?

Options :

1. ✓ Real, inverted and magnification greater than one
2. ✘ Real, inverted and magnification less than one
3. ✘ Virtual, upright and magnification greater than one
4. ✘ Virtual, upright and magnification less than one.

Question Number : 78 Question Id : 678 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Two 1.5 V batteries in series power a transistor radio. The batteries hold a total charge of 270 C.

If the radio has a resistance of 100 Ω , the batteries will last

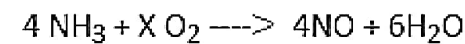
Options :

1. ✘ 5.0 hours
2. ✓ 2.5 hours
3. ✘ 1.25 hours
4. ✘ 33 hours.

Question Number : 79 Question Id : 679 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

what is the value of **X** in the following equation ;



Options :

2

1.
2. 3
3. 4
4. 5

Question Number : 80 Question Id : 680 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

During the electrolytic refining of copper using copper sulphate as an electrolyte

Options :

1. Impure copper is made the anode
2. Impure copper is made the cathode
3. (ii) only
4. (iii) only

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

Question Number : 81 Question Id : 681 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The electronic configuration of an element is 2, 8, 1. To which of the following elements will it be similar?

Options :

1. 2,1
2. 2, 8, 4
3. 2, 7
4. 2, 8,7

Question Number : 82 Question Id : 682 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A solution containing 80 grams of sodium hydroxide (molecular mass= 40) completely neutralizes another solution containing 98 grams of an acid "A" (molecular mass= 98) . The charge on the anion part of "A" is

Options :

1. -1
2. -2

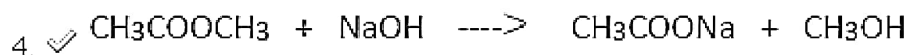
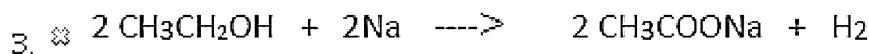
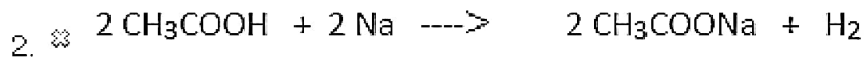
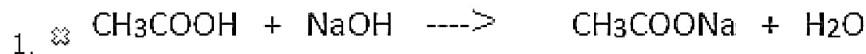
3. ✖ -3

4. ✖ -4

Question Number : 83 Question Id : 683 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following is a saponification reaction?

Options :



Question Number : 84 Question Id : 684 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which of the following is a molecule of an element?

Options :

1. ✖ Neon (g)

2. ✔ Chlorine (g)

3. ✖ Sulphur dioxide (g)

4. ✖ Water (l)

Question Number : 85 Question Id : 685 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which out of the following perform all body functions in a single cell?

Options :

1. ✖ Bacteria only

2. ✔ Bacteria and Protozoa

3. ✖ Bacteria ,Protozoa and Fungi

4. ✖ Protozoa only

Question Number : 86 Question Id : 686 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In the food chain given below who gets the least energy ?

Leaves \longrightarrow Caterpillars \longrightarrow Birds \longrightarrow Cats

Options :

1. ✖ Leaves

2. ✖ Caterpillar

4. Cat

Question Number : 87 Question Id : 687 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which part of the flower becomes the seed after fertilization?

Options :

1. Pollen
2. Ovule
3. Ovary
4. Carpel

Question Number : 88 Question Id : 688 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

One feature in which spiders are different from insects is that spiders have

Options :

1. jointed legs
2. body covered with chitinous cuticle
3. body distinctly divided into parts like head etc.
4. four pairs of legs

Question Number : 89 Question Id : 689 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

In humans, digestion begins in the

Options :

1. buccal cavity
2. oesophagus
3. stomach
4. intestine

Question Number : 90 Question Id : 690 Question Type : MCQ Option Shuffling : No
Correct : 1.0 Wrong : 0.33

Which is not a hereditary feature in humans?

Options :

1. Height
2. Weight

3. Blood group

4. Eye colour

Question Number : 91 Question Id : 691 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The HCF of two numbers is 15 and their LCM is 210. If one number is 105, the other number is

Options :

1. 15

2. 30

3. 45

4. 75

Question Number : 92 Question Id : 692 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The least number which when divided by 10, 15 and 18, leaving remainder 5 in each case is

Options :

1. 85

2. 90

3. 95

4. 105

Question Number : 93 Question Id : 693 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If $a : b = 4 : 5$ and $b : c = 2 : 3$, then $c : a$ is

Options :

1. 15 : 8

2. 8 : 15

3. 4 : 5

4. 3 : 4

Question Number : 94 Question Id : 694 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If 25, x , 5, 3 are in proportion, then x is equal to

Options :

1. 5

2. 15

3. 75

4. 125

Question Number : 95 Question Id : 695 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Successive discounts of 20% and 5% are equivalent to a single discount of

Options :

1. ✖ 25%
2. ✖ 22%
3. ✖ 21%
4. ✔ 24%

Question Number : 96 Question Id : 696 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The simple interest on rupees 800 for 3 years at 5% per annum in rupees is

Options :

1. ✖ 24
2. ✖ 40
3. ✔ 120
4. ✖ 140

Question Number : 97 Question Id : 697 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Compound interest on rupees 8000 for 1 year at 10% per annum compounded half yearly is

Options :

1. ✔ 800
2. ✖ 1680
3. ✖ 840
4. ✖ 820

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

Question Number : 98 Question Id : 698 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If CP of 7 articles is equal to SP of 5 articles, then in the whole transaction there is a profit of

Options :

1. ✔ 40%
2. ✖ 30%
3. ✖ 25%
4. ✖ $\frac{200}{7}$ %

Question Number : 99 Question Id : 699 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

To gain 20% after allowing a discount of 5%, the shopkeeper should mark the price of the article which cost him ₹ 475 as

Options :

- ₹ 4500
- ₹ 550
- ₹ 600
- ₹ 650

Question Number : 100 Question Id : 700 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A shopkeeper mixes 35 kg of wheat which cost him ₹ 15 per kg with 25 kg of wheat which costs him ₹ 20 per kg. He sells the mixture at ₹ 22 per kg. His gain is

Options :

- $\frac{1180}{41}\%$
- $\frac{1475}{66}\%$
- $\frac{1080}{41}\%$
- $\frac{1325}{41}\%$

Question Number : 101 Question Id : 701 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In two vessels A and B, the milk and water are in the ratio of 3 : 4 and 2 : 3 respectively. The ratio in which these are mixed to obtain new mixture which contains milk and water in the ratio 20 : 29 is

Options :

- 6 : 5
- 7 : 9
- 2 : 5
- 3 : 5

Question Number : 102 Question Id : 702 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A person cycles from one place to another in 100 minutes. If his speed is 18 km/h, the distance between two places is

Options :

- 20 km
- 30 km
- 15 km
- 25 km

Question Number : 103 Question

A train 200 m long is moving at 68 km/h. The time in seconds, it will take to pass another train 150 m long which is moving at 50 km/h in the same direction from the moment they meet is

Options :

- 40
- 50
- 60
- 70

Question Number : 104 Question Id : 704 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A and B can do a piece of work in 24 days. If efficiency of A is double than B, then in how many days B alone can do the same work?

Options :

- 72
- 60
- 36
- 30

Question Number : 105 Question Id : 705 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

P and Q can do a piece of work in 12 days, Q and R in 15 days and R and P in 20 days. In how many days R alone can do the same work?

Options :

- 70
- 60
- 45
- 30

Question Number : 106 Question Id : 706 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The average of first six even whole numbers is

Options :

- 5
- 6
- 7
- 8

Question Number : 107 Question Id : 707 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The average weight of 100 students is 46 kg. The average weight of girls is 40 kg. If the number of girls is 40, the average weight of boys in kilograms is

Options :

- 40

3. ✓ 50

4. ✗ 60

Question Number : 108 Question Id : 708 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The common difference of an AP in which $a_{18} - a_{13} = 45$ is

Options :

1. ✗ - 9

2. ✓ 9

3. ✗ - 5

4. ✗ 5

Question Number : 109 Question Id : 709 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The tenth term of the GP $3, 1, \frac{1}{3}, \dots$ is

Options :

1. ✗ 3^{-10}

2. ✗ 3^{-9}

3. ✓ 3^{-8}

4. ✗ 3^9

Question Number : 110 Question Id : 710 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A ladder 15 m long just reaches the top of a vertical wall. If the ladder makes an angle of 60° with the wall, the distance of the foot of the ladder from the wall is

Options :

1. ✗ 7.5 m

2. ✗ $5\sqrt{3}$ m

3. ✗ $10\sqrt{3}$ m

4. ✓ $\frac{15\sqrt{3}}{2}$ m

Question Number : 111 Question Id : 711 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

From a point on the bridge across a river the angles of depression of the bank on the opposite side of the river are 60° and 45° respectively. If the bridge is at a height of 4m from the bank, the width of the river is

Options :

1. ✓ $\frac{4(3+\sqrt{3})}{3}$ m

2. $\otimes 4(\sqrt{3} + 1) m$

3. $\otimes \frac{2(1+\sqrt{3})}{3} m$

4. $\otimes 2(2\sqrt{3} + 1)m$

Question Number : 112 Question Id : 712 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If $(x - 1)$ is a factor of $x^4 + x^3 - 2x^2 + ax + 1$, then a is equal to

Options :

1. $\otimes 1$

2. $\checkmark - 1$

3. $\otimes 2$

4. $\otimes - 2$

Question Number : 113 Question Id : 713 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

One of the factors of $(49x^2 - 1) + (1 + 7x)^2$ is

Options :

1. $\otimes 7 + x$

2. $\otimes 7 - x$

3. $\checkmark 14x$

4. $\otimes 7x - 1$

Question Number : 114 Question Id : 714 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

All values of k for which $2x^2 + kx + 8 = 0$ has real roots is

Options :

1. $\otimes -8 \leq k \leq 8$

2. $\checkmark 8 \leq k \leq -8$

3. $\otimes -2\sqrt{2} \leq k \leq 2\sqrt{2}$

4. $\otimes 2\sqrt{2} \leq k \leq -2\sqrt{2}$

Question Number : 115 Question Id : 715 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The sum and product of the roots of the equation $-5x^2 + 2x - 10 = 0$ are respectively

Options :



1. $-\frac{2}{5}, 2$

2. $2, -\frac{2}{5}$

3. $\frac{2}{5}, 2$

4. $-\frac{2}{5}, -2$

Question Number : 116 Question Id : 716 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which statement is not true for a game of Badminton?

Options :

1. Total points to be scored are 21

2. If both sides score upto game point, the winner needs two clear points in a row

3. The game never ends in a draw

4. Total points to be scored are 15

Question Number : 117 Question Id : 717 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Paralympics is a multisport event involving those athletes who are

Options :

1. only visually challenged

2. only hearing impaired

3. just mentally challenged

4. with a range of physical disability

Question Number : 118 Question Id : 718 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Whose saying 'Earth has enough for man's need but not enough for man's greed' is often being quoted by speakers on Environment?

Options :

1. Independent India's first Prime Minister

2. The second President of India

The Environmen

4. ✓ The father of our nation

Question Number : 119 Question Id : 719 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The country called 'Land of the Rising Sun' is

Options :

1. ✘ China
2. ✘ Norway
3. ✓ Japan
4. ✘ Sweden

Question Number : 120 Question Id : 720 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The term 'collegium system' was recently seen in the newspapers. With which field is this term associated?

Options :

1. ✘ Education
2. ✓ Judiciary
3. ✘ Politics
4. ✘ Constitution

Question Number : 121 Question Id : 721 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

One of the following is not an objective of the Mid-day Meal scheme in school launched by the government. Select from options given below

Options :

1. ✘ Provide full nutritional support to children at the Primary stage of education
2. ✘ Encourage disadvantaged section of the society to attend school regularly and concentrate on studies
3. ✘ Improve the nutritional status of children in the primary section
4. ✓ Bridge the gender and social category gaps in schools at the primary level itself

Question Number : 122 Question Id : 722 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which one out of the values of the Indian constitution means 'having complete freedom a

Options :

- Socialism
- Secularism
- Sovereignty
- Liberty

Question Number : 123 Question Id : 723 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

There are two forms of government, presidential and parliamentary. Which type of government do India, US and England have?

Options :

- India – Parliamentary, England – Parliamentary, US – Parliamentary
- India – Presidential, England – Parliamentary, US – Presidential
- India – Parliamentary, England – Parliamentary, US – Presidential
- All three countries have Presidential form

Question Number : 124 Question Id : 724 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If you were to measure the strength of a current which instrument would you look for ?

Options :

- Voltmeter
- Thermometer
- Ammeter
- Barometer

Question Number : 125 Question Id : 725 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Another term for genetic engineering is

Options :

- Recombinant DNA technology
- Polymerase Chain Reaction
- DNA Fingerprinting
- DNA Typing

Question Number : 126 Question Id : 726 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which function of the body is not carried out by long bones?

Options :

- Providing support to legs
- Formation of blood
- Making the neck rotate to body bend on the sides
- Serving as platform for attachment of muscles

Question Number : 127 Question Id : 727 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which disease does Quinine cure and from which plant is it obtained?

Options :

- Malaria ; Cinchona
- Blood Pressure ; Rawolfia
- Tuberculosis ; Nicotiana
- Jaundice ; Hibiscus

Question Number : 128 Question Id : 728 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The artificial satellites cannot be used for

Options :

- Relaying Radio, TV and Telephone signals
- Weather forecasting
- Monitoring atmospheric pollution
- Exploring solar system

Question Number : 129 Question Id : 729 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Of the Slav population scattered in Eastern Europe, those who began the Pan Slav movement to have one state were

Options :

- Serbians
- Bulgarians
- Romanians
- Polish

Question Number : 130 Question Id : 730 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Who built the Pyramids?

Options :

- Pharaohs
- Chinese
- Confucians
- Romans

Question Number : 131 Question Id : 731 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The king of Mauryan Empire who in 322 BC uprooted Greeks from Punjab and Nandas from the Gangetic plane was

Options :

- Chadragupta
- Bindusar
- Ashok
- Mahapadmananda

Question Number : 132 Question Id : 732 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Which method will you use to separate yoghurt (Curd) from water contained in it?

Options :

- Distillation
- Crystallisation
- Filtration
- Decantation

Question Number : 133 Question Id : 733 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Out of two bottles of pickle, one old and one freshly made, the old one can be detected by its smell and taste caused by

Options :

- Oxidation of oil in the pickle making it rancid
- Invasion of bacteria causing putrefaction
- Reduction in volume of oil in the pickle
- Fermentation by yeast

Hair dyes may contain the base

Options :

- Sodium Hydroxide
- Ammonium Hydroxide
- Calcium Hydroxide
- Potassium Hydroxide

Question Number : 135 Question Id : 735 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A bicycle pump works on the principle:

Options :

- When volume decreases, pressure increases
- When volume increases, pressure increases
- Air pressure at one point becomes zero
- At one point volume and pressure become equal

Question Number : 136 Question Id : 736 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

What is not true of the Thar Desert?

Options :

- Has arid and semiarid weather conditions throughout the year
- The flora is mainly cacti and thorny bushes
- Water is available in sinduates and streams which are always there even without rainfall
- Rainfall is scanty

Question Number : 137 Question Id : 737 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

What is a hotspot?

Options :

- A region of high endemic biodiversity
- A geographical area with very high exotic bio-diversity
- A region of scanty rainfall
- An area of constant high temperature

Question Number : 138 Question Id : 738 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Give the term for 'Dr

Options :

- Effective exchange rate
- Nominal exchange rate
- Spot rate
- Purchasing Power Parity

Question Number : 139 Question Id : 739 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The labour or workforce of a country does not include one of the following.

Options :

- Employees of Government
- Self employed
- Unemployed
- Those of age less than 14 years

Question Number : 140 Question Id : 740 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The terms of trade measure

Options :

- Ratio of export prices and import prices
- Sum of export prices and import prices
- Difference of export price and import price
- Product of export price and import price

Question Number : 141 Question Id : 741 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Pointing to a portrait, Suresh said, "His father is the husband of my father's only daughter." How is the person in the portrait related to Suresh?

Options :

- uncle
- nephew
- cousin
- brother

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

Question Number : 142 Question Id : 742 Question Type : MCQ Option Shuffling : No

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.

$$27 : 65 :: 125 : ?$$

Options :

1. 217
2. 237
3. 253
4. 344

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

Question Number : 143 Question Id : 743 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

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

School : Student :: Hospital : ?

Options :

1. Doctor
2. Patient
3. Nurse
4. Inmates

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

Question Number : 144 Question Id : 744 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

A team of five is to be selected from among five boys P, Q, R, S, and T and four girls A, B, C and D with the following conditions.

- (i) B and R have to be put together.
- (ii) P cannot be put with D.
- (iii) C and Q cannot be together.
- (iv) S cannot be put with A.

If the team would consist of 3 boys and 2 girls, the team will consist of:

Options :

1. RTSBA

2. ✖ TCAPQ
3. ✖ DTQPS
4. ✖ QBATR

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

Question Number : 145 Question Id : 745 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. Wall 2. Brick 3. Decoration 4. House 5. Clay 6. Room

Options :

1. ✓ 2, 5, 1, 6, 3, 4
2. ✖ 5, 2, 1, 6, 3, 4
3. ✖ 5, 2, 1, 6, 4, 3
4. ✖ 5, 1, 2, 6, 4, 3

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

Question Number : 146 Question Id : 746 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

The numbers in each group are related in a certain way. Choose the correct number from among the alternatives that will replace the question mark.

$$(3 [5] 4) \quad (5 [13] 12) \quad (6 [?] 8)$$

Options :

1. ✓ 11
2. ✖ 10
3. ✖ 14
4. ✖ 9

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


Question Number : 147 Question Id : 747 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

In a certain language, '283' means 'trees have leaves'; '758' means 'leaves are green'; and '2495' means 'forests have green bushes'. Which digit means 'forests' in that language?

Options :

1. ✓ 9
2. ✖ 4
3. ✖ either 4 or 9

4.  either 2 or 9

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

Question Number : 148 Question Id : 748 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

If 'QUESTION' is coded as 'OTEQUSIN', then 'COMPUTER' would be coded as:

Options :

1. EUMCOPTR
2. RTPOCMUE
3. EUMCRTPO
4. CMUERTPO

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

Question Number : 149 Question Id : 749 Question Type : MCQ Option Shuffling : No

Correct : 1.0 Wrong : 0.33

Starting from his school, Vipul moves 5 km to the West, takes a left turn and moves 10 km. He then takes two successive left turns covering 10 km and 15 km respectively. Finally he takes another left turn and covers 10 km. In which direction is he now with respect to his school?

Options :

1. North-East
2. North
3. North-West
4. West

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





Question Number : 150 Question Id : 750 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?

3	8	11
6	4	10
45	80	?

Options :

1.  108
2.  196
3.  202
4.  221

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