

QUESTION PAPER
Junior Engineer(Mechanical) [SHIFT - 1]

Exam Date : 28/02/2024

Time : 10:00 AM - 12:00 PM

Subjective questions

Question 1

Question Id : 1

Which one of the following represents Open thermodynamics system?

Answer :

(A) Manual Ice cream Freezer

(B) Centrifugal Pump

(C) Pressure Cooker

(D) Bomb Calorimeter

Option Id

1001

1002

1003

1004

Right Answer :

Centrifugal Pump

Right Option Id : 1002

Question 2

Question Id : 28

The standard fixed point of thermometry is

Answer :

(A) Ice Point

(B) Sulphur point

(C) Triple point of water

(D) Normal Boiling point of water

Option Id

28001

28002

28003

28004

Right Answer :

Triple point of water

Right Option Id : 28003

Question 3

Question Id : 29

First law of thermodynamics is valid for

Answer :

(A) All processes

(B) Only reversible processes

(C) Only cyclic processes

Option Id

29001

29002

29003

(D) Only cyclic processes that are carried out reversibly

29004

Right Answer :

All processes

Right Option Id : 29001

Question 4

Question Id : 30

Choose the correct statement

Answer :

(A) Entropy is an intensive property

Option Id

30001

(B) Density is an extensive property

30002

(C) Density is an intensive property

30003

(D) Pressure is an extensive property

30004

Right Answer :

Density is an intensive property

Right Option Id : 30003

Question 5

Question Id : 31

Which of the following parameters does not indicate the departure of real gas from the ideal gas behavior?

Answer :

(A) Compressibility factor

Option Id

31001

(B) Joule- Kelvin coefficient

31002

(C) Fugacity

31003

(D) Entropy

31004

Right Answer :

Entropy

Right Option Id : 31004

Question 6

Question Id : 32

Helmholtz function (F) is given by

Answer :

(A) $F=H-TS$

Option Id

32001

(B) $F=U-TS$

32002

(C) $F=U+TS$

32003

(D) None of the given options

32004

Right Answer :

F=U-TS

Right Option Id : 32002

Question 7

Question Id : 33

For an Otto cycle, the increase in compression ratio leads to

Answer :

(A) An increase in thermal efficiency but a decrease in mean effective pressure

Option Id

33001

(B) A decrease in thermal efficiency but an increase in mean effective pressure

33002

(C) A decrease in thermal efficiency and mean effective pressure

33003

(D) An increase in thermal efficiency and mean effective pressure

33004

Right Answer :

An increase in thermal efficiency and mean effective pressure

Right Option Id : 33004

Question 8

Question Id : 34

Air standard diesel cycle has a compression ratio of 14 and cut off takes place at 6% of the stroke. What is the cut off ratio?

Answer :

(A) 0.6

Option Id

34001

(B) 0.78

34002

(C) 1.78

34003

(D) None of the given options

34004

Right Answer :

1.78

Right Option Id : 34003

Question 9

Question Id : 35

What should be the limiting value of final dryness fraction of steam in a steam turbine?

Answer :

(A) 0.95

Option Id

35001

(B) 0.91

35002

(C) 0.88

35003

(D) 0.78

Right Answer :

0.88

Right Option Id : 35003

Question 10

Question Id : 36

COP of a Carnot heat pump operating between -3°C and 27°C is

Answer :

(A) 10

(B) 9

(C) 0.111

(D) 0.1

Option Id

36001

36002

36003

36004

Right Answer :

10

Right Option Id : 36001

Question 11

Question Id : 37

In a vapour compression cycle, the refrigerant immediately after expansion valve is

Answer :

(A) Saturated liquid

(B) Sub cooled liquid

(C) Wet vapour

(D) Dry vapour

Option Id

37001

37002

37003

37004

Right Answer :

Wet vapour

Right Option Id : 37003

Question 12

Question Id : 38

The number of Hydrogen Atoms in the refrigerant R-12 is

Answer :

(A) 4

(B) 2

(C) 1

(D) 0

Option Id

38001

38002

38003

Right Answer :

0

Right Option Id : 38004

Question 13

Question Id : 39

The mechanism used in a shaping machine is

Answer :

- (A) A closed 4-bar chain having 4 revolute pairs
- (B) A closed 6-bar chain having 6 revolute pairs
- (C) A closed 4-bar chain having 2 revolute and 2 sliding pairs
- (D) An inversion of the single slider – crank chain

Option Id

39001

39002

39003

39004

Right Answer :

An inversion of the single slider – crank chain

Right Option Id : 39004

Question 14

Question Id : 40

In a reciprocating engine, the maximum fluctuation in energy is found to be 2 J and the variation in speed is limited to 2% of the mean speed. If the mean speed is 100 rad/s and the radius of gyration of wheel is 0.1m, the mass of the flywheel is

Answer :

- (A) 3 kg
- (B) 2kg
- (C) 1kg
- (D) 0.5kg

Option Id

40001

40002

40003

40004

Right Answer :

1kg

Right Option Id : 40003

Question 15

Question Id : 41

The maximum fluctuation of energy in a flywheel is equal to

Answer :

- (A) $I\omega(\omega_1 - \omega_2)$
- (B) $I\omega^2K$
- (C) 2KE
- (D) All of the given options

Option Id

41001

41002

41003

Right Answer :

All of the given options

Right Option Id : 41004

Question 16

Question Id : 42

Natural frequency of undamped free vibration is 100RPS and Damping is provided with damping factor is 0.8 then what is the frequency of damped vibration

Answer :

(A) 80rps

(B) 45rps

(C) 60rps

(D) 96rps

Option Id

42001

42002

42003

42004

Right Answer :

60rps

Right Option Id : 42003

Question 17

Question Id : 43

The property of a material that cannot be significantly changed by heat treatment is

Answer :

(A) Yield strength

(B) Ultimate tensile strength

(C) Ductility

(D) Elastic modulus

Option Id

43001

43002

43003

43004

Right Answer :

Elastic modulus

Right Option Id : 43004

Question 18

Question Id : 44

What is the process by which two or more chemically different monomers are polymerized to form a cross link polymer together with a by product such as water or ammonia, known as?

Answer :

(A) Addition polymerization

(B) Co- polymerization

(C) Linear polymerization

Option Id

44001

44002

44003

(D) Condensation polymerization

44004

Right Answer :

Condensation polymerization

Right Option Id : 44004

Question 19

Question Id : 45

Alloy steel which is work hardenable and which is used to make the blades of bulldozers, bucket wheel excavators and other earth moving equipment contain iron, carbon and

Answer :

(A) Chromium

Option Id

45001

(B) Silicon

45002

(C) Manganese

45003

(D) Magnesium

45004

Right Answer :

Manganese

Right Option Id : 45003

Question 20

Question Id : 46

Which of the following operation does not uses a Jig?

Answer :

(A) Turning

Option Id

46001

(B) Drilling

46002

(C) Reaming

46003

(D) Taping

46004

Right Answer :

Turning

Right Option Id : 46001

Question 21

Question Id : 47

Angle between the face and flank of the single point cutting tool is known as

Answer :

(A) Rake angle

Option Id

47001

(B) Clearance angle

47002

(C) Lip Angle

47003

(D) Point Angle

47004

Right Answer :

Lip Angle

Right Option Id : 47003

Question 22

Question Id : 48

A grinding wheel is specified as
49 A 26 36 M 7 V 24 .

The number 36 stands for

Answer :

Option Id

(A) Structure

48001

(B) Grade

48002

(C) Grit Size

48003

(D) Bond

48004

Right Answer :

Grit Size

Right Option Id : 48003

Question 23

Question Id : 27

During ultrasonic machining, the metal removal is achieved by

Answer :

Option Id

(A) High frequency eddy currents

27001

(B) High Frequency sound waves

27002

(C) Hammering action of abrasive particles

27003

(D) Rubbing action between tool and work piece

27004

Right Answer :

Hammering action of abrasive particles

Right Option Id : 27003

Question 24

Question Id : 25

Which of the following instruments is used for conducting alignment tests?

Answer :

Option Id

(A) Strain Gauge

25001

(B) Dial Gauge

25002

(C) Dynamometer

25003

(D) Tachometer

25004

Right Answer :

Dial Gauge

Right Option Id : 25002

Question 25

Question Id : 2

A Master Gauge is

Answer :

Option Id

(A) A new gauge

2001

(B) An international reference standard

2002

(C) A standard gauge for checking accuracy of gauges used on shop floors

2003

(D) A gauge used by experienced technicians

2004

Right Answer :

A standard gauge for checking accuracy of gauges used on shop floors

Right Option Id : 2003

Question 26

Question Id : 24

Surface roughness on a drawing is represented by

Answer :

Option Id

(A) Circle

24001

(B) Triangle

24002

(C) Square

24003

(D) None of the given options

24004

Right Answer :

Triangle

Right Option Id : 24002

Question 27

Question Id : 3

Internal gears can be made by

Answer :

Option Id

(A) Hobbing

3001

(B) Gear Shaping with rake cutter

3002

(C) Gear shaping with pinion cutter

3003

(D) Grand milling

3004

Right Answer :

Gear shaping with pinion cutter

Right Option Id : 3003

Question 28

Question Id : 4

In arc welding arc is created between the electrode and work by

Answer :

(A) Flow of current

Option Id

(B) Voltage

4001

(C) Material Characteristics

4002

(D) Contact resistance

4003

4004

Right Answer :

Contact resistance

Right Option Id : 4004

Question 29

Question Id : 5

Soldering process is carried out in the temperature ranges

Answer :

(A) 15-60°C

Option Id

(B) 70-150°C

5001

(C) 180-250°C

5002

(D) 300-500°C

5003

5004

Right Answer :

180-250°C

Right Option Id : 5003

Question 30

Question Id : 6

The DC power source for arc welding has the characteristics $3V+I=240$, where V= Voltage and I = Current in amp. For maximum arc power at the electrode, voltage should be set at

Answer :

(A) 20V

Option Id

(B) 40V

6001

6002

(C) 60V

6003

(D) 80V

6004

Right Answer :

40V

Right Option Id : 6002

Question 31

Question Id : 7

In which one of the following machining manual part programming is done?

Answer :

(A) CNC Machining

Option Id

7001

(B) NC Machining

7002

(C) DNC Machining

7003

(D) FMS Machining

7004

Right Answer :

NC Machining

Right Option Id : 7002

Question 32

Question Id : 8

In which machining system, the highest level of automation is found?

Answer :

(A) CNC machine tools

Option Id

8001

(B) Automatic transfer machines

8002

(C) Machine tools with electro hydraulic positioning and control

8003

(D) DNC Machining system

8004

Right Answer :

Automatic transfer machines

Right Option Id : 8002

Question 33

Question Id : 9

Programmable automation is suitable for

Answer :

(A) Low production volume and large varieties of parts

Option Id

9001

(B) Low production volume and small varieties of parts

9002

(C) High production volume and small varieties of parts

9003

(D) High production volume and large varieties of parts

9004

Right Answer :

Low production volume and large varieties of parts

Right Option Id : 9001

Question 34

Question Id : 10

What is the correct order of the development of the following?

- 1.Numerical control
- 2.Computer numerical control
- 3.Direct numerical control
4. Distributed numerical control

Answer :

(A) 1, 2, 3 and 4

(B) 4, 2, 3 and 1

(C) 1, 3, 2 and 4

(D) 4, 3, 2 and 1

Option Id

10001

10002

10003

10004

Right Answer :

1, 2, 3 and 4

Right Option Id : 10001

Question 35

Question Id : 11

Machining centre is

Answer :

(A) An automatic tool changing unit

(B) A group of automatic machine tool

(C) A next logical step beyond NC Machine

(D) An NC machine tool

Option Id

11001

11002

11003

11004

Right Answer :

A group of automatic machine tool

Right Option Id : 11002

Question 36

Question Id : 12

Which one of the following types of layout is used for the manufacturing of huge aircraft?

Answer :

(A) Product layout

Option Id

12001

(B) Process layout

12002

(C) Fixed position layout

12003

(D) Combination layout

12004

Right Answer :

Fixed position layout

Right Option Id : 12003

Question 37

Question Id : 13

The correct sequence of increasing production volume is

Answer :

(A) Batch, job flow and mass

Option Id

13001

(B) Mass, flow, batch and job

13002

(C) Job, flow, mass and batch

13003

(D) Job, batch, mass and flow

13004

Right Answer :

Job, batch, mass and flow

Right Option Id : 13004

Question 38

Question Id : 14

A shaft made from ductile material is subjected to combined bending and twisting moments. Calculation based on which one of the following failure theories would give the most conservative values?

Answer :

(A) Maximum principle stress theory

Option Id

14001

(B) Maximum shear stress theory

14002

(C) Maximum strain energy theory

14003

(D) Maximum distortion energy theory

14004

Right Answer :

Maximum shear stress theory

Right Option Id : 14002

Question 39

Question Id : 15

The maximum efficiency of self locking screw is

Answer :

(A) 50%

Option Id

15001

(B) 70%

15002

(C) 75%

15003

(D) 80%

15004

Right Answer :

50%

Right Option Id : 15001

Question 40

Question Id : 16

In case of power screw, what is the combination of materials used for the screw and the nut?

Answer :

(A) Cast iron screw and mild steel nut

Option Id

16001

(B) Carbon steel screw and phosphor bronze nut

16002

(C) Cast iron screw and cast iron nut

16003

(D) Aluminum screw and alloy steel nut

16004

Right Answer :

Carbon steel screw and phosphor bronze nut

Right Option Id : 16002

Question 41

Question Id : 17

A square steel bar of 50 mm side and 5m long is subjected to a load where upon, it absorbs a strain energy of 100J. What is its modulus of resilience?

Answer :

(A) $8 \times 10^{-3} \text{N/mm}^2$

Option Id

17001

(B) $125 \text{mm}^2/\text{N}$

17002

(C) 0.01N/mm^2

17003

(D) $100 \text{mm}^2/\text{N}$

17004

Right Answer :

$8 \times 10^{-3} \text{N/mm}^2$

Right Option Id : 17001

Question 42

Question Id : 18

Which one of the following properties cannot be evaluated by static tension test?

Answer :

(A) Shear strength

Option Id

18001

(B) Modulus of elasticity

18002

(C) Ductility

18003

(D) Poisson's ratio

18004

Right Answer :

Shear strength

Right Option Id : 18001

Question 43

Question Id : 19

For a specific application Young's modulus of materials is 125 GPa and Poisson's ratio is 0.25, the modulus of rigidity is-

Answer :

(A) 50Gpa

Option Id

19001

(B) 60Gpa

19002

(C) 80Gpa

19003

(D) 90Gpa

19004

Right Answer :

50Gpa

Right Option Id : 19001

Question 44

Question Id : 20

The axially loaded bar is subjected to a normal stress of 173MPa. The shear stress in the bar is-

Answer :

(A) 75 MPa

Option Id

20001

(B) 86.5 MPa

20002

(C) 100 MPA

20003

(D) 122.3 MPa

20004

Right Answer :

86.5 MPa

Right Option Id : 20002

Question 45

Question Id : 21

A beam carrying a uniformly distributed load rests on two supports 'b' apart with equal overhangs 'a' at each end. The ratio b/a for zero bending moment at mid-span is

Answer :

(A) 1/2

Option Id

21001

(B) 1

21002

(C) 3/2

21003

(D) 2

21004

Right Answer :

2

Right Option Id : 21004

Question 46

Question Id : 22

The moment diagram for a cantilever beam subjected to bending moment at end of beam will be

Answer :

(A) Cubic parabola

Option Id

22001

(B) Rectangle

22002

(C) Triangle

22003

(D) Elliptical

22004

Right Answer :

Rectangle

Right Option Id : 22002

Question 47

Question Id : 23

The ratio of hoop stress to longitudinal stress in thin walled cylinder is

Answer :

(A) 1

Option Id

23001

(B) 1/2

23002

(C) 2

23003

(D) 1/4

23004

Right Answer :

2

Right Option Id : 23003

Question 48

Question Id : 49

What causes a short steel strut to fail?

Answer :

(A) Fracture

Option Id

49001

(B) Shearing

49002

(C) Buckling

49003

(D) Yielding

49004

Right Answer :

Fracture

Right Option Id : 49001

Question 49

Question Id : 26

If one end of a hinged column is made fixed and the other free, how much is the critical load compared to the original value?

Answer :

Option Id

(A) One- fourth

26001

(B) One –half

26002

(C) Twice

26003

(D) Four times

26004

Right Answer :

One- fourth

Right Option Id : 26001

Question 50

Question Id : 50

Arrangement of silver, air, aluminum and lead in order of increasing thermal conductivity at room temperature yields

Answer :

Option Id

(A) Air , Aluminium, Silver, Lead

50001

(B) Air, Aluminium, Lead, Silver

50002

(C) Lead, Air, Aluminium, Silver

50003

(D) Air, Lead, Aluminium, Silver

50004

Right Answer :

Air, Lead, Aluminium, Silver

Right Option Id : 50004

Question 51

Question Id : 51

Which of the following have a highest thermal conductivity

Answer :

Option Id

(A) Boiling water

51001

(B) Steam

51002

(C) Solid ice

51003

(D) Rain water

51004

Right Answer :

Solid ice

Right Option Id : 51003

Question 52

Question Id : 52

The Fourier law of heat conduction is valid for

Answer :

Option Id

(A) One dimension only

52001

(B) Two dimension only

52002

(C) Three dimension only

52003

(D) None of the given options

52004

Right Answer :

One dimension only

Right Option Id : 52001

Question 53

Question Id : 53

What is the dimension of kinematic viscosity of a fluid?

Answer :

Option Id

(A) LT^{-2}

53001

(B) L^2T^{-1}

53002

(C) $ML^{-1}T^{-1}$

53003

(D) $ML^{-2}T^{-2}$

53004

Right Answer :

L^2T^{-1}

Right Option Id : 53002

Question 54

Question Id : 54

Gauge pressure at a point is equal to

Answer :

Option Id

(A) Absolute pressure plus atmospheric pressure

54001

(B) Absolute pressure minus atmospheric pressure

54002

(C) Vacuum pressure plus absolute pressure

54003

(D) Vacuum pressure minus absolute pressure

54004

Right Answer :

Absolute pressure minus atmospheric pressure

Right Option Id : 54002

Question 55

Question Id : 55

The minor loss due to sudden contraction is due to

Answer :

Option Id

(A) Flow contraction

55001

(B) Expansion of flow after sudden contraction

55002

(C) Boundary friction

55003

(D) Cavitation

55004

Right Answer :

Expansion of flow after sudden contraction

Right Option Id : 55002

Question 56

Question Id : 56

Newton's law of viscosity for a fluid states that the shear stress is

Answer :

Option Id

(A) proportional to angular deformation

56001

(B) proportional to rate of angular deformation

56002

(C) inversely proportional to angular deformation

56003

(D) inversely proportional to rate of angular deformation

56004

Right Answer :

proportional to rate of angular deformation

Right Option Id : 56002

Question 57

Question Id : 57

The critical value of Reynolds number for transition from laminar to turbulent boundary layer in external flows is taken as

Answer :

Option Id

(A) 2300

57001

(B) 4000

(C) 5×10^5

57002

(D) 3×10^6

57003

57004

Right Answer :

5×10^5

Right Option Id : 57003

Question 58

Question Id : 58

Centrifugal pump is started with its delivery valve

Answer :

(A) Kept fully closed

Option Id

(B) Kept fully open

58001

(C) Kept 20% open

58002

(D) Kept 50% open

58003

58004

Right Answer :

Kept fully closed

Right Option Id : 58001

Question 59

Question Id : 59

Which of the following is correct for Burger's Vector in screw dislocation?

Answer :

(A) Perpendicular to the dislocation line

Option Id

(B) Inclined to the dislocation line

59001

(C) Parallel to dislocation line

59002

(D) Opposite to the dislocation line

59003

59004

Right Answer :

Parallel to dislocation line

Right Option Id : 59003

Question 60

Question Id : 60

Which of the following is a case hardening process?

Answer :

(A) Spheroidising

Option Id

(B) Tempering

60001

60002

(C) Normalizing

60003

(D) Cyaniding

60004

Right Answer :

Cyaniding

Right Option Id : 60004

General English

Question 61

Question Id : 70

Fill in the blank " _____ has turned on the television "

Answer :

Option Id

(A) who

70001

(B) how

70002

(C) when

70003

(D) where

70004

Right Answer :

who

Right Option Id : 70001

Question 62

Question Id : 69

change the following sentence from active to passive voice. "Everyone liked his performance "

Answer :

Option Id

(A) his performance was liked by everyone

69001

(B) his performance liked everyone

69002

(C) his performace was liked everyone by

69003

(D) his performance liked by everyone

69004

Right Answer :

his performance was liked by everyone

Right Option Id : 69001

Question 63

Question Id : 66

Inform me in advance ____ you are unable to attend the meeting.

Answer :

Option Id

(A) although

66001

(B) during

66002

(C) until

66003

(D) in case

66004

Right Answer :

until

Right Option Id : 66003

Question 64

Question Id : 68

choose correct antonym of Foremost

Answer :

Option Id

(A) hindmost

68001

(B) unimortant

68002

(C) disposed

68003

(D) mature

68004

Right Answer :

unimortant

Right Option Id : 68002

Question 65

Question Id : 67

choose correct synonym . FOSTERING

Answer :

Option Id

(A) safeguarding

67001

(B) neglecting

67002

(C) ignoring

67003

(D) nurturing

67004

Right Answer :

nurturing

Right Option Id : 67004

Question 66

Question Id : 61

fill in the blanks with suitable words. Rukmani_____three paintings last year (make)

Answer :

Option Id

(A) has made

61001

(B) makes

61002

(C) will make

61003

(D) made

61004

Right Answer :

made

Right Option Id : 61004

Question 67

Question Id : 65

Identify the adjective in the following sentence: "I want a blue shirt "

Answer :

Option Id

(A) I

65001

(B) want

65002

(C) blue

65003

(D) shirt

65004

Right Answer :

blue

Right Option Id : 65003

Question 68

Question Id : 64

READ THE FOLLOWING PASSAGE AND ANSWER THE QUESTIONS THAT FOLLOWS:

Chameleons can change their skin color, but not because they choose to. The chameleon changes color to help it avoid its enemies. It is a form of camouflage, a disguise that allows it to blend in with its surroundings. The change is actually determined by environmental factors such as light and temperature. Bright sunlight darkens the skin. On cool nights, the color fades to a creamy color. The color changes when the chameleon is excited, angry, or scared. The change is rapid and increases when the chameleon is handled , injured, or approached by another chameleon. There are many types of chameleons. Almost half of them are found on the African island of Madagascar. Others occur mostly in the Sahara desert, with a few in western Asia and southern Europe. Chameleons live in trees where they usually eat insects. Very large chameleons can even use their sticky tongues to catch birds.

Question - What is the reason for a chameleon to change its skin color ?

Answer :

Option Id

(A) To attract its prey

64001

(B) To communicate with other chameleons

64002

(C) To blend in with its surroundings

64003

(D) To show of its beauty

64004

Right Answer :

To blend in with its surroundings

Right Option Id : 64003

Question 69

Question Id : 63

READ THE FOLLOWING PASSAGE AND ANSWER THE QUESTIONS THAT FOLLOWS:

Chameleons can change their skin color, but not because they choose to. The chameleon changes color to help it avoid its enemies. It is a form of camouflage, a disguise that allows it to blend in with its surroundings. The change is actually determined by environmental factors such as light and temperature. Bright sunlight darkens the skin. On cool nights, the color fades to a creamy color. The color changes when the chameleon is excited, angry, or scared. The change is rapid and increases when the chameleon is handled , injured, or approached by another chameleon. There are many types of chameleons. Almost half of them are found on the African island of Madagascar. Others occur mostly in the Sahara desert, with a few in western Asia and southern Europe. Chameleons live in trees where they usually eat insects. Very large chameleons can even use their sticky tongues to catch birds. -

Question - What factors determine a chameleon's color change ?

Answer :

(A) The food it eats

Option Id

63001

(B) The time of day

63002

(C) Light and temperature

63003

(D) The size of the chameleon

63004

Right Answer :

Light and temperature

Right Option Id : 63003

Question 70

Question Id : 62

READ THE FOLLOWING PASSAGE AND ANSWER THE QUESTIONS THAT FOLLOWS:

Chameleons can change their skin color, but not because they choose to. The chameleon changes color to help it avoid its enemies. It is a form of camouflage, a disguise that allows it to blend in with its surroundings. The change is actually determined by environmental factors such as light and temperature. Bright sunlight darkens the skin. On cool nights, the color fades to a creamy color. The color changes when the chameleon is excited, angry, or scared. The change is rapid and increases when the chameleon is handled , injured, or approached by another chameleon. There are many types of chameleons. Almost half of them are found on the African island of Madagascar. Others occur mostly in the Sahara desert, with a few in western Asia and southern Europe. Chameleons live in trees where they usually eat insects. Very large chameleons can even use their sticky tongues to catch birds. -

Question - How does bright sunlight affect a chameleon's skin color ?

Answer :

(A) It lightens the skin

Option Id

62001

(B) It darkens the skin

62002

(C) It turns the skin blue

62003

(D) It has no effect on the skin color

62004

Right Answer :

It darkens the skin

Right Option Id : 62002

General Knowledge

Question 71

Question Id : 80

Who is known as the " Father of the White Revolution" in India for his pioneering efforts in transforming the dairy industry ?

Answer :

Option Id

(A) M.S. Swaminathan

80001

(B) Dr. Verghese Kurien

80002

(C) Durgesh Patel

80003

(D) Sam Pitroda

80004

Right Answer :

Dr. Verghese Kurien

Question 72

Question Id : 77

Which country has won the ICC Women's Cricket World Cup 2023 ?

Answer :

Option Id

(A) England

77001

(B) South Africa

77002

(C) India

77003

(D) Australia

77004

Right Answer :

Australia

Right Option Id : 77004

Question 73

Question Id : 79

" Swaraj is my birthright and I shall have it," who said these words ?

Answer :

Option Id

(A) Gopal Krishna Gokhale

79001

(B) Bal Gangadhara Tilak

79002

(C) Lala Lajpat Rai

79003

(D) K.T. Telang

79004

Right Answer :

Bal Gangadhara Tilak

Right Option Id : 79002

Question 74

Question Id : 78

R21/Matrix-M, which was recently approved, is the vaccine against which disease ?

Answer :

Option Id

(A) COVID - 19

78001

(B) Malaria

78002

(C) Tuberculosis

78003

(D) Influenza

78004

Right Answer :

Malaria

Right Option Id : 78002

Question 75

Question Id : 76

Why carbon dioxide is called a greenhouse gas ?

Answer :

(A) Because they absorb heat

Option Id

76001

(B) Because they absorb moisture

76002

(C) Because they absorb oxygen

76003

(D) Because they absorb hydrogen

76004

Right Answer :

Because they absorb heat

Right Option Id : 76001

Question 76

Question Id : 71

Which Crop is Sown in the Largest Area in India ?

Answer :

(A) Wheat

Option Id

71001

(B) Barley

71002

(C) Maize

71003

(D) Rice

71004

Right Answer :

Rice

Right Option Id : 71004

Question 77

Question Id : 75

Which year the Right to Information (RTI) Act was passed ?

Answer :

(A) 2005

Option Id

75001

(B) 2007

75002

(C) 2012

75003

(D) 2006

75004

Right Answer :

2005

Right Option Id : 75001

Question 78

Question Id : 74

"Beti Bachao, Beti Padhao" (BBBP) Yojana of Govt. of India addresses about the -

Answer :

(A) Prevention of gender biased sex selective elimination

Option Id

(B) Ensuring survival & protection of the girl child

74001

(C) Ensuring educatin and participation of the girl child

74002

(D) All of the given options

74003

74004

Right Answer :

All of the given options

Right Option Id : 74004

Question 79

Question Id : 73

The National Institute of Research in Tribal Health (NIRTH) is situated at -

Answer :

(A) Bhopal

Option Id

(B) Jabalpur

73001

(C) New Delhi

73002

(D) Pune

73003

73004

Right Answer :

Jabalpur

Right Option Id : 73002

Question 80

Question Id : 72

Which of the following rivers is NOT a major river flowing through Uttar Pradesh ?

Answer :

(A) Ganga

Option Id

72001

(B) Yamuna

72002

(C) Godavari

72003

(D) Ghaghara

72004

Right Answer :

Godavari

Right Option Id : 72003

Reasoning

Question 81

Question Id : 90

In a certain code language, THANKS is written as HTNASK
How is COMMON written in that language?

Answer :

(A) ONMMCO

Option Id

90001

(B) OOMMNC

90002

(C) OCMNMO

90003

(D) OCMMNO

90004

Right Answer :

OCMMNO

Right Option Id : 90004

Question 82

Question Id : 89

Introducing Ruchi, Mukesh said that his father is the only son of my father, so tell me how Mukesh is related to Ruchi?

Answer :

(A) Father

Option Id

89001

(B) Uncle

89002

(C) Brother

89003

(D) maternal uncle

89004

Right Answer :

Father

Right Option Id : 89001

Question 83

Question Id : 88

Amrita ranks 9th in a class of 56 students. What is her rank from the bottom?

Answer :

(A) 65th

Option Id

(B) 67th

88001

(C) 66th

88002

(D) None of the given options

88003

88004

Right Answer :

None of the given options

Right Option Id : 88004

Question 84

Question Id : 87

If 5th May 2003 is Monday, what will be the day on 5th May 2004?

Answer :

(A) Tuesday

Option Id

(B) Wednesday

87001

(C) Thursday

87002

(D) Friday

87003

87004

Right Answer :

Wednesday

Right Option Id : 87002

Question 85

Question Id : 86

In the following number series, which number will replace the question mark?

4, 2, 5, 4, 7, 6, 10, 8, 14, ?

Answer :

(A) 10

Option Id

(B) 12

86001

(C) 18

86002

(D) 19

86003

86004

Right Answer :

10

Right Option Id : 86001

Question 86

Question Id : 85

In the following number series, which number will replace the question mark?

23, 29, 31, 37, 41, 43, ?

Answer :

Option Id

(A) 45

85001

(B) 53

85002

(C) 47

85003

(D) 49

85004

Right Answer :

47

Right Option Id : 85003

Question 87

Question Id : 84

Which of the following will complete the given series?

1, 6, 15, (...?), 45, 66, 91

Answer :

Option Id

(A) 25

84001

(B) 26

84002

(C) 27

84003

(D) 28

84004

Right Answer :

28

Right Option Id : 84004

Question 88

Question Id : 83

arrange the words given below in a meaningful sequence :

1. police
2. punishment
3. crime
4. judge
5. judgement

Answer :

Option Id

(A) 3,1,2,4,5

83001

(B) 1,2,3,4,5

83002

(C) 5,4,3,2,1

83003

(D) 3,1,4,5,2

83004

Right Answer :

3,1,4,5,2

Right Option Id : 83004

Question 89

Question Id : 82

If CUP : LIP :: BIRD : ?

Answer :

(A) GRASS

(B) FOREST

(C) BEAK

(D) BUSH

Option Id

82001

82002

82003

82004

Right Answer :

BEAK

Right Option Id : 82003

Question 90

Question Id : 81

Look at this series : 80,10,70,15,60,what should be the next number

Answer :

(A) 20

(B) 25

(C) 30

(D) 50

Option Id

81001

81002

81003

81004

Right Answer :

20

Right Option Id : 81001

Mathematical Aptitude

Question 91

Question Id : 99

What is the sum of the sides of a triangle ?

Answer :

(A) The length of its sides

(B) its area

(C) its perimeter

(D) All the given options

Option Id

99001

99002

99003

99004

Right Answer :

its perimeter

Right Option Id : 99003

Question 92**Question Id : 98**

Arun is the father of Rohit. Rohit is the brother of Mala. Mala is Dilip's wife. How is Dilip related to Rohit?

Answer :

(A) Brother-in-law

(B) Father

(C) Uncle

(D) Son

Option Id

98001

98002

98003

98004

Right Answer :

Brother-in-law

Right Option Id : 98001

Question 93**Question Id : 97**

Which instrument is used to measure or construct angles ?

Answer :

(A) Compasses

(B) A scale

(C) A protractor

(D) Set squares

Option Id

97001

97002

97003

97004

Right Answer :

A protractor

Right Option Id : 97003

Question 94**Question Id : 96**

M is the largest number which when rounded off to the nearest hundreds gives 63500. N is the smallest number which when rounded off to the nearest thousands gives 150000. What is the sum of M and N ?

Answer :

(A) 202049

(B) 231409

(C) 213049

(D) 213490

Option Id

96001

96002

96003

96004

Right Answer :

213049

Right Option Id : 96003

Question 95

Question Id : 91

Find the difference obtained when $9/40$ is subtracted from $23/40$

Answer :

(A) $25/40$

(B) $14/40$

(C) $31/40$

(D) $32/40$

Option Id

91001

91002

91003

91004

Right Answer :

$14/40$

Right Option Id : 91002

Question 96

Question Id : 94

If $(2,0)$ is a solution of the linear equation $2X + 3Y = K$, then the value of k is : a

Answer :

(A) 4

(B) 6

(C) 5

(D) 2

Option Id

94001

94002

94003

94004

Right Answer :

4

Right Option Id : 94001

Question 98**Question Id : 92**

Waheeda bought an ai cooler for Rs. 3300 including a tax of 10%. The price of the air cooler before VAT was added is:

Answer :

(A) Rs. 2000

(B) Rs. 3000

(C) Rs. 2500

(D) Rs. 2800

Option Id

92001

92002

92003

92004

Right Answer :

Rs. 3000

Right Option Id : 92002

Question 99**Question Id : 95**

By what number is $19/25$ lesser than $27/25$?

Answer :

(A) $8/25$

(B) $5/25$

(C) $6/25$

(D) $9/25$

Option Id

95001

95002

95003

95004

Right Answer :

$8/25$

Right Option Id : 95001

Question 100**Question Id : 100**

What is the product obtained when a fraction is multiplied by its reciprocal?

Answer :

(A) 0

(B) 1

(C) Reciprocal Parts

(D) Excerpt

Option Id

100001

100002

100003

100004

Right Answer :

1

Right Option Id : 100002