RRC
Group D

Previous Year Paper
(5 Nov 2018 Shift 1)

Que. 1 In the code language, FAIL is written as UZRO. What is the code for PASS?
1. KZHH
2. KWHH
3. LZHH
4. KYHH

Correct Option **- 1**

Que. 2 Rajya Sabha member Praful Manoharbhai Patel belongs to _____.
1. BJP
2. INC
3. Shiv Sena
4. NCP

Correct Option **- 4**

Que. 3 _____ Empire was founded by Hasan Gangu in 1347.
1. Sangma
2. Bahmani
3. Kakatiya
4. Vijayanagar

Correct Option **- 2**

Que. 4 Which of the given two statements A and B is/are true? What is the force of gravity:
   A. It is directly proportional to the product of the masses of the two objects.
B. It is directly proportional to the square of the distance between two objects.
1. Only B is true while A is false.
2. Both A and B are false.
3. Only A is true while B is false.
4. Both A and B are true.

Correct Option **- 3**

Que. 5 Given that the weight of a 1-mole atom of oxygen is 16g. What is the molecular weight of ozone?
1. 32 g/mol
2. 48 g/mol
3. 64 g/mol
4. 16 g/mol

Correct Option **- 2**

Que. 6 The 2017 Deaflympics was held in _____.
1. Istanbul, Turkey
2. Samsun, Turkey
3. Ankara, Turkey

4.   Budapest, Hungary

Correct Option - **2**

Que. 7   The first and second groups of the modern periodic table are called?

1.   b-block
2.   s-block
3.   o-block
4.   p-block

Correct Option - **2**

Que. 8   Out of total 85 students, 35 took Mathematics, 33 took Biology, while 23 students did not choose these two subjects. How many students opted for both Mathematics and Biology subjects?

1.   8
2.   7
3.   9
4.   6

Correct Option - **4**

Que. 9 Nm^{-2} is the international (SI) unit of _____.

1.   force
2.   thrust
3.   momentum
4.   pressure

Correct Option - **4**

Que. 10   A mini van passes two persons moving in the same direction at 5.4 km/h and 6 km/h such that the mini-van is moving at 4.5 sec and 6.75 sec respectively. What is the length of the mini-van?

1.   2.75 meter
2.   2 meter
3.   2.5 meter
4.   2.25 meter

Correct Option - **4**

Que. 11   The marked price of the laptop is Rs 22,000. The discount given is $12\frac{1}{2}$%. VAT is charged at 10%. How much will the customer have to pay for the laptop?

1.   Rs. 21,175
2.   Rs. 21,275
3.   Rs. 21,715
4.   Rs. 21,517

Correct Option - **1**

Que. 12   Select the option which is related to the third term in the same way as the second term is related to the first term.

North America : Canada :: Europe : ?

1.   Mexico

2. Spain
3. Egypt
4. Russia

Correct Option - **2**

Que. 13 | Ramesh credited 15% of his salary in his fixed deposit account and spent 30% of the remaining amount on getting groceries. If he has Rs. 2,380 is cash, then what is his salary?

1. Rs. 2,380
2. Rs. 4,500
3. Rs. 4,000
4. Rs. 2,800

Correct Option - **3**

Que. 14 | Who among the following has been appointed as the independent director of the International Cricket Council (ICC), on February 9, 2018?

1. Sachin Tendulkar
2. Jagmohan Dalmiya
3. indra nooyi
4. Sourav Ganguly

Correct Option - **3**

Que. 15 | Choose the Venn diagram that best represents the three classes given in the question below:

Copper, Book, Wire

(A)   (B)

(C)   (D)

1. A
2. B
3. C
4. D

Correct Option - **3**

Que. 16 | Complete the given alphabetical series:

A, C, F _____, _____, U

1. I, P
2. J, O
3. I, O
4. J, P

Correct Option - **2**

Que. 17 Hari invested Rs.100 for three years at a simple interest rate of 11.03%. How much should Tipu invest to get the same amount after three years, but at 10% compound interest?

1. Rs. 120
2. Rs. 110
3. Rs. 100
4. Rs. 105

Correct Option **- 3**

Que. 18 Fill in the blanks using the correct option for the following statements from the given alternatives. On heating _____, plaster of paris is obtained.

1. Carbonic acid
2. Baking soda
3. Gypsum
4. Calcium Carbonate

Correct Option **- 3**

Que. 19 _____ is a part of DNA, which provides information for a protein.

1. Chromosome
2. Nucleus
3. Trait
4. Gene

Correct Option **- 4**

Que. 20 Arun gifted Vijay a watch, which moves forward by 5 seconds every 3 minutes. It was set right at 7 in the morning. That same day, it was quarter past four in the afternoon. Find the exact time?

1. 4 p.m.
2. 587 minutes more than 03:11 p.m.
3. 597 minutes more than 3:12 p.m.
4. 23 minutes more than 04:11 p.m.

Correct Option **- 1**

Que. 21 Find the value of :

$$\tan\frac{\pi}{24}\tan\frac{3\pi}{24}\tan\frac{5\pi}{24}\tan\frac{7\pi}{24}\tan\frac{9\pi}{24}\tan\frac{11\pi}{24}\tan\frac{16\pi}{24}$$

1. $\sqrt{3}$
2. -1
3. 1
4. $-\sqrt{3}$

Correct Option **- 4**

Que. 22 When is National Youth Day celebrated in India?

1. 12 July
2. 15 December
3. 12 January

4. 12 November

Correct Option **- 3**

Que. 23 Who suggested that life evolved from simple inorganic (abiotic) molecules?

1. Murey
2. Darwin
3. Haldane
4. Mendel

Correct Option **- 3**

Que. 24 What was the day on 5th august, 1987?

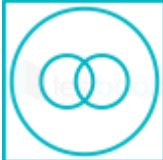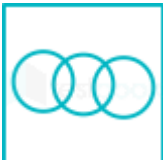1. Tuesday
2. Thursday
3. Saturday
4. Wednesday

Correct Option **- 4**

Que. 25 Narendra and Sunil are facing north direction. Narendra rotates 45º clockwise and then again 45º clockwise. How much will Sunil have to walk so that they both face each other?

1. 180º anticlockwise
2. 180º clockwise
3. 90º anticlockwise
4. 45º clockwise

Correct Option **- 3**

Que. 26 Choose the best suitable Venn diagram for the following words:

"Sun, Jupiter, Solar System"

1.

2.

3.

4.

Correct Option **- 1**

Que. 27 Political leader Sudesh Mahto is from which of the following Indian states?
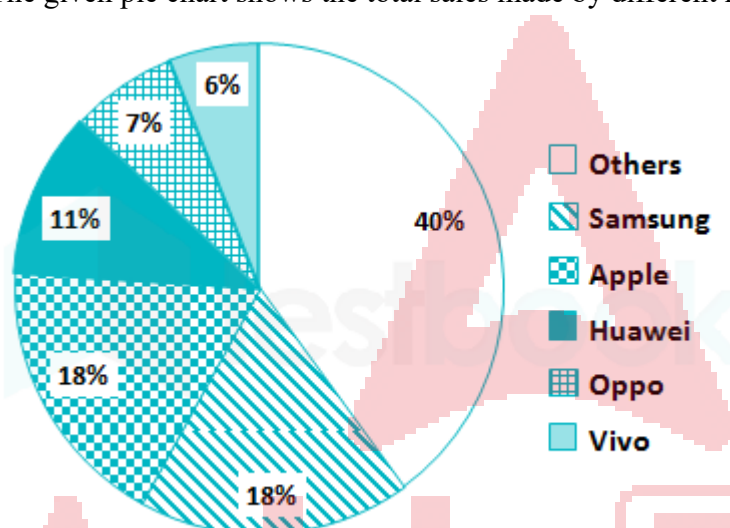
1. Bihar
2. Odisha
3. Jharkhand
4. West Bengal

Correct Option - **3**

Que. 28 A and B can do a piece of work in 12 and 16 days respectively. Together they do that work together for 3 days, then A leaves. Then in how many days will B alone complete the remaining work?

1. 12
2. 18
3. 9
4. 10

Correct Option - **3**

Que. 29 The given pie chart shows the total sales made by different mobile companies in the year 2017.

If the total sales in the year 2017 is Rs. 5,000 crores, then the total sales made by the Huawei company was Rs. _____ crores.

1. 2000
2. 550
3. 350
4. 900

Correct Option - **2**

Que. 30 Which of the following is a film based on the life of a girl who climbed Mount Everest at a young age (13 years 11 months)?

1. Newton
2. Shabd
3. Secret superstar
4. Poorna

Correct Option - **4**

Que. 31 Choose the correct figure from the options given below, which is suitable for the above blank space (?).

1.

2.

3.

4.

Correct Option **- 3**

Que. 32 | Who is the Union Minister of Science and Technology at present (as of July 2018)?

1.   Mahesh Sharma
2. Ravi Shankar Prasad
3. Dr. Harsh Vardhan
4. Suresh Prabhu

Correct Option **- 3**

Que. 33 | Which of the following is the tube that originates from the heart and carries blood to various organs in the body?

1. Veins
2. Blood cell to lung
3. Artery
4. Pulmonary arteries

Correct Option **- 3**

Que. 34 | Read the given question and decide which of the following statements are sufficient to answer the question.

Question:

Latika has 25 boxes of three colors and three different sizes (small, medium and big). How many oversized blue boxes does he have?

Statements:

1. The number of big box is half of the number of medium box.

2. There are 10 small blue colored boxes.

3. The number of medium boxes of green and red color is same.

1.   Statements 1, 2 and 3 together are not sufficient.
2. Statement 1 alone is sufficient.

3. Statement 2 alone is sufficient.
4. Statements 1, 2 and 3 together are sufficient.

Correct Option **- 1**

Que. 35 | Pandit Narayanrao Bodas belonged to which Gharana of Hindustani classical music?

1. Kirana Gharana
2. Banaras Gharana
3. Rampur Gharana
4. Gwalior Gharana

Correct Option **- 4**

Que. 36 | It is a religious city located in the state of Odisha in India.

1. Saputara
2. Puri
3. Naina Devi
4. Katra

Correct Option **- 2**

Que. 37 | What can be inferred regarding energy from the given figure?

1. The gravitational potential energy is in both the vehicles.
2. Two vehicles are moving fast using high energy.
3. Both vehicles are converting mechanical energy into muscular energy.
4. Both vehicles have kinetic energy.

Correct Option **- 4**

Que. 38 | Which of the following is a folk sport from rural Appalachia?

1. Opera
2. Hillbilly music
3. Rasta Music
4. Reggae

Correct Option **- 2**

Que. 39 | Select the term which is related to the third term in the same way as the second term is related to the first term.

A   B   C   D

1. D
2. A
3. B
4. C

Correct Option **- 1**

Que. 40 In a class of 45 students, the ratio of boys and girls is 4 : 5. The average marks of boys is 75 and that of girls is 82. What is the approximate average marks of the whole class?

1. 78.6
2. 78.5
3. 78.9
4. 79.0

Correct Option **- 3**

Que. 41 If the velocity is doubled, then

1. Momentum increases by 3 times and kinetic energy by 4 times
2. Momentum increases by 4 times and kinetic energy increases by 3 times
3. Momentum increases by 2 times and kinetic energy by 4 times
4. Momentum increases by 4 times and kinetic energy by 2 times

Correct Option **- 3**

Que. 42 In each of the questions below is given a statement followed by two assumptions I and II have been given. You have to consider the statement and the following assumptions and decide which of the assumptions are implicit in the statement.

Statements:

Everyone loves to read fairy tales.

Assumptions:

I. Fairy tales are only reading material.

II. Nobody likes other stuff.

1. Only assumption I is implicit.
2. Both I and II are implicit.
3. Neither I nor II is implicit.
4. Only Assumption II is implicit.

Correct Option **- 3**

Que. 43 There are 70 patients in a naturopathy hospital. It has three facilities (clay/steam/oil bath). 15 chose a clay and oil bath. 8 chose clay and steam bath. 9 chose oil and steam bath. 35 chose only 1 type of bath. How many chosen all three types of the bath?

1. 3
2. 9
3. 12

4. 2

Correct Option - **1**

Que. 44 Which of these agricultural products earns maximum export value in the market?
1. Spices
2. Cotton
3. Coffee
4. Basmati rice

Correct Option - **4**

Que. 45 Who won the Best Actress in a Leading Role award at Jio Filmfare Awards 2018?
1. Deepika Padukone
2. Radhika Apte
3. Vidya balan
4. Kareena kapoor

Correct Option - **3**

Que. 46 The interest accruing on a certain sum of money at 10% in one year is Rs. is 400. Calculate the compound interest for the same sum of money at the same rate and for the same period, if the interest is compounded half yearly.
1. Rs. 400
2. Rs. 210
3. Rs. 410
4. Rs. 200

Correct Option - **3**

Que. 47 If a = 0.125 then what is value of $\sqrt{4a^2 - 4a + 1} + 3a$?
1. 1.500
2. 1.125
3. 1.250
4. 1.225

Correct Option - **2**

Que. 48 A meaningful word is formed by taking the letters at positions 1, 19, 20, and 25 of ABCDEFGHIJKLMNOPQRSTUVWXYZ. The second letter of that meaningful word is:
1. T
2. O
3. M
4. Y

Correct Option - **1**

Que. 49 In which of the following the heart has only two chambers?
1. Salamander
2. Cobra
3. Frog

4.   Rohu

Correct Option **- 4**

Que. 50   According to the World Bank's Global Economic Prospects Report 2018, India may top the list as the fastest growing economy with a growth rate of _____.

1.   8.0%
2.   7.3%
3.   6.3%
4.   5.4%

Correct Option **- 2**

Que. 51   Let the given statements be true even when they seem to be at variance from commonly known facts and decide which of the given conclusions completely follow from the statement.

Statement:

A notice indicating, "Don't spill the trash; please use the dustbin."

Conclusion:

1. People often do not follow instructions.

2. People read notices and follow instructions.

1.   Either conclusion 1 or 2 follows.
2.   Neither conclusion 1 nor 2 follows.
3.   Only conclusion 1 follows.
4.   Only conclusion 2 follows.

Correct Option **- 4**

Que. 52   Which of the following does not belong to this group?

A. well

B. pond

C. mug

D. Lake

1.   D
2.   B
3.   C
4.   A

Correct Option **- 3**

Que. 53   Read the given question and decide which of the following statements are sufficient to answer the question.

Question:

Which word represents 'Mangoes' in the code language?

Statements:

1. "I love Mangoes" is written as 'E la mange'.

2. 'I love Orange' is written as 'E la orage'.

1.   Only statement 1 is sufficient
2.   Both Statements 1 and 2 are not sufficient.
3.   Both Statements 1 and 2 are sufficient.

4. Only statement 2 is sufficient

Correct Option **- 3**

Que. 54 The British divided the regions in India into the provinces of Bengal, Bombay and Madras called _____.

1. Presidency
2. Constituency
3. Subdivision
4. Sectors

Correct Option **- 1**

Que. 55 The length of each side of the polygon is 2.9 cm and its circumference is 17.4 cm. How many sides does a polygon have?

1. 6
2. 5
3. 4
4. 7

Correct Option **- 1**

Que. 56 A man clapped near the rock and heard the echo after 4 seconds. Then what is the distance of the rock from the person?

(speed of sound = 346m/s)

1. 1384 m
2. 173 m
3. 692 m
4. 346 m

Correct Option **- 3**

Que. 57 Aparna Popat is related to which sport?

1. Chess
2. Badminton
3. Tennis
4. Hockey

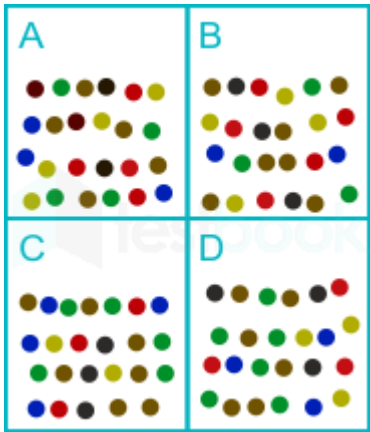Correct Option **- 2**

Que. 58 What is the object called through which sound is transmitted?

1. Material
2. Trembling
3. Medium
4. Machine

Correct Option **- 3**

Que. 59

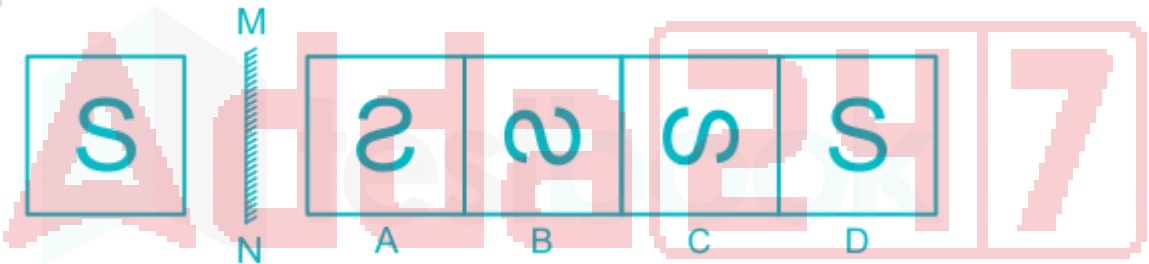Select the shape that is different in the group.

1. C
2. B
3. A
4. D

Correct Option - **1**

Que. 60 | Which union ministry organizes the National Film Awards every year?

1. Culture and Tourism
2. Home Ministry
3. Youth affairs
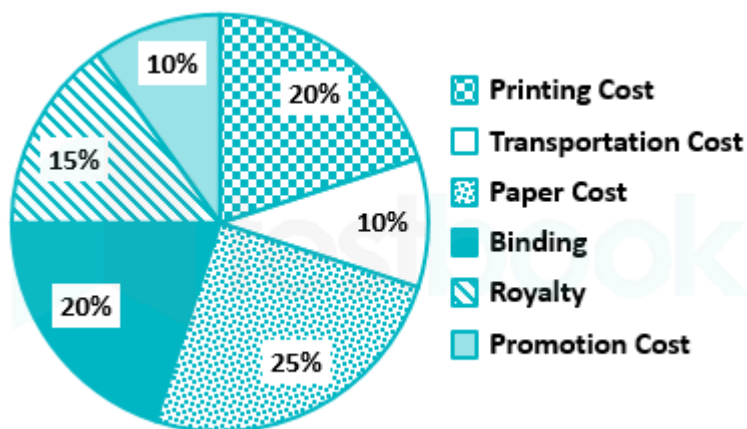4. Information and Broadcasting

Correct Option - **4**

Que. 61 | Select the mirror image for the figure given below:

1. B
2. C
3. A
4. D

Correct Option - **3**

Que. 62

The given pie diagram shows the expenditure of a publishing house in Karnataka. If the total expenditure is Rs. 50,000, then the cost of the paper is _____.

1. Rs. 12,500
2. Rs. 5,000
3. Rs. 10,000
4. Rs. 7,500

Correct Option - **1**

| **Que. 63** | In November 2017, who was appointed as the Secretary-General of the Lok Sabha? |

1. Sumitra Mahajan
2. Rama Devi
3. Desh Deepak Verma
4. Snehalta Srivastava

Correct Option - **4**

| **Que. 64** | The product of the ages of Anusha and Neelima is 240. If twice the age of Neelima is more than the age of Anusha by 4 years, then what is the age of Anusha? |

1. 18 years
2. 16 years
3. 20 years
4. 14 years

Correct Option - **3**

| **Que. 65** | Select the missing word. |
| | Lion : Pride :: Wolf : _____ ? |

1. Pack
2. Herd
3. Pod
4. Flock

Correct Option - **1**

| **Que. 66** | Select the alternative which has the same relation to the third word as the second word is to the first word. |

Honour : Nobility :: Humiliate :

1. Eradicate
2. Entertain
3. Disgrace
4. Disappear

Correct Option **- 3**

Que. 67 Four identical resistors, each of resistance R, are connected in parallel with each other. The equivalent resistance of the combination will be _____.

1. 4R
2. $\frac{R}{2}$
3. 2R
4. $\frac{R}{4}$

Correct Option **- 4**

Que. 68 Select the number which does not belong to the series.

6, 7, 16, 51, 206, 1045

1. 1045
2. 16
3. 206
4. 7

Correct Option **- 3**

Que. 69 What percentage is 15 minutes of $\frac{3}{2}$ day?

1. 10%
2. $\frac{1}{6}$%
3. $\frac{25}{36}$%
4. $41\frac{2}{3}$%

Correct Option **- 3**

Que. 70 Which day was 3rd May, 2008?

1. Sunday
2. Wednesday
3. Saturday
4. Monday

Correct Option **- 3**

Que. 71 Consider the statement and the following arguments and decide which of the argument is strong with respect to the statement.

Statement:

Whenever the national anthem is sung, people should stand upright and respect it.

Arguments:

I. Yes, it shows respect and pride for the country, as we are its citizens.

II. No, we don't need to claim patriotism unnecessarily.

1. Both Arguments I and II are strong.
2. Neither I nor II is strong.
3. Only argument I is strong.
4. Only argument II is strong.

Correct Option **- 3**

Que. 72 | Read the given question and select the correct conclusion.

Question:

Pravalika studies in class 10th. Is Pravalika older than her classmate Pranita?

Conclusion:

I. Yes, since Pranita is Pravalika's classmate, so Pranita is younger than her.

II. No, since Pranita is Pravalika's classmate, Pranita is older than her.

1. Only conclusion I is correct
2. Only conclusion II is correct
3. Neither conclusion I nor conclusion II is correct.
4. Either conclusion I or conclusion II is correct.

Correct Option **- 3**

Que. 73 | If the amount of water vapour in the air is high, then the rate of evaporation is _____.

1. Will decrease
2. Will be zero
3. Will remain the same
4. Will Increase

Correct Option **- 1**

Que. 74 | State the HCF and LCM of 60 and 72 respectively.

1. 16 and 360
2. 12 and 260
3. 12 and 360
4. 10 and 360

Correct Option **- 3**

Que. 75 | If the cost of $\frac{1}{9}$ of a pizza is Rs. 300, then the cost of $\frac{4}{9}$ of the same pizza will be:

1. Rs. 420
2. Rs. 1200
3. Rs. 440
4. Rs. 436

Correct Option **- 2**

Que. 76 | Which of the following statement is not correct about acids

1. Are sour in taste.
2. React with metals and bicarbonates to produce H_2, CO_2, and salts.
3. Slow neutralization i.e.
   Acid + Base $\rightarrow H_2$ + salt
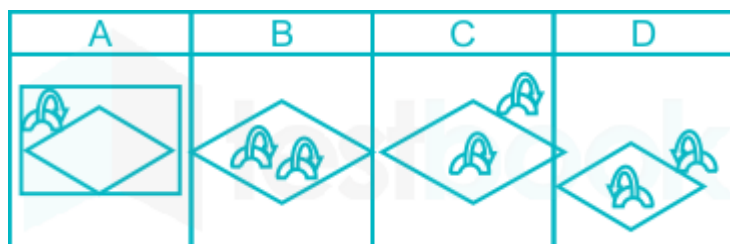
4. Forms H^+ in an aqueous medium/liquid state.

Correct Option **- 3**

Que. 77 Which of the following option figures is closest to the question figure?

Question figure:

Answer figure:

1. B
2. A
3. C
4. D

Correct Option **- 4**

Que. 78 Ligaments and Tendons are made up of:
1. Nervous system
2. Muscle tissue
3. Epithelial tissue
4. Connective tissue

Correct Option **- 4**

Que. 79 Who is the present Governor of Maharashtra? (2018)
1. Shri C. Subramaniam
2. Shri Chennamaneni Vidyasagar Rao
3. Shri S.C. Jamir
4. Dr P. C. Alexander

Correct Option **- 2**

Que. 80 When Mendeleev started the work (Classification of Elements), _____ elements were known.
1. 64
2. 63
3. 65
4. 61

Correct Option **- 2**

Que. 81 Identify the missing number.

676 : 841 :: 324 : _____

1. 484

2. 361
3. 441
4. 400

Correct Option **- 3**

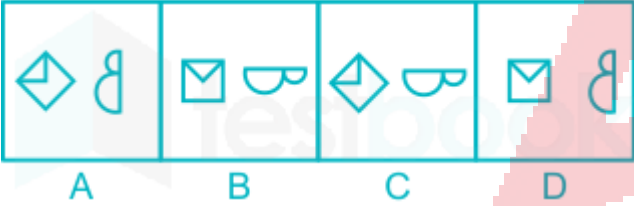**Que. 82** | Which of the following is an organic acid?

1. Carbonic acid
2. Sulfuric acid
3. Nitric acid
4. Oxalic acid

Correct Option **- 4**

Que. 83 | Select the figure from the answer figure which can replace the question mark in the question figure.
Question figure:

Answer figure:

1. A
2. B
3. D
4. C

Correct Option **- 4**

Que. 84 | Frequency is expressed in _____ and indicates that the event is repeated every second.

1. Ohm
2. Decibel
3. Ampere
4. Hertz

Correct Option **- 4**

Que. 85 | Where is the Wild Ass Sanctuary located?

1. Gujarat
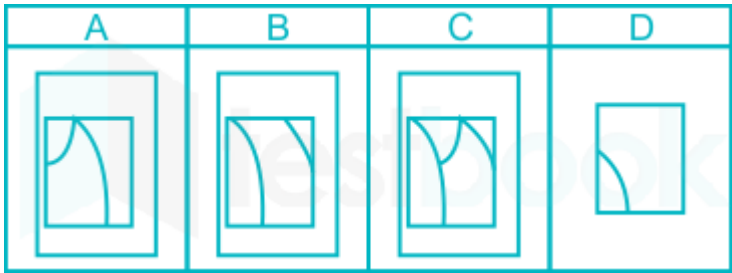2. Goa
3. Odisha
4. Maharashtra

Correct Option **- 1**

Que. 86 | Which answer figure is formed from the shapes given in the question figure?

Question figure:

Answer figure:

1. A
2. C
3. B
4. D

Correct Option - **1**

Que. 87 _____ is a surface phenomenon.
1. Sweat
2. Boiling
3. Steam
4. Excitement

Correct Option - **3**

Que. 88 The potential difference across the terminals of an electric heater is 60V when it receives a current of 4A from the source. If the potential difference increases to 142.5V, what will be the current received by the heater?
1. 15 A
2. 24 A
3. 9.5 A
4. 12 A

Correct Option - **3**

Que. 89 What will be the value of $\frac{4}{7} \times \frac{4}{9}$?
1. $\frac{16}{63}$
2. $\frac{8}{20}$
3. $\frac{8}{12}$
4. $\frac{8}{9}$

Correct Option - **1**

Que. 90 Based on the given statements two conclusions are given, decide which of the conclusions follows from the statement.

Statement:

All clips are pins. All pins are books.

Conclusion:

1. All clips are books.

2. Some pins are clips.

   1.   Only (2) follows.

   2.   Only (1) follows.

   3.   Both (1) and (2) follows.

   4.   Either (1) or (2) follows.

Correct Option - **3**

Que. 91   Read the following statements:

     A. If the value of the universal gravitational constant of the earth is Ge, then the value of the universal gravitational constant of the moon is Gm, then Ge = Gm

B. The force between two objects will be one-fourth of the mass of both objects is doubled.

C. If the value of the universal gravitational constant on the earth is Ge and the value of the universal gravitational constant on the moon is Gm, then Ge > Gm

D. The acceleration due to gravity is doubled everywhere.

Which of these statements is correct.

   1.   B, C and D

   2.   Only A

   3.   A, B and C

   4.   A, C and D

Correct Option - **2**

Que. 92   _____ helps to know the speed of the vehicle.

   1.   Speedometer

   2.   Voltometer

   3.   Velometer

   4.   Lactometer

Correct Option - **1**

Que. 93   Simplify the equation:

$$\left(\frac{5}{6} \times \frac{1}{3}\right) + \left(\frac{1}{3} \times \frac{1}{2}\right) - \left(\frac{11}{4} \times \frac{1}{3}\right) =?$$

   1. $\frac{-17}{36}$

   2. $\frac{17}{9}$

   3. $\frac{14}{33}$

   4. $\frac{23}{9}$

Correct Option - **1**

Que. 94   All three angles of a triangle have equal value. What will be the value of each angle?

   1.   45°

   2.   90°

   3.   60°

   4.   80°

Correct Option - **3**

Que. 95 Given below are three statements followed by two conclusions I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. Decide which of the conclusions follow from the statements.

Statements:

1. No guitar is a violin.

2. All violins are strings

3. No string is metal.

Conclusion:

I. No string being violin is a possibility.

II. Some guitars are not strings.

1.   Both conclusion I and II follow.

2.   Neither conclusion I nor II follow.

3.   Only conclusion I follows.

4.   Only conclusion II follows.

Correct Option **- 2**

Que. 96 Find the proper word for the blank space in the given series:

H, J, M, Q, ? , B

1.   Z

2.   C

3.   T

4.   V

Correct Option **- 4**

Que. 97 $\sqrt{75.24 + ?} = 8.71$

1.   0.6241

2.   6.0241

3.   6.241

4.   62.41

Correct Option **- 1**

Que. 98 Two cars A and B starting at the same time meet each other after t hours in opposite directions and reach their destination after 5 hours and 6 hours respectively after the meeting. If the speed of car A is 55 km/h, then what will be the speed of car B?

1. $66\sqrt{12}$ km/hr

2. $110\sqrt{3}$ km/hr

3. $\frac{110}{\sqrt{6}}$ km/hr

4. $\frac{55}{6}\sqrt{30}$ km/hr

Correct Option **- 4**

Que. 99 Alkanes are saturated hydrocarbons in which a bond is found between two carbon atoms. which has a general formula.

1. C_nH_{2n+2}

2. C_nH_{n+1}

3. C_nH_{2n-1}

4. C_nH_{2an+1}

Correct Option - **1**

Que. 100   Find the value of k so that $(3x - 2)$ is a factor of $15x^2 - kx - 14$.

1. -10
2. -11
3. 10
4. -12

Correct Option - **2**