Welcome to the IATSAT International Olympiad 2021-2022. Please follow the instructions mentioned below.

- There are 140 questions given, students have to attempt all the questions.
- This test consists of five sections; Mathematics, English, Science, General Awareness and Psychometric.
- Time duration for the test will be 140 minutes.
- Once you submit the question you are not allowed to go back.
- Please keep your camera ON.
- Once your camera will be turned off you will be logged out automatically.

SECTION-I (Mathematics)

1.Which of the following sets of Roman numerals are written in ascending order?
A: A.V, L, X, I
B: B.I, V, L, X
C: C.I, V, X, L
D: D.X, V, I, L

2.How many rectangular slabs of 10 cm x 8 cm are required to cover the floor of a hall of 12 m x 10 m ?
A. 12000
B. 15000
C. 10000
D. 18000

3.Divide the place value of 5 in 256798 by 1 less than the predecessor of 10002.
A. 501
B. 50
C. 5001
D. 55

4.A number is always divisible by 90, if .
A.It is divisible by both 2 and 45
B.It is divisible by both 5 and 18
C.It is divisible by both 9 and 10
D.All of these

5.The students in a class can be divided into groups of 2, 3, 5 and and 6. What is the least number of students this class can have?
A.40
B.30
C.35
D.42

6.Which of the following statements is CORRECT?
A. An angle whose measure is less than the measure of a right angle is called an acute Angle.
B .A perpendicular always bisects a line segment into two equal parts.
C. A quadrilateral is a five sided polygon
D. All of these

7.The cost of fencing a rectangular field at Rs 24 per meter is Rs 1920. If its length is 27 m then what is its breadth?
A.12 m
B.13 m
C.15 m
D.16 m

8.The ratio of length of a field to its width is 5:3. What is its length if the width is 42 m?
A.60 m
B.65 m
C.70 m
D.72 m

9.If 144: x:: x: 121 then what is the value of x?
A. 112
B. 122
C. 132
D. 142

10.A brick is an example of a
A.Cube
B.Cuboid
C.Cylinder
D.Prism

11.If white is red, red is yellow, yellow is orange, orange is blue, blue is violet, violet is green, then what is the colour of brinjal?
A. Violet
B.Blue
C.Green
D.Yellow

12.If LAPTOP is written as NYRRQN then MOUSE is written as
A.OMVQG
B.OMWQG
C.OMWPG
D.ONWPG

13. The difference between the place values of digit 5 in the greatest and the smallest 5-digit number formed by using the digits 2, 1 , 5 , 7 and 3 (each digit should be used only once) is
A. 6274
B. 6296
C. 4964.
D. 4950.

14.Two numbers are such that one of them exceeds the other by 9 and their sum is 81. Which is the larger number?
A. 36
B. 45
C. 48

D. 5

15.The cost of 5 bananas is Rs. 25. Then what is the cost of 5 dozen bananas?
A.Rs. 200
B.Rs. 240
C.Rs. 280
D.Rs. 30

16. What is the value of x if x / 8 - 1 / 2 = x / 6 - 2 ?
A. 28
B. 32
C. 36
D. 40

17. What is the value of P if 3(2 – 5P) – 2(1 – 6P) = 1?
A.1
B.1 / 2
C.1 / 3
D. 2

18.If a is the predecessor of b, then the value of (a – b) and (b – a) are respectively.
A. –1 and 1
B. 1 and –1
C. 0 and 1
D. 1 and 0

19. Among 2.007, 2.067, 2.607 and 2.67 which is the largest?
A. 2.607
B. 2.67
C. 2.007
D. 2.067

20. 0.404 + 0.004 + 4.044 + 4.444 =?
A. 8.896
B. 8.886
C. 8.096
D. 8.806

21. The angles of a quadrilateral are 3:4:5:6. What is the difference between the largest and smallest angle of a quadrilateral?
A. 20°
B. 30°
C. 40°
D. 60°

22. In a class of 35 students Kartik is placed 7th from the bottom whereas Mohit is placed 9th from the top. Sonal is placed exactly in between Kartik and Mohit. What is Kartik's position from Sonal?
9th
B. 10th
C. 11th
D. 8th

23. Pointing to a photograph Arun said, "she is the mother of my brother's son's wife's daughter." How is the lady related to Arun?
A.Cousin
B.Daughter in Law
C.Uncle
D.Brother in Law

24. Choose the odd one out from the following:
A. 29(96)17
B. 23(120)27
C. 77(76)68
D. 64(88)53

25. Arrange the following words according to English dictionary.
1. Hepatitis 2. Cholera 3. Peptidoglycan 4. Chitin
A. 2, 3, 1, 4
B. 4, 2, 1, 3
C. 4, 1, 3, 2
D. 3, 1, 4,

26. Arrange the following words according to English dictionary.
1. Hepatitis 2. Cholera 3. Peptidoglycan 4. Chitin
A. 2, 3, 1, 4
B. 4, 2, 1, 3
C. 4, 1, 3, 2
D. 3, 1, 4,

27. If '×' means '÷', '+' means '×', '−' means '+' and '÷' means '×', then 125 × 25 + 20 − 80 = ?
A. 180
B. 90
C. 200
D. 20

28.The length of a rectangular hall is 5 m more than its breadth. If the perimeter is 74 m. What is the area of a rectangle?
A. 332m²
B. 334m²
C. 336m²
D. 338m²

29.How many lines can be drawn passing through two given points
A. One
B. Two
C. Three
D. Unlimited

30. The cost of fencing a rectangular field at Rs 24 per meter is Rs 1920. If its length is 27 m then what is its breadth?
A. 12 m
B. 13 m
C. 15 m
D. 16 m

SECTION-II (ENGLISH)

Select correct options (verbs) to replace the blanks.

1.I only_____a little salt for my biryani.
A Want
B wanting
C have wanted
D will want

2.These bangles_____cheaper in Sultan Bazar.
A.is
B.was
C.are
D.will

3.Select correct options (with the most suitable form of the verb agreeing with the subject) to fill the blanks.

_____ Anybody ever told you that you're beautiful?
A.have
B.had
C.will
D.has

4.Some of the products _____to be contaminated.
A.appear
B. will appear
C. appears
D. has appeared

5. Select options (synonyms) to the underlined words.

His behaviour is idiotic. I don't encourage him ever.
A.important
B. foolish
C. Ideal
D. intellectual

6.Identify the given sentence on the basis of its structure.
Rabindranath Tagore was both a poet and a writer.
A.Simple
B.Complex
C.Compound
All of these

7. Find the analogy.
If 'House' is to 'Shelter' then 'Soap':?
Washer man
Cleanliness
Bathroom
Water

8.In which of the following sentences the verbs used is/ are transitive verb(s):
A. Jack eats.
B. Messi plays soccer.
C.Lata sings a song.
A)Only A
B)A and B
C)Only C
D)B and C

9. Fill in the blank with the correct pronoun.
Two sisters loved .
One another
Each other
Neither
themselves
.
10. Arrange P, Q, R, S to make a meaningful sentence. He said that those who
P:would miss a very interesting game
Q:to be played
R: between two famous teams
S:would not accompany him
QRPS
SPQR
SQRP
SRPQ

Direction: (For Q11-12) Read the given passage carefully and select the appropriate answer:
In Bengal, many poor farmers had been forced and compelled to take up indigo cultivation when the British settlers were given the right to purchase and cultivate land in India.

Many whites, therefore, either acquired land or advanced loans to poor farmers and pressured them to forsake the farming of food grains and other cash crops for indigo cultivation. Within a few years, most of the fertile lands had undergone forcible indigo cultivation, resulting in a famine situation in Bengal. When the farmers declined to cultivate indigo, they were tortured, jailed and even killed.

11. The poor farmers in Bengal took up indigo cultivation because:
This was the only crop that would grow in Bengal.
It was a lucrative earning opportunity for the farmers.
Farmers were forced to do so.
The British government gave the farmers huge money for indigo cultivation.

12. Why did indigo cultivation result in famine in Bengal?
Farmers were not interested in the cultivation of food grains.
Most of the fertile lands had undergone forcible indigo cultivation.
British settlers forcibly took away all the food grains out of Bengal.
All foods were transported to Europe.

13. Give the usage of the word underlined in the given sentence.
She is a beautiful lady.

(A)Adjective
(B)Conjunction
(C) Determiners
(D) Pronoun

15. Change the direct sentence into indirect one.
The boy said to me,"Don't buy this toy."
A)The boy asked me not to buy the toy.
B)The boy told me not to buy the toy.
C)The boy forbade me to buy that toy.
D)All of the above

16.The worried mother sat-----her child all night.
A. beneath
B.Upon
C.Beside
D.underneath

17.--------Purer water than this does not exist
A. The
B. A
C. An
D. No article

18. How can I thank you for lending me money.
A.Never
B.Never
C.Least
D. each

19. Don't hesitate to write again if I can be of any help.
A.Farther
B.Further
C.Future
D. after

20. Members only have access ----------the Board of Directors hall.
A.for
B.to
C.On
D. upon

21. Five lakhs of rupees----------a huge amount.
A. are

B. is
C. Am
D. they

22.Choosing this job offer was a difficult situation for him. It was like selecting between the ----------
A. two odds.
devil and the deep sea
C. two halfs
D. apple and pie

23.The speaker was unable to express himself properly. He was----------.
A.inimitable.
B. inarticulate.
C. indelible
D. inaudible

24.I ----------for him since quarter to eight and I shall wait only another five minutes.
A. was waiting
B. had been waiting
C. have been waiting
D. had waited
FOR QUESTIONS 53 AND 54, CHOOSE THE PART OF THE SENTENCE THAT HAS AN ERROR:
25. The wind was blowing hard and soon there was a devastating sandstorm.
A. The winds
B. was blowing hard
C. and soon there was
D. a devastating sandstorm.

26.The celebrations after winning the World Cup went on till the wee hours of the morning.
A. The celebrations
B. After winning the World Cup.
C. went on till the wee hours
D. of the morning.

FOR QUESTIONS 27-28, CHOOSE THE CORRECT SYNONYM OF THE
27.GIVEN WORD Plod
Cry
B. Move
C. Hurry
D. Imitate

28. GIVEN WORD Topple
A.Top over something
B. Decorate
C. Tumble
D. Free moving

FOR QUESTIONS 29 AND 30, CHOOSE THE CORRECT ANTONYM OF THE GIVEN WORD:
29.Cowardice
A.Honest
B. Failure
C. Courage
D. Demean

30.Vague
A.Astonish
B. Clear
C. Crafty
D. Honest

FOR QUESTIONS 31 AND 32, CHOOSE THE OPTION WITH THE CORRECT SPELLING:
31. One who is a professional
A. Amature
B. Amateur
C. Amatur
D. Amaetur

32. A type of free weight used for weight training
A. Dumbell
B.Dumbbell
C. Dumbill D. Dumbbell

SECTION-III (Science)

1 .Motion and Measurement of Distances Motion and Measurement of Distances The motion in which all points of the body move through the same distanced in the same time is
A .Rotatory motion
B. Linear motion
C. Circular motion
D. motion

2. Spinning of a top is an example of…….

A. Rotatory motion
B.Translatory motion
C.Vibratory motion
D.Oscillatory motion

Choose the incorrect statement from the following.
A.Distance between Delhi and Hyderabad is of order in km
B.Hundred centimeter make one meter
C.1 quintal is equal to 100 kg
D.A simple pendulum is used to measure the mass of a bob.

4.An early device used for measuring time was
A.Watch with balance wheel
B.Pendulum clock
C.Sundial
D.Sand glass

5.The reason why scientists repeat measurements they take during experiments is so that they can.
A.Check whether the instruments used are inaccurate
B.List the measurements taken in a table
C.Take the average and reduce the possibility of error
D.Get more than one answer

6.Which of the following defines mimicry?
A.Change color or shape to blend in the environment
B.Look or sound like some other animal to protect themselves
C.Make fun of other animals to survive
D.Learn to fight to survive

7.What is camouflage adaptation?
A.Hide under water to protect themselves
B.Hide with leaves and dry grass to protect themselves
C.Look like its surroundings to protect themselves
D.Look like its predator to protect themselves

8.What organ system is made of heart, blood and vessels?
A.Skeletal System
B.Respiratory System
C.Digestive System

D.Circulatory System

9. What organ system is made of the mouth, esophagus, stomach, intestines?
A.Skeletal System
B.Respiratory System
C.Digestive System
D.Circulatory System

10.What is the largest internal organ in the human body?
A.Brain
B..Heart
C.Liver
D.Stomach

11. When magnesium ribbon is burnt, heat and light are produced. It is an example of
A.Chemical change
B.Physical and irreversible change
C.Chemical and exothermic change
D.Chemical and endothermic change

12.Reverse of boiling is:
A.Condensation
B.Evaporation
C.Vaporization
D.Freezing

13.The process in which heat is taken in are
A.Evaporation and melting
B.Freezing and condensation
C.Freezing and evaporation
D.Condensation and melting

14.In burning of paper
A.A new substance is formed
B.Change is permanent
C.Both A new substance is formed & Change is permanent
D.Physical change occurs

15.Expansion on heating, contraction on cooling and change of state is

A.Chemical change
B.Permanent change
C.Reversible change
D.Irreversible change

16. Which of the following activities would show that air is dissolved in water?
A. Press a piece of cotton wool into the bottom of a tumbler. Hold the tumbler upside down and insert it into a bowl of water, without tilting it.
B. Press steel wool into the bottom of the gas jar. Invert the gas jar into the bowl of water on two small wooden blocks so that there is space between the gas jar and the bowl.
C. Take some water in a pan. Heat it gently on a gas burner. Observe the water as it begins to heat.
D. None of these

17.Reema's mother has done some preparation for her 'Birthday Party'. Which of the following changes can be reversed?
A.Baking cake in an oven
B.Burning of a candle
C.Rolling a ball of dough and baking it to make kulcha
D.Blowing of a balloon

18.Which of the following statements best describes the cooling of tea faster?
A.The metal spoon absorbs the coldness from the surroundings and transfers the coldness to the hot tea.
B.The metal spoon absorbs heat from the hot tea and transfers the heat to the surroundings.
C.The metal spoon absorbs heat from the cup and transfers the heat to the surroundings.
D. None of the above

19.A substance made by the body that helps white blood cells destroy disease germs is a
A.allergy.
B.virus
C. antibody
D. Hemoglobin

20. Vertebrates, or chordates, are animals that all have:
A. Notochord and a nerve cord.
B. A backbone.
C.All of the above
D.None of the above

21. What type of tectonic plate boundary involves a collision between two tectonic plates?

A.Divergent
B.Transformation
C.convergent
D.Normal

22.A negatively-charged particle moving around the nucleus of an atom is a(n) .
A.compound
B.Electron
C.Atom
D.proton

23.Current is the flow of electric charge.
A.True
B.False
Both A& B
None of the above

24.Human beings are able to produce new human beings through…….
respiration
B. reproduction
C. circulation
D. digestion

25.Cell walls are part of_____

A.plant cells.
B.Animal cells.
C.organ systems.
D.plant & animal cells.

26. The diagram shows the layers of Earth. Which of the following best describes layer B?
A.solid rock
B.solid metal
C.liquid and solid rock
D.liquid and solid metal

27.A specific characteristic that an organism can pass to its offspring is called a (n).
A.Function
B.Structure
C.Embryo
D. Trait

28.In a completely dark room, if you hold up a mirror in front of you, will you see?

A.Your shadow
B.A sharp shadow
C.Your image
D.No image

29. The two poles of a horseshoe magnet are:
A.East and West poles
B.North and South poles
C.North-East and South-East poles
D.North-West and South-West poles

30.A magnet will attract objects made of:
(i) Iron (ii) Cobalt (iii) Nickel (iv)copper
A. (i), (ii) & (iii)
B. (i), (ii) & (iv)
C. (ii), (iii) & (iv)
D. (i), (ii), (iii) & (iv)

SECTION-IV (General Awareness)

1.Who was known as the Frontier Gandhi ?
A.Abdul Gaffar khan
B.Sardar Vallabh Bhai Patel
C.Subhash Chandra Bose
D. Indira Gandhi

2.How many medals did India win at the 2018 Asian Games
A.70
B.50
C.60
D.55

3.2018 Asian games was held in
A.Jakarta
B.Guangzhou
C.Kuala Lumpur
D.Shanghai

4……..is the winner of men's singles title in French Open 2020
A.Dominic Thiem
B.Rafael Nadal
C.Roger Federer
Novak Djokovic

5.……won India's first medal in Wrestling at the Olympics
A.Sushil Kumar
B.Yogeshwar Dutt
C.KD Jadhav
D .None of the above.

6…….was ranked as World Number 1 at BWF ranking in Badminton in 2018.
A.K Srikanth
B.P Gopichand
C.P Kashyap
D.None of the above

7. Dhyan Chand is an Indian Sports player of World renown in the sport of ----------
A.Cricket
B.Athletics
C.Hockey
D.Badminton

8.……won the most number of UEFA Champions League titles

A)Real Madrid

B)Barcelona
C)Bayern Munich
D)AC Milan

9.……won the most Formula One World Championships.

A)Lewis Hamilton
B)Alain Prost
C)Sebastian Vettel
D) Fernando Alonso

10. Anju Bobby George won the Bronze medal in……..at 2003 World Championships in

A)High Jump
B)Long Jump
C)Shot Put
D.Javelin Throw

11.-----won India's first Olympic Bronze medal in Boxing.

A.Vijender Singh
B.Akhil Kumar
C.Dingko Singh
D. Mary Kom

12.Garry Kasparov is a former world Chess Champion from :-
A.Bulgaria
B.Ukraine
C.Russia
D.Belarus
13…… won the most Australian Open titles.
A.Novak Djokovic
B.Roger Federer
C.Andre Agassi
D.Pete Sampras

13…… won the most Australian Open titles.
A.Novak Djokovic
B.Roger Federer
C.Andre Agassi
D.Pete Sampras

14…….won the most number of FIFA Football World Cup titles.
A.Italy
B.Brazil
C.Germany
D.Argentina

15……scored the famous goal in FIFA World Cup which later on came to be known as 'Hand of God' goal.
A.Pele
B.Ronaldo
C.Puskas
D.Diego Maradona

16. 'Hitting across the line' is the autobiography of_____, a famous cricket player.
A.Vivian Richards
B.Donald Bradman
C.Garfield Sobers
D.Jack

17. James T Russel is known for invention of……..
A.Compact Disc (CD)
B.Monitor
C.Floppy Disk
D.None of the above.

18.Famously known as Human Computer of World.
A.S Ramanujan
B.C V Raman
C.Shakuntala Devi
D.None of the above

19……. is the full form of PDF
A.Portable Docs Format
B.Passive Document Format
C.Portable Document Format
D.None of the above

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A.S Ramanujan
B.C V Raman
C.Shakuntala Devi
D.None of the above

19……. is the full form of PDF

A.Portable Docs Format
B.Passive Document Format
C.Portable Document Format
D.None of the above

20. International Business Machine (IBM) was established in
A. 1921
B. 1991
C. 1951
D. 1911

21.Osborne 1 was the first _____
A.Laptop
B.Calculator
C.Portable Computer
D.None of the above

22.ARPANET was developed by
A.UK Department of Defense
B.US Department of Defense
C.French Department of Defense
D.None of the above

23.Google originated from the word Googol. Googol is equivalent to ----------

A.10 to the power 100
B.10 to the power 1000
C.10 to the power 10
D.10 to the power 50

25.Yahoo was acquired by……in 2017
A.Amazon
B.Verizon Media
C.Google
D.Microsoft

26.Bjarne Stroustrup is a Danish computer scientist known for developing……...
A.C++
B.COBOL
C.Python
D.None of the above

27.Guido van Rossum in 1991 designed ____language
A.Python

B.JAVA
C.Ruby on Rails
D.None of the above

28.World Computer Literacy Day is celebrated every year on
A.1st December
B.2nd December
C.4th December
D.14th January

29.Router will enable access to the internet from multiple devices.
A.True
B.False
C.Both A&B
D.None of the above

30.Full Form of MODEM is …….
A. Modulator Demodulator
B. Demodulator
C.Modulator Demodification
D.None of the above

31.Amazon was founded in……
A. 1990
B. 1995
C. 2000
D. 1994

SECTION-V PSYCHOMETRIC TEST

This test is designed to measure your ability to interpret verbal information and reach correct conclusions.

The brain has around one hundred billion cells (neurons). Brain cells make links that form neural pathways and it is these links that help us to learn. It is estimated that there might be as many as one hundred trillion such neural links, although others have put the figure much higher – 1 with millions of zeros after it. The number of neural links has been likened to trying to imagine all the trees in the Amazon rainforest as the number of neurons, and the number of leaves on every tree in the rainforest as the number of neural connections. Much of the new research into how the brain works has been boosted by the development of magnetic resonance imaging (MRI) technology. This technology allows us to be able to gain a greater understanding of the complex processes that are involved in normal human activity. Different parts of the brain can be shown to be more active in certain types of human physical and mental activity than others, and whilst we still have much to learn about the brain, the leap in our understanding has not only helped the medical profession but also business and economics.

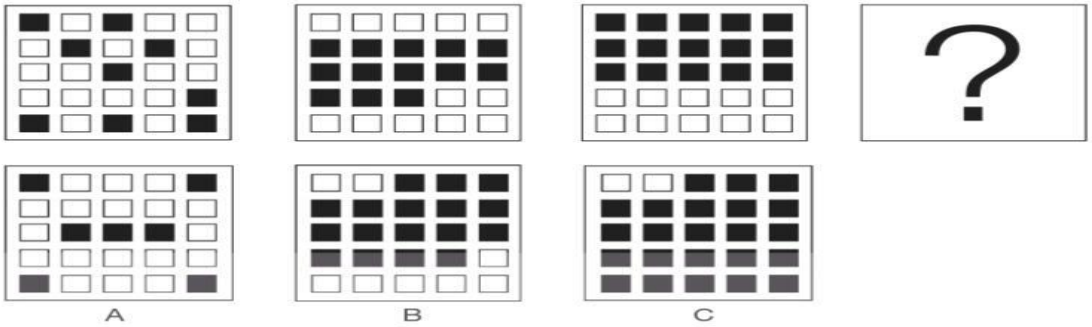
Question 1. There are one hundred trillion neural links in the human brain.
A. True
B. False
C. Cannot say
D.None of the above

Question 2. MRI technology is useful to conduct research on the brain.
A.True - The second paragraph details how MRI technology helps us better understand the complex processes involved in normal human activity.
B. False
C.Cannot say
D. None of the above

Question 3. Improving our understanding of the brain is useful for sports.
A. True
B.False
C. Cannot Say
D.None of the above

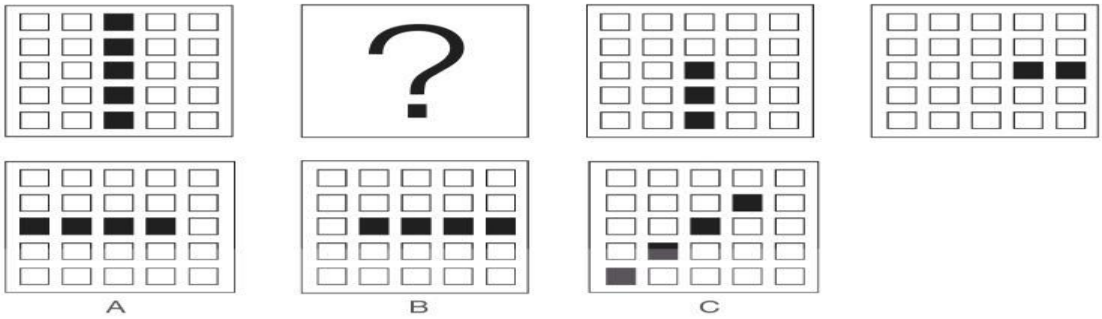
Question 4. A magician bought a rabbit for £60 and a pigeon for £70. How much more expensive is the pigeon than the rabbit in percentage?
A. 10%
B.5%
C. 16.66%
D. 17.8%

Question 5.Which of the suggested answers is the next step or the missing step in the series?



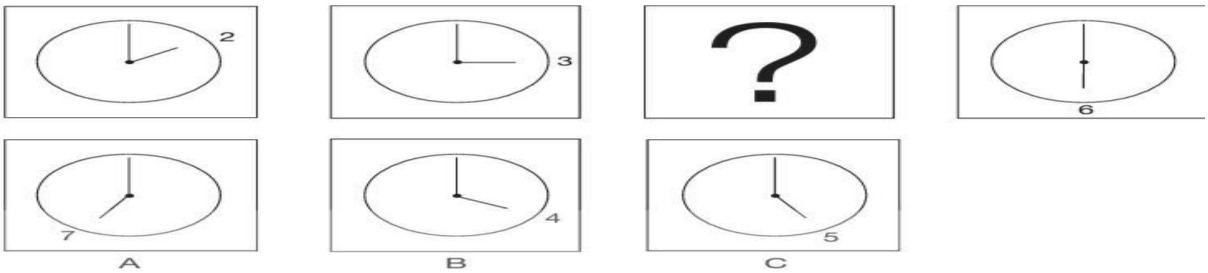
ANS…….

Question 6.Which of the suggested answers is the next step or the missing step in the series?



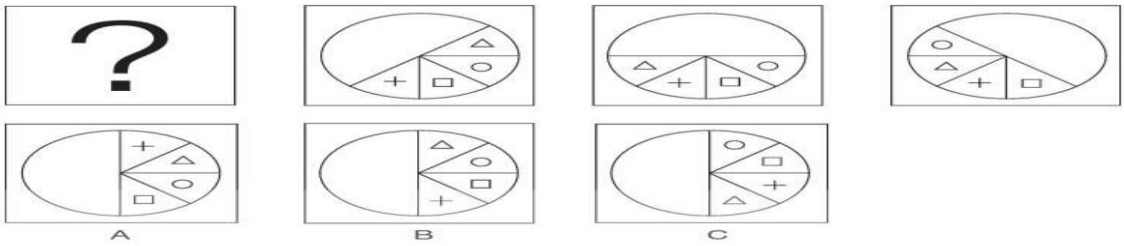
ANS……

Question: 7. which of the suggested answers is the next step or the missing step in the series?



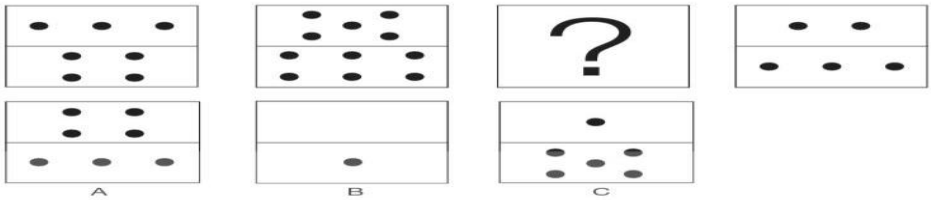
ANS…….

Question 8. Which of the suggested answers is the next step or the missing step in the series?



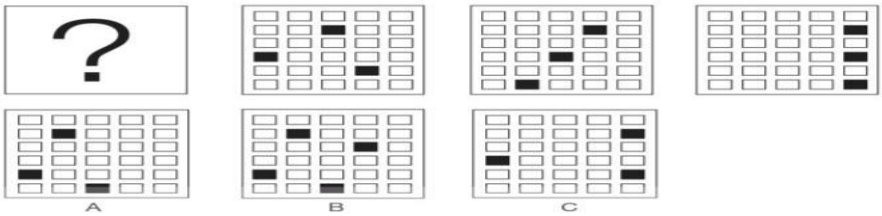
ANS……

Question 9.Which of the suggested answers is the next step or the missing step in the series?



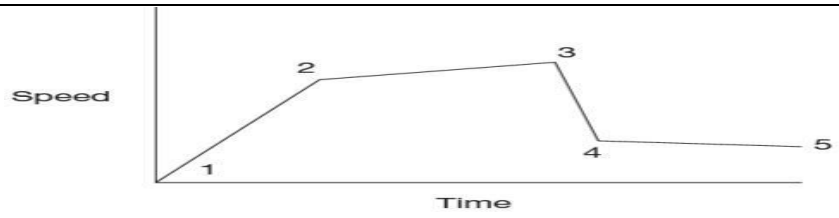
ANS……

Question 10.Which of the suggested answers is the next step or the missing step in the series?



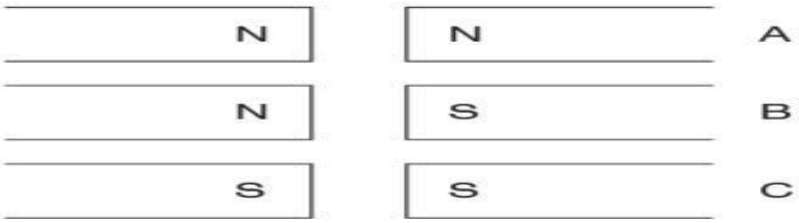
ANS……

Question 11 when did the vehicle reach a constant speed?



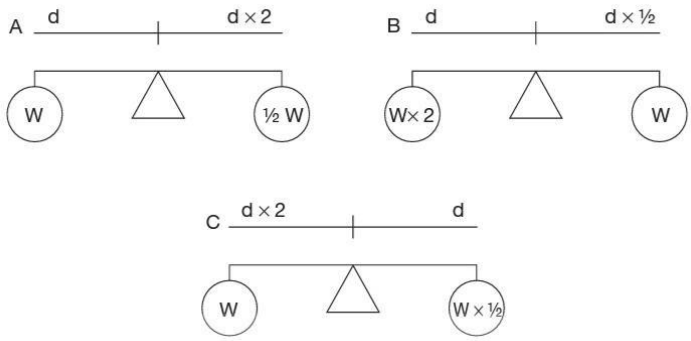
ANS……

Question 12 which magnets will repel?



Ans……..

Question 13. Which see saw is in equilibrium?



Ans……..

Question 14.If I witnessed someone being bullied I would inform my supervisor.
A.Do not agree or disagree
B.Disagree
C.Disagree strongly
D. Agree strongly
E.Agree

Answer……..

Question 15.There are some types of people you just know you are not going to get on with.
A.Agree strongly
B.Agree
C.Do not agree or disagree
D.Disagree
E.Disagree strongly
Answer……..

Question 16.I do not think it is right if I am asked to do something that is not in my job description.
A.Agree strongly
B.Agree
C.Do not agrees or disagrees
D.Disagree
E.Disagree strongly

Answer……..

Question 17.I am prepared to argue my corner until I am blue in the face.
A.Agree strongly
B.Agree
C.Do not agree or disagree
D.Disagree
E.Disagree strongly

Answer……..

Question 18.When a gun is discharged the potential energy of the chemical charge is transferred to what?
A.Actual chemical energy
B.Electrical energy
C.Kinetic energy
D.Elastic energy
E.Gravitational energy
F.Heat and light
Answer…….

Question 19.Which is the odd one out?
A.Sheet bend
B.Bowline
C.Half hitch
D.Turk's head
E.Tapir
F.Monkey's fist

Answer……

Question 20. Which is the odd one out?
Green
Howler
Vervet
Woolly
Capybara
Proboscis
Answer…….

----------**END**----------