CLASS: IV

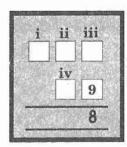
MATHEMATICS

What must be done to each number in column A to get the number next to it in column B?

Column A	Column B
10	2
15	3
25	5
50	10



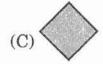
- (A) Add 8 to the number in column A
- (B) Add 8 to the number in column B
- (C) Subtract 8 from the number in column A
- (D) Divide the number in column A by 5
- 2 Complete the subtraction by filling in each box with one digit.



- (A) (i) 1, (ii) 1, (iii) 7, (iv) 9
- (B) (i) 1, (ii) 0, (iii) 7, (iv) 9
- (C) (i) 1, (ii) 2, (iii) 7, (iv) 9
- (D) (i) 1, (ii) 3, (iii) 7, (iv) 9
- 3 A movie started at eleven 0'Clock A.M. and lasted three hours. At what time did the movie end?
 - (A) 12: 00 P.M. (B) 1: 00 P.M. (C) 2: 00 P.M. (D) 3: 00 P.M.
- 4 Which of these shapes is a Rhombus?



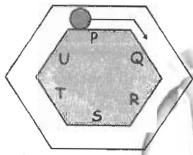






- 0.4 is same as:
 - (A) four

- (B) four-tenths
- (C) four hundredths
- (D) one-fourth
- A ball starts from one end of side P. Which side will the ball be at when it has rolled clockwise through $\frac{3}{4}$ of the distance around the regular hexagonal track?



- (A) Side R
- (B) Side S
- (C) Side T
- (D) Side U

- Which is the odd one?
 - (A) $1 \div 9 + 9 \div 1$ (B) $1 \times 9 \div 9 \times 1$ (C) $1 9 + 9 \times 1$ (D) $1 + 9 \div 9 1$
- The number of weeks in 147 days are:
 - (A)27
- (B) 21___
- (C) 23
- (D)22

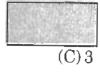
What time is it?



- (A) half past 4 (B) 4 past 6 (C) 20 past 6
- (D) 6 past 4
- How many lines of symmetry does a rectangle have?

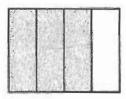


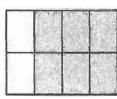
(B)2



(D)4

- Which of the following is likely to have a capacity of 200 litres?
 - (A) A cup of glass
- (B) A pressure cooker
- (C) A water tank
- (D) A pond
- Each figure represents a fraction. Which two figures represent the same fraction?









(I)

(II)

(III)

(IV)

(A) I and II

(B) I and IV

(C) II and III

(D) III and IV

13 Identify the odd one out among the following numbers.

26, 39, 45, 52

(A) 26

(B) 39

(C)45

(D) 52

The 10th term in the sequence (1, 2), (2, 3), (3, 5), (4, 7), (5, 11), (6, 13) is:

(A) (10, 23)

(B) (23, 10)

(C) (29, 10)

(D)(10, 29)

A thin wire 20 centimeters long is formed into a rectangle. If the width of this rectangle is 4 cms, what is its length?

(A) 5 cms

(B) 6 cms

(C) 12 cms

(D) 16 cms

16 (2 m) - (1000 mm) is:

(A) 10 cm

(B) 100 cm

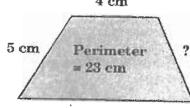
(C) 20 cm

(D) 200 cm

- Which of these would most likely be measured in milliliters?
 - (A) The amount of liquid in a teaspoon
 - (B) The weight (mass) of a pin
 - (C) The amount of gasoline in a tank
 - (D) The thickness of 10 sheets of paper

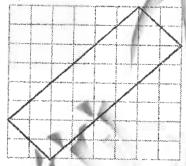
UCN/2011/IV

18 Find the missing length of the following figure.

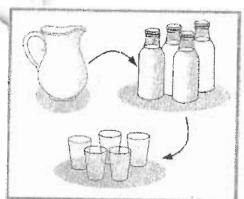


8 cm

- (A) 6 cm
- (B) 4 cm
- (C) 2 cm
- (D) 5 cm
- 19 25×18 is more than 24×18 . How much more?
 - (A) 1
- (B) 18
- (C)24
- (D) 25
- A plank is placed on a tiled floor. What fraction of the floor is not covered by the plank?



- (A) $\frac{1}{4}$
- (B) $\frac{3}{8}$
- (C) $\frac{17}{64}$
- (D) $\frac{5}{8}$
- The jug holds 1 *l* of water. Half the water from the jug is poured out and the water fills 4 bottles. All the water from 3 of the bottles is poured out and the water fills 5 glasses.



How much water does each glass hold?

- (A) 125 ml
- (B) 375 ml
- (C) 75 ml
- (D) 50 ml

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- John kept a box in a shelf that is 96.4 cm long. The box is 33.2 cm long. What is the longest box he could keep in the rest of the shelf?
 - (A) 99.6 cm
- (B) 66.4 cm
- (C) 96.4 cm
- (D) 63.2 cm
- Akhil has to work for 5 days and he can choose between 2 methods of payment.

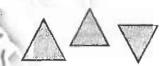
Option 1: He will be paid Rs. 5 for each day of work

Option 2: He will be paid Rs. 1 on the first day. On each

subsequent day of work, his pay will be doubled

How much more money will he get by choosing the better pay option?

- (A) Rs. 5
- (B) Rs. 6
- (C) Rs. 7
- (D) Rs. 8
- 24 The date of the 100th day of any year that is a leap year is:
 - (A) April 10
- (B) April 9 (C) April 7
- (D) April 11
- 25 Look at the three triangles. Which of the following shapes can be made from the three triangles?





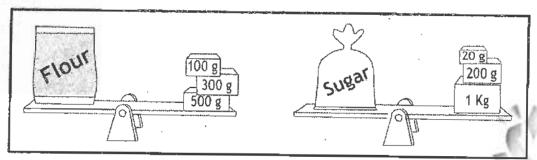






- The difference between the place value and the face value of the digit 5 in 49526 is:
 - (A) 500
- (B) 505
- (C)5
- (D) 495
- Tanya has read the first 78 pages in a book that is 130 pages long. Which number sentence could Tanya use to find the number of pages she must read to finish the book?
 - (A) $130 + 78 = \Box$
- (B) | -78 = 130
- (C) $130 \div 78 =$
- (D) 130 78 =

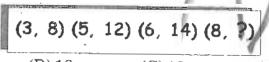
Observe the figure given below.



The packet of sugar is how many grams heavier than the packet of flour.

- (A) 120 g
- $(B)^{2}40g$
- (C) 340 g
- (D) 320 g

Fill in the missing number in the set

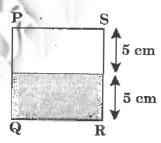


- (A) 16
- (B) 18
- (C)19
- (D) 1"

Which symbol cannot be repeated in Roman numeration system?

- (A) D
- (B) N
- (C) C
- (D)M

The diagram shows a square PQRS.



The area of the shaded part is:

- (A) 10 cm²
- (B) 25 cm^2
- (C) 50 cm^2 (D) 100 cm^2

32 The number of 3 digit even numbers that can be written using the digits 0, 3, 6 without repetition is:

- (A) 6
- (B)3
- (C) 4
- (D) 2

Uday bought some fruits. $\frac{2}{5}$ of them were mangoes. If he bought 12 mangoes, then how many fruits did Uday buy altogether?

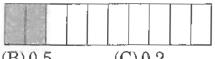
(A) 25

(B)28

(C)30

(D)35

Which number represents the shaded part of the figure?



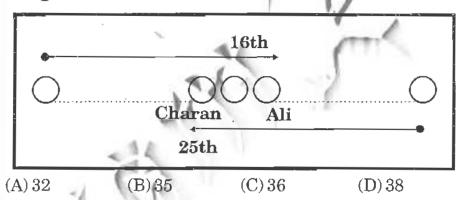
(A) 2.8

(B) 0.5

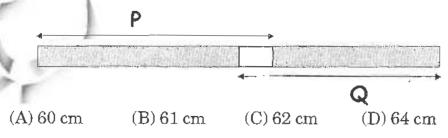
(C) 0.2

(D) 0.0

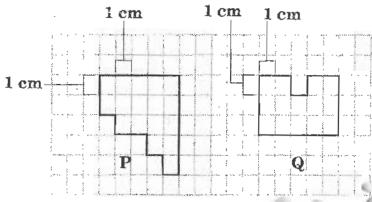
Some children were sitting in a row. Ali was sitting on the 16th chair from the left. Charan was sitting on the 25th chair from the right. There was one chair between Ali and Charan. How many chairs were there in the row altogether?



Ribbon P was 35 cm long and ribbon Q was 30 cm long. The two ribbons were joined together by applying glue on 3 cm length on each ribbon and then overlapping the two glued portions. Find the total length of the ribbon formed.

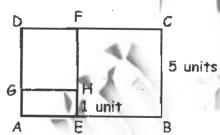


37 Which figure has a bigger perimeter?



- (A) P
- (C) P = Q

- $\left(B\right) Q$
- (D) Cannot be determined.
- In the figure given BCFE, DFHG are squares, BC = 5 units, HE = 1 unit, the length and breadth of the rectangles ABCD are:



- (A) 8 units and 5 units
- (B) 5 units and 10 units
- (C) 5 units and 7 units
- (D) 9 units and 5 units
- The distance between the centre of the circle to any point on the circle is called:
 - (A) centre

(B) radius

(C) chord

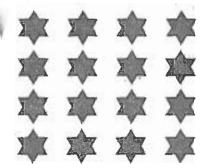
- (D) diameter
- 40 Which of the following fractions is the greatest?
 - (A) $\frac{1}{9}$
- $(B) \frac{1}{2}$
- (C) $\frac{1}{5}$
- (D) $\frac{1}{10}$
- What percent of 1 hour is 15 minutes?
 - (A) 50%
- (B) 15%
- (C) 75%
- (D) 25%

Observe the objects on the scale.



Now say which of the following statements is definitely true.

- (A) P is of the same mass as S while R is of the same mass as T
- (B) The total mass of Q and R is the same as that of S and T.
- (C) If R is heavier than T, then Q has to be heavier than S.
- (D) If Q is heavier than S, then R has to be heavier than T.
- 48 There are four people in a room. If an apple is cut into 4 equal pieces and 1 piece is taken by each, then each has eaten what part of the apple?
 - (A) 1
- (B) Half
- (C) three-fourth (D) One-fourth
- In a certain year, the 1st day of August fell on a Tuesday. Which days of the week would appear 5 times during this month?
 - (A) Friday and Saturday
- (B) Saturday and Sunday
- (C) Wednesday and Thursday (D) Thursday and Friday
- Look at the arrangement of stars given below.



Assuming a star used once in a group of 8 stars. Identify the number of such groups?

- (A)4
- $(\mathbf{B})3$
- (C)2
- (D)1

CLASS : IV

GENERAL SCIENCE

The two groups of animals in the table given below are classified according to:

Group X	Group Y
Eagles	Crows
Vultures	Bears

- (A) the way they move
- (B) the way they reproduce
- (C) the way they eat
- (D) their body coverings
- Which of these substances can be compressed?
 - (A) A sheet of iron
- (B) Water

(C) Milk

- (D) Carbon dioxide gas
- 48 How can you separate water from a mixture of sand and water?
 - (A) Freezing
- (B) Boiling (C) Filtering (D) Melting
- Which of the following organs is used for respiration by tadpole?
 - (A) Skin
- (B) Gills
- (C) Book lungs (D) Lungs
- 50 Abhi made the following notes about an animal he was studying:
 - They have skins covered with hard dry scales and they breathe with their lungs
 - They lay eggs

Which of the following animals is described in the above notes?

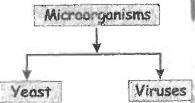
- (A) Fish
- (B) Frog
- (C) Snake
- (D) Snail

The figure shows a tooth that is decayed.



What causes a tooth to become decayed?

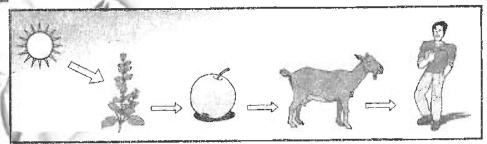
- (A) Eating of too much of spicy food
- (B) Brushing teeth regularly
- (C) Not exercising enough
- (D) Bacteria in the mouth
- The microorganisms given below are classified on the basis of:



- (A) type of habitat
- (B) whether harmful or useful

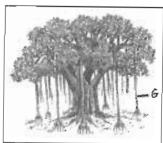
(C) size

- (D) All of the above
- 53 Which of the following body systems uses the most water?
 - (A) Skeletal
- (B) Digestive (C) Nervous
- (D) Respiratory
- How is energy transferred through a food chain as given below?



- (A) When one living thing produces another
- (B) When all living things absorb sunlight
- (C) When all living things decompose
- (D) When one living thing consumes another

What is the function of the structure labelled 'G' to the given plant?



- (A) To provide support
- (B) To absorb sunlight
- (C) To take in air
- (D) To transport food to other parts of the plant
- You are given four bags made of leather, plastic, jute and cloth for your shopping. Which of these bags is bad for the environment?
 - (A) Leather bag
- (B) Plastic bag

(C) Jute bag

- (D) Cloth bag
- Naveen made the following notes about a substance 'X'.
 - ♦ It has a definite mass
 - ♦ It has a definite volume
 - ♦ It does not take the shape of the container in which they are kept

What is substance 'X'?

- (A) Air inside a tyre
- (B) Filtered water

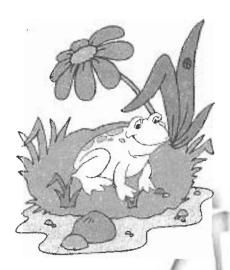
(C) Copper wire

- (D) Hot coffee
- Which of the following animals can change its skin colour, has long tongue and reproduces by laying eggs?
 - (A) A chameleon
- (B) A turtle

(C) A toad

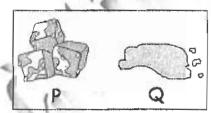
(D) An arctic fox

59 The figure shows an animal.



How does this animal protect itself from extreme weather conditions?

- (A) It undergoes hibernation (B) It migrates to warmer places
- (C) It has moist skin
- (D) It has a thick layer of fat
- 60 Look at the figures given below.



How can 'P' change into 'Q'?

- (A) Place P in the freezer
- (B) Supply heat
- (C) Place a thermometer in P(D) Supply cool air
- The diagram below represents a process that takes place in a living thing in the presence of sunlight.

Water + carbon dioxide Sunlight food + oxygen

Identify the process in which the living thing produce food and oxygen?

(A) Watercycle

- (B) Respiration
- (C) Photosynthesis
- (D) Excretion

Match the organs in the human digestive system with their functions.

. Organs		Functions
(a) Stomach	(i)	Completely digests food into simplest substances
(b) Small intestine	(ii)	Absorbs water from undigested food
(c) Large intestine	(iii)	Partially digests and crushes food

- 63 'X' enables work to be done. There are many forms of 'X'. What is 'X'?
 - (A) Energy

(B) The Sun

(C) Technology

- (D) Heat
- 64 The figure given below shows a plant which is kept in a tight plastic bag.



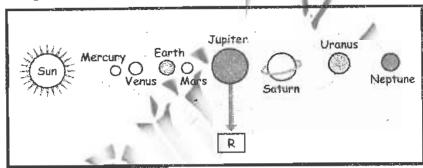
After five days, the plant died because it did not have?

- (A) Stomata
- (B) Sunlight (C) Air
- (D) Space
- 65 Decayed organic matter present in soil is called:
 - (A) humus
- (B) weedicide (C) fertilizer
- (D) pesticide

Which of the following is classified correctly?

	Come from animals	Come from plants		
(A)	Paper	Leather		
(B)	Wool	Cotton		
(C)	Jute	Silk		
(D)	Linen	Fur		

- Which of the following components of balanced diet cannot be digested by us?
 - (A) Fats
- (B) Roughage (C) Pulses
- (D) Rice
- 68 R is one of the planets in the solar system as shown in the figure below.



Which statement is true about R?

- (A) It is the sixth planet from the Sun
- (B) It has 64 moons
- (C) It is known as red planet
- (D) It is the smallest planet
- Which pair best matches with the pair of words given below in the box?

TADPOLE - FROG

- (A) WORM-SNAKE
- (B) BRANCH-TREE

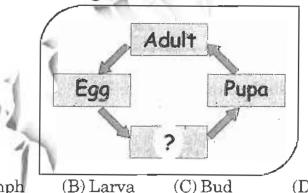
(C) EGG-SEED

(D) NYMPH-COCKROACH

- Which of the following explains why mushrooms cannot produce oxygen?
 - (A) They do not respire
 - (B) They do not have energy
 - (C) They do not have chlorophyll
 - (D) They do not move from place to place
- We have longer days and shorter nights in:
 - (A) summer
- (B) autumn
- (C) winter
- (D) spring
- A force that slows down or stops the motion of a bicycle is:
 - (A) sound
- (B) heat
- (C) friction
- (D) electricity
- The function of the small intestine is to:
 - (A) remove waste material
- (B) absorb digested food

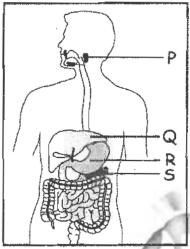
(C) produce bile

- (D) kill harmful germs
- Which of the following would complete the life cycle shown in the diagram?



- (A) Nymph
- (B) Larva
- (D) Sperm
- Which of the following changes is wrong?
 - (A) Solid-
- $heat \rightarrow liquid$ (B) Solid $cool \rightarrow gas$
 - (C) Liquid $\xrightarrow{\text{cool}}$ solid (D) Liquid $\xrightarrow{\text{heat}}$ gas

76 The figure given below shows human digestive system.



Which of the following organs releases juices and an acid?

- (A)P
- (B) Q
- (C)R
- (D)S

What is the best way to protect ourselves from accidental electrical shocks?

- (A) We should go too closer to a heater or a table fan
- (B) We should try to repair electrical appliances ourselves
- (C) Cover the switches with plastic casing
- (D) We should not turn off the main switch during an electric shock or spark

78 Stars give off their own light hence, they are like the:

- (A) Moon
- (B) Earth
- (C) Planets
- (D) Sun

79 Which of the following forms of energy is/are given out by the Sun?

- (A) Heat energy only
- (B) Light energy only
- (C) Sound energy only
- (D) Both (A) and (B)

Apoorva found a plant 'X' growing around the stem and on the branches of another plant in her balcony as shown in the figure given below.



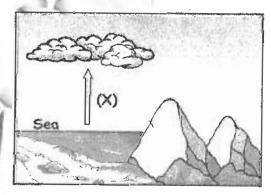
Why do you think that the plant 'X' is curling around the stem of another plant?

- (A) 'X' gets support from the plants stem
- (B) 'X' needs water from the plants stem
- (C) 'X' helps the plant to carryout photosynthesis
- (D) 'X' wants to get oxygen from the plant
- 81 Which one of these lives in the soil?
 - (A) Silkworm

(B) Tapeworm

(C) Earthworm

- (D) Roundworm
- Process X in the figure given below is a part of the water cycle.



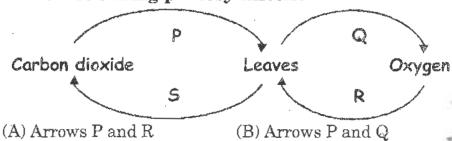
What is process 'X'?

- (A) Condensation
- (B) Evaporation

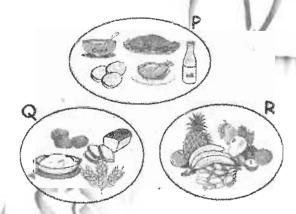
(C) Freezing

(D) Melting

Which arrows correctly show the exchange of gases in the leaves during photosynthesis?



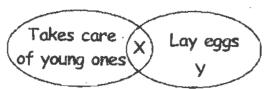
- (C) Arrows S and R
- (D) Arrows S and Q
- A man made material used to make clothes is:
 - (A) silk
- (B) cotton
- (C) nylon
- (D) wool
- The picture given below shows food substances.



Which of the following foods provide quick energy?

- (A) Ponly
- (B) Q only
- (C) R only
- (D) P and R only
- Which of the following animals have spines to defend themselves from their enemies?
 - (A) Platypus
- (B) Porcupine (C) Tortoise
- (D) Chameleon
- Why do people wear gloves in winter?
 - (A) To prevent loss of heat through the hands
 - (B) It is fashionable to wear gloves
 - (C) To prevent sweating of the hands
 - (D) To keep the body cool

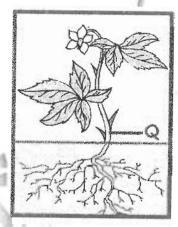
88 Look at the figure given below.



Identify 'X' and 'Y'.

	X	У
(A)	Cat	Pigeon
(B)	Platypus	Snake
(C)_	Tiger	Frog
(D)_	Dog	Grasshopper

89 What is the function of the part labelled 'Q' in the given plant?



- (A) It absorbs water for the plant
- (B) It prepares food for the plant
- (C) It helps in transport food and water
- (D) It helps in reproduction

90 Changes in the seasons are caused by:

- (A) the rotation of the Earth around its own axis
- (B) revolution of the Earth around the Sun
- (C) revolution of the Sun around the Earth
- (D) rotation of the sun around its own axis

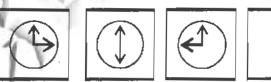
GENERAL QUESTIONS

- Which countries are separated by Mac Mohan line?
 - (A) India and Pakistan
- (B) China and Tibet
- (C) India and China
- (D) India and Bangladesh
- 92 Which Indian biscuit brand is the single largest selling biscuit in the world in its segment?
 - (A) Sunfeast
- (B) Britannia (C) Parle G
- (D) Aliva
- Identify the input devices of a computer from the following.
 - (A) Keyboard (B) Monitor
- (C) CPU
- (D) Printer
- 94 Which of the following is the Silicon Valley of India?
 - (A) Mumbai
- (B) Bangalore (C) Hyderabad (D) Bhubaneshwar
- 95 Which of these is a popular dance of Gujarat?
 - (A) Ghoomar
- (B) Gidda
- (C) Garba
- (D) Kikali
- 96 Dhyan Chand is associated with:
 - (A) Athletics
- (B) Hockey
- (C) Football
- (D) Weightlifting
- Who built the 'Grand Trunk Road'?
 - (A) Akbar

(B) Ashoka

(C) Shajahan

- (D) Sher Shah Suri
- Which figure will continue the series given below?







 (\mathbf{B})



(C)





- Which is the fastest train in India?
 - (A) Shatabdi

- (B) Raidhani
- (C) Deccan Queen
- (D) Palace on wheels
- 100 In which sport do we use the term 'butterfly stroke'?
 - (A) Cricket
- (B) Snooker
- (C) Swimming (D) Gymnastics