BANSAL CLASSES
PR I VATE LIM I T E D

## SAMPLE PAPER

Class: VI
Time allowed : 2 hours
Maximum Marks : 320

## Please read the instructions in Question Booklet before answering the question paper. INSTRUCTIONS

1. The question paper has '13' printed pages. Please ensure that the copy of the question paper you have received contains all pages.
2. Before starting the paper, fill up the required details in the blank space provided in the answer sheet.
3. Write your name and Seven digit Reg. No. in the space provided at the top of this booklet.
4. The question paper consists of '80' objective type questions. Each question carry $\mathbf{4}$ marks and all of them are compulsory.
5. Each question contains four alternatives out of which only ONE is correct.
6. There is NO NEGATIVE marking.
7. Indicate the correct answer for each question by filling appropriate bubble in your answer sheet.
8. The answers of the questions must be marked by shading the circle against the question by dark Black Ball point Pen only.
9. For rough work, use the space provided at the bottom of each page. No extra sheet will be provided for rough work and you are not supposed to bring the same.
10. Use of blank papers, clip boards, log tables, calculator, slide rule, mobile or any other electronic gadgets in any form is "NOT PERMISSIBLE".
11. You must not carry mobile phone even if you have the same, give it to your Invigilator before commencement of the test and take it back from him/her after the exam.
12. The Answer Sheet will be checked through computer hence the answer of the questions must be marked by shading the circles against the question by dark Black Ball point Pen only.

For example if only ' C ' choice is correct then, the correct method for filling the bubble is

the wrong method for filling the bubble are
(a)

Tick Mark
(b)

C
D

Cross Mark
(c)

C D
Half filled or Semi Dark

The answer of the questions in wrong or any other manner will be treated as wrong.
USEFUL DATA
Take $g=10 \mathrm{~m} / \mathbf{s}^{2}$ wherever required.

Corporate Office : "BANSAL TOWER", A-10, Road No.-1, I.P.I.A., Kota-324 005 (Raj.) INDIA
Tel.: (0744) 2791000
website : www.bansal.ac.in | Email: admin@bansal.ac.in
Q. 1 Motion in a straight line is called
(A) non periodic motion.
(B) periodic motion.
(C) circular motion.
(D) rectilinear motion
Q. 2 Taruna's feet measure 13 cm each. She wants to measure the length of a room in terms of her feet. She covers the length of the room with 50 steps. The length of the room is
(A) 63 cm .
(B) 650 cm .
(C) 63 m .
(D) 650 m .
Q. 3 Motion is the change in the position of an object with
(A) distance.
(B) speed.
(C) time.
(D) velocity.
Q. 4 A kite flying in the sky undergoes
(A) translatory motion.
(B) random motion.
(C) periodic motion.
(D) oscillatory motion.
Q. 5 To search for targets and threats in the surrounding sea and air, submarines make use of :
(A) kaleidoscopes.
(B) periscopes.
(C) magnifying glass.
(D) rear view mirror.
Q. 6 The correct sequence of seven colours of a rainbow is :
(A) Blue, Orange, Red, White, Purple, Yellow, Green.
(B) Violet, Blue, Indigo, Green, Red, Yellow, Orange.
(C) Red, Orange, Yellow, Green, Blue, Indigo, Violet.
(D) Red, Orange, Yellow, Green, Violet, Indigo, Blue.
Q. 7 In the side mirror of a car, the images of all the objects appear to be :
(A) equal to that of the objects.
(B) smaller than the objects.
(C) larger than the objects.
(D) of point size.
Q. 8 Objects become visible to us because :
(A) Light is absorbed by them.
(B) Light is reflected by them before reaching our eyes.
(C) They obstruct the path of light.
(D) Light passes through them
Q. 9 The pulley and lever shown in the figures mechanical energy to move an object. The pulley and lever are examples of

(A) Circuits
(B) Magnets
(C) Measurement tools
(D) Simple machines
Q. 10 How does it take for the Earth to rotate on its axis seven times?
(A) One day
(B) One week
(C) One month
(D) One year
Q. 11 The given diagram shows four identical marbles and a graduated cylinder containing 43 ml of water. A student puts two marbles in the cylinder and the water level rises from 43 ml to 45 ml . The student then puts the other two marbles in the cylinder. What will be the level of water when all the four marbles are in the graduated cylinder?

(A) 43 ml
(B) 45 ml
(C) 47 ml
(D) 49 ml
Q. 12 Which statement described the motion represented in this model?

(A) Earth goes around the Moon, and the Sun goes around the Earth.
(B) The Moon goes around the Earth, and the Earth goes around the Sun.
(C) The Moon goes around the Sun, and the Sun goes around the Earth.
(D) The Sun goes around the Moon, and the Earth goes around the Sun.
Q. 13 When an ice cube melts, its state of matter changes from a $\qquad$ .
(A) Gas to a liquid
(B) Solid to a liquid
(C) Liquid to a solid
(D) Solid to a gas
Q. 14 A student measured the quantity of water in a pan. Then he boiled the water for thirty minutes and then measured the quantity of water again. The quantity of water most likely $\qquad$ .
(A) Decreased
(B) Increased
(C) Remained the same
(D) First increased then decreased
Q. 15 How can you change a liquid into a gas?
(A) Make it colder
(B) Heat it up
(C) Add baking soda
(D) Shake it
Q. 16 Mohit has a mixture of sugar and iron filings. The easiest and quickest method for separating these substances is to $\qquad$ .
(A) Pour the mixture into a sieve to remove the sugar
(B) Use a magnet to remove the sugar
(C) Use a magnet to remove the iron filings
(D) Pour the mixture into water
Q. 17 Which of the following is an example of precipitation?
(A) Water from the rivers enters the ocean.
(B) Water from the clouds falls to the ground
(C) Water in a puddle seeps into the ground.
(D) Water in a cup evaporates on heating.
Q. 18 Which of the following would help in preventing pollution?
(A) Tall chimneys must be fitted in factories.
(B) Untreated dirty water must be released into seas, rivers or lakes.
(C) We must get our vehicles fitted with CNG or LPG kits.
(D) Both (B) and (C).
Q. 19 Which of the following statements is INCORRECT?
(A) Precious metals like gold and platinum are used for making jewellery.
(B) Dentists use powdered pumice for polishing our teeth.
(C) Black gold is another name of coal.
(D) Shale is used to make files and bricks.
Q. 20 Two beakers M and N of water were heated at different times with different burners. The graph shows the changes in the temperature of the water in beakers M and N .


Select the correct option regarding this activity.
(A) Water in beaker ' N ' boils before the water in beaker ' M '.
(B) The water in beaker ' N ' is heated with stronger flame.
(C) Water of both beakers reach the same temperature at 8.20 a.m.
(D) All of these.
Q. 21 Refer the given diagrams ' L ', ' M ' and ' N ' showing three states of matter.


The arrows P, Q, Rand S represent processes involved in interchange of states of matter. Identify P, Q, Rand S.

|  | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ | $\mathbf{S}$ |
| :--- | :--- | :--- | :--- | :--- |
| (A) | Freezing | Melting | Evaporation | Condensation |
| (B) | Evaporation | Condensation | Melting | Freezing |
| (C) | Condensation | Evaporation | Heating | Freezing |
| (D) | Evaporation | Freezing | Sublimation | Condensation |

Q. 22 This crude oil is a mixture of many compounds. So after drilling. It is sent through oil tankers to an oil refinery. Here it is processed and refined into various products like petrol, diesel, kerosene, paraffin wax and liquefied petroleum gas (LPG).
Read the above passage and select the correct option regarding it.
(A) 'This' in the passage is petroleum. It is also called 'black gold'
(B) Petrol and diesel are used as fuel in vehicles
(C) LPG and kerosene are used for cooking
(D) All of these
Q. 23 Four sugar solutions are prepared in the following ways:
(i) Cold water + One spoon of sugar crystals
(ii) Warm water + One spoon of powdered sugar
(iii) Cold water + One spoon of powdered sugar
(iv) Warm water + One spoon of sugar crystals

Arrange them in an order of fastest to $s$ lowest prepared solution.
(A) (iv) $>$ (ii) $>$ (i) $>$ (iii)
(B) (ii) $>$ (i) $>$ (iv) $>$ (iii)
(C) (ii) $>$ (iv) $>$ (iii) $>$ (i)
(D) (iii) $>$ (iv) $>$ (i) $>$ (ii)
Q. 24 The diagram below shows four beakers of water, $\mathrm{P}, \mathrm{Q}, \mathrm{R}$ and S , at different temperature and volume.


Which one of the following statements is true?
(A) Beaker $P$ has the most heal energy.
(B) Beaker R has more heat energy than beaker Q .
(C) Beaker S has more heat energy than beaker R .
(D) Beaker P and beaker S have the same amount of heal energy.
Q. 25 Which geometric figure has six square faces?
(A) Cube
(B) Cone
(C) Cylinder
(D) Sphere
Q. 26 Which figure has no line of symmetry?
(A)

(B)

(C)

(D)

Q. 27 Charu cut each piece of paper shown below on the dotted line. Which of the following are the shapes of the four pieces?

(A) Triangles and rectangles
(B) Squares and triangles
(C) Squares and hexagons
(D) Rectangles and circles
Q. 28 Which of the following has the same value as $5 \times \frac{1}{2}$ ?
(A) $\frac{1}{2}+5$
(B) $\frac{1}{2}+\frac{1}{5}$
(C) $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$
(D) $\frac{1}{2}+\frac{1}{2}+\frac{1}{2}+\frac{1}{2}+\frac{1}{2}$
Q. 29 Look at the number line. Between which shapes is $\frac{2}{3}$ lying?

(A) Betweenand $\bigcirc$
(B) Between $\bigcirc$ and $\triangle$
(C) Between $\triangle$ and $\square$
(D) Between $\square$ and $s$
Q. 30 What number amI?

- I am a two-digit even number.
- I am a common multiple of 6 and 7 .
- I have a total of 8 factors.
(A) 35
(B) 42
(C) 36
(D) 84
Q. 31 There are 9 rows of seats in a theatre. Each row has the same number of seats. If there is a total of 162 seats, how many seats are in each row?
(A) 17
(B) 18
(C) 19
(D) 20
Q. 32 A beaker is $\frac{5}{7}$ filled with water. Another 10 litres of water is needed to fill the beaker to its brim. What is the capacity of the beaker?
(A) 50 litres
(B) 20 litres
(C) 70 litres
(D) 35 litres
Q. 33 A car can travel 315 km on 30 litres of petrol. How far can the car travel if it has 50 litres of petrol in its petrol tank?
(A) 10.5 km
(B) 189 km
(C) 525 km
(D) 840 km
Q. 34 What is the numeric form of the number given below?
"One hundred four thousand, one hundred three"
(A) 1,413
(B) 14,103
(C) 104,103
(D) 104,113
Q. 35 Look at the diagram of Shreya's yard. Which expression can Shreya use to find the perimeter of her yard?

(A) $(4 \times 4)+(2 \times 8)$
(B) $(4 \times 8)+(2 \times 8)$
(C) $(4+4)+(2+8)$
(D) $(4 \times 8)+(2 \times 4)$
Q. 36 Multiply the smallest 3-digit number formed using the digits 4, 2 and 5 by 8 .
(A) 4336
(B) 3400
(C ) 2032
(D) 1960
Q. 37 Which digit makes the given sentence true?
$58,314,70$ ? is divisible by 5 .
(A) 4
(B) 5
(C) 9
(D) 1
Q. 38 The figure is made of three squares joined together. What is the area of the figure in square cm ?

(A) 9 square cm
(B) 18 square cm
(C) 27 square cm
(D) 81 square cm
Q. 39 Which of the following statements about the 3-dimensional figure appears to be true?

(A) It has no congruent faces.
(B) It has 3 congruent rectangular faces.
(C) It has 6 congruent faces.
(D) It has 3 congruent triangular faces.
Q. 40 Find the value of $(24-16) \times 8-64 \div(10-2)+4$.
(A) 60
(B) 56
(C) 16
(D) 24
Q. 41 Abhay found the perimeter of a square to be 12 metres. Which of the following could be used to find the length $(l)$ of one edge of the square?
(A) $l=4 \times 12$
(B) $l=12 \div 4$
(C) $l=4+12$
(D) $l=4-12$
Q. 42 Which relationship between units of time is correct?
(A) One hour is $\frac{1}{365}$ of one year
(B) One hour is $\frac{1}{365}$ of one hour
(C) One second is $\frac{1}{60}$ of one minute
(D) One minute is $\frac{1}{60}$ of one second
Q. 43 Which of the following statements is CORRECT?
(A) All whole numbers are natural numbers.
(B) Every natural number has a predecessor.
(C) Division by zero is not defined.
(D) Every whole number has a predecessor.
Q. 44 An oil tank contains $30 \frac{2}{5}$ litres of oil. It is then filled with $37 \frac{2}{3}$ litres of oil. later, $56 \frac{1}{9}$ litres of oil is pumped out from the tank. What is the volume of oil left in the tank in litres?
(A) $11 \frac{43}{45}$
(B) $12 \frac{43}{45}$
(C) $37 \frac{8}{3}$
(D) $18 \frac{4}{45}$
Q. 45 If $(\mathrm{k}-8)$ is the highest common factor of 56 and 77 , then the value of k is $\qquad$ .
(A) 7
(B) 11
(C) 15
(D) 16
Q. 46 Which of the following numbers is divisible by 9 ?
(A) 9076185
(B) 92106345
(C) 10349576
(D) 95103476
Q. 47 Which of the following has fractions in ascending order?
(A) $\frac{2}{3}, \frac{3}{5}, \frac{7}{9}, \frac{9}{11}, \frac{8}{9}$
(B) $\frac{3}{5}, \frac{2}{3}, \frac{7}{9}, \frac{9}{11}, \frac{8}{9}$
(C) $\frac{8}{9}, \frac{9}{11}, \frac{7}{9}, \frac{2}{3}, \frac{3}{5}$
(D) $\frac{8}{9}, \frac{9}{11}, \frac{7}{9}, \frac{3}{5}, \frac{2}{3}$
Q. 48 Find the value of X in the given expression.

$$
832.58-242.31=779.84-X
$$

(A) 179.57
(B) 199.57
(C) 295.05
(D) 189.57
Q. 49 The given figure shows a food chain. If the wheat plant died, the population of mice would most likely $\qquad$ .

(A) Decrease
(B) Increase
(C) Remain the same
(D) Cannot say
Q. 50 The given figure shows the gases that enter and leave a plant during the process of photosynthesis. Which gases do arrows 1 and 2 represent?

(A) Arrow 1 is nitrogen and arrow 2 is oxygen.
(B) Arrow 1 is oxygen and arrow 2 is nitrogen.
(C) Arrow 1 is oxygen and arrow 2 is carbon dioxide.
(D) Arrow 1 is carbon dioxide and arrow 2 is oxygen.
Q. 51 Match Column-I with Column-II and select the correct option from the codes given below.

## Column-I

(a) Brain
(b) Kidney
(c) Skin
(d) Bones

## Column-II

(i) Nervous system
(ii) Skeletal system
(iii) Sensory system
(iv) Excretory system
(B) (a)-(iii), (b)-(ii), (c)-(iv), (d)-(i)
(D) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
Q. 52 In a research, it is proved that elder women should intake more quantity of proteins in their diet than any other group of food. Which of the following justifies this?
(A) Proteins help to repair and build muscles. In old age, muscles growth increases, hence protein intake should be more.
(B) Proteins help to repair and build muscles. In old age, muscles become weak, hence protein intake should be more.
(C) Proteins give energy to the body. In old age, the body needs more energy to work, hence protein intake should be more.
(D) Proteins give energy to the body. In old age, the body uses stored fat in our body, hence protein intake should be more.
Q. 53 Refer the given figure showing ' $X$ ' kind of pollination to identify ' Y ' and ' $Z$ '.

|  | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :--- | :--- | :---: |
| (A) | Cross pollination | Anther | Stigma |
| (B) | Self pollination | Anther | Stigma |
| (C) | Cross pollination | Stigma | Anther |
| (D) | Self pollination | Stigma | Anther |


Q. 54 Which part of a mustard plant is edible?
(A) Seeds and flowers
(B) Leaves and flowers
(C) Seeds and leaves
(D) Stem and roots
Q. 55 Night blindness is caused due to deficiency of
(A) vitamin A
(B) vitamin B
(C) vitamin C
(d) vitamin D
Q. 56 Which is a correct set of parts of a pistil?
(A) Ovary, style and filament
(B) Ovary, style and stigma
(C) Ovary, anther and filament
(D) Filament and anther
Q. 57 In cockroaches, the body parts helping in movement are
(A) three pairs of legs and two pairs of wings
(B) two pairs of legs and two pairs of wings
(C) two pairs of legs and three pairs of wings
(D) none of these
Q. 58 Which one of the following statements is correct?
(A) Several kinds of plants and animals may share the same habitat.
(B) All the animals and plants in a habitat are adopted to it.
(C) Both the statements (A) and (B) are correct.
(D) None of these is correct.
Q. 59 Which is an aquatic adaptation?
(A) Streamline body
(B) Light and hollow bones
(C) Hair on body
(D) Gills
Q. 603 'R' means
(A) reduce, reuse and recycle
(B) rain, reuse and recycle
(C) rotting, reduce and reuse
(D) recycle, rain and rotting
Q. 61 Which digit will appear on the face opposite to the face with number 4?

(A) 3
(B) 5
(C) 6
(D) 1
Q. 62 Look at the given series: $21,9,21,11,21,13,21, \ldots \ldots$. What number should come next?
(A) 14
(B) 15
(C) 21
(D) 23
Q. 63 Blueberries cost more than strawberries.

Blueberries cost less than raspberries.
Raspberries cost more than both strawberries and blueberries.
If the first two statements are true, the third statement is $\qquad$ .
(A) True
(B) False
(C) Uncertain
(D) None of these
Q. 64 Geeta put a CD in the CD player and pressed play. When she put the CD in, it looked like the picture shown aside. After the song ended, Geeta opened the CD player and the CD looked like it had rotated (turned) $180^{\circ}$. Which figure given below shows the CD after it rotated (turned) $180^{\circ}$ ?

(A)

(B)

(C)

(D)

Q. 65 In the given diagram the boys who are athletic and disciplined are indicated by which number?

(A) 1
(B) 2
(C) 10
(D) 6
Q. 66 Six friends (A, B, C, D, E and F) are sitting in a circle and are facing the centre of the circle. A is between B and C. D is between E and F. B and E are opposite to each other. Who is sitting opposite to C?
(A) E
(B) A
(C) D
(D) F
Q. 67 Which number completes the puzzle?

(A) 23
(B) 19
(C) 21
(D) 20
Q. 68 What kind of triangles will be obtained if X draws a line segment connecting points A and C on the rectangle shown aside?

(A) Isosceles
(B) Right angled
(C) Equilateral
(D) Obtuse
Q. 69 Look at this pattern. Which of the following flowers will complete the given pattern?

(A)

(B)

(C)

(D)

Q. 70 Ginni used pebbles to make a design in the sand. Based on this pattern, how many pebbles are there in row 6 ?

(A) 16 pebbles
(B) 17 pebbles
(C) 20 pebbles
(D) 21 pebbles
Q. 71 About how many more bricks does Molly need in her pile to make it equal to 50 kilograms?


Molly's Pile


1 brick $=4 \mathrm{~kg}$
(A) 7
(B) 8
(C) 45
(D) 46
Q. 72 Which of the following sentence must be true if the adjoining scale is balanced?

(A)

(B)

(C)

$\square$
(D) $\Delta=\square$ : $\square$
Q. 73 Observe the given pattern.

If the pattern continues, which could be the next two figures?
(A)

(B)

(C)

(D)

Q. 74 The fact family shown below is missing a fact.
$3 \times 8=24 ; \quad 8 \times 3=24 ; \quad 24 \div 8=3$; $\qquad$
$\qquad$
Which is the missing fact?
(A) $24 \div 3=8$
(B) $24 \div 4=8$
(C) $24+3=27$
(D) $24-4=20$
Q. 75 Peter went to watch a movie at a cinema. The movie started at $11: 45 \mathrm{a} . \mathrm{m}$. and lasted 1 h 45 min . Choose the clock face that correctly shows the time at which the movie ended.
(A)

(B)

(C)

(D)

Q. 76 In the adjoining figure how many different paths can be travelled from point A to point D by visiting a point only once?

(A) 2
(B) 3
(C) 4
(D) 5
Q. 77 Look at the puzzle. Which piece completes the puzzle?

(A)

(B)

(C)

(D)

Q. 78 Which of the figures below has the line of symmetry drawn correctly?
(A)

(B)

(C)

(D)

Q. 79 Find the odd one out.
(A) 15
(B) 21
(C) 27
(D) 31
Q. 80 Rohit is incharge of feeding breakfast to the animals on his farm. He feeds them 4 oats every morning. If Rohit has 16 oats left after feeding them on Sunday, what is the last day he will most likely have oats for the animals?
(A) Wednesday
(B) Thursday
(C) Friday
(D) Saturday

## ANSWER KEY

## Class: VI

SAMPLE PAPER

| Q. 1 | D | Q. 31 | B | Q. 61 | A |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q. 2 | B | Q. 32 | D | Q. 62 | B |
| Q. 3 | C | Q. 33 | C | Q. 63 | A |
| Q. 4 | B | Q. 34 | C | Q. 64 | A |
| Q. 5 | B | Q. 35 | A | Q. 65 | B |
| Q. 6 | C | Q. 36 | D | Q. 66 | D |
| Q. 7 | B | Q. 37 | B | Q. 67 | B |
| Q. 8 | B | Q. 38 | C | Q. 68 | B |
| Q. 9 | D | Q. 39 | B | Q. 69 | B |
| Q. 10 | B | Q. 40 | A | Q. 70 | B |
| Q. 11 | C | Q. 41 | B | Q. 71 | B |
| Q. 12 | B | Q. 42 | C | Q. 72 | B |
| Q. 13 | B | Q. 43 | C | Q. 73 | D |
| Q. 14 | A | Q. 44 | A | Q. 74 | A |
| Q. 15 | B | Q. 45 | C | Q. 75 | C |
| Q. 16 | C | Q. 46 | A | Q. 76 | C |
| Q. 17 | B | Q. 47 | B | Q. 77 | B |
| Q. 18 | C | Q. 48 | D | Q. 78 | C |
| Q. 19 | D | Q. 49 | A | Q. 79 | D |
| Q. 20 | D | Q. 50 | D | Q. 80 | B |
| Q. 21 | D | Q. 51 | C |  |  |
| Q. 22 | D | Q. 52 | B |  |  |
| Q. 23 | C | Q. 53 | A |  |  |
| Q. 24 | B | Q. 54 | C |  |  |
| Q. 25 | A | Q. 55 | A |  |  |
| Q. 26 | C | Q. 56 | B |  |  |
| Q. 27 | A | Q. 57 | A |  |  |
| Q. 28 | D | Q. 58 | C |  |  |
| Q. 29 | B | Q. 59 | A |  |  |
| Q. 30 | D | Q. 60 | A |  |  |


| From Class 6th to 7th Moving |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CURRENT CLASS | PHYSICS | Chemistry | Mathematics | Biology | Mental Ability |
|  | $100 \%$ Previous Class (V) Syllabus |  |  |  |  |
| VI | Motion Measurment of Distances, Light Shadow And Reflections, Electricity, Fun with Magnet | Sorting Materials into Groups, Fiber To Fabric, Separation Of Substances, Water, Air around us | Knowing our numbers, Whole Numbers, Playing with numbers, Basic Geometrical Ideas, Understanding Elementary Shapes, Integers, Fractions, Decimals, Data Handing, Mensuration, Algebra, Ratios \& Proportion, Symmetry, Practice | FOOD: Where does it come from, Component of food, Getting to know plants, Body Movement, Living organisms and their surrounding, Waste Management | Verbal and <br> Non-Verbal Reasoning |

