## CLASS - VI <br> SAMPLE PAPER <br> Concept Scholarship cum Admission Test

Time Limit: 1 hr .
Maximum Marks: 160
INSTRUCTION:

- Paper consists of a Science and Mathematics part containing 40 questions.
- Each question has FOUR options. ONLY ONE of these four options is the correct answer.
- For each question, choose the option corresponding to the correct answer in OMR sheet.
- Answer to each question will be evaluated according to the following marking scheme:
- Full marks: +4 for every correct answer.
- Zero marks: 0 if none of the options is chosen. (i.e., the answer is unanswered)
- Negative marks: -1 for every incorrect answer.
- Don't write anything on the question paper except on the rough space given.
- Use only black or blue ballpoint pen.

1. Which of the following statements is incorrect?
a) The symbol $X$ can be subtracted from $L$ and $C$ only.
b) $\mathrm{V}, \mathrm{L}$ and D are never repeated.
c) $V, L$ and $D$ are never subtracted.
d) I or $V$ can be written to the left of $L$ or $C$.
2. Which of the following number of dots cannot be arranged as a triangle?
a) 3
b) 6
c) 8
d) 10
3. If the number $517^{*} 324$ is exactly divisible by 3 , then the smallest whole number in place of * will be
a) 0
b) 1
c) 2
d) 3
4. Which of the following statement is incorrect?
a) Two parallel lines will always intersect.
b) A triangle is a three sided polygon.
c) A line has no end points.
d) The diameter of a circle is double of its radius.
5. A polygon has a prime number of sides. If the number of sides is equal to the sum of the two least consecutive primes. The number of diagonals of the polygon is
a) 4
b) 5
c) 7
d) 10
6. Find the value of $-12-(-48)-[(-13)+(-8)-(-3)+4]$.
a) -48
b) 50
c) -12
d) 62
7. On a number line, numbers are marked at a distance of 1 cm apart from each other. Point $A$ is marked at -8 and point $B$ is marked at 9 . What is the distance between $A$ and $B$ (in cm)?
a) 1
b) -1
c) 16
d) 17
8. The difference of two fractions is $\frac{1}{8}$. If the smaller fraction is $\frac{2}{5}$, the greater fraction is
a) $\frac{21}{40}$
b) $\frac{17}{40}$
c) $\frac{40}{21}$
d) 21
9. Vipin, Tushar and Vikas are living in a room on rent. In a month, Tushar decided to pay one-fifth of the total rent and Vikas decided to pay two-fourth of the total rent. How much will Vipin pay, if the rent of the room is ₹ 12500 per month?
a) ₹ 6250
b) ₹ 3750
c) ₹ 2500
d) ₹ 2560
10. The simplification of
$2.002+7.9+\{2.8-6.3+(3.6-1.5)+15.6\}$ gives
a) 2.002
b) 4.2845
c) 40.843
d) 24.102
11. The total number of students who applied for scholarship in the last five years is given below.

| Year | 2008 | 2009 | 2010 | 2011 | 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| No. of students | 3000 | 3500 | 4000 | 4500 | 5000 |

Using the * symbol to represent 500 students, answer the following questions.
(i) How many symbols are needed to represent the number of students in 2010?
(ii) How many more symbols are needed to represent the number of students in 2012 than in 2009?
a) (i) 7 , (ii) 4
b) (i) 7 , (ii) 3
c) (i) 8 , (ii) 4
d) (i) 8 , (ii) 3
12. Find the number of envelopes that can be made out of a sheet of paper 384 cm by 168 cm , if each envelope requires a piece of paper of size 16 cm by 12 cm .
a) 340
b) 344
c) 336
d) 342
13. Figure $P$ is made up of six identical squares. Two squares were removed from figure $P$ to form figure $Q$ and the perimeter of figure $P$ is 240 cm . What is the perimeter of figure $Q$ ?


Figure $P$


Figure Q
a) 220 cm
b) 180 cm
c) 200 cm
d) 160 cm
14. There are three numbers $A, B$ and $C$. $A$ is double of $B$ and $C$ is 65 , which is 17 less than $A$. What is the value of $B$ ?
a) 41
b) 40
c) 36
d) 42
15. At present, Kirti is 12 years old and her mother Kamlesh is 42 years old. Find the ratio of Kamlesh's age two years ago to Kirti's age two years hence.
a) $7: 20$
b) $20: 7$
c) $10: 3$
d) $3: 10$
16. How many of the following letters have at least one line of symmetry in the word OLYMPIAD?
a) 3
b) 4
c) 5
d) 6
17. Arrange the following steps to construct two concentric circles with centre $O$ and radii 3 cm and 5 cm .
Step-1 : Mark a point 'O' as the centre of the circle.
Step-2 : Place the pointer of the compasses at 0 .
Step-3 : Open the compasses for 3 cm .
Step-4 : Turn the compasses slowly to draw the second circle.
Step-5 : Turn the compasses slowly to draw the circle.
Step-6 : Again open the compasses for 5 cm and place the pointer of the compasses at O .
a) $1 \rightarrow 3 \rightarrow 5 \rightarrow 2 \rightarrow 6 \rightarrow 4$
b) $1 \rightarrow 3 \rightarrow 2 \rightarrow 5 \rightarrow 6 \rightarrow 4$
c) $1 \rightarrow 3 \rightarrow 5 \rightarrow 4 \rightarrow 2 \rightarrow 6$
d) $2 \rightarrow 1 \rightarrow 3 \rightarrow 5 \rightarrow 4 \rightarrow 6$
18. The algebraic expression for the statement 'One-fifth of a number $x$ is subtracted from the sum of $b$ and thrice of $c^{\prime}$
a) $3(b+c)-\frac{x}{5}$
b) $(b+3 c)-\frac{x}{5}$
c) $\frac{x}{5}-(b+3 c)$
d) $\frac{x}{5}-3(b-3 c)$
19. The difference between place values of digit 5 in 456.385 is $\qquad$ .
a) 49995
b) 499.95
c) 49.995
d) 49.999
20. Consider the following statements:
I. Every prime number is odd.
II. Product of the given statement(s) is/are correct?
a) I only
b) II only
c) I and II
d) Neither I and II
21. Which one of the following is the uppermost layer of atmosphere?
a) Troposphere
b) Stratosphere
c) Mesosphere
d) Exosphere
22. Which type of joint is there in between the upper bone and lower arm bone?
a) Hinge joint
b) Fixed joint
c) Pivot joint
d) Ball and socket
23. Which one of the following types of plants has a soft and delicate stem?
a) Herbs
b) Shrubs
c) Trees
d) All of these
24. Which of the following is the male part of the flower?
a) Sepal
b) Petal
c) Stamen
d) Pistil
25. Name the disease which occurs due to deficiency of Vitamin A
a) Marasmus
b) Rickets
c) Night blindness
d) Scurvy
26. Which one of the following are decomposers?
a) Green plants
b) Crocodiles
c) Bacteria and fungi
d) Birds
27. Which one of the following is the insulator of electricity?
a) Rubber
b) Silver metal
c) Copper metal
d) Aluminum metal
28. The rotted plant and animal wastes used as manure for growing plants is called:
a) Minerals
b) Compost
c) Urea
d) Biomass
29. The deficiency of protein in the diet of small children causes a disease known as:
a) Rickets
b) Kwashiorkor
c) Scurvy
d) Beriberi
30. Which one of the following can be recycled?
a) Old newspaper
b) Magazines
c) Books and Notebooks
d) All of these
31. Which of the following statements are incorrect?
(i) A bag placed below the seat of a moving bus is in motion with respect to the floor of the bus.
(ii) While measuring length of an object using a metre scale, use the zero-mark even if the ends are worn out.
(iii) Blinking of eyes is an example of periodic motion.
(iv) If a body as a whole moves around in a circular path, the motion is known as revolution.
a) (i), (ii) and (iv) only.
b) (i), (ii) and (iii) only.
c) (ii), (iii) and (iv) only.
d) (i), (iii) and (iv) only.
32. Which of the following properties is/are correct about the image formed by a plane mirror?

I - The image is at the same distance from the mirror as the object.
II - The image is upside down.
III - The image is laterally inverted.
a) I only
b) I and III only
c) II and III only
d) I, II and III
33. Which of the following statements are correct?
i) the shape of the shadow depends on the position of the source of light.
ii) A plane mirror can change the direction of light falling on it.
iii) A pinhole camera forms an erect image of an object on a screen.
iv) A shadow is formed when light passes through a transparent object.
a) (i) and (iii) only.
b) (ii) and (iv) only.
c) (i), (ii) and (iii) only.
d) (i) and (ii) only.
34. Nidhi has two bulbs connected across two cells in a simple circuit as shown. How can she make the bulbs glow dimmer?
a) Replace one cell with a piece of chalk.
b) Replace one cell with a piece of wire.
c) Replace one bulb with a piece of wire.
d) Replace one bulb with another cell.
35. Sheetal has some jewelry made of gold and silver. They will be $\qquad$
a) Attracted by a magnet
b) Repelled by a magnet
c) Attracted only by natural magnets
d) Unaffected by magnets
36. Rashmi, a class 6 teacher listed the given materials on the board and asked students to classify them on the basis of transparency.
(I) Window glass (II) Oily paper (III) Metal sheet (IV) Thin muslin cloth (V) Concrete wall Which of the following represents the correct classification?
a) I, IV-transparent; II-translucent; III, V-opaque
b) I, II-translucent; III-opaque; IV, V-transparent
c) I-transparent; II, IV-translucent; III, V-opaque
d) V-opaque; II, III-translucent; I, IV-transparent
37. Read the given statements and select the correct option.

Statement 1 : Naphthalene balls are kept in open air in order to maintain their state.
Statement 2 : The process of conversion of a solid into the liquid state on heating is called sublimation.
a) Both statements 1 and 2 are true and statement 2 is the correct explanation of statement 1.
b) Both statements 1 and 2 are true but statement 2 is not the correct explanation of statement 1.
c) Statement 1 is true but statement 2 is false.
d) Both statements 1 and 2 are false.
38. The appearance of Halley's comet after every 76 years is a
a) permanent change
b) temporary change
c) physical change
d) periodic change.
39. The coloured plastic covering on an electric wire makes the wire
a) Safe to touch
b) Long lasting
c) More attractive
d) Resistant to corrosion.
40. A plane sheet of glass placed in the path of light will result in the formation of
a) a shadow
b) an image
c) both (a) and (b)
d) none of these.

