## ATOMIC ENERGY EDUCATION SOCIETY

 Anushaktinagar, MumbaiTerm - I Examination 2017-2018
Date of Examination- 12 Sept 2017

Subject-MATHEMATICS
Class-VI

Total Marks-80
Time : 3 Hours

## Instructions

1. This question paper consists of five sections $A, B, C$ and $D$
2. Section $A$ has 10 multiple choice questions (MCQ) and each carries 1 mark.
3. Section $B$ has 10 questions, each question carries 2 marks.
4. Section $C$ has 10 questions, each question carries 3 marks.
5. Section $D$ has 5 questions, each question carries 4 marks.
6. All questions are compulsory

## SECTION A

I Choose the correct option from the brackets.

1) The digit whose place value remains fixed is
a) 0
b) 1
c) 2
d) 5
2) $\mathrm{LXIX}=$ $\qquad$
a) 49
b) 59
c) 69
d) 79
3) HCF of two co-prime numbers is
a) 1
b) 2
c) 3
d) none of these
4) The greatest 1-digit composite number is
a) 5
b) 7
c) 9
d) none of these
5) Identity element for whole numbers is
a) 1
b) 0
c) 2
d) none of these
6) The integer for 4 more than -5 is
a) 1
b) 9
c) -9
d) none of these
7) Which of the following is a proper fraction?
a) $\frac{18}{11}$
b) $\frac{21}{22}$
c) $\frac{5}{3}$
d) $2 \frac{1}{4}$
8) A ray has
a) 1 end point
b) 2 end points
c) 3 end points
d) no end point
9) If two lines are perpendicular to each other, then the angles between them is
a) $90^{\circ}$
b) $45^{\circ}$
c) $180^{\circ}$
d) $0^{\circ}$
10) In quadrilateral $P Q R S$, the two diagonals are
a) $P Q$ and $R S$
b) PR and RS
c) PS and PR
d) PR and QS

## SECTION B

II Answer the following questions.
$(2 \times 10=20)$

1) Write the first four multiples of 18.
2) Check whether 2500 is divisible by 3 using Divisibility Rule.
3) Simplify using distributive property of multiplication: $125 \times 215-125 \times 15$.
4) Write the number name according to Indian system of numeration.
a) 53947234
b) 1800004
5) Simplify: $[47-(-8)]+[12-(-4)]$
6) Find the equivalent fraction of $\frac{5}{8}$ with
a) numerator 25
b) denominator 64
7) Round off 43,98 and 256 to the nearest tens. After rounding off, add them.
8) Arrange the following fractions in descending order. $\frac{5}{16}, \frac{1}{4}, \frac{11}{12}, \frac{19}{24}$
9) A boatman is rowing his boat due North-East. In which direction will he be rowing, if he turns to the left through:
a) one straight angle
b) one complete angle?
10) What fraction of a revolution clockwise does the hour hand of a clock turn
through when it goes from :
a) 4 to 7
b) 2 to 11 ?

## SECTION-C

## III Answer the following questions.

1) Determine the H.C.F. of 120, 144, 204.
2) Write the numbers between 10 and 30 which have exactly 2 factors.
3) Express as a sum of two prime numbers: $\quad$ a) 36 and 60 b)
4) Estimate the product to the nearest hundreds: a) $32 \times 28 \quad$ b) $146 \times 51$.
5) There are 80 students in class, out of which 26 play cricket, 10 play hockey and rest do not play any of the two games. Find the number of students who do not play any of the games?
6) Preeti had one rope of $5 \frac{1}{6} \mathrm{~m}$ length and another of $3 \frac{1}{2} \mathrm{~m}$ length. How much length of rope did Preeti have in all?
7) Represent the following numbers on number line: $5,10,-2,-7$
8) Determine if 25,110 is divisible by 45 .
9) Find the value of: $-16+18-20+25$
10) The temperature of Nainital on Sunday was $5^{\circ} \mathrm{C}$, on Monday it was $-2^{\circ} \mathrm{C}$ and on Tuesday it was $0^{\circ} \mathrm{C}$. Which was the coldest day which was the hottest day?

## SECTION-D

## IV Answer the following questions.

1) Find the smallest natural number which when divided by $16,24,40$ leaves a remainder 8 in each case.
2) Name the triangles shown in figure (1). Which triangles have
i) $\quad X$ as a vertex
ii) $\quad \mathrm{Y}$ as a vertex
iii) $Z$ as a vertex

3) In a mathematics quiz 1 mark is given for each correct answer and 1 mark is deducted for each wrong answer. There are 20 questions. If all questions are answered correctly, a student's score will be 20 ; if all questions are answered incorrectly, the score will be -20 . Ramesh has a score of 2 . What will be his new score if he
i) Answers the next 5 questions correctly?
ii) Answers the next 5 questions incorrectly?
iii) Answers 2 of the next 5 questions correctly and 3 of them incorrectly?
iv) Answers 4 of the next questions incorrectly and 1 correctly?
4) Draw a circle with radius 3 cm and mark the following:
a) its centre
b) a radius
c) a diameter
d) an arc
5) The length, breadth and height of a room are $825 \mathrm{~cm}, 675 \mathrm{~cm}$ and 450 cm respectively. Find the longest rope which can measure the three dimensions of the room exactly.
