## Semester: 4

Subject Code: 06193257
Subject Name: CDC- [Maths-English]

Date: 08/01/2018
Time: 10:30AM to 01:00PM
Total Marks: 60

## Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.
5. No calculating device is permitted in the exam hall.

## Q. 1 Do as Directed.

A).Multiple choice type questions/Fill in the blanks. (Each of 1 mark)

1. Find the greatest number that will divide 148,246 and 623 leaving remainders 4,6 and 11 respectively.
a) 12
b) 14
c) 13
d) 15
2. Three-fourths of one-fifth of a number is 60 . The number is. $\qquad$
a) 300
b) 400
c) 450
d) 1200
3. Find the area of an equilateral triangle each of whose sides measures 6 cm .
a) $9 \mathrm{~cm}^{2}$
b) $8 \mathrm{~cm}^{2}$
c) $9 \sqrt{3} \mathrm{~cm}^{2}$
d) $8 \sqrt{3} \mathrm{~cm}^{2}$
4. Find the sum of 20 terms of an A.P. whose first term is 3 and the last term is 57
a) 500
b) 575
c) 545
d) 600
5. Find the area of a square with perimeter 48 m .
a) $122 m^{2}$
b) $154 \mathrm{~m}^{2}$
c) $134 \mathrm{~m}^{2}$
d) $144 m^{2}$
B).Do the following. (Each of 1 mark)
6. The sum of all the prime numbers between 60 to 80 is. $\qquad$
7. The largest prime number of three digits is $\qquad$
8. Solve: $x+y=3,2 x+3 y=7$
9. The product of the roots of the quadratic equation $2 x^{2}+5 \sqrt{3} x+6=0$ is.......
10. Find the perimeter of a rectangle of length 12 m and breadth 6 m
C).Arrange the given words in the alphabetical order and tick the one that come at last.
11. (a) Cover
(b) Collect
(c) Caught
(d) Callous
(e) Career
12. (a) Demand
(b) Destroy
(c) Deterred
(d) Direct
(e) Damage
13. (a) Finger
(b) Flourish
(c) Formal
(d) Forget
(e) Forgo
14. (a) Window
(b) Marriage
(c) Widow
(d) Distress
(e) Matrimonial
15. (a) Mother
(b) Monitor
(c) Monkey
(d) Master
(e) Matter

## Q. 2 Answer the following questions.

A).1. If the $9^{\text {th }}$ term of an A.P. is 99 and $99^{\text {th }}$ term is 9 , find the $108^{\text {th }}$ term ( $\mathbf{2}$ marks)
a) 0
b) 2
c) 4
d) 6
2. The radius of a circle is 13 cm and the length of one of the chords is 10 cm . What is the distance Of the chord from the center. ( 2 marks)
a) 10 cm
b) 15 cm
c) 12 cm
d) 11 cm
3. A man has some hens and cows. If the number of heads be 48 and number of feet equals 140 , then the number of hens. ( 2 marks)
a) 26
b) 24
c) 23
d) 22
4. $\frac{250}{\sqrt{?}}=10(\mathbf{1} \mathbf{~ m a r k})$

## B).Theory/ Direct Questions.(2 marks each)

1. How many terms of the A.P. $1,4,7 \ldots \ldots$ are needed to give the sum 715 ?
a) 33
b) 22
c) 24
d) 27
2. The diameter of the base of a right circular cylinder is 28 cm and the height is 10 cm . Find out the volume and area of the curved surface of the cylinder.
a) $8980 \mathrm{~cm}^{3}, 800 \mathrm{~cm}^{2}$
b) $4567 \mathrm{~cm}^{3}, 788 \mathrm{~cm}^{2}$ c) $6789 \mathrm{~cm}^{3}, 456 \mathrm{~cm}^{2}$
d) $6160 \mathrm{~cm}^{3}, 880 \mathrm{~cm}^{2}$
3. How many small cubical blocks whose each edge measures 20 cm ?
a) 56
b) 48
c) 64
d) 52
4. The L.C.M of two numbers is 14560 and their H.C.F is 13 . If one of them 416 , then the other is.....
a) 460
b) 455
c) 450
d) 446

## Q. 3 Answer the following questions.

A).1. What is the number just more than 5000 which is exactly divisible by 73 ? ( $\mathbf{2}$ marks)
a) 50001
b) 5009
c) 5037
d) 5027
2. $(35)^{2} \div \sqrt[3]{125}+(25)^{2} \div 125=$ $\qquad$ (2 marks)
a) 200
b) 250
c) 150
d) 100
3. If one root of the quadratic equation $2 x^{2}+\mathrm{Px}+4=0$ is 2 , find the second root and value of $\mathrm{P}(2$ marks $)$
a) $1,-6$
b) 1,6
c) $-1,6$
d) $-1 .-6$
4. Find the cost of painting the walls of a room of 6 m long, 5 m broad and 4 m high at Rs. $7.50 \mathrm{~m}^{2}$ (

1 mark)
a) Rs. 660
b) Rs. 560
c) Rs. 345
d) Rs. 440

## B). Do as Directed (Each 1 mark)

1. The sum of all the angles round a point is $\qquad$
2. The smallest prime number is
3. Formula to find perimeter of a square is.
4. Which term of an A.P. $5,13,21, \ldots \ldots$. is 181 ?
a) $21^{\mathrm{st}}$
b) $22^{\text {nd }}$
c) $23^{\text {rd }}$
d) $24^{\text {th }}$
5. Find the least number of four digit which is divisible by $4,6,8$ and 10
a) 1080
b) 1800
c) 1008
d) 1880
6. For what value of $\mathbf{k}$, the system of equation $3 x+4 y=6$ and $6 x+8 y=\mathbf{k}$ represents coincident lines?
a) 9
b) 10
c) 11
d) 12
7. What is the volume of a cuboid whose dimensions are $25 \mathrm{~m}, 10 \mathrm{~m}$ and 2 m ?
a) $450 \mathrm{~m}^{2}$
b) $500 \mathrm{~m}^{2}$
c) $550 \mathrm{~m}^{2}$
d) $600 \mathrm{~m}^{2}$
8. A cylinder of height of 21 cm has base of radius 7 cm . Find out the total surface area of the cylinder.
a) $1132 \mathrm{~cm}^{2}$
b) $1232 \mathrm{~cm}^{2}$
c) $1323 \mathrm{~cm}^{2}$
d) $1332 \mathrm{~cm}^{2}$

## Q. 4 Attempt the following questions. (Each of 1mark)

Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.
1)



(2)

(3)

(4)
2) Choose the correct water image of the given figure ( X ) from amongst the four alternatives.

(X)

(1)

(2)

(3)

(4)
3) In a certain code language, '123' means 'bright little boy', '145' means 'tall big boy' and '637' means 'beautiful little flower'. Which digit in that language means 'bright'?
(a) 1
(b) 3
(c) 2
(d) 6
(e) None of these
4) In a certain code TOGETHER is written as RQEGRJCT. In the same code. PAROLE will be written as
(a)NCPQJG
(b) NCQPJG
(c) RCPQJK
d) RCTQNG
(e) None of these
5) If SHARP is coded as 58034 and PUSH as 4658 , then RUSH is coded as
(a) 3568
(b) 3658
(c) 3685
(d) 3583
6) Hair : Grass :: Fur :?
(a)Feather
(b) Cloth
(c) Wood
(d) Leather
7) Forecast : Future : : Regret :?
(a) present
(b) at one
(c) past
(d) sins
2. Read the following paragraph \& fill in the blanks (Any8) with correct options from given alternatives.

To change the hearts of the ....(1)... in such a way as to make it ...(2).... for them to indulge in these $\ldots$.(3).... without changing the ....(4)..... of the governments that rule over....(5)... is an impossibility when....(6)... reaches that point it will ....(7)... to be human, it will become a ....(8) ... of supermen, of gods and it will no ....(9).... need the guidance of.....(10).... of the stature of Mahatma Gandhi.

1) (a) mobs (b) men (c) crowd (d) groups
2) (a) unlikely (b) likely (c) possible (d) impossible
3) (a) cruelties (b) misdeeds (c) actions (d) brutalities
4) (a) minds (b) hearts (c) decisions (d) stands
5) (a) us (b) people (c) them (d) you
6) (a) humanity (b) life (c) behavior (d) nature
7) (a) start (b) continue (c) begin (d) cease
8) (a) committee (b) body (c) organization (d) government
9) (a) less (b) more (c) longer (d) further
10) (a) men (b) man (c) god (d) gods
