PARUL UNIVERSITY
FACULTY OF MANAGEMENT
BBA, Winter 2019 - 20 Examination

Semester: 4   Date: 14/12/2019
Subject Code: 06193257   Time: 2:00 pm to 4:30 pm
Subject Name: CDC [Maths-English]   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.

Q.1 Do as Directed.

A). Multiple choice type questions/Fill in the blanks. (Each of 1 mark)   **(05)**

    1. How many terms are there in the A.P.   15,21,27,………,285.
        a)40   c)46
        b)50   d)55

    2. Find the number of factors of 240.
        a)15   c)14
        b)20   d)18

    3. Find the Simple Interest on Rs.5200 for 2 years at 6% per annum.
        a)624   c)650
        b)520   d)750

    4. Find the Square of 111 using Shortcut Method.
        a)12341   c)12121
        b)13141   d)12321

    5. Find the slope of the line passing through the points (2,3) and (4,9)
        a)2   c)3
        b)1   d)4

B). Choose the correct option. (Each of 1 mark)   **(05)**

    1. The volume and the total surface area of a cuboids whose dimensions are 25 m, 10 m, and 2 m.
        (a)520 m^3 , 620 m^2 (b) 500 m^3 , 640 m^2 (c) 540 m^3 , 600 m^2 (d) 640 m^3, 500 m^2

    2. Solve 2X + 3Y=7, 3X - Y=5
        (a)X=4, Y=2   (b) X=3, Y=4   (c) X=2, Y=1   (d) X=2, Y=4

    3. Two Numbers are in the ratio of 4:5 and the sum of these numbers is 27. Find the two numbers.
        (a)20,25   (b) 12,15   (c) 9,18   (d) 20,7

    4. Sides of two cubes are in the ratio of 2:3. Find out the ratio of their surface areas
        (a) 1:2   (b) 8:9   (c) 2:4   (d) 4:9

    5. Find the mean proportional between 48 & 12.
        (a)24   (b) 20   (c) 18   (d) 36

C). Arrange the given words in the alphabetical order and tick the one that come at last.   **(05)**
    1. (a) Mother   (b) Monitor   (c) Monkey   (d) Master   (e) Matter
    2 .(a) Window   (b) Marriage   (c) Widow   (d) Distress   (e) Matrimonial
    3.(a) Finger   (b) Flourish   (c) Formal   (d) Forget   (e) Forgo
    4.(a) Demand   (b) Destroy   (c) Deterred   (d) Direct   (e) Damage
    5.(a) Cover   (b) Collect   (c) Caught 3   (d) Callous   (e) Career

Q.2 Answer the following questions.

A). Choose the correct option.(Each of one marks)   **(07)**

1. Find the greatest 4-digit number which is exactly divisible by 420.
   (a)9670   (b)9668   (c) 9660   (d) 9661

2. Find the 7th term of the G.P. 4,8,16,……
   (a) 250   (b) 252   (c) 254   (d) 256

3. What is the radius of a circular plot whose circumference is 176 m?
   (a) 28 m   (b) 26 m   (c) 30 m   (d) 24 m

4. Find the average of First 81 natural numbers.
   (a) 40   (b) 41   (c)42   (d) 43

5. Find the length of the longest bamboo that can be placed in a room 12 m long, 9 m broad and 8m high.
   (a) 13 m   (b) 14 m   (c) 16 m   (d) 17 m

6. Find C.I. on Rs.4000 for 2 years at 4% per annum.
   (a) Rs.432.60   (b) Rs. 400   (c) Rs. 508   (d) Rs. 500

7. Do multiplication 123 x 999 with shortcut method.
   (a) 122867   (b) 122567   (c) 122877   (d) 122527

B).Choose the correct option.(Each of two marks)   **(08)**

1. Find the H.C.F. & L.C.M. of 132,360.
   (a) 12, 3960   (b) 10, 4660   (c) 14,2340   (d) 16, 8460

2. Mahesh borrowed Rs.3000 from his friend Suresh at 15% per annum for 3 years. Find the Interest & Money returned by Mahesh to Suresh.
   (a) 1250, 4250   (b) 1320, 4320   (c) 1350, 4350   (d) 1150, 4150

3. Find the Sum of $1, \frac{1}{3}, \frac{1}{9}, \frac{1}{27}, \frac{1}{81}, \& \frac{1}{243}$

   (a) $\frac{264}{360}$ (b) $\frac{364}{243}$ (c) $\frac{463}{213}$ (d) $\frac{729}{315}$

4. Find the Sum and the Product of the roots of the quadratic equation $2x^2 + 5\sqrt{3} + 6 = 0$.
   (a) $-\frac{5\sqrt{3}}{2}$, 3   (b) $\frac{5\sqrt{5}}{2}$, 4   (c) 6 , 5   (d) $-\frac{5\sqrt{7}}{2}$, 2

Q.3 A) Answer the following questions.
Choose the alternative which is closely resembles the water-image of the given combination.
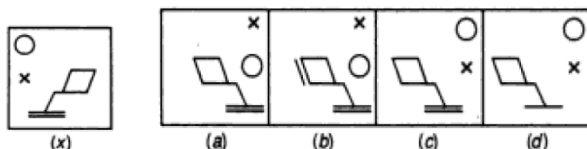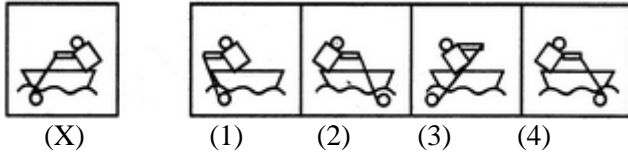
1)
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N4tQj3
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(1) image   (2) image
(3) image   (4) image

1. Choose the alternative of fig. (x) which most closely resembles the mirror-image of the given figures.

3)Choose the correct mirror image of the given figure (X) from amongst the four alternatives.

(X)   (1)   (2)   (3)   (4)

Directions (*Questions 4-7*) : *Study the letter series given below and answer the questions that follow :*

H D Y S M W N B Q P O C R T B L Z V E G U F

4.Which is the only letter that occurs twice?

    (a) B (b) E (C) M *(d)* S

5.How many 'T' s are there in the following sequence which are immediately preceded by 'P' but not immediately followed by 'S'?

    S T P Q T S P T R P T S R P S T Q P T R P T M P T S

6.In the following series, count each 'N' which is immediately followed by 'X' but 'X' is not immediately followed by 'T'. How many such 'N's are there?

    N X N T Q M N X T M X N X C N Q M N N X Q N X T X N A M X N X M

        (a) 2   *(b)* 4   (c) 5 *(d)* 7   (e) 9   **(07)**

7.In the following letter sequence, how many 'n's are followed by 'm' but not preceded by 'h'?

    a g r h t n m b c n m l b u v n m h e r h n m g f e h n m e c n m w q a n m h l b

Theory Question / Applied Arrange the given words in a meaningful sequence.

1) 1) Skull 2) Shoulder 3) Neck 4) Face 5) Legs

A) 1,2,3,4,5 B) 1,4,3,2,5 C) 1,3,4,2,5 D) 1,4,2,3,5

2) 1) Teacher 2) College 3) Guide 4) Study 5) Exam

A) 2,3,1,4,5 B) 2,4,1,3,5 C) 4,1,2,3,5 D) 2,1,3,4,5

Find correct sequence of sentence :

3)

P: youngsters in the cities and the villages

Q: The effect

R: of the cinema

S: on the school and college going is very bad

A)PRQS B)QRSP C)QPSR D)RQSP

B). 4)   **(08)**

P. I have not come to complain he said

Q. even if it means some humiliation

R. but the boy must learn to be honest

S. and admit he broke it

.A)PQRS   B)QRPS   C)QPRS   D)PRQS

5.If CAGED is coded as 31754, what will be the code for DEAF?

a)4517   (b) 4516   (c) 4519   (d) 4518

6. Bombay : Maharashtra : : Trivandrum : ?

(a) Calcutta   (b)Gujarat   (c) Rajasthan   *(d)* Kerala   (*e*) Sikkim

7)In a certain code, *'nee tim see* means *'how are you'; 'ble nee see'* means *'where are you* what is the code for *'where' ?*

(a)nee (b) tim (c) see d) Can't be determined (e) None of these

8)If water is called food, food is called tree, tree is called sky, sky is called wall, which gives a fruit?

Q.4 **Choose the right option (Q1 is of one mark & remaining are of 2 marks)** **(15)**

1. The sum of length, breadth, and height of a cuboid is 12 m long, find the total surface area of the cuboid
   (a) $80\ cm^2$　　　　(b) $82\ cm^2$　　　　(c) $84\ cm^2$　　　　(d)$78\ cm^2$

2. A man purchased 5 toys at the rate of Rs.200 each, 6 toys at the rate of Rs.250 each & 9 toys at the rate of Rs.300 each. Calculate the average cost of one toy.
   (a) 250　　　　(b) 255　　　　(c) 260　　　　(d) 265

3. Find the sum of 20 terms of an A.P. whose first term is 3 & the last term is 57.
   (a) 400　　　　(b) 600　　　　(c) 700　　　　(d) 800

4. For what values of k will the system of equations $kx + 2y = 5,\ \ 3x + y = 1$ have a no unique solution.
   (a) 3　　　　(b) 4　　　　(c) 5　　　　(d) 6

5. Solve the quadratic equation $\sqrt{3}\ x^2 + 10x - 8\sqrt{3} = 0$.
   (a) $\dfrac{2}{\sqrt{5}}, \dfrac{-12}{\sqrt{5}}$　　　(b) $\dfrac{1}{\sqrt{3}}, \dfrac{-2}{\sqrt{3}}$　　　(c) $\dfrac{2}{\sqrt{3}}, \dfrac{-12}{\sqrt{3}}$　　　(d) $\dfrac{12}{\sqrt{5}}, \dfrac{1}{\sqrt{5}}$

6. Find the sum of number of factors of 150.
   (a)372　　　　(b) 546　　　　(c) 360　　　　(d)540

7. Nikita invested Rs.8000 for 3 years at 5% C.I. in a post office. If the interest is compounded once in a year, what sum will she get after 3 years?
   (a)9061　　　　(b) 8261　　　　(c)9161　　　　(d) 9261

8. Find the average value of six numbers 7, 12, 17, 24, 26 &28. If 8 is added to each number what will be the new average.
   (a)18 , 26　　　　(b) 19, 27　　　　(c) 20,28　　　　(d) 21, 29