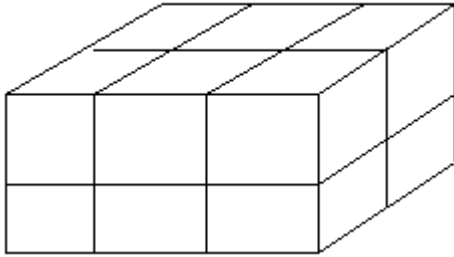# UPES M.Des Sample Paper

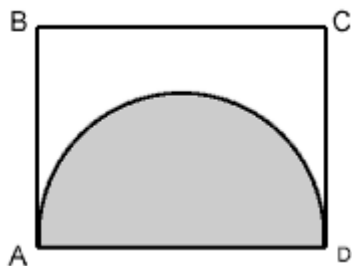**A. Quantitative Awareness**

Q.1

(Figure not to scale)

The solid brick shown is made of small bricks of side 1. When the large brick is disassembled into its component small bricks, the total surface area of all the small bricks is how much greater than the surface area of the large brick?

a) 32
b) 40
c) 60
d) 72

Q2

(Firgure not to scale)

Rectangle ABCD has a perimeter of 26. The half circle with diameter AD has an area of 8π. What is the perimeter of the part of the figure that is not shaded?

a) 26 + 4π

b) 18 + 8π

c) 18 + 4π

d) 14 + 4π

Q3 One tenth of a number is 35. What is the three seventh of the same number?

a) 70
b) 150
c) 210
d) 300

Q4. The average monthly income of Avi and Bilal is Rs.5050. The average monthly income of Bilal and Chandra is Rs.6250 and the average monthly income of Avi and Chandra is Rs.5200. The monthly income of Avi is:

a) 2000
b) 4000
c) 4500
d) 5000

Q5. Look at this series: 8, 6, 9, 23, 87, ... What number should come next?

a) 128
b) 226
c) 345
d) 429

Q6 Look at this series: 36, 34, 30, 28, 24, ... What number should come next?

a) 20
b) 22
c) 24
d) 18

Q7 In an ODI between India and England, England won the toss and elected to bat first. In 50 overs England made 281 by spending 8 wickets. India did a very slow starts with run rate of 3.2 in first 10 overs. What should be the run rate India should target to win the game?

a) 6
b) 6.5
c) 7
d) 7.5

Q 8 A pump can fill a tank with water in 2 hours. Because of a leak, it took $2\frac{1}{3}$ hours to fill the tank. The leak can drain all the water of the tank in:
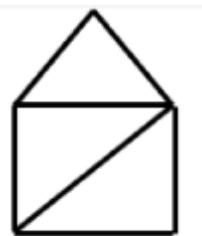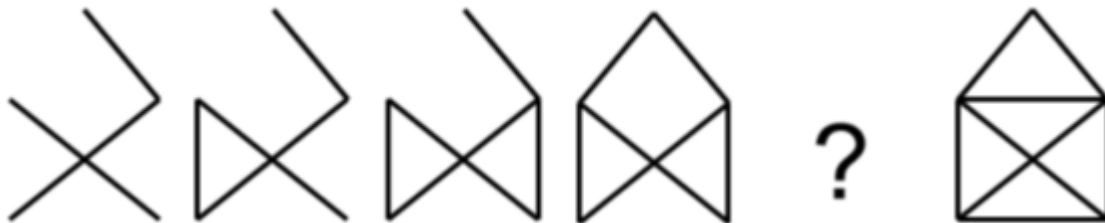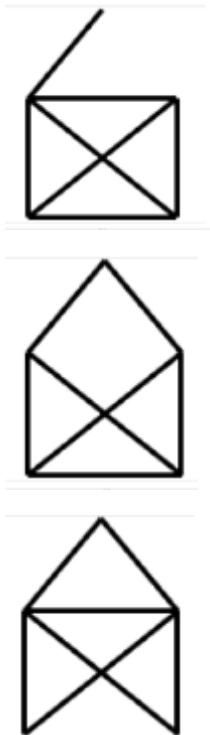
a) 4.5
b) 6
c) 9
d) 14

B. Visual analogy

Q1 In an enclosure there were both crows and cows. If there were 30 heads and 100 legs, what is the number of crows in the enclosure?

a) 10
b) 12
c) 20
d) 16

Q2 Choose the image that completes the pattern:

Q3 If BLACK is coded as KCALB, then WHITE is codes as

a) ETIHW
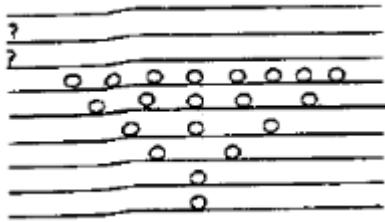b) TIEHW
c) HTWIE
d) ETHIW

Q4 The path of a projectile is

a) Parabola
b) Hyperbola
c) Straight line
d) Depend on angle of throw

Q 5 Find the missing number
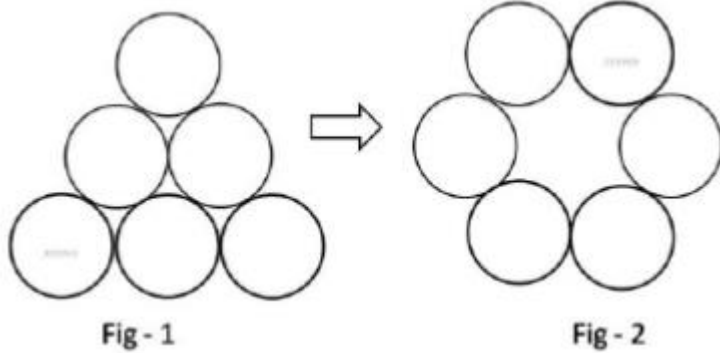
a) 1
b) 0
c) 2
d) 3

Q6 The number of circles in the blank rows must be (in the figure below)
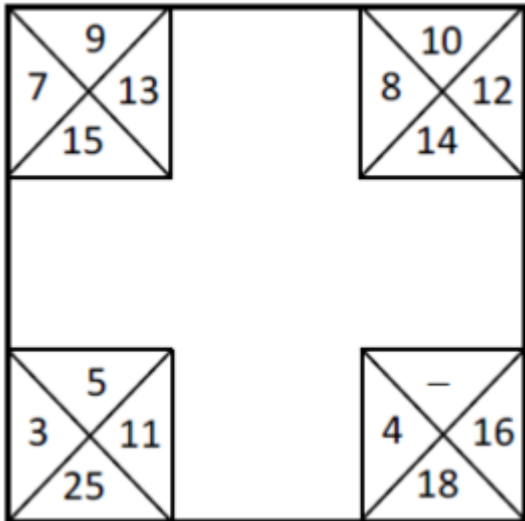

a) 12 and 20

b) 13 and 20

c) 13 and 21

d) 10 and 11

Q 7 What is the minimum number of moves required to transform figure 1 to figure 2? A move is defined as removing a coin and placing it such that it touches two other coins in its new position.

Fig - 1   Fig - 2

a) 1
b) 2
c) 3
d) 4

Q 8 Find the missing number

```
9              10
7  X  13     8  X  12
  15            14

5              —
3  X  11     4  X  16
  25            18
```

a) 10
b) 8
c) 6
d) 12

Q 9 Mahesh, Ramesh, Suresh and Nimesh were broker, builder, doctor and designer, but not necessarily in that order. Nimesh told the builder that Suresh is on his way. Mahesh is sitting across the designer and nest to the doctor. The designer did not say anything. What is each person's occupation?

a) Mahesh – doctor; Ramesh – designer; Suresh – builder; Nimesh – broker

b) Mahesh – doctor; Ramesh – builder; Suresh – broker; Nimesh – designer

c) Mahesh – builder; Ramesh – broker; Suresh – designer; Nimesh – doctor

d) Mahesh – builder; Ramesh – designer; Suresh – broker; Nimesh – doctor

C. Design Awareness

Q1 Shopping Ka Naya Address" is the tagline of which famous brand?

a) Amazon

b) Flipkart

c) Myntra

d) Zabong

Q2 "Swad Zindagi Ka" is the tagline of which famous brand in India?

a) Amul
b) Parag
c) Dairy milk
d) Mother dairy

Q3 Famous symbol of Ferrari has which animal on its Logo?

a) Bison
b) Horse
c) Dog
d) Rhino

Q4 Adobe Photoshop is a Vector based photo editing software.

a) True

b) False

Q 5 Which out of four is the softest lead used in Pencils?

a) HB
b) 2B
c) 2H
d) 4B

Q 6 Which colors are used in BMW logo?

a) Blue, Black and White

b) Black, Green and White

c) Green, Blue and White

d) Black, White and Yellow

Q 7 Any two colours 180 degrees opposite in the colour wheel is called ?

a) Analogous Colour

b) Complimentary Colour

c) Triadic Colour

d) Monochrome Colour

Q 8, Identify the terms used in photography?

a) Tinkering

b) Depth of Field

c) Jiggering

d) Dodging

Answer Key

A. Quantitative Awareness

1-b ,2-b, 3-b, 4-b, 5-d ,6-b ,7- b, 8-d,

B. Visual analogy

1-a ,2-c, 3-a, 4-a, 5-d ,6-c ,7- c, 8-c, 9-d

C. Design Awareness

1-b ,2-c, 3-b, 4-b, 5-d ,6-a,7- b, 8-b,