





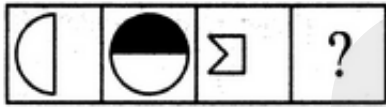
<b>QP Code: D 123571</b>	<b>Pages: 3</b>	<b>Name:</b>
		<b>Register No.</b>
<b>SECOND SEMESTER (CUFYUGP) DEGREE EXAMINATION, APRIL 2025</b>		
<b>MATHEMATICS</b>		
<b>MAT2FM106(2) : Mathematics for Competitive Examinations - Part II</b>		
<b>2024 Admissions</b>		
<b>Maximum Time : 1.5 Hours</b>		<b>Maximum Marks : 50</b>


### Section A

**All Questions can be answered. Each Question carries 2 marks (Ceiling : 16 Marks)**


1	In a certain code, 'COMPUTER' is written as 'PMOCRETU', how is 'DECIPHER' written in that code?
2	<b>EDITOR</b> is related to <b>EIDRTO</b> , in the same way <b>TRIBAL</b> is related to . . . . .
3	In the following question, four words have been given of which three are alike in some way and one is different. Choose the odd one out.  (a) Geometry                      (b) Algebra                      (c) Calculus                      (d) Thermodynamics
4	Find the wrong term in the following <b>PBA,QDC,REE,SHG</b>
5	A woman introduces a man as the son of the brother of her mother. How is the man related to the woman?
6	Which of the following diagrams indicates the best relationship between Professors, Doctors, and Men?  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>A</p> </div> <div style="text-align: center;">  <p>B</p> </div> <div style="text-align: center;">  <p>C</p> </div> <div style="text-align: center;">  <p>D</p> </div> </div>

7 Select a suitable figure from the Answer Figures that would replace the question mark(?).

**Problem Figures:** 

**Answer Figures:** 

8 Choose the figure which is different from the rest.



9 Choose the alternative which is closely resembles the water-image of the given combination.

**US91Q4M5W3**

(1)  $\text{U}^{\text{S}}\text{91Q4M5W3}$       (2)  $\text{U}^{\text{S}}\text{61Q4W2M3}$   
 (3)  $\text{U}^{\text{S}}\text{91Q4W2M3}$       (4)  $\text{U}^{\text{S}}\text{91Q4W2M3}$

10 Find the number of bricks of dimension  $24 \times 12 \times 8$  cm each that would be required to make a wall 24 m long, 8 m high and 60 cm thick.

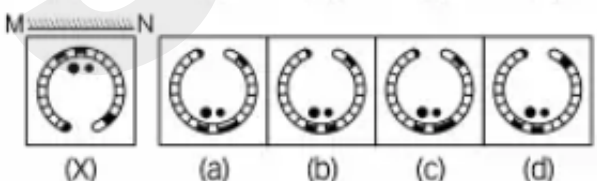
### Section B

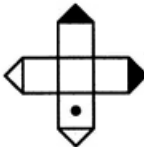




All Questions can be answered. Each Question carries 6 marks (Ceiling : 24 Marks)

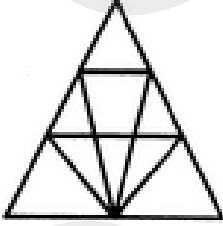
11 Siya is 18th from left end and 12th to the right of Rinku who is 38th from the right end. If all of them are facing north, Find out total number of persons in the row?

12 A + B means A is the sister of B  
 A - B means A is the brother of B  
 A × B means A is the daughter of B.  
 How can you write E is the maternal uncle of D?

13 In the following figure, if a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?



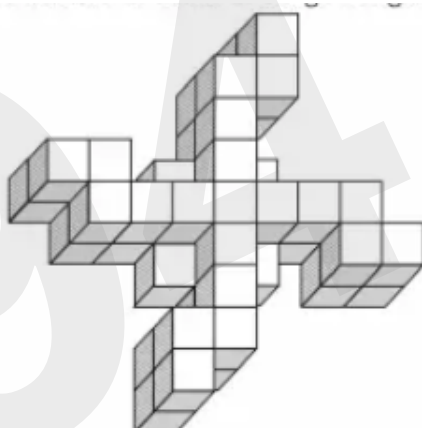
14	<p>Choose the box that is similar to the box formed from the given sheet of paper (X).</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>(X)</p> </div> <div style="text-align: center;">  <p>(1)</p> </div> <div style="text-align: center;">  <p>(2)</p> </div> <div style="text-align: center;">  <p>(3)</p> </div> <div style="text-align: center;">  <p>(4)</p> </div> </div>
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15	<p>Find the number of triangles in the given figure.</p> <div style="text-align: center;">  </div>
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**Section C**

**Answer any ONE. Each Question carries 10 marks (1x10=10 Marks))**

16	<p>Goki is looking for his wife Vartika. He went 90 metres in the east before turning to his right. He went 20 metres before turning to his right again. He walked 30 metres further to look for Vartika at his uncle's place, but was told that Vartika has already left. Disappointed he went 100 metres to his north before meeting Vartika. How far did Goki meet his wife from starting point?</p>
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17	<p>How many cubes are in the diagram</p> <div style="text-align: center;">  </div>
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