## D.A.V. PUBLIC SCHOOL, CRRC, Medical Road, Gaya Sunday Test (Date -21/7/2024)

Class - XI
Sub. - Applied Maths

Time : $\mathbf{4 0}$ Min
F.M. - 20

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\text { Section - A (2 x } 5 \text { = } 10 \text { Marks) }
$$

1. Write the power set of $A$, where $A=\{-1,0,1\}$.
2. Write the following intervals in set builder form :
i. $(2,7)$
ii. $(-5,2]$
3. Draw a suitable venn diagram for each of the following
i. (AUB)'
ii. A' $\cap B^{\prime}$
4. If $A$ and $B$ are two sets such that $n(A-B)=5, n(B-A)=3$ and $n(A \cap B)=10$, then find the following
i. $n(A \cup B)$
ii. $n(B)$
5. If $A=\{-1,0,1\}$ and $B=\{3,5\}$, then find
i. $A \times B$
ii. $B \times A$

$$
\text { Section - B (5 × } 2 \text { = } 10 \text { Marks) }
$$

1. If $R=\left\{(x, y): x, y \in W, x^{2}+y^{2}=100\right\}$,then find the domain and range of $R$ also write $R$ in roster form.
2. In a group of 400 people who speak either Hindi or English or both, if 230 speak Hindi only and 70 speak both English and Hindi, then how many of them speak English only?
