

JAGDISH NANDAN COLLEGE MADHUBANI

Department of Mathematics

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Home Assignment for winter vacation

Class XI^{th}

Q.1. Define set, relation and function with suitable examples.

Q.2. If $A = \{5, -1, 3\}$ then find the all subsets of A.

Q.3. Find the degree measure corresponding to radian measure $(-2)^c$.

Q.4. A horse is tied to a post by a rope. If the horse moves along a circular path, always keeping the rope tight and describes 88 metres when it traces 72° at the centre, find the length of the rope.

Q.5. Find the value of the followings:-

(a) $\sin(765^\circ)$ (b) $\operatorname{cosec}(-1110^\circ)$ (c) $\sin\left(\frac{31\pi}{3}\right)$.