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INFORMATION ASSURANCE SECURITY

CLASS WORK - I

1) Conversion of plain text to cipher text.

Formula : $c = (P + k) \mod (26)$

Plain text -> meet me after the toga party.

meet -> PHHW

$c = (12 + 3) \mod 26 = 15 \mod 26$

$c = (4 + 3) \mod 26 = 7 (H)$

$c = (19 + 3) \mod 26 = 22 (W)$

me - PH

after - DIWHU

the - WKH

toga - WRJD

party - SDUWB

cipher text - PHHW PH DIWHU WKH WRJD SDUWB

2) Vignere Cipher

   Plain text → wearediscovered saveyourself

   key = decephue

w	e	a	r	e	d	i	s	c	o	v	e	r	e	d	s	a	v	e	y	o	u	r	s	e	l	f
d	e	c	e	p	t	i	v	e	d	e	c	e	p	t	i	v	e	d	e	c	e	p	t	i	v	e
2	1	c	v	T	w	a	N	g	R	2	g	V	r	w	A	v	2	H	e	a	Y	g	2	M	g	J

From vignere table

   Cipher Text -

   2 1 C V T W Q N G R 2 G V T W A V 2 H C Q Y G 2 M G J