SECOND TERMINAL MATHEMATICS-VHSE(I)
KEY

Quest. No.	Scoring Indicators	Split Score	Total Score
1	(a). A={2,3,5} B={1,2,3,4,5} (b) U={1,2,3,4,5,6} (c). B-A={1,4} $A-B=\varphi$	2+1 2	5
2	(a). n(AVB)=550, (b). Data is incorrect	2+1	3
3	$x=1, y=^{-}1$	2	2
4	$B\cap C=\varphi \quad Ax(B\cap C)=\varphi$	1+2	3
5	5:4	3	3
6	(a). $Sin2x=Sin(x+x)=SinxCosx+CosxSumx=2SinxCosx$ (b). (c).Simplify $2Cos3xCosx$ $\lvert z_1-z_2\rvert=\sqrt{6}$ (d). $x=2n\pi\pm\frac{5}{6}$ OR (a). $SinA=\frac{-5}{13}\ TanA=\frac{5}{12}$ (b). $\tan 4x=\tan(3x+x)=\frac{\tan 3x+\tan x}{1-\tan 3x\tan x}$	2 1 1 1 4 3	7
7	P(1)=7 P(2)=9 which i not a prime. Then the stataement is not true	2	2
8	Induction Method. Give marks for correct steps	3	3
9	(a). $\lvert z\rvert=1$ (b). $z=\cos\left(-\pi/2\right)+1\sin\left(-5/2\right)$ (c). $z^{-1}=\Lambda$	1+1+1	3
10		3	3

11	(a). Soluation set [1,00) (b) Graph neatness to be noted	2 3	5
12	n=10, (b). 27720	3+3	6
13	(a). 7 terms (b). $6C_r\left(\frac{x}{r}\right)^{6-r}\left(\frac{2}{x}\right)^{r}$ (c). Term independend of $x = 6C_3$	1 2+2	5
14	(a). 98450 (b). $\frac{n}{3}(4n^2-1)$	5+5	10
15	(a). $-9/6$ (b). 90^0 (c).	1+2+3	6
16	$\frac{x^2}{25}-\frac{y^2}{39}=1$	4	4
17	Diagonals are of different lengths	3	3
18	(a). 1 (b). 2 (c). 1/2 (d). 0	4	4
19	$3x-y=7, x+3y=9$ $f^1(x)=\lim_{n\to 0} f\frac{(x+h)-f(x)}{h}$	3	3