Symbol of Secularism & National Integration

ANJUMAN-I-ISLAM'S

KALSEKAR TECHNICAL CAMPUS, NEW PANVEL

School of Engineering & Technology

DEPARTMENT OF MECHANICAL ENGINEERING

CLASS:- **TE ME II**	SEM:- **V**
SUBJECT:- **MECHANICAL MEASUREMENTS AND CONTROL**	DATE:- **/ 09 / 2016**
DURATION:- **60 min.**	MARKS:- **20**

CLASS TEST I

Q.01 Attempt any two: (08 Marks)

a)	Solve the given characteristic equation using Routh criterion and comment on the stability of the system. $s^4+2s^3+11s^2+18s+18 = 0$	**4**
b)	Explain the term drift and also give classification of drift.	**4**
c)	Explain briefly the following terms (i) Repeatability (ii) Reproducibility	**4**

Q.02 Attempt any one: (12 Marks)

a)	Sketch the Root locus plot and comment on the stability of system having open loop transfer function as $G(s) = k(s+4)(s+5)/(s+3)(s+1)$	**12**
b)	Sketch Bode plot for the following unity feedback system $G(s) = 50/(s+1)(s+2)$ Find Gain Margin, Phase Margin and comment on the stability of the system	**12**