



ANJUMAN-I-ISLAM'S
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL
School of Engineering & Technology

DEPARTMENT OF MECHANICAL ENGINEERING

CLASS:- TE ME (I & II)

SUBJECT:- PP3

DURATION:- **60 min.**

SEM:- V

DATE:- **15 / 09 / 2016**

MARKS:- **20**

CLASS TEST 01

Q.01 Attempt any two: (08 Marks)

- a) What is Transfer line? Explain its Classification, Advantages and Limitations **04**
- b) Explain Compound die with diagram **04**
- c) Explain types of Automats **04**

Q.02 Attempt any two: (12 Marks)

- a) A circular cup is manufactured using deep drawing process has a height of 48mm and a diameter of 48mm. the corner radius is 2mm and working piece material is medium carbon steel and is 1mm thick. Determine the following: **06**
- a) Percentage deduction
- b) Blank size
- c) No. of draws required
- d) Punch and die radius
- e) Die clearance
- f) Drawing force
- g) Blank holding force
(take yield strength as 427 N/mm^2)
- b) Find total pressure, dimensions of die set to produce the washer of 5cm outside diameter with 2.5 cm diameter hole from material 3mm thick having shear strength 360 N/mm^2 **06**
- c) Explain types of strip layout in detail **06**