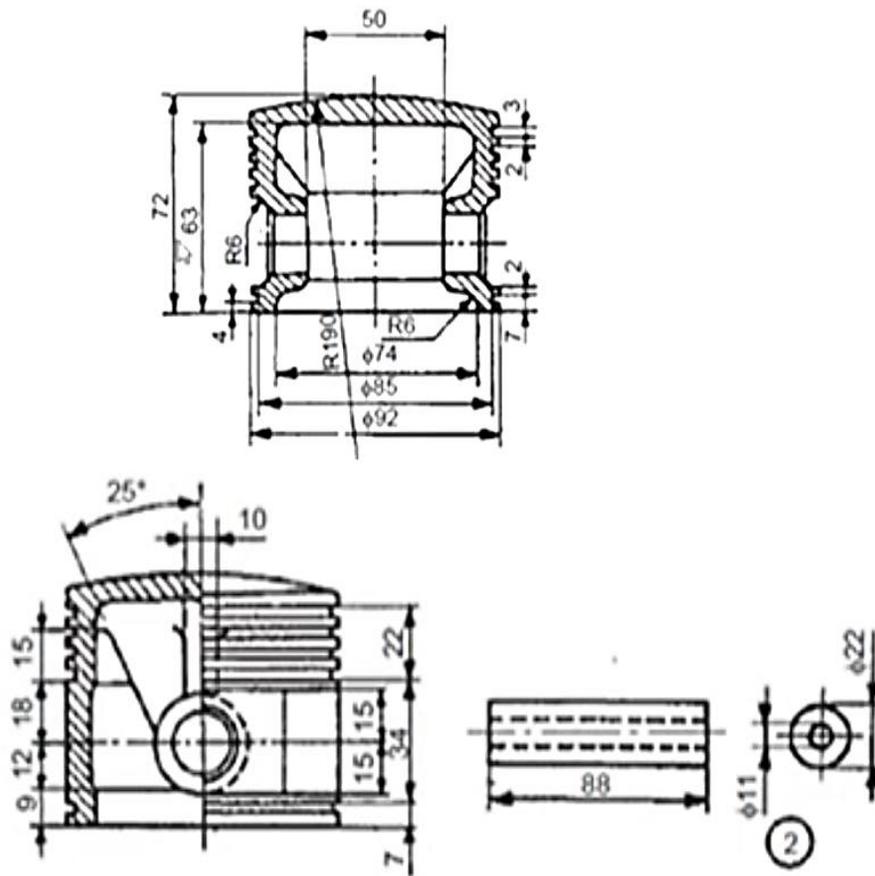


Name:			
Enrolment No:			
UPES End Semester Examination, December 2023			
Course: Automotive Assembly Drawing (MEAD2011) Program: B.Tech (ADE) Course Code: (MEAD2011)		Semester: 3rd Time: 03 hrs. Max. Marks: 100	
Instructions: Section-A&B: Attempt all questions Section-C: Attempt all questions, in Q 11 answer anyone. Make a suitable assumption whenever necessary.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	What do you mean by “Assembly drawing” explain with an example.	4	CO1
Q 2	Discuss the main advantages of shock absorber.	4	CO1
Q 3	Discuss all label points on a propeller shaft.	4	CO1
Q 4	Write a short note on flywheel.	4	CO1
Q 5	Why second and fourth quadrants are not used in practice?	4	CO1
SECTION B (4Qx10M= 40 Marks)			
Q 6	Write a short note on crank shaft.	10	CO2
Q 7	Draw all assembly parts of the Internal expanding shoe brake.	10	CO2
Q 8	What is the main function of a Shock absorber?	10	CO1
Q 9	Sketch and explain all assembly parts of a constant mesh-type gearbox.	10	CO3
SECTION-C (2Qx20M=40 Marks)			
Q 10	Assemble the parts of the piston, shown in figure and draw the following views: (i) Sectional view from the front (ii) View from the left (iii) View from above	20	CO2



Q 11

Determine allowances and tolerances for the following dimensions of mating parts according to the hole basic system. State type of fit.

(a)

Shaft	Hole
$\text{Ø}=27.470\text{mm}$	$\text{Ø}=27.500\text{mm}$
$\text{Ø}=27.445\text{mm}$	$\text{Ø}=27.523\text{mm}$

(b)

Shaft	Hole
$\text{Ø}=29.90\text{mm}$	$\text{Ø}=30.000\text{mm}$
$\text{Ø}=29.85\text{mm}$	$\text{Ø}=30.025\text{mm}$

OR

Sketch neatly the detail parts of knuckle joint with assembly.

20

CO3