Fayoum University
Faculty of Engineering
Mechanical Engineering Dept.
1st year

Mechanical Drawing & Computer Drafting (MDP 115)
Final Term Exam
1st Semester 2015/2016
Time Allowed: 3 Hrs.

Question One (16 Marks):

For a diameter 60 mm and fit H10/e8 determine the following:

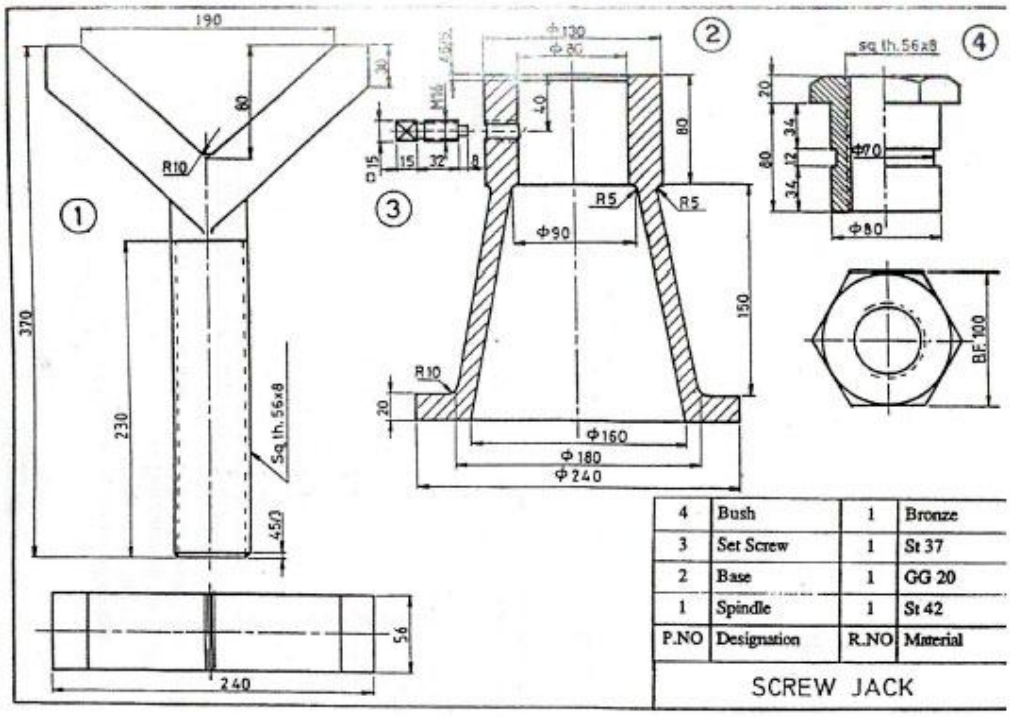
1- Type of tolerancing system.
2- Type of the fit.
3- Tolerance on the hole.
4- Tolerance on the shaft.
5- Upper & lower limits on hole.
6- Upper & lower limits on shaft.

Size	H 7	H 8	H 9	H 10	H 11	d 9	e 8	f 7	g 6	h 6
From 10	+ 18	+ 27	+ 43	+ 70	+ 110	- 50	- 32	- 16	- 6	0
Up to 18	0	0	0	0	0	- 93	- 59	- 34	- 17	- 11
From 18	+ 21	+ 33	+ 52	+ 84	+ 130	- 65	- 40	- 20	- 7	0
Up to 30	0	0	0	0	0	- 117	- 73	- 41	- 20	- 13
From 30	+ 25	+ 39	+ 62	+ 100	+ 160	- 80	- 50	- 25	- 9	0
Up to 50	0	0	0	0	0	- 142	- 89	- 50	- 25	- 16
From 50	+ 30	+ 46	+ 76	+ 120	+ 190	- 100	- 60	- 30	- 10	0
Up to 80	0	0	0	0	0	- 174	- 105	- 60	- 29	- 19
From 80	+ 35	+ 54	+ 87	+ 140	+ 220	- 120	- 72	- 36	- 12	0
Up to 120	0	0	0	0	0	- 207	- 126	- 71	- 34	- 22

Question Two (64 Marks):

The drawing shows the details of **SCREW JACK**. Draw with scale 1:1 sectional front view all parts assembled showing the position numbers and the main dimensions. A list for the shown items is given below:

Pos. No.	Part	No. Off
1	Spindle	1
2	Base	1
3	Set Screw	1
4	Bush	2



P.NO	Designation	R.NO	Material
4	Bush	1	Bronze
3	Set Screw	1	St 37
2	Base	1	GG 20
1	Spindle	1	St 42

SCREW JACK