



QUESTION 1: ANALYTICAL (MECHANICAL)

Given:

The working drawings of a diaphragm regulator with a title block and a table of questions.

Instructions:

Complete the table below by neatly printing the answers to the questions, which all refer to the accompanying drawings and the title block. **[30]**

QUESTIONS		ANSWERS	
1	On what date was the revision completed?		1
2	Who checked the drawing?		1
3	What is the title of the drawing?		1
4	What scale is indicated for the drawing?		1
5	From what material are the metal components of the regulator made?		1
6	How many internal screw threads are there in the assembly?		1
7	How many parts make up the assembly?		1
8	What orthographic projection system has been used?		1
9	What would VIEW 3 be called?		1
10	What would VIEW 2 be called?		1
11	What is the outer diameter of the rubber diaphragm?		1
12	What is the diameter of the sphere?		1
13	Determine the dimensions at: A B C D E F		6
14	What drawing feature is shown at 1?		1
15	What drawing feature is shown at 2?		1
16	What type of section is shown at 3?		1
17	What does the machining symbol $\sqrt{\quad}$ mean?		2
18	In the block below, draw, in neat freehand, the simplified SABS 0111 convention for a spring.		4
19	What is the permissible tolerance on the components of the regulator?		1
20	Determine the upper limit of tolerance for a dimension of 34 mm.		2
TOTAL			30

12/05/09	MARIE	DIAMETER OF INLETS	A
DATE	CHANGED BY	REVISION DESCRIPTION	No

DIAPHRAGM REGULATOR	
EGD ENGINEERING (SA) (PTY) LTD	188 SCHOEMAN STREET PRETORIA 0001 www.egdengineering.co.za 012 555 2345

DRAWING SYSTEM: AutoCAD 2009	DRAWN: MANDLA	20/03/09
DRAWING No. LFN/304/2009	CHECKED: CARLA	29/03/09
FILE NAME: D5-Y2	APPROVED: ROELF	03/04/09
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MILLIMETRES WITH A TOLERANCE OF 0,25.		
UNLESS OTHERWISE SPECIFIED, ALL SURFACE TEXTURE FINISHES ARE $\sqrt{\quad}$		
MATERIAL: BRASS		
HEAT TREATMENT: NORMALISE		
SCALE: 1:2		

18.

Convention for the spring

EXAMINATION NUMBER	
EXAMINATION NUMBER	2