**IE-352**

**Section 1, CRN: 32997**

**Section 2, CRN: 5022**

**Second Semester 1431-32 H (Spring-2011) – 4(4,1,1)   
MANUFACTURING PROCESSES - 2**

**Sunday, Apr 17, 2011 (13/5/1432H)**

**Quiz 3 ANSWERS**

|  |  |
| --- | --- |
| **Name:** | **Student Number:**  **42** |

**Examine the shaft system below (dimensions in mm) and answer the following questions.**

**A**

*ϕ*.225 ±.003

┴

*ϕ* .007

A

1. **Describe below each element of the *feature control frame*.** [3 Points]

**The shaft must lie perpendicular within a tolerance zone of 0.007 mm diameter (***ϕ* **) at the maximum material condition (MMC), with respect to datum axis A.**

1. **What type of geometric tolerance is involved here (form, orientation, or location)?** [1 Point] **ANSWER:**

**orientation**

1. **What is the basic size?** [2 Points] **ANSWER:**
2. **What is the feature size at *MMC*?** [2 Points] **ANSWER:**

**At MMC:**

1. **What is the feature size at *VC*?** [2 Points] **ANSWER:**