UNIVERSITI SAINS MALAYSIA

2nd. Semester Examination
2002/2003 Academic Session

February / March 2003

EAS 152/3 -
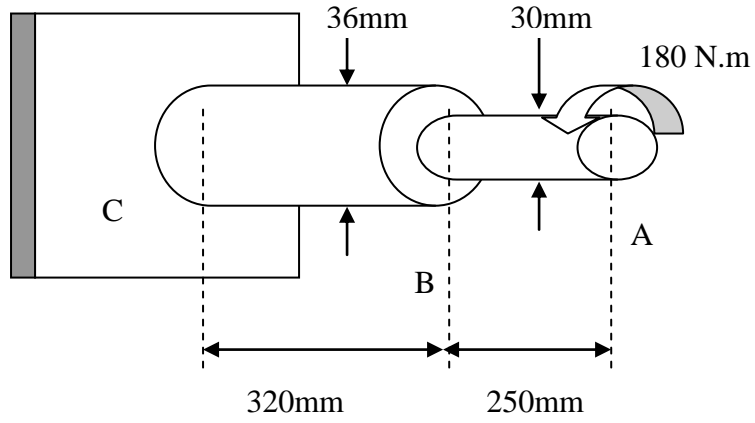
Duration : 3 hours

Instructions to candidates:

1. Ensure that this paper contains **SEVEN (7)** printed pages include appendices.

2. This paper contains **SEVEN (7)** questions. Answer **FIVE (5)** questions only. Marks will be given to the **FIRST FIVE (5)** questions put in order on the answer script and **NOT** the **BEST FIVE (5)**.

3. All questions carry the equal marks.

4. All questions **MUST BE** answered in Bahasa Malaysia.

5. Write answered question numbers on the cover sheet of the answer script.

1.   The solid brass rod AB (Modulus of Rigidity, G = 39 GPa) is bonded to the solid
      Aluminum rod BC (G = 27 GPa) . It is attached to a fixed base at C and is subjected to a
      torque of 180 Nm at A as shown in Figure 3. Determine the angle of twist at A and B.

Rajah 3

(20 marks)