## MAY/JUNE 2006 SECTION B (021-1) (ESSAY)

Attempt FIVE questions only

All questions carry equal marks.

- 1. (a) State the materials from which the following vehicle parts are manufactured:
  - (i) Clutch lining
  - (ii) Hoses for petrol
  - (iii) Brake pad
  - (iv) Distributor housing
  - (b) State ONE reason for each of the materials chosen.
- 2. (a) List FIVE checks to be made before carrying out wheel alignment of a vehicle.
  - (b) State ONE possible causes which can prevent an engine from from running after starting.
- 3. List THREE causes of each of the following valve problems:
  - (i) Sticking
  - (ii) Burning
  - (iii) Wear
  - (v) Breakage
- 4. (a) Sketch the universal joint and label TWO parts
  - (b) State the function of the universal joint.
- 5. (a) State ONE cause and effects of each of the following plug conditions:
  - (i) Worn plug
  - (ii) Oiled plug.
  - (iii) Carbon fouled
- (b) With the aid of a correctly labeled simple sketch, describe the centrifugal advance mechanism during the retard position.
- 6. (a) State THREE important pump test before refitting in a C.I.engine.
  - (b) State the precaution to be observed to protect the skin from fuel penetration.