

THE HONG KONG POLYTECHNIC UNIVERSITY  
HONG KONG COMMUNITY COLLEGE

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**Subject Title** : Computer Organisation

**Subject Code** : CCN2264

**Session** : Semester Two, 2016/17

**Numerical Answers**

**Question B1**

- (b) RAID 0 = 8 TB
- RAID 1 = 4 TB
- RAID 3 = 7 TB
- RAID 5 = 7 TB
- RAID 6 = 6 TB

**Question B2**

- (b)  $-436_{10}$
- (c)  $C345F000_{16}$

**Question B3**

- (a)  $A27_{16}$
- (b) Yes, position 11

**Question B6**

- (a) Registers M = 1011
- Registers Q = 1110
- Registers A = 0000
- Register C = 0

**Question C1**

- (a) Input = 3 bits
- Output = 5 bits

**Question C2**

- (a) # of bit in Address = 21 bits
  - # of bits in WORD field = 5 bits
  - # of bits in LINE field = 2 bits
  - # of bits in TAG field = 14 bits
- (c) Hit rate = 42.857%