國立臺北教育大學 98 學年度學士班轉學考試

學系:資訊科學系 **試卷共兩頁**

年級:二年級

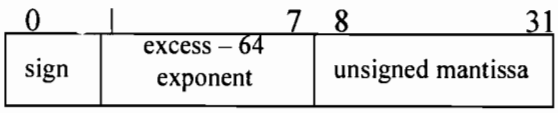
科目:計算機概論

(共五大題,每題 20 分,答案請依序寫於答案卷上)

1. ①. What is storage interleaving? (10%)

② Give the bit patterns of A, B,; A=$(000000)_2$, B=$(001111)_2$, C=$(010011)_2$ please compute Hamming Distance between. (a) A and B (b) B and C. (10%)

2. Suppose that the floating - point numbers are represented in a 32 - bit format:



The 24 - bit mantissa is normalized and has an implied base of 16,

① What is the range in this format? (10%)

② What is the precision for this format? (10%)

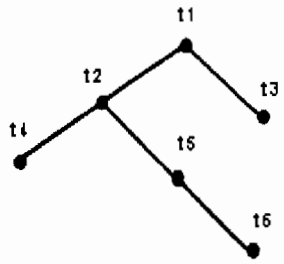
(Note that precision is defined as the minimum difference between two mantissa representations.)

3. ① Give the preorder traversal sequence of the following tree? (7%)

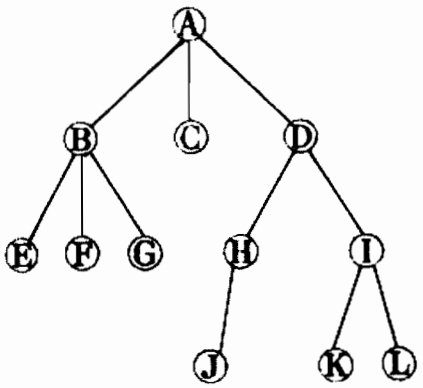
② Redraw the tree in threaded form (7%)

③ If $t_1 = /$, $t_2 = *$, $t_3 = 7$, $t_4 = 3$, $t_5 = -$, $t_6 = 5$

Calculate the expression represented by the tree? (6%)



4. Give the binary tree representation of the following tree: (20%)



5. Give a detail description about "Embedded System" 。 (20%)