Mid Semester Examination

Organizational Behavior

Sem-4th, B.Tech

Full Marks-20

Branch-IT,CSE, CE,MME,ETC,PE,ME

Time- 2 hours

Answer Question No. 1 which is compulsory and any three from the rest

1. Answer the following questions. [1x5]

a. Define Organizational Behavior.

b. What are the steps of social learning?

c. Why ERG theory is named as frustration-regression theory?

d. What is the difference between "Hallo Effect" and "Stereotyping" perceptual error?

e. The tripartite division of personality into id, ego, and super ego comes under _____theory of Personality and who developed this theory?

2. a) Compare between custodial and collegial model. [2.5]

b) What are the Opportunities and challenges for OB managers in managing workforce diversity? [2.5]

3. a) Compare between classical and operant conditioning theory. [2.5]

b) Discuss in brief about the type theory of personality. [2.5]

4. What is perception? Explain the perceptual process model. [1+4]

5. a) State the applicability of motivation in an organization. [3]

b) Discuss the Limitation of Maslow's Need hierarchy theory of Motivation. [2]

********** BEST OF LUCK**********

Veer Surendra Sai University of Technology
Mid Term Examination Feb 2018
4th Semester B. Tech. (CSE, IT)
Sub: Design & Analysis of Algorithm

Max. Marks: 20 **Time: 2Hrs.**

Note: Q. No. 1 is Compulsory. Answer any three from the rest of the questions

1. Answer all: [1 × 5]
   (a) Is $2^{n+2}=O(2^n)$? Is $2^{2n}=O(2^n)$? Justify.
   (b) Differentiate between Performance Measurement and Performance Analysis.
   (c) If the recurrence relation is represented as $T(n) = AT(n/B) + f$. Then what is the value of A, B and f for all of these cases. (i) Binary search (ii) Merge sort (iii) Quick sort (BEST CASE) (d) Matrix multiplication.
   (d) What is the purpose of Big Oh notation? Arrange the following functions in increasing order: $n \log n$, $(\log n)^3$, 2^n, $\log n$.
   (e) What are prefix codes? Explain with example.

2. (a) Explain the characteristics of a good algorithm. [2]
   (b) Develop a Huffman code for the input string "a fast runner need not fear the dark". [3]

3. (a) Find the asymptotic bound for the following recurrence: [2.5X2]

$$T(n) = 1, \quad \text{if } n \le 4$$
$$T(n) = 2T(\sqrt{n}) + \log n, \quad \text{if } n > 4$$

   (b) Solve the following recurrence relation using recursion tree method

$$T(n)=3T(n/4) + cn^2 \qquad (T(n)=1 \text{ for } n=1)$$

4. Write the algorithm for Quicksort and find out its average case and worst case time complexity. [5]

5. (a) Find the optimal solution for the fractional knapsack problem [2.5X2]
   Given: $I = \{I_1, I_2, I_3, I_4, I_5\}$ $w = \{5, 10, 20, 30, 40\}$ $v = \{30, 20, 100, 90, 160\}$ and the knapsack capacity, W=60.
   (b) Explain the basic concept of a divide-and-conquer algorithm.

6. (a) Find an optimal parenthesization of a matrix-chain product whose sequence of dimensions is <2, 3, 5, 4, 2 >.
   (b) Determine the longest common subsequence of <1,0,0,1,0,1,0,1> and <0,1,0,1,1,0,1,1,0>.