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COLLEGE OF COMMERCE & ECONOMICS

**G.V.M's G.G.P.R. COLLEGE OF COMMERCE & ECONOMICS  
FARMAGUDI, PONDA**

**INTRA SEMESTER ASSESSMENT TEST-III OF SEMESTER -II  
MARCH 2014**

**F.Y.B.C.A.  
OPERATING SYSTEM CONCEPTS**

**MARKS:- 15**

**Duration:- 45 minutes**

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1. Answer the following. (2 x 1mk=2 mks)
    - a.) What is swapping ?
    - b.) What is semaphore?
  
  2. Draw the Gantt chart based on the given processes and calculate the waiting time and the average waiting time for each of the scheduling methods, if were scheduled using,
    - a.) First-Come, First-Served Scheduling. (1½ mks)
    - b.) Shortest-Job-First Scheduling. (1½ mks)
    - c.) Round-Robin Scheduling with a time quantum of 4 milliseconds. (2 mks)

| <u>Process</u> | <u>Burst Time</u> |
|----------------|-------------------|
| P <sub>1</sub> | 28                |
| P <sub>2</sub> | 4                 |
| P <sub>3</sub> | 3                 |
| P <sub>4</sub> | 11                |

3. Answer the following. (2 x 4 mks=8 mks)
  - a.) Explain the concept of Paging with the help of the diagram.
  - b.) Explain the Optimal Page Replacement with an example.

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