QUESTION 1: Describe one mobile operating system. (15 Marks, 5 for each) You have to show the following issues:

(a) Architecture:

(b) Benefits:

(e) Market share:
QUESTION 2: List 3 services of cloud computing, then describe each one. (12 Marks, 4 for each)

QUESTION 3: Describe the following terms (6 marks)

a) Cloud Computing:

b) Grid Computing:

c) Big Data:
QUESTION 4: Discuss the benefits of cloud computing (4 marks)

1. Reduce capital and operations costs
   - No longer required to make large up-front capital investment on data-centers
   - Eliminate the need to plan ahead for provisioning
   - Allow companies to start small and increase their resources investment as needed (pay-as-you-go)

2. Simplify app deployment & management
   - Common programming model across mobile, browser, client, server, cloud
   - Access to strong ecosystem of widely deployed applications
   - Integration with existing IT assets (Software + Services)

QUESTION 5: Discuss the Location Based Services (LBS). Hint: use the figure. (4 marks)
QUESTION 6: Draw the architecture of 3-tiers. (4 Marks)

QUESTION 7: Discuss the relationships between Mobile computing and cloud computing. (5 Marks)