Dept. of Computer Engineering
First Exam, First Semester: 2011/2012

Course Title:	Advanced Programming Language	**Date:**	20/11/2011
Course No:	630501	**Time Allowed:**	1 Hour
Lecturer:	Dr. Qadri Hamarsheh	**No. Of Pages:**	2

Information for candidates
1. *This examination paper contains 3 questions totaling 20 marks*
2. *The marks for parts of questions are shown in round brackets.*

Advices to candidates
1. *You should attempt all questions.*
2. *You should write your answers clearly.*

Basic notions: *The aims of the questions in this part are to evaluate the required minimal student knowledge and skills. Answers in the pass category represent the minimum understanding of basic concepts: Components of a Wireless Networks, WAP Browser, WAP Gateway, Web Server, and WAP Protocols.*

Question 1 **Choose the most appropriate answer among the following:**   **(6 marks)**

1. The WAP protocol that implements a simple request-response transaction-oriented protocol is

a) WTLS   b)   WTP   c)   WAE   d)   WDP

2. Which of the following WAP Protocol stack layers need to be implemented to get non-secure connectionless delivery of data?

    a) WAE-WSP-WTP-WDP

    b) WAE-WSP-WTP-WTLS-WDP

    c) WAE-WSP-WDP

    d) WAE-WSP-WTLS-WDP

3. Connectionless session services operates directly over the ---------- protocol

a) WTP   b)   WTLS   c)   WAE   d)   None of above

4. The content belonging to a non-secure session is cached on the storage media of the …….

a) Network Operator   b) WAP Server   c) Gateway   d) Mobile Device

5. How many octets (tokens) , the WSP representation will contain for the accept header:

    Accept: text/plain, text/ vnd.wap.wml, text/vnd.wap.wmlscript

a) 56   b)   4   c)   7   d)   11

6. The best position of a WAP Gateway in the network to get access to any internet content is

a) Network Operator   b) Content Provider   c) ISP Provider   d) Mobile Device

Question 2

Explain the WAP session execution steps (3 marks)

Familiar and Unfamiliar Problems Solving: The aim of the questions in this part is to evaluate that the student has some basic knowledge of the key aspects of the lecture material and can attempt to solve familiar and unfamiliar problems of advanced WML tags and event programming.

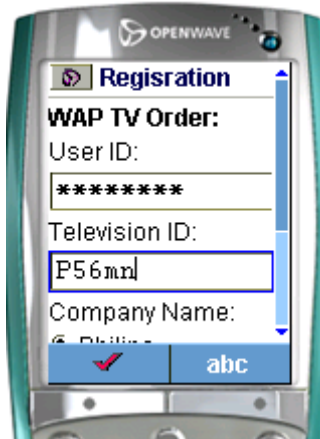## Question 3 According to Figures 1, 2, 3, and 4, do the following (11 marks)
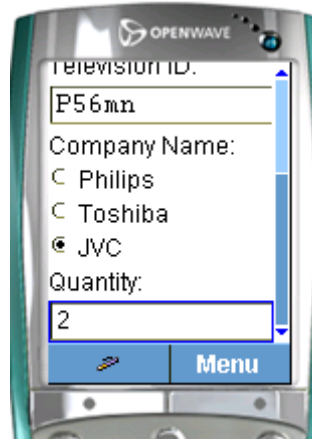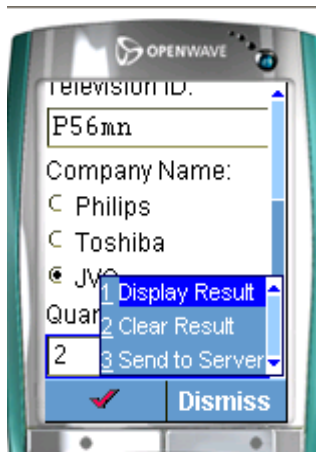

Figure 1

Figure 2

Figure 3

Figure 4

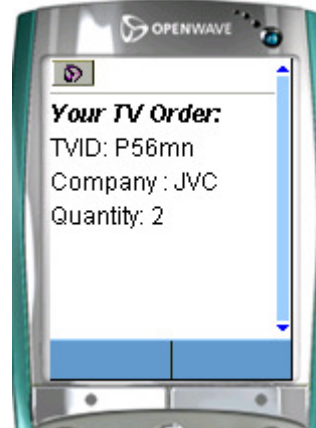a) Write WML code (deck) that contains two cards as shown in figures 1, 2 (input card) and 4(output card) **(4 marks)**

b) Write WML code to create three right soft keys (**options** attribute) as shown in figure 3:
- *Display Result* key: get the result of the inputs values as shown figure 4.
- *Clear Result* key: clear the inputs values and go back to the card.
- *Send to Server* key: send the inputs values to SomeFile.asp **(4 marks)**

c) Initialize all variables with suitable values within **onenterforward** event. **(2 marks)**

d) Write WML code to go back to home card "**Registration** " after 6 seconds of getting the output card **(1 marks)**

GOOD LUCK