

King Fahd University of Petroleum and Minerals  
College of Computer Sciences and Engineering  
Department of Computer Engineering

COE 547/CSE 552 – Network Management (T141)

**Homework # 02 (due date & time: Monday 27/10/2014 during class period)**

\*\*\* Show all your work. No credit will be given if work is not shown! \*\*\*

**Problem # 1 (7.5 points):** Solve problem **6** from chapter 3 of the 2<sup>nd</sup> edition of the textbook. Assume that day1 is “Sunday”.

**Problem # 2 (7.5 points):** Solve problem **7** from chapter 3 of the 2<sup>nd</sup> edition of the textbook. Assume that day1 is “Sunday”.

**Problem # 3 (15 points):** Solve problem **8** (parts **(b)** and **(c)** only) from chapter 3 of the 2<sup>nd</sup> edition of the textbook.

**Problem # 4 (5 points):** Solve problem **9** from chapter 3 of the 2<sup>nd</sup> edition of the textbook.

**Problem # 5 (25 points):** Solve problem **12** from chapter 3 of the 2<sup>nd</sup> edition of the textbook.

**Problem # 6 (10 points):** Solve problem **13** from chapter 3 of the 2<sup>nd</sup> edition of the textbook.

**Problem # 7 (30 points):** Encode in TLV format the following (Use the Hexadecimal representation):

- a. The value of ‘0F’H of an *OCTET STRING*.
- b. The IP address **172.16.10.20**. (definition of *IpAddress* data type is given below)
- c. A value of **172** for the *ifInOctets* OID. *ifInOctets* is defined as a Counter. (definition of *Counter* data type is given below)

```
IpAddress ::=
    [APPLICATION 0]          -- in network-byte order
    IMPLICIT OCTET STRING (SIZE (4))
```

```
Counter ::=
    [APPLICATION 1]
    IMPLICIT INTEGER (0..4294967295)
```