

**M. SC. (COMPUTER SCIENCE) SEM – III (CHOICE BASED
CREDIT & GRADE SYSTEM) :WINTER - 2017
SUBJECT : MOBILE TECHNOLOGIES**

Day : Monday
Date : 06/11/2017

W-2017-0829

Time : 03.00 PM TO 06.00 PM
Max. Marks : 60

N.B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the **RIGHT** indicate full marks.
 - 3) Draw diagrams **WHEREVER** necessary.
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- Q.1**
- a) Explain protocol architecture for GSM. (08)
 - b) With necessary diagram explain the SMS architecture. (07)
- OR**
- a) What are the main benefits of spread spectrum system? State the advantages of DSSS over FHSS. (08)
 - b) Explain the adhoc routing protocols in detail. (07)
- Q.2**
- A)** Answer **ANY ONE** of the following: (08)
- i) Explain the transition of mobile phone from 1G to 3G.
 - ii) Explain the GPRS system.
- B)** Answer **ANY ONE** of the following: (07)
- i) Explain the concept of radio subsystem in detail.
 - ii) Explain the working of indirect TCP with necessary diagram.
- Q.3** Answer **ANY THREE** of the following: (15)
- a) Explain the concept of reverse tunneling in mobile IP.
 - b) Explain the goals, assumptions and requirements for mobile IP.
 - c) Explain WAP push architecture.
 - d) Give details about dynamic source routing.
 - e) State the pro's and con's of wireless messaging.
- Q.4** Write short notes on **ANY THREE** of the following: (15)
- a) MAC
 - b) MIDlets
 - c) Wireless messaging
 - d) WML
 - e) Optimization techniques in TCP.