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**Question Paper Code: 36022** 

## B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

## Sixth Semester

## Computer Science and Engineering

## 01UCS602 - FUNDAMENTALS OF MOBILE COMPUTING

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

**Answer ALL Questions** 

PART A -  $(10 \times 2 = 20 \text{ Marks})$ 

- 1. Define mobile computing.
- 2. Give the use of SDMA.
- 3. How to perform route optimization in Mobile IP?
- 4. Discuss agent discovery.
- 5. What are the types of Handover in GSM?
- 6. Define GPRS. What are the goals of GPRS?
- 7. What is count to infinity problem?
- 8. How VANET differs from a traditional MANET?
- 9. What are the advantages of the Android over windows iphone?
- 10. Compare any two features of android, symbian OS and Windows phone7.

PART - B $(5 \times 16 = 80)$	Marks)	
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11.	(a)	Explain in detail about the various random assignment schemes.	(16)
		Or	
	(b)	Discuss the structure of mobile computing application.	(16)
12.	(a)	Describe briefly about the route optimization in mobile IP.	(16)
		Or	
	(b)	List the reasons why ordinary TCP algorithms does not work for Moenvironments and explain the various TCP improvement algorithms adapted Mobile networks in detail.	
13.	(a)	Explain UMTS architecture and its upgradation.	(16)
		Or	
	(b)	Explain GSM system architecture in detail.	(16)
14.	(a)	Explain how dynamic source routing protocol handles routing. Give example.	(16)
		Or	
	(b)	Analyze traditional routing protocols with MANET protocols like AODV and DS protocols.	SDV (16)
15.	(a)	Describe M-commerce in detail and write it's pros and cons.	(16)
		Or	
	(b)	Explain the principle functions of the operating system of a mobile device. Dischow an example application can be implemented on a mobile device and functionality of the specific operating system service that it makes use of.	