

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Mobile Computing

Semester: 7th

Program: B.Tech Computer Science (Cyber Law/ET-IPR)

Time : 03 hrs.

Course Code: CSEG 402

Max. Marks: 100

Instructions: All questions of section A are compulsory. Question number 9 (Section B) and 11 (Section C) have internal choice.

SECTION A

S. No.		Marks	CO
Q 1.	What is handover? Discuss the difference between soft hand over and hard hand over.	1+3	CO1
Q 2.	Differentiate between a piconet and a scatternet.	4	CO1, CO2
Q 3.	What are push based systems? Give appropriate example.	3+1	CO3
Q 4.	What is proactive routing in MANET? Give example of one such protocol.	3+1	CO1, CO2
Q 5.	Discuss cache invalidation in brief.	4	CO5

SECTION B

Q 6.	(a) With the help of necessary signal diagrams, explain the working principle of CDMA between two stations. You may assume key values for both the stations. (b) Explain the phenomenon of multipath propagation in wireless communication.	6+4	CO2, CO1
Q 7.	Discuss the characteristics of mobile computing. Show, how some of those characteristic are actually limitations.	6+4	CO6
Q 8.	List down the possible application areas of mobile computing.	4+6	CO6
Q 9.	Describe in detail the reasons why traditional MAC layer is not suitable for wireless medium. Write a short note on IPV6. OR Discuss different data hording techniques followed in mobile computing. What is multipath fading?	6+4 8+2	CO4, CO6 CO5

SECTION-C

Q. 10	(a) Discuss how selective retransmission can improve performance of traditional TCP. (b) Discuss the different improvisations made on traditional TCP to make it work for wireless medium. Make a vis-à-vis comparison of those improvisations	5+(10+5)	CO4
Q. 11	Differentiate between a proactive and a reactive mobile routing protocol. Discuss one reactive and one proactive protocol of your choice along with their relative merits and demerits. OR Discuss the concept of mobile IP in brief. What is tunneling? Describe the discovery, renewal and release processes in DHCP	5+15 3+2+15	CO4 CO2, CO4