Total No. of Questions : 5]

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SEAT No. :

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[4937]-302

M.Sc.

COMPUTER SCIENCE

CS - 302 : Mobile Computing

(2011 Pattern) (Semester - III)

Time : 3 Hours] *[Max. Marks : 80*

Instructions to the candidates:

1) *All questions are compulsory.*

2) *Neat diagrams must be drawn wherever necessary.*

3) *Figures to the right indicate full marks.*

Q1) Attempt All of the following [16]

a) Define user mobility & device portability.

b) Give the disadvantages of spread spectrum.

c) List the problems related with reverse funneling.

d) Write any two advantages of snooping TCP.

e) Explain hidden & exposed terminals.

f) Explain the use of broadcast control channel.

g) List four J2ME profiles.

h) Give the name of any four mobile communication protocols.

Q2) Attempt any four of the following: [16]

a) What are the advantages & disadvantages of CDMA?

b) Explain different types of handover used in UMTS.

c) Which are the components of GPRS & what is their purpose?

d) Discuss the various applications of mobile computing.

e) How wireless transport layer establishes a secure session?

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Q3) Attempt <u>any four</u> of the following: [16]

    a) Explain Features of Android.

    b) Explain the function of each layer in WAP Architecture.

    c) List & explain various mobile services of GSM?

    d) Explain FDMA in detail.

    e) Explain Dynamic source Routing.

Q4) Attempt any four of the following: [16]

    a) Explain any one method used for congestion control in mobile transport layer.

    b) Write a short note on reverse tunneling.

    c) What advantages does the use of IPV6 offer for mobility?

    d) What are the advantages & disadvantages of cellular systems?

    e) Explain lifecycle of MIDlet.

Q5) Attempt <u>any four</u> of the following: 16]

    a) What is MMS? How it is different from short message service? Describe MMS Architecture.

    b) Describe FHSS with neat diagram.

    c) Write note on Indirect TCP.

    d) Describe funneling & encapsulation.

    e) What is code Division multiplexing? Explain.

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