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**Question Paper Code: 56401**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Sixth Semester

Electronics and Communication Engineering

15UEC601-WIRELESS COMMUNICATION SYSTEMS

(Regulation 2015)

Duration: 1.15 hrs

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any six of the following questions)**

1. Radio capacity may be increased in cellular concept by\_\_\_\_\_. CO1-R
  - (a) Increase in radio spectrum
  - (b) decreasing radio spectrum
  - (c) Increasing the number of base stations & reusing the channels
  - (d) Decreasing the number of base stations
2. The FDMA channel carries \_\_\_\_\_phone circuit at a time CO1- R
  - (a) 10
  - (b) 2
  - (c) 1
  - (d) Several
3. Mobile Assisted Handoff (MAHO) provides\_\_\_\_. CO2-R
  - (a) Faster handoffs
  - (b) frequent handoffs
  - (c) No monitor of signal strength by MSC
  - (d) All the above.
4. A propagation model that estimates radio coverage of a transmitter is called CO2- R
  - (a) Large scale propagation model
  - (b) Small scale propagation model
  - (c) Fading model
  - (d) Okumura model
5. Identify the incorrect option related to OFDM. CO3-R
  - (a) Multi carrier method
  - (b) Encoding digital data
  - (c) Short band digital communication
  - (d) 4G mobile communication

6. PSK system uses a phase shift of CO3- R  
 (a)  $\pi$  (b)  $\pi/2$  (c)  $\pi/4$  (d)  $2\pi$
7. Which of the following is NOT a diversity Scheme? CO4-R  
 (a) Time (b) Frequency (c) Space (d) Doppler
8. Diversity decisions are made by CO4- R  
 (a) Receiver (b) Transmitter (c) Adaptive algorithms (d) Channel
9. A\_\_\_\_\_ system is any collection of elements (or subsystems) CO5-R  
 that operate interdependently and use unguided electromagnetic-  
 wave propagation to perform some specified function(s).  
 (a) wireless (b) Cellular (c) Satellite (d) Mote G
10. What is the term used by ITU for a set of global standards of 3G CO5- R  
 systems?  
 (a) IMT2000 (b) GSM (c) CSMA (d) EDGE

PART – B (3 x 8= 24 Marks)

**(Answer any three of the following questions)**

11. Analyze the different methods to improve coverage and channel CO1-U (8)  
 capacity in cellular systems.
12. Using neat ray diagram, explain the Link Budget design for wireless CO2-App (8)  
 channel.
13. Describe about Transceiver Implementation. CO3-U (8)
14. Explain the concept of Adaptive equalization. Bring out the salient CO4-U (8)  
 features.
15. Summarize the types of 802.11 wireless standards. CO5-U (8)