

INTEGRAL UNIVERSITY
Wireless Communication (EC-604)
IIIrd Year 6th Semester
Group: EC1
Quiz-1

Date:

Name:

Branch:

Roll Number:

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1. Which of the following is not a 1 G (First Generation) standard-
 - (a). NMT
 - (b). IS-136
 - (c). AMPS
 - (d). ETACS

2. What is the modulation scheme used in IS-136?
 - (a). Frequency Modulation (FM)
 - (b). Amplitude Modulation (AM)
 - (c). PSK
 - (d). $\pi/4$ QPSK

3. Which packet data technology does 3G supports-
 - (a). GPRS
 - (b). LTE
 - (c). HSDPA
 - (d). EDGE

4. Which generation of mobile communication system introduced packet data switching
 - (a). (1G) First Generation
 - (b). (2G) Second Generation
 - (c). (2.5G) Generation
 - (d). (3G) Third Generation

5. The Walky Talky is an example of which type of radio communication system—
 - (a). Simplex
 - (b). Half Simplex
 - (c). Full Duplex
 - (d). Half Duplex

6. A 10A-h battery is used on cellular phone. Assume that the cell phone draws 25 mA in idle mode and 200mA during a call. How long would the phone work (Battery Life) if the user leaves the phone ON continually and has one 3 minute call every 6 hours.
- 15.7 hrs
 - 13.8 hrs
 - 22.4 hrs
 - 9.8 hrs
7. A wave gets reflected by the ionosphere when transmitted from an antenna on earth. What type of wave is it?
- Ground Wave
 - Sky Wave
 - Space Wave
 - Micro Wave
8. What is the expression of maximum usable frequency (MUF) for
- $MUF = f_c \sin \theta$
 - $MUF = f_c \cot \theta$
 - $MUF = \frac{f_c}{\cos \theta}$
 - $MUF = f_c \cos \theta$
9. Find the far-field distance for an antenna with maximum dimension of 1m and operating frequency of 900MHz
- 3m
 - 4m
 - 5m
 - 6m
10. What is the path loss in two ray ground reflection model—
- $\Delta = d'' - d' \cong 2h_t h_r d$
 - $\Delta = d'' - d' \cong 2h_t h_r / d$
 - $\Delta = d'' - d' \cong 4h_t h_r d$
 - $\Delta = d'' - d' \cong 4h_t h_r / d$

