

S.No. 21

12PELED1

(For the candidates admitted from 2012–2013 onwards)

P.G. DEGREE EXAMINATION, NOVEMBER 2017.

Second Semester

CELLULAR PHONE SERVICING

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write a short note on the history of wireless communication.

Or

- (b) Draw the radiation pattern of simple dipole antenna, directed antenna and sectorized antennas.

2. (a) Explain briefly about frequency hopping.

Or

- (b) How is incoming and outgoing calls maintained?



3. (a) Name the various protocols in Bluetooth communication.

Or

- (b) What is GPRS and how is it useful in a cellular system?
4. (a) What is EIT and TDT in a digital video broadcasting system?

Or

- (b) Name the various transport mechanism in DAB and explain them briefly.
5. (a) Write a short note on battery check up and maintenance.

Or

- (b) Write the procedures involved in servicing a keypad in a cell phone.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Draw the diagram of the electromagnetic spectrum and highlight on the various radio frequency ranges.

Or

- (b) Write a detailed note on signal propagation with reference to transmission range, detection range and interference range.

7. (a) Draw the block diagram of a CDMA system and explain it in detail.

Or

- (b) Compare and contrast a FDMA and TDMA system and what is frequency interleaving?
8. (a) How is transmission effected in a GSM system through Regular Pulse Excitation (RPE), Linear Prediction Coding (LPC) and Gaussian Minimum Shift Keying (GMSK) modulation.

Or

- (b) Write a detailed note on Link Manager Protocol (LMP) for bluetooth communication.
9. (a) Draw the block diagram to represent the components of a DAB sender and explain it in detail.

Or

- (b) Write a detailed note on how DVB is useful in high speed internet access.
10. (a) Write a detailed note on cell phone servicing.

Or

- (b) Explain in detail about the preventive maintenance for a mobile phone.