Section-A

I. Answer any Three of the following questions.   (3x5=15 Marks)

1. Discuss about I/O port organization.

2. Write about the PSW register.

3. Differentiate absolute and relative addressing modes.

4. Discuss about arithmetic data transfer.

5. Write a program to add two decimal numbers.

6. Explain briefly about TMOD register.

Section-B

II. Answer all of the following questions.   (3x15=45 Marks)

7. (a) What is an interrupt? Explain about interrupt handling in detail.

(OR)

(b) Draw the block diagram of 8051 µC and explain its features.

8. (a) Explain about classification of data transfer.

(OR)

(b) What is indexed addressing? Explain about accessing memory using direct and indirect addressing modes.

9. (a) Explain about subroutines. Write a program to arrange a given set of 5 numbers in descending order.

(OR)

(b) Explain the interfacing of temperature sensor to 8051 µC.

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Faculty of Science

B.Sc (Electronics) III-Year, CBCS-VI Semester

Backlog Examinations, Dec/Jan 2019-20

PAPER: DIGITAL COMMUNICATION

Time: 3 Hours

Max Marks: 60

Section-A

I. Answer any Three of the following questions (3x5=15 Marks)

1. Write a short note on random signals and noise.

2. State sampling theorem.

3. Compare PCM and PPM.

4. What are the drawbacks of delta modulation?

5. Mention the properties of cyclic codes.

6. Write a short note on GPS.

Section-B

II. Answer all of the following questions (3x15=45 Marks)

7. (a) Explain correlation and power spectrum of signals in communication.

(OR)

(b) Explain in detail about properties of Fourier transform in communication.

8. (a) What is meant by quantization? Derive the expression for signal to quantization noise ratio in PCM system.

(OR)

(b) Explain in detail, frequency shift keying.

9. (a) Compare different coding techniques.

(OR)

(b) Explain in detail, working of cellular phone with neat diagram.

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