

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc., Summer 2018-19 Examination

Semester: 4**Subject Code: 11204251****Subject Name: Microprocessor-II and Microwaves****Date: 01/04/2019****Time: 02:00pm To 04:30pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Answer the following question (08)**
(a) Explain data transfer instructions and write a program to add 2222 H and AAAA H.
(b) Write difference between CALL-RET instructions.
- Q.1. B) Answer the following questions (Any two) (04)**
(a) Answer following (04)
1. Explain LXI D, AB12 H and LDA 2034 H
2. Discuss subroutine operation briefly.
(b) Discuss JUMP and CALL instruction with example (04)
(c) Explain 8 bit BCD to binary conversion (04)
- Q.2. A) Answer the following questions. (04)**
(a) Answer following (04)
1. What is the content of A after performing instruction MVI A, 0F H and XRI A, 50 H
2. If the content of A is 88H and CY is zero what is the content of A after performing instruction RLC
(b) Explain 8 –bit Addition operation in 8085 processor with example (04)
- Q.2. B) Answer the following questions (Any two) (03)**
(a) Discuss logical AND, OR and NOT operation with example (03)
(b) Write a program to add 32 H and 42 H and display result on Port A. (03)
(c) Write a program to multiply 02H and 04 H data. (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
(a) Write a short note on Klystrons.
(b) Write a short note on Impatt diode.
- Q.3. B) Answer the following questions (Any two) (04)**
(a) Discuss various modes of operation in Gunn Diode. (04)
(b) Discuss binary to unpacked BCD conversion with example. (04)
(c) Give a difference between E-plane tee, H-plane tee. (04)
- Q.4. A) Answer the following questions. (04)**
(a) Discuss electron path in cavity Magnetron. (04)
(b) Derive a equation of Power of Microwave (04)
- Q.4. B) Answer the following questions (Any two) (03)**
(a) Write a short note on helix traveling wave tube wave modes (03)
(b) Explain 8 bit Subtraction operation in 8085 with necessary examples (03)
(c) Explain Velocity modulation with appropriate equation (03)