

UNIVERSITY OF MADRAS
B.Sc. DEGREE COURSE IN PHYSICS
SYLLABUS WITH EFFECT FROM 2020-2021

BPS-CSC13

CORE-XIII: CORE PRACTICAL – V (Applied Electronics)
(Common to B.Sc.Physics with Computer Applications)
(At the end of Sixth Semester - Any Fifteen Experiments)

Credits:2

1. Microprocessor – 8085 – 8 bit Addition
2. Microprocessor – 8085 – 8 bit Subtraction
3. Microprocessor – 8085 – 8 bit Multiplication
4. Microprocessor – 8085 – 8 bit Division
5. Microprocessor – 8085 – Sorting of given set of numbers in ascending order
6. Microprocessor – 8085 – Sorting of given set of numbers in descending order
7. Microprocessor – 8085 – Finding the largest no. in a given set of numbers.
8. Microprocessor– 8085 – Finding the smallest no. in a given set of numbers.
9. Microprocessor– 8085 – reversing the elements in an array.
10. Microprocessor – 8085 – Addition of N Number of single byte numbers
11. Op amp 741 - Inverting, Non - Inverting amplifier, unity follower.
12. Op amp 741 - Summing and difference amplifier
13. Op amp 741 – Differentiator, integrator
14. OP amp 741 – Solving simultaneous equations.
15. OP amp 741 – Astable multivibrator.
16. Op amp 741 – Wien’s Bridge oscillator
17. Op amp 741 - Phase Shift oscillator
18. Op amp 741-Solving Simultaneous Equations
19. 555 - Timer - Schmitt Trigger
20. 555 - Timer - Astable operation
21. D/A Converter – 4 bit, binary weighted resistor method