This question paper contains 4 printed pages.

5720 *Your Roll No.* .....

B.Sc. (Hons.) PHYSICS / III Sem. B

Paper PHHP 308— Microprocessor and Computer Lab

Time : 45 minutes *Maximum Marks* : 15

(Write your Roll No. on the top immediately on receipt of this question paper.)

*Attempt any **fifteen** questions.*
All questions carry equal marks.

1. How many address lines are required to address 4 megabytes of memory?

2. What are the advantages of assembly language in comparison to high level?

3. In a three byte instruction, specify what each byte stands for.

4. What are the two parts of an instruction in assembly language programming?

5. Why are program counter and stack pointer 16 bit registers?

P. T. O.

6. What is flag?

7. What is the clock frequency of the microprocessor?

8. How much memory can 8085 access?

9. What is the function of interrupts? Write the highest priority interrupt.

10. What is the single step instruction for multiplication by 2?

11. What is overflow in a computer programme?

12. What is the purpose of operator size ( ) in a string?

13. If $m=44$; what is the value of m and n for the following operations:

    (*i*) $n=++m$

    (*ii*) $n=m++$

14. Correct the following code:

```
if x<y   min=x
else min=y;
```

15. State whether the following statement is true or not. Give reason.

p&&q||r is same as p&&(q||r)

16. Write the syntax of 'for' statement.

17. When does the function need an include directive?

18. What is the minimum number of iterations that (*i*) a while loop can make, (*ii*) a do ... while loop can make?

19. Explain the difference between 'switch' statement and 'if ... if else' statement with example.

20. Which of the following function headings are valid?

(*a*) int thisone (char x)

(*b*) char another (int a, b)

21. To which memory location does program counter point when "Reset" key is pressed, in 8085 μp kit?

22. If the contents of F register are E2, what is the status of sign, carry, zero and parity flags?

23. Differentiate between local and global variables.