53 (CS 501) SYPR

2015

SYSTEM PROGRAMMING

Paper : CS 501

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any five** questions*

1. 5×4=20

(i) Define a System Programming.

(ii) Compare language processor and language translator.

(iii) Write a short note on component of system software.

(iv) Define Application Software.

2. (a) List the basic functions of assembler. What are the types of assembly language statement ? 10

(b) Give the design specification of an assembler and explain how two pass translation is done. **10**

3. (a) Explain how intermediate code generation is done in assembler. **10**

(b) Draw the flow chart of pass 2 assembler. **10**

4. (a) Define the macro and nested macro with example. **10**

(b) What are the basic tasks that must be performed by a macroprocessor ? **10**

5. (a) Explain the macro definition and call with an example. **10**

(b) Write a note on macro expansion. **10**

6. (a) What are the functions of loader ? Explain in brief. **10**

(b) Give the complete design of absolute loader. **10**

7. *(a)* Define compiler and with a neat sketch explain all of its phases. 10

(b) Explain Translation hierarchy in detail. 10