## 2011 MCA

## 2nd Semester Examination SYSTEM PROGRAMMING

PAPER—CS/MCA/205

Full Marks: 70

Time: 3 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Q. No. 1 and any five from the rest.

1. Write any four from the following:

- $4\times2\frac{1}{2}$
- (a) What is assembly language? Describe its advantage.
- (b) What is BALR?
- (c) Discuss longway No Looping.
- (d) Discuss 'Macro calls within Macros'.
- (e) Comment on different types of binders.
- 2. (a) Discuss briefly General Machine structure.
  - (b) What is machine language? Discuss address modification using Instructions as data.
  - (c) What do you mean by macro?

6+(1+3)+2

- 3. (a) Briefly discuss the data structures and data types of 2-pass Assembler.
  - (b) Discuss LTSTO & STSTO.
  - (c) What is BTDROP?

6+(2+2)+2

- 4. (a) What is macro expansion? Describe Macro Instruction Arguments.
  - (b) Briefly discuss basic tasks of macro instruction processor.
  - (c) What is lexical expansion?

(1+4)+6+1

- 5. (a) What is program relocation? Split out the design steps of a linker.
  - (b) What is dynamic and static linking? (1+7)+(2+2)
- 6. (a) What is a loader? Discuss its functions.
  - (b) Write down advantage and disadvantage of absolute loader.
  - (c) What is Relocation Loader?

(1+4)+(2+2)+3

- 7. (a) What types of data can be handled in IBM 360?
  - (b) Write down function of PUNCH, MOTGET2.

8+(2+2)

- 8. (a) Write down the two pass algorithm of Macro processor.
  - (b) What is 'Macro Instructions Defining Macros'.

8+4