| Registration No. :  | 1 |  |  |  |  |   |
|---------------------|---|--|--|--|--|---|
| rtogioti alloni i i |   |  |  |  |  | l |

Total number of printed pages – 2

B. Tech BECS 2207

## Third Semester Regular Examination – 2014 OBJECT ORIENTED PROGRAMMING

BRANCH(S): CSE, IT

**QUESTION CODE: H389** 

Full Marks - 70

Time: 3 Hours

ENTRAL

Answer Question No. 1 which is compulsory and any five from the rest.

The figures in the right-hand marginal dicate marks

Answer the following questions :

2×10

- (a) What is this pointer? Why does compiler insert it implicitly?
- (b) What is the use of static member function in OOP?
- (c) Explain nested class with an example.
- (d) Under which condition static memory allocations become unsuitable?
- (e) What is the syntax of new operator for allocating memory for an array?
- (f) What do you mean by pure virtual function? When it is required?
- (g) Differentiate between text file and binary file.
- (h) What are smart pointer and how they are created?
- List the keywords used for exception handling.
- (j) What do you mean by iterators? Give an example.
- (a) Discuss the advantage and disadvantages of different access specifiers.
  - (b) What is inline function? Explain its importance with an example.

5

5

| 3. | (a)  | With an example explain how polymorphism is achieved at compile time and runtime? | d<br>5     |
|----|------|---|------------|
|    | (b)  | What is class? How does it accomplish data hiding? Explain with a example.        | n<br>5     |
| 4. | Writ | te a C++ program to print a table of values of the function $X = k^{-p}$ .        | )          |
| 5. | (a)  | What are the issues associated with handling errors in a constructor?             | 5          |
|    | (b)  | How does a un subscripted name of a two dimensional array interpreter in C++?     | d<br>5     |
| 6. | (a)  | What do you mean by object slicing? Explain with an example.                      | 5          |
|    | (b)  | Differentiate between virtual function and pure virtual function with example     | <b>)</b> . |
|    |      | GIMP  | 5          |
| 7. | (a)  | What is exception? Discuss different methods to handle exception.                 | 5          |
|    | (b)  | What are references in C++? How the references are used as function               | n<br>5     |
|    |      |   |            |
| 8. | Writ | te notes on : 5 × 2   | 2          |
|    | (a)  | Copy constructor  |            |
|    | (b)  | Late binding.   |            |