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## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, December 2017** 

**Program Name: B.Tech (EIE) IOT** Ш Semester – Course Name: OOPS Through Java Max. Marks: 100 **Course Code: CSEG319** Duration : 3 Hrs

No. of page/s: 2

Note: All questions are compulsory.

Assume appropriate data as and where necessary

**SECTION - A** 

5\*4=20 Marks

- **1.** Explain Java Memory Model?
- **2.** Explain the concept of inner class with example?
- 3. A) Which of the following may be part of a class definition? Options are
  - a. instance variables
- b. instance methods c. constructors d. all of the above
- B) The implicit return type of a constructor is
- a. void
- b. Class object in which it is defined
- c. There is no return type
- d. None

- **4.** Write java code to explain the following methods:
  - a) String charAt()
- b) String compareTo()
- **5.** Explain constructor and state different types of constructors?

**SECTION B** 

4\*10=40Marks

**6.** What is exception and error? State the difference between checked and unchecked exception?

(5+5)

7. Why String objects are immutable? Discuss the differences between overloading and overriding?

(4+6)

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- 8. a) Explain wrapper class? State all the wrapper classes? (5+5)b) Write a program to demonstrate polymorphism of two methods add and subtract?
- 9. What is thread in java and explain thread life cycle? (5+5)

SECTION C 2\*20=40 Marks

- 10. (a) What is JDBC? Explain all JDBC drivers in detail?
  - (b) Also write their advantages and disadvantages (5+15+5)
- **11.** Explain IO streams with pictorial representation and state at least two classes each for input and output of each category? Write a Program to read from a file using BufferedReader class?

(12+8)