PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2017

(Fifth Semester)

Branch - INFORMATION TECHNOLOGY

CORE ELECTIVE -1 GRID COMPUTING

Time: Three Hours Maximum: 75 Marks

SECTION-A (20 Marks!

Answer **ALL** questions

ALL questions carry EQUAL marks $(10 \times 2 = 20)$

- 1 What is a grid?
- 2 List some of the QOS features available in grid computing.
- What is semantic grid?
- 4 What are the basic goals of GGF?
- 5 Define web service.
- 6 What are the features of SOAP?
- What are the major goals of OGSA?
- 8 Write the service data attributes.
- 9 Define pivot table.
- What is a stateful web service?

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks $(5 \times 5 = 25)$

11 a Explain some of the grid application and their usage patterns.

OR

- b Write short note on : (i) Load balancing (ii) Grid portals.
- Write notes on organizations developing grid computing tool kits frame works.

OR

- b Explain the service oriented architecture and grid.
- 13 a What are the service message description mechanisms available? Explain.

OR

- b Explain briefly about WSDL.
- 14 a Explain briefly about life cycle grid of a service instance.

OR

- b Explain briefly about commercial data centre.
- 15 a Describe in detail about advanced service data concepts.

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b Write notes on common distributed logging.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks $(3 \times 10 = 30)$

- Explain briefly about grid infrastructure.
- Discuss briefly about organization building and using grid based solution to solve their computing data and network requirements.
- Explain briefly about web service architecture.
- 19 Describe the OGSA platform components? Write note on each of them.
- 20 Describe the domain policy architecture.