PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018 (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** Define grid resource brokers.
- 2 Mention the common needs of grid applications.
- 3. Define dynamic accounting system.
- 4 What is meant by delegation?
- 5 What are the major building blocks identified by GXA?
- 6 What are the WS Security specification addresses?
- 7 What are the more specific goals of OGSA?
- 8 What are the main purpose of use cases defined by the OGSA group?
- 9 Define pivot handler.
- 10 What are the features of grid service container?

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

11 a Explain about virtual organization in detail.

OR

b Explain about schedulers in detail.

12 a Explain the global grid forum.

OR

b Differentiate condor from condor - G.

13 a Discuss about global XML architecture vision in detail.

OR

- b Discuss about web service and grid service in detail.
- 14 a Explain briefly about grid services.

OR

b Illustrate the service fault handling in OGSI.

15 a Describe the common server side handlers.

OR

b Describe in brief about service programming model.

SECTION - C (30 MarksI

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Write about the scope of grid computing in business areas.
- 17 Explain the layered architecture of grid with a neat diagram.
- 18 Explain about SOAP in detail.
- **19 Describe the OGSA platform components and write note on each of them.**
- 20 Explain the architecture of globus GT3 toolkit with a neat diagram.