PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - **INFORMATION TECHNOLOGY**

<u>CORE ELECTIVE -1 GRID COMPUTING</u>

Time : Three Hours   Maximum : 75 Marks

<u>SECTION-A (20 Marks!</u>
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (10 x 2 = 20)

1   What is Grid Computing?
2   Give the quality parameters in Grid Computing
3   Define the role of Grid computing organisation.
4   List the layers in Grid architecture.
5   How to manage the grid services architecture with web services architecture?
    List the two aspects for the specification of tools in SOAP messages.
    Give two examples for Data centers.
    List the layers of basic OGSA architectural organisation.
    What are Grid services?
10 Define the different levels of policy abstraction.

<u>SECTION-B (25 Marks!</u>
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a Discuss about current grid activities.
                            OR
    b Explain any 5 grid applications and their usage pattern.

12 a Write a note on Grid computing toolkits and its framework.
                            OR
    b Write about semantic grid with neat diagram.

13 a Describe web service architecture in detail.
                            OR
    b What do you mean by web service interoperability and their roles in
        organization? Explain.

14 a Write about any two use cases that drive CGSA.
                            OR
    b Describe OGSI infrastructure and their basic services.

15 a Discuss about grid service factory concept and grid service handle
        resolution concept of OGSI naming and change management.
                            OR
    b Describe the features of policy architecture.

<u>SECTION - C (30 Marks)</u>
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16   Illustrate the grid infrastructure with neat diagram.

17   Explicate on organisation building and using Grid based solutions to solve
     computing data and network requirements.

18   Explain the relationship between grid service and web service.