

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2019  
(Fifth Semester)

Branch – INFORMATION TECHNOLOGY

**CORE ELECTIVE – I : GRID COMPUTING**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 Mention the foundation of grid computing environment.
- 2 List the data requirements in the early grid solution.
- 3 What are the classification of grid organization?
- 4 What Nimrod provides?
- 5 What do you mean SOAP module?
- 6 What web service policy frame work provides?
- 7 What is OGSA hosting environment?
- 8 Mention the name of VO.
- 9 What is Grid Service instance?
- 10 What membership rules for a service group specifies?

**SECTION - B (25 Marks)**

Answer ALL Questions

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

- 11 a Draw and explain current grid activities.  
OR  
b Give an overview of Grid business areas.
- 12 a What are the basic goals of GGF.  
OR  
b Describe autonomic computing in detail.
- 13 a Explain service description for web services.  
OR  
b How integrity of the SOAP message maintained?
- 14 a Draw and explain OGSA architecture and goal.  
OR  
b Mention the OGSA basic services.
- 15 a Explain the significance of transforming GWSOL to WSOL definition.  
OR  
b Is Grid service a stateful web service. Justify.

**SECTION - C (30 Marks)**

Answer any THREE Questions

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

- 16 Give any five applications of grid computing in operating system view.
- 17 Explain 'Tera Grid' with figures.
- 18 Explain WSDL in detail.
- 19 Discuss the sample use cases that drive the OGSA.
- 20 Explain service data structure in detail.