

Total No. of Questions :7]

SEAT No. :

P1018

[Total No. of Pages : 3

[5319]-4005

S.Y.B.C.A.

SCIENCE

**BCA-407: Grid and Cloud Computing
(2016 Pattern) (Semester-IV)**

Time :3Hours]

[Max. Marks :50

Instructions to the candidates:

- 1) Question No-1 (A and B) is compulsory.*
- 2) Solve any two questions from group-I and any two questions from group-II.*
- 3) Figures to the right indicate full marks.*

Q1) A) Answer the following.

[5]

- a) _____ is an example of Internet computing.
- | | |
|------------------|------------------|
| i) Genome @ Home | ii) SETI @ Home |
| iii) ECCP-109 | iv) All of these |
- b) The goal to virtualize the resources on the grid and uniformly handle _____ systems will create new opportunities to better manage a larger, more distributed infrastructure.
- | | |
|------------------|-----------------|
| i) heterogeneous | ii) homogeneous |
| iii) hybrid | iv) none |
- c) Google App Engine is an example of _____
- | | |
|-----------|-------------------|
| i) SaaS | ii) PaaS |
| iii) IaaS | iv) none of these |
- d) _____ is Type 1 Hypervisor.
- | | |
|----------------------|--|
| i) Wind River Simics | ii) Virtual server 2005 R ₂ |
| iii) KVM | iv) Lynx Secure |
- e) SOAP stands for _____ .
- | |
|------------------------------------|
| i) Simple online Access protocol |
| ii) State object Access protocol |
| iii) Simple object Access protocol |
| iv) Static object Access protocol |

P.T.O.

- B) Answer in short. [5]
- i) List the application areas of grid computing.
 - ii) What is abstraction.
 - iii) Define hypervisor.
 - iv) List the areas where Internet Computing is used .
 - v) What is data grid.

Group-I

Q2) Attempt the following:

- a) Explain in brief the centralised model of P2P [4]
- b) Explain general structure of cloud (components of cloud). [4]
- c) State the need of grid. [2]

Q3) Attempt the following.

- a) What is hybrid cloud. Explain with example. [4]
- b) State the advantages of high performance computing. [4]
- c) What is emulation. [2]

Q4) Attempt the following.

- a) Write short note on compute grids. [4]
- b) Explain IaaS service model of cloud computing Give examples. [4]
- c) What is software virtualization. [2]

Group-II

Q5) Attempt the following.

- a) Write short note on reliability. [4]
- b) With the help of diagram explain grid computing architecture model in brief. [4]
- c) List essential characteristics of cloud computing [2]

Q6) Attempt the following :

- a) Compare cluster and grid computing. [4]
- b) Explain benefits of cloud computing in brief. [4]
- c) What are the goals of load balancing. [2]

Q7) Attempt the following :

- a) State the advantages and disadvantages of cluster computing. [4]
- b) Explain community cloud. [4]
- c) Explain in short case study sales force-com as SaaS. [2]

