

(2½ Hours)

[Total Marks: 75]

- N.B. 1) All questions are compulsory.  
2) Figures to the right indicate marks.  
3) Illustrations, in-depth answers and diagrams will be appreciated.  
4) Mixing of sub-questions is not allowed.

**Q. 1 Attempt ANY FOUR from the following: (20M)**

- (a) Write a note on WSDL.
- (b) Compare SOAP and Rest web services.
- (c) State and explain HTTP methods.
- (d) Write a short note on oVirt.
- (e) State pros and cons of virtualization.
- (f) Explain in detail about KVM.

**Q. 2 Attempt ANY FOUR from the following: (20M)**

- (a) Classify the various types of cloud models.
- (b) Enlist secure development best practices with respect to cloud computing.
- (c) Explain SaaS in detail.
- (d) Explain open challenges of cloud computing.
- (e) Compare Cloud providers and traditional IT service providers.
- (f) Explain Cloud Security Design principles.

**Q. 3 Attempt ANY FOUR from the following: (20M)**

- (a) What is DevStack? Enlist the installation steps.
- (b) Explain the role of SimJava in CloudSim.
- (c) What is QUOTAS in OpenStack? Explain.
- (d) Explain CludSim Architecture.
- (e) Explain the OpenStack Command Line Interface(CLI).
- (f) Write a note on Amazon VPC.

**Q. 4 Attempt ANY FIVE from the following: (15M)**

- (a) Write a short note on "JAX RS".
- (b) Differentiate Distributed and Parallel computing.
- (c) Explain the concept of Community Cloud in detail.
- (d) What is Virtualization? Give its benefits.
- (e) Explain Components and services of AWS.
- (f) Explain Architecture of Nova.

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