

Course Title : CLOUD COMPUTING

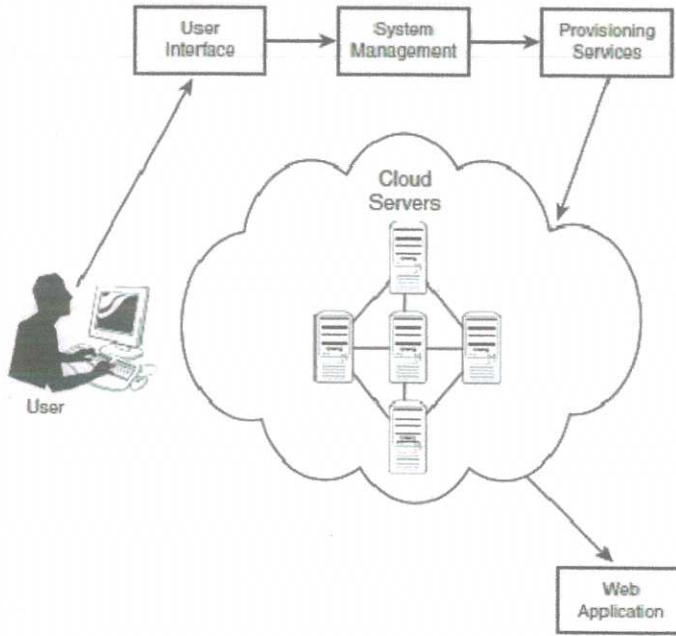
Qst. No.	Scoring Indicator	Split up score	Sub Total	Total
PART A				
I(i)	“ Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”	2	2	10
I(ii)	Any two SaaS like Google Docs, Microsoft Office 365	2	2	
I(iii)	Any two Scheduling applications like Google Calendar, Yahoo Calendar	2	2	
I(iv)	cloud storage is a form of networked data storage where data files are stored on multiple virtual servers.	2	2	
I(v)	Any two web mail services like Gmail, Yahoo mail	2	2	
II(i)	Software as a Service(SaaS) A single application is delivered to thousands of users from the vendor's servers. Eg: Google Docs Platform as a Service(PaaS) The development environment is offered as a service. Eg: GoogleAppEngine On-Demand Computing(Infrasrtucture as a Service (IaaS)) on-demand computing packages computer resources as a metered service similar to that of a public utility.	2+2+2=6	6	42
II(ii)	Any Six Companies and their products like Google (Google Docs) Amazon (Amazon EC2) Windows (Windows Azure) Salesforce.com (Slaceforce) IBM (BlueCloud) Apple (iCloud)	1*6=6	6	

II(iii)	<p>Enables anywhere/anytime access to email. Pre-cloud computing, email access was via a single computer, which also stored all email messages.</p> <p>For this purpose, programs like Microsoft Outlook or Outlook Express, was installed on our computer.</p> <p>A better approach is to use a web-based email service, such as Gmail or rediffmail. These services place email inbox in the cloud; which can be accessed from any computer connected to the Internet.</p> <p>The messages received are stored on the web, as are the messages sent, so nothing depends on a single PC.</p> <p>It's easy for anyone to send us a message even if they are not sure where we are.</p> <p>We can access our inbox at any time and find our messages.</p> <p>We can reply as necessary and await response.</p> <p>Even if we change locations or computers, our message remains in our inbox, and our reply remains in our sent messages folder.</p>	2+2+2=6	6	
II(iv)	<p>customer resource management (CRM)</p> <p>CRM application has features such as activity scheduling, appointment reminders, email templates etc. These apps include additional functions, including expense account management, sales activity reports, and various team management features.</p> <p>Eg BigContacts (www.bigcontacts.com), and Salesforce (www.salesforce.com)</p>	1+3+2=6	6	
II(v)	<p>There are three primary benefits to cloud storage:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Scalability. When you rent cloud storage space, you can opt to use as much or as little space as you need. <input type="checkbox"/> Reliability Cloud storage can be used as giant online backup drive. <input type="checkbox"/> Lower costs. Cloud storage services can offer lower storage rates because they more efficiently use the server space they have; space gets reassigned to users almost instantly, on an as-needed basis. <p>Risks of Storing Data in the Clouds</p> <ul style="list-style-type: none"> <input type="checkbox"/> Reliability <input type="checkbox"/> Security <input type="checkbox"/> User error <input type="checkbox"/> Access Problems 	3+3=6	6	

II(vi)	<p>Even the smallest project has numerous pieces and parts, all of which have to be completed in a precise order and on an exacting timetable for the project to come in on time and on budget.</p> <p>The process of managing a project gets even more complex when the participants are in different locations. Project management is the act of planning, organizing, and managing resources to bring about the successful completion of specific project objectives. The project itself can be anything, from creating a product brochure to implementing a new hiring process to launching a new product line. What all projects have in common is that every project has a specific start and completion date. If all the component tasks are completed on time and on budget, the entire project will be completed as planned. To manage the individual tasks within a project requires managing a larger set of resources—people, money, materials, space, communications, and the like. This resource management is crucial to ensuring the eventual success of a project.</p> <p>Basecamp One of the most popular project management applications today is Basecamp (www.basecamphq.com). Its web-based nature makes it viable for both internal and external (client) projects. Project management is provided via a special dashboard, which displays all projects and clients on a single screen, with late items and those due soon highlighted on the screen.</p> <p>Zoho Projects Another popular product from the Zoho cloud combine, it is a standard project management application, complete with tasks and milestones, a project calendar, Ganttcharts and other reports.</p>	4+2=6	6	
II(vii)	<p>The typical social network is a hosted site that aims to create a community of users, each of whom posts his or her own personal profile on the site. Each user includes enough personal information in her profile to enable one's collection of friends helps to build a succession of personal communities. Most profile pages include some form of blog, discussion forum, or chat space so that friends can communicate with the person profiled. In many instances, individual users also post a running list of their current activities so that their friends always know what they're up to.</p> <p>In other words, a social network group is like a virtual meeting or community room. Instead of posting notices on a physical bulletin board, you post notices on a virtual message board. Instead of exchanging brochures and papers by hand, you upload photos, documents, and other files for all to share. And, because most social networks are free for all to use (in exchange for the occasional on-page advertisement), it's a cheap way to keep the members of your group up-to date and organized. other users with similar interests to connect as "friends"; Eg: facebook, instagram</p>	5+1=6	6	

III(a)	<p>Any nine among:</p> <ul style="list-style-type: none"> Lower-Cost Computers for Users Improved Performance Lower IT Infrastructure Costs Fewer Maintenance Issues Lower Software Costs Instant Software Updates Increased Computing Power Unlimited Storage Capacity Increased Data Safety Improved Compatibility Between Operating Systems Improved Document Format Compatibility Easier Group Collaboration Universal Access to Documents Latest Version Availability Removes the Tether to Specific Devices 	9*1=9	9	15
III(b)	<ul style="list-style-type: none"> Requires a Constant Internet Connection Doesn't Work Well with Low-Speed Connections Can Be Slow Features Might Be Limited Stored Data Might Not Be Secure If the Cloud Loses Your Data 	6*1=6	6	
IV(a)	<p>1) Client/Server Computing All the software applications, all the data, and all the control resided on huge mainframe computers, otherwise known as <i>servers</i>. Users connected to the server via a computer terminal, sometimes called a workstation or <i>client</i>. Users accessed the mainframe only when granted permission. Users need to wait for their turn, there is no immediate access.</p> <p>2) Peer-to-Peer Computing P2P computing defines a network architecture in which each computer has equivalent capabilities and responsibilities. P2P enables direct exchange of resources and services</p> <p>3) Distributed Computing Idle PCs across a network or across the Internet are tapped to provide computing power for large, processor-intensive projects.</p> <p>4) Collaborative Computing Collaboration was enabled by the combination of several different P2P technologies. The goal was to enable multiple users to collaborate on group projects online, in real time.</p> <p>5) Cloud Computing Users from multiple locations within a corporation and from multiple organizations, desired to collaborate on projects that crossed company and geographic boundaries. For this, projects had to be housed in the "cloud" of the Internet, and accessed from any Internet-enabled location.</p>	7	7	15

IV(b)



4+4=8

8

FIGURE 1.2

The architecture behind a cloud computing system.

The users select a task or service.

The user's request then gets passed to the system management, which finds the correct resources and then calls the system's appropriate provisioning services.

These services carve out the necessary resources in the cloud, launch the appropriate web application.

V(a)

You and your family members can collaborate on your to-do list by using a web-based word processing application, or you can use a dedicated web-based planning program.

Applications, such as Zoho Planner (planner.zoho.com) let you create multiple to-do lists on the web, which all members can add to from any computer, at any time.

You can even set email reminders to refresh your memory when a task is due.

Add your tasks one at a time, and then mark them off as they're completed.

If these applications are too advanced for your needs, consider using a simpler web-based to-do list application.

Eg www.rememberthemilk.com and www.tadalist.com, operate more like a simple notepad-based list. Some even let you add tasks via email or access the list when you're on the go with your mobile phone.

5+2=7

7

15

V(b)	<p>A good solution for managing contacts from multiple family members is to use a web-based program for contact management. First, you can use your web-based email program (Gmail, Yahoo! Mail) as a contact management program. All of these programs let you create and store complete information about your contacts—email address, postal address, phone number, and so forth. The only problem with using this approach is that all family members have to use the same email program and the same email address.</p> <p>Solution is to use a dedicated web-based contact management program such as www.myevents.com targeted at home users and ideal for holiday card lists. Other programs, such as www.highrisehq.com will manage your holiday card list and do a lot more.</p> <p>These programs include the robust customer resource management (CRM) features needed for business and sales force management. You need to authorize access for both you and other members. This way everyone can both import their existing Outlook or Windows Address Book contacts, as well as add new names when and where they come up. All you need to do is log onto your web-based application from wherever you are and add the new person's name and contact info.</p>	8	8	
VI(a)	<p>The key component of any community collaboration is communication. Many community activities are undertaken by people in their spare time—outside of work and home activities. They might communicate during any spare moment wherever they may happen to be which makes traditional desktop email, such as Microsoft Outlook or Windows Mail, problematic. The solution is web-based email program, such as Gmail, Microsoft Windows Live Hotmail etc. These programs can be accessed from any computer connected to the Internet using a web browser to send and view email messages hosted on the web. Everything sent and received is stored in the cloud, accessible from anywhere at any time.</p>	7	7	15
VI(b)	<ol style="list-style-type: none"> 1) Managing Schedules 2) Managing Contact Lists 3) Managing Projects 4) Collaborating on Reports 5) Collaborating on Marketing Materials 6) Collaborating on Expense Reports 7) Collaborating on Budgets 8) Collaborating on Presentations 	8*1=8	8	

VII(a)	<p>Following are the users for whom web-based word processing holds promise:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Beginning users. If you're just starting out in the word processing world, there's no better place to start than with a web-based application. <input type="checkbox"/> Casual users. If all you're doing is writing memos and letters, a web-based application gets the job done with ease <input type="checkbox"/> Anyone who wants access to their documents from multiple locations. If you work on the same data at work and at home. There are no synchronization issues; you work on the same file wherever you go. <input type="checkbox"/> Anyone who needs to share their documents with others. Sometimes you need others to view what you're working on. A web-based word processor lets you share your documents with anyone you like, over the Internet. <input type="checkbox"/> Anyone who needs to edit their documents in a collaborative environment. If you need multiple users to both access and edit data in a document, a web-based word processor lets you do things that are impossible in Microsoft Word. <p>Users who shouldn't use them are</p> <ul style="list-style-type: none"> <input type="checkbox"/> Power users. If you've created your own custom documents or templates in Microsoft Word, especially those with macros, a web-based word processor is not for you. <p>27</p> <ul style="list-style-type: none"> <input type="checkbox"/> Anyone who wants to create sophisticated printouts <input type="checkbox"/> Anyone working on sensitive documents <input type="checkbox"/> Anyone who needs to work when not connected to the Internet 	5+3=8	8	
VII(b)	<p>It is the most popular web-based word processor available today. Docs is actually a suite of applications that also includes Google Spreadsheets and Google Presentations; the Docs part of the Docs suite is the actual word processing application. Google Docs interface is clean and, it works well without imposing a steep learning curve. Basic formatting is easy enough to do, storage space for your documents is generous, and sharing/ collaboration version control is also easy.</p> <p>As with all web-based word processors, when you create a Google Docs document, you're actually creating an HTML document—just like a web page. All HTML-type formatting is available for your documents, through the Google Docs interface. The document is also saved in HTML format, although you can export or download the document in a number of other formats, including Microsoft Word DOC format and Adobe PDF. One of the most useful features of Google Docs is the capability to share a document with other Google Docs users, either for viewing or for collaborative editing.</p> <p>To share a document or spreadsheet for viewing or collaboration, click the Share button and select Share with others.</p>	7	7	

VIII(a)	<p>When organizing a big event such as a conference, you have to manage the tasks involved with putting together the event, you also have to handle attendee registration, event marketing, ticket sales etc.</p> <p>The cloud hosts everything to be scheduled and markets your events, as well as handles registration, payment, etc. Some apps also offer detailed task and budget management functions. Examples include Cvent (www.cvent.com), RegOnline (www.regonline.com). Unlike some web-based apps, these aren't free; you have to pay for the power you need to manage the details of the particular event.</p>	8	8	
VIII(b)	<p>Experts claim that it takes several emails or voice mails to arrange a single meeting; a typical businessperson can spend more than 100 hours each year just scheduling meetings. The online scheduling application requires all users to enter their individual calendars beforehand.</p> <p>When you schedule a meeting, the app checks attendees' schedules for the first available free time for all. The app then generates automated email messages to inform attendees of the meeting request, at the designated time, followed by automatic confirmation emails when attendees accept the invitation.</p> <p>Eg: Jiffle, Presdo</p>	7	7	15
IX(a)	<p>A blog (short for "web log") is a kind of online journal that its author updates frequently with new musings and information. A blog is a collection of individual <i>posts</i> or messages. The posts are arranged in reverse chronological order, with the newest posts at the top- which makes it easy to keep track of the latest developments. Older posts are relegated to the blog archives, which are generally accessible via a link in the sidebar column. And, at the end of each post, you'll find a link to comments; this is where blog readers can register their own personal comments about any given post.</p> <p>A blog doesn't have to be the work of a single author; it can include posts from multiple contributors, as well as comments on each of those posts. This makes a blog ideal for keeping track of progress on a group project.</p> <p>Examples Blogger, WordPress</p>	6	6	15

IX(b)	<p>Application sharing, where the presenter and participants can all access and use the same application in real time. This is useful for smaller group meetings, when all participants are collaborating on a project.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Desktop sharing, similar to application sharing, but with the presenter's entire desktop visible and accessible to participants. <input type="checkbox"/> File and document sharing, with individual files and documents open for all to edit, also useful for group collaboration. <input type="checkbox"/> PowerPoint presentations, the core component of large presentations; the presenter gives a PowerPoint presentation in real time, complete with slide transitions and animations, using audio conferencing tools to narrate the presentation. <input type="checkbox"/> Presenter notes, which let the presenter take notes during the course of the conference for future action. <p>Annotation, which lets the presenter mark up the document or presentation being shared or given, typically by drawing or highlighting on the screen.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Whiteboard, which is a blank screen on which the presenter or participants can draw or highlight objects. <input type="checkbox"/> Text-based chat, which lets participants discuss the presentation with each other in real time. <input type="checkbox"/> Audio conferencing, which adds the spoken words of the presenter to a PowerPoint presentation. With two-way audio, all participants can speak—assuming that they all have microphones. <input type="checkbox"/> Video conferencing, which puts a picture of the presenter in a corner of the conference web top, typically generated via webcam. With two way video, conference participants can also show pictures of themselves onscreen. <input type="checkbox"/> Polling, which lets the presenter ask questions of the audience. <input type="checkbox"/> Quizzes, which lets participants answer test questions, typically with results tabulated in real time. 	1*9=9	9	
X(a)	<ul style="list-style-type: none"> <input type="checkbox"/> groupware puts all your group communications in one place—and that one place is accessible to group members in any location, as long as they have an Internet connection. <input type="checkbox"/> Groupware makes it easier to communicate, which should reduce the number of meetings and conferences calls, as well as your email traffic. <input type="checkbox"/> All this should increase your group's collective and members' individual productivity <p>Online groupware typically includes some or all of the following tools:</p> <ul style="list-style-type: none"> <input type="checkbox"/> File and document uploading and sharing <input type="checkbox"/> Web calendar <input type="checkbox"/> Task/project manager <input type="checkbox"/> Message boards <input type="checkbox"/> Text-based chat rooms / instant messaging <input type="checkbox"/> Wiki-like collaborative pages <input type="checkbox"/> Blogs 	3+6=9	9	15

X(b)	<p>Wiki is a collection of web pages where any users can contribute or modify content. The first wiki was WikiWikiWeb, a website founded in 1995 to facilitate the exchange of ideas between computer programmers.</p> <p>Wikis enable all users not only to write new articles, but also to comment on and edit existing articles. Today, many organizations use wikis as collaborative applications. A group wiki can be public (open to all users), as wikipedia is, or private—which is ideal for project groups, businesses, and other organizations. A private wiki invites all group members to create new pages on the wiki site or to edit any existing page. All writing and editing is done within the web browser, no extra software or tools necessary. In most instances, there is no review of the articles or edits before they're accepted. The result is a collection of articles or documents, written collaboratively. The wiki software organizes the articles behind the scenes and manages the versioning for each article.</p>	6	6	
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