





























































[HALF YEARLY EXAMINATION KEY ANSWER -2024-2025]							
STD: XII – COMPUTER APPCATIONS – DR SURESH MATRIC HSS – RAMANATHAPURAM (DIST)							
I	(One Word)						
	1.C 2.B 3.A 4.C 5.A 6.B 7.A 8.A 9.A 10.D 11.C 12.B 13.B 14.B 15.B						
II	Two Marks) (Q.no 24 is compulsory)						
16	1.Raster or Bitmap Images, 2.Vector Images						
17	<table border="1"> <thead> <tr> <th>SQL</th> <th>My SQL</th> </tr> </thead> <tbody> <tr> <td>❖ It is a standardized language used to access the database.</td> <td>❖ My SQL is a open source software that allows managing relational databases.</td> </tr> <tr> <td>❖ The data's are processed to turn into efficient information.</td> <td>❖ It provides the flexibility of changing the source code as per the needs.</td> </tr> </tbody> </table>	SQL	My SQL	❖ It is a standardized language used to access the database.	❖ My SQL is a open source software that allows managing relational databases.	❖ The data's are processed to turn into efficient information.	❖ It provides the flexibility of changing the source code as per the needs.
SQL	My SQL						
❖ It is a standardized language used to access the database.	❖ My SQL is a open source software that allows managing relational databases.						
❖ The data's are processed to turn into efficient information.	❖ It provides the flexibility of changing the source code as per the needs.						
18	<ul style="list-style-type: none"> ❖ by enclosing a comma-separated list of values in square brackets (or) by using the array () function. <p>Syntax: \$arrayVariable = [element1, element2, element3, ... elementN]; (or) \$arrayVariable = array(element1, element2, element3, ... elementN);</p> <p>Examples: (a) \$fruits = ['apple', 'banana', 'orange']; (b) \$fruits = array('apple', 'banana', 'orange');</p>						
19	MySQLi is extension in PHP scripting language which gives access to the MYSQL database.						
20	1) It provides mobility. 2) It provides connection to Internet, 3) Flexibility of LAN. 4) Ensures connectivity. 5) Low cost, high benefits.						
21	<ul style="list-style-type: none"> ❖ Ethernet port is an opening which is a part of an Ethernet card. It accepts RJ45 connector with Ethernet cable. ❖ It is found on personal computers, laptops, routers, switches, hubs and modems. 						
22	<ul style="list-style-type: none"> ❖ A significant output of simulation is the trace files. ❖ Trace files can document every incident that happened in the simulation and are used for examination. 						
23	<ul style="list-style-type: none"> ❖ Typo piracy is a variant of Cyber Squatting. ❖ Some fake websites try to take advantage of users' common typographical errors in typing a website address and direct users to a different website. ❖ Such people try to take advantage of some popular websites to generate accidental traffic for their websites. <p>Example: 1.www.goggle.com, 2.www.faceblook.com</p>						
24	<pre>while (condition is true) { code to be executed; }</pre>						
III	(Three Marks) (Q.no 33 is compulsory)						
25	<ul style="list-style-type: none"> ❖ Adobe PageMaker is a page layout software. ❖ It is used to design and produce documents that can be printed. ❖ You can create anything from a simple business card to a large book. 						
26	<ul style="list-style-type: none"> ❖ It is defined as the number of items that must be included in a relationship. i.e number of entities in one set mapped with the number of entities of another set via the relationship. ❖ The three classifications in Cardinality are one-to-one, one-to-many and Many-to-Many. 						
27	<ul style="list-style-type: none"> ❖ PHP code is enclosed in <?php and?> tags. These tags are called opening and closing tags. ❖ A PHP statement must end with a semicolon (;). <p>Example:</p> <pre><?php echo "Hello, World!"; ?></pre>						
28	<pre>Switch (expression) { case value1: //code to be executed if expression = value1; break; case value2: //code to be executed if expression = value2; break; default: //code to be executed if expression is not equal to any of the values; }</pre>						
29	<ul style="list-style-type: none"> ❖ Checkbox is a important feature which selects more than one value from the HTML form. ❖ Radio box is similar to checkbox but one value can be chosen at a time. 						
30	<ul style="list-style-type: none"> ❖ Mobile network is the network connecting devices without cable (wireless). ❖ Mobile computers, such as laptop, tablet, and hand held computers, were fastest growing segments. 						

	<ul style="list-style-type: none"> ❖ At land areas network was distributed as cells, each will be served by single – location transceiver, but generally three cell sites or a base transceiver station. ❖ This base station provides the cell with network coverage and other features that can be utilized for transmission of voice, data and other content as well. 								
31	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Absolute URL</th> <th style="text-align: center;">Relative URL</th> </tr> </thead> <tbody> <tr> <td>❖ Absolute URL is the complete address of a document on the Internet.</td> <td>❖ Relative URL is the partial address of a document on the Internet.</td> </tr> <tr> <td>❖ Absolute URL contains all the information that are required to find the files on the Internet.</td> <td>❖ Relative URL contains only file name or file name with folder name.</td> </tr> <tr> <td>❖ All the four parts is very important in absolute URL.</td> <td>❖ Relative URL is used when the file is on the same server related to original document.</td> </tr> </tbody> </table>	Absolute URL	Relative URL	❖ Absolute URL is the complete address of a document on the Internet.	❖ Relative URL is the partial address of a document on the Internet.	❖ Absolute URL contains all the information that are required to find the files on the Internet.	❖ Relative URL contains only file name or file name with folder name.	❖ All the four parts is very important in absolute URL.	❖ Relative URL is used when the file is on the same server related to original document.
Absolute URL	Relative URL								
❖ Absolute URL is the complete address of a document on the Internet.	❖ Relative URL is the partial address of a document on the Internet.								
❖ Absolute URL contains all the information that are required to find the files on the Internet.	❖ Relative URL contains only file name or file name with folder name.								
❖ All the four parts is very important in absolute URL.	❖ Relative URL is used when the file is on the same server related to original document.								
32	<p>Similarity of credit card and debit card:</p> <ul style="list-style-type: none"> ❖ The way of using debit cards and credit cards is generally the same. ❖ The debit card and credit card are identical in their physical properties. <p>Difference between credit card and debit card:</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Credit card</th> <th style="text-align: center;">Debit card</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> ❖ Normally used for retail transactions. ❖ The credit card issuer allows you to spend the money. ❖ The card issuer to payback the value later with an agreed interest </td> <td> <ul style="list-style-type: none"> ❖ Debit Card is an electronic payment card where the transaction amount is deducted directly from the card holder's bank account upon authorization. ❖ Generally, debit cards function as ATM cards and act as a substitute for cash. </td> </tr> </tbody> </table>	Credit card	Debit card	<ul style="list-style-type: none"> ❖ Normally used for retail transactions. ❖ The credit card issuer allows you to spend the money. ❖ The card issuer to payback the value later with an agreed interest 	<ul style="list-style-type: none"> ❖ Debit Card is an electronic payment card where the transaction amount is deducted directly from the card holder's bank account upon authorization. ❖ Generally, debit cards function as ATM cards and act as a substitute for cash. 				
Credit card	Debit card								
<ul style="list-style-type: none"> ❖ Normally used for retail transactions. ❖ The credit card issuer allows you to spend the money. ❖ The card issuer to payback the value later with an agreed interest 	<ul style="list-style-type: none"> ❖ Debit Card is an electronic payment card where the transaction amount is deducted directly from the card holder's bank account upon authorization. ❖ Generally, debit cards function as ATM cards and act as a substitute for cash. 								
33	Output: 75								
IV	(Five Marks)								
38.a	Output: Pass								
OR	<p>1.INTERNET:</p> <ul style="list-style-type: none"> ❖ The Internet, “the Net,” is a worldwide system of computer networks. ❖ A global network, public TCP/IP network used by over a billion people all over the world. ❖ A network of networks where the users at any one computer can, if they have permission, get information from any other computer. ❖ The Internet is a network of global connections – comprising private, public, business, academic and government networks – linked by guided, wireless and fiber-optic technologies. ❖ It was perceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first recognized as the ARPANet. <p>Example:</p> <ul style="list-style-type: none"> ❖ Sending email to a friend ,Download programs and files, Social media, E-Mail <p>2.INTRANET:</p> <ul style="list-style-type: none"> ❖ It is a private network within an enterprise to share company data and computing resources between the employees. ❖ It may consist of many interlinked local area networks. ❖ It includes connections through one or more gateway (connects two networks using different protocols together known as protocol convertor) computers to outside Internet. <p>Example:</p> <ul style="list-style-type: none"> ❖ Sharing of company policies/rules and regulations, Access employee database, Distribution of circulars/Office Orders <p>3.EXTRANET:</p> <ul style="list-style-type: none"> ❖ It is a private network that uses Internet technology and the public telecommunication system to securely share business's information with suppliers, vendors, partners, customers, or other business. <p>Example:</p> <ul style="list-style-type: none"> ❖ Customer communications, online education/ training, Account status enquiry. 								
34. a	<p>1.Production Manager:</p> <ul style="list-style-type: none"> ❖ In a multimedia production, the role of production manager is to define, and coordinate, the production of the multimedia project in time and with full quality. ❖ The production manager should be an expertise in the technology expert, good at proposal writing, good communication skills and budget management skills. <p>2. Content Specialist:</p> <ul style="list-style-type: none"> ❖ Content specialist is responsible for performing all research activities concerned with the proposed application's content. ❖ Program content refers to projects information, graphics, data or facts presented through the multimedia production. <p>3. Script Writer :</p> <ul style="list-style-type: none"> ❖ The script writer visualizes the concepts in three dimensional environments and if needed uses the virtual reality integration into the program. <p>4. Text Editor:</p> <ul style="list-style-type: none"> ❖ The content of a multimedia production always must flow logically and the text should always be structured and correct grammatically. 								

	<p>5. Multimedia Architect:</p> <ul style="list-style-type: none"> ❖ The multimedia architect integrates all the multimedia building blocks like graphics, text, audio, music, video, photos and animation by using an authoring software. <p>6. Computer Graphic Artist:</p> <ul style="list-style-type: none"> ❖ The role of Computer Graphic Artist is to deal with the graphic elements of the programs like backgrounds, bullets, buttons, pictures editing, 3-D objects, animation, and logos etc. <p>7. Audio and Video Specialist:</p> <ul style="list-style-type: none"> ❖ The roles of these specialists are needed for dealing with narration and digitized videos to be added in a multimedia presentation ❖ They are responsible for recording, editing sound effects and digitizing. <p>8. Computer Programmer:</p> <ul style="list-style-type: none"> ❖ The computer programmer writes the lines of code or scripts in the appropriate language. ❖ These scripts usually develops special functions like developing the software to give the size and shape of video windows, controlling peripherals and so on. <p>9. Web Master:</p> <ul style="list-style-type: none"> ❖ The responsibility of the web master is to create and maintain an Internet web page. ❖ They converts a multimedia presentation into a web page. ❖ Final multimedia product is a joint effort of the entire team. 																																																												
OR	<ul style="list-style-type: none"> ❖ EDI was developed to solve the problems inherent in paper-based transaction processing and in other forms of electronic communication. ❖ Implementing EDI system offers a company greater control over its supply chain and allow it to trade more effectively. ❖ It also increases productivity and promotes operational efficiency. <p>The following are the other advantages of EDI:</p> <p>1.Improving service to end users 2.Increasing productivity 3.Minimizing errors 4.Slashing response times 5.Automation of operations 6.Cutting costs 7. Integrating all business and trading partners. 8. Optimizing financial ratios</p>																																																												
35.a	<table border="1"> <thead> <tr> <th>Tool</th> <th>Toolbox</th> <th>Cursor</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>Pointer tool</td> <td></td> <td></td> <td>Used to select, move, and resize text objects and graphics.</td> </tr> <tr> <td>Text tool</td> <td></td> <td></td> <td>Used to type, select, and edit text.</td> </tr> <tr> <td>Rotating tool</td> <td></td> <td></td> <td>Used to select and rotate objects.</td> </tr> <tr> <td>Cropping tool</td> <td></td> <td></td> <td>Used to trim imported graphics.</td> </tr> <tr> <td>Line tool</td> <td></td> <td>+</td> <td>Used to draw straight lines in any direction.</td> </tr> <tr> <td>Constrained Line tool</td> <td></td> <td>+</td> <td>Used to draw vertical or horizontal lines.</td> </tr> <tr> <td>Rectangle tool</td> <td></td> <td>+</td> <td>Used to draw squares and rectangles.</td> </tr> <tr> <td>Rectangle Frame tool</td> <td></td> <td>+</td> <td>Used to create rectangular placeholders for text and graphics.</td> </tr> <tr> <td>Ellipse tool</td> <td></td> <td>+</td> <td>Used to draw circles and ellipses.</td> </tr> <tr> <td>Ellipse Frame tool</td> <td></td> <td>+</td> <td>Used to create elliptical placeholders for text and graphics.</td> </tr> <tr> <td>Polygon tool</td> <td></td> <td>+</td> <td>Used to draw polygons.</td> </tr> <tr> <td>Polygon Frame tool</td> <td></td> <td>+</td> <td>Used to create polygonal placeholders for text and graphics.</td> </tr> <tr> <td>Hand</td> <td></td> <td></td> <td>Used to scroll the page (an alternative to the scroll bar)</td> </tr> <tr> <td>Zoom</td> <td></td> <td></td> <td>Used to magnify or reduce an area of the page.</td> </tr> </tbody> </table>	Tool	Toolbox	Cursor	Use	Pointer tool			Used to select, move, and resize text objects and graphics.	Text tool			Used to type, select, and edit text.	Rotating tool			Used to select and rotate objects.	Cropping tool			Used to trim imported graphics.	Line tool		+	Used to draw straight lines in any direction.	Constrained Line tool		+	Used to draw vertical or horizontal lines.	Rectangle tool		+	Used to draw squares and rectangles.	Rectangle Frame tool		+	Used to create rectangular placeholders for text and graphics.	Ellipse tool		+	Used to draw circles and ellipses.	Ellipse Frame tool		+	Used to create elliptical placeholders for text and graphics.	Polygon tool		+	Used to draw polygons.	Polygon Frame tool		+	Used to create polygonal placeholders for text and graphics.	Hand			Used to scroll the page (an alternative to the scroll bar)	Zoom			Used to magnify or reduce an area of the page.
Tool	Toolbox	Cursor	Use																																																										
Pointer tool			Used to select, move, and resize text objects and graphics.																																																										
Text tool			Used to type, select, and edit text.																																																										
Rotating tool			Used to select and rotate objects.																																																										
Cropping tool			Used to trim imported graphics.																																																										
Line tool		+	Used to draw straight lines in any direction.																																																										
Constrained Line tool		+	Used to draw vertical or horizontal lines.																																																										
Rectangle tool		+	Used to draw squares and rectangles.																																																										
Rectangle Frame tool		+	Used to create rectangular placeholders for text and graphics.																																																										
Ellipse tool		+	Used to draw circles and ellipses.																																																										
Ellipse Frame tool		+	Used to create elliptical placeholders for text and graphics.																																																										
Polygon tool		+	Used to draw polygons.																																																										
Polygon Frame tool		+	Used to create polygonal placeholders for text and graphics.																																																										
Hand			Used to scroll the page (an alternative to the scroll bar)																																																										
Zoom			Used to magnify or reduce an area of the page.																																																										
OR	<table border="1"> <thead> <tr> <th>Traditional Commerce</th> <th>E-Commerce</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> ❖ Traditional commerce is buying or selling of products and services physically. ❖ Customer can easily identify, authenticate and talk to the merchant. </td> <td> <ul style="list-style-type: none"> ❖ E-Commerce carries out commercial transactions electronically on the Internet. ❖ Neither customer nor merchant see the other. </td> </tr> </tbody> </table>	Traditional Commerce	E-Commerce	<ul style="list-style-type: none"> ❖ Traditional commerce is buying or selling of products and services physically. ❖ Customer can easily identify, authenticate and talk to the merchant. 	<ul style="list-style-type: none"> ❖ E-Commerce carries out commercial transactions electronically on the Internet. ❖ Neither customer nor merchant see the other. 																																																								
Traditional Commerce	E-Commerce																																																												
<ul style="list-style-type: none"> ❖ Traditional commerce is buying or selling of products and services physically. ❖ Customer can easily identify, authenticate and talk to the merchant. 	<ul style="list-style-type: none"> ❖ E-Commerce carries out commercial transactions electronically on the Internet. ❖ Neither customer nor merchant see the other. 																																																												

	<ul style="list-style-type: none"> ❖ Physical stores are not feasible to be open all the times. ❖ Products can be inspected physically before purchase. ❖ Scope of business is limited to particular area. ❖ Resource focus Supply side. ❖ Business Relationship is Linear. ❖ Marketing is one way marketing. ❖ Payment is made by cash, cheque, cards etc. ❖ Most goods are delivered instantly 	<ul style="list-style-type: none"> ❖ It is always available on all time and all days of the year. ❖ Products can't be inspected physically before purchase. ❖ Scope of business is global. Vendors can expand their business Worldwide. ❖ Resource focus Demand side. ❖ Business Relationship is End-to-end. ❖ One-to-one marketing. ❖ Payment system is mostly credit card and through fund transfer. ❖ It takes time to transport goods.
36.a	<p><u>ER Model basic concepts:</u></p> <ul style="list-style-type: none"> ❖ The basic concepts of ER model consists of..., ❖ Entity or Entity type 2. Attributes 3. Relationship ❖ These are the general concepts which help to create an ER diagram and produce an ER model. ❖ With the help of these any database design can be created and viewed to know the concept in that database design. <p><u>1.Entity or Entity type:</u></p> <ul style="list-style-type: none"> ❖ An Entity can be anything a real-world object or animation which is easily identifiable by anyone even by a common man. <p><u>Example:</u></p> <ul style="list-style-type: none"> ❖ In a company's database Employee, HR, Manager are considered as entities, where each of these entity will be having their own attributes. ❖ An entity is represented by a rectangular box. <p><u>Types of Entity:</u> 1. Strong Entity 2. Weak Entity 3. Entity Instance</p> <p><u>2.Attributes:</u></p> <ul style="list-style-type: none"> ❖ An attribute is the information about that entity and it will describe, quantify, qualify, classify, and specify an entity. ❖ An attribute will always have a single value, that value can be a number or character or string. <p><u>Types of attributes:</u> 1. Key 2. Simple 3. Composite 4. Single Valued 5. Multi Valued Attribute</p> <p><u>3.Relationship Type:</u></p> <ul style="list-style-type: none"> ❖ In ER Model, relationship exists between two entities. ❖ Three types of relationships are available and the Entity- Relationship(ER) diagram is based on the three types listed below. ❖ 1. One-to-One relationship 2. One-to-Many relationship 3. Many-to-Many relationship. <p><u>One-to-One relationship:</u></p> <ul style="list-style-type: none"> ❖ Consider two entities A and B. one-to-one (1:1) relationship is said to exist in a relational database design, if 0 or 1 instance of entity A is associated with 0 or 1 instance of entity B, and 0 or 1 instance of entity B is associated with 0 or 1 instance of entity A. <p><u>One-to-Many relationship:</u></p> <ul style="list-style-type: none"> ❖ Consider two entities A and B. one-to-many (1:N) relationship is said to exist in a relational database design, for 1 instance of entity A there exists 0 or 1 or many instances of entity B, but for 1 instance of entity B there exists 0 or 1 instance of entity A. <p><u>Many-to-Many relationship:</u></p> <ul style="list-style-type: none"> ❖ Consider two entities A and B. many-to-many (M:N) relationship is said to exist in a relational database design, for 1 instance of entity A there exists 0 or 1 or many instances of entity B, and for 1 instance of entity B there exists 0 or 1 or many instance of entity A. 	
OR	<ul style="list-style-type: none"> ❖ OSS projects are collaboration opportunities that improve skills and build connections in the field. <p><u>Domains that developers can contribute to the open source community include:</u></p> <ul style="list-style-type: none"> ❖ 1. Communication tools. 2. Distributed revision control systems. ❖ 3. Bug trackers and task lists. 4. Testing and debugging tools. <p><u>Benefits of Open Source software:</u></p> <ul style="list-style-type: none"> ❖ There are many open source software.so ❖ We can select and use any software that suits our needs. ❖ The software can be used without any cost and restrictions. ❖ We can share our ideas with the team, write the required code and share it with many. ❖ We can learn many ideas and make our program writing skills more efficient. ❖ The coding in open source software are being groomed by many enthusiastically members of the group. ❖ Problems in the programs are quickly mended by the group's effort. ❖ We can add the most required features in the software by making changes to the open source software. 	

37.a	<ul style="list-style-type: none"> ❖ Many open source software are very user friendly. ❖ 'for loop' is called as the entry-check loop. ❖ The for loop is used to execute a block of code a specific number of times. <p>Syntax: for (initialization: condition; increment /decrement) { //code to be executed; }</p> <ul style="list-style-type: none"> ❖ The initialization part is executed only once at the beginning of the loop. ❖ It is used to initialize variables. ❖ The condition is evaluated before each iteration of the loop. ❖ If it is true, the code block is executed. ❖ If it is false, the loop is terminated. ❖ The increment/decrement part is executed after each iteration for the loop. ❖ It is used to update variables. <p>Example 1:</p> <ul style="list-style-type: none"> ❖ To print the numbers from 1 to 5 in ascending order. <pre>for (\$i = 1; \$i <= 5; \$i++) { echo \$i. "
"; }</pre> <p style="text-align: right;">Output 1 to 5</p> <p>Example 2:</p> <ul style="list-style-type: none"> ❖ To print the numbers from 5 to 1 in descending order. <pre>for (\$i = 5; \$i >= 1; \$i--) { echo \$i. "
"; }</pre> <p style="text-align: right;">Output 5 to 1</p>
OR	<ul style="list-style-type: none"> ❖ When the user enters the URL (consists of protocol, domain name, folder name, file name) in the browser, the system first checks its DNS cache for the corresponding IP address. ❖ If the IP address is found in the cache then the information is retrieved from cache. ❖ If not, then the system needs to perform DNS query i.e., the system needs to query the resolver about the IP address from Internet Service Provider (ISP). ❖ Each resolver has its own cache and if it is found in that then that information is retrieved. ❖ If not, then the query is passed to next domain server i.e., TLD (Top Level Domain) which reviews the request and direct the query to name servers associated with that specific domain. ❖ Until the query is solved it is passed to next level domains. ❖ Finally, the IP address is detected and corresponding record is sent to the resolver. ❖ Then the resolver returns the record back to the computer browser. <p>Now the user can view the webpages for the detected IP address</p> 