PES University, Bengaluru

(Established under Karnataka Act 16 of 2013)

Sample

E-COMMERCE DEVELOPMENT

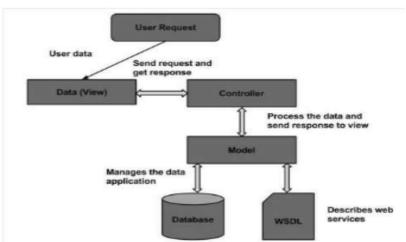| 1.	a)	**Identify different e-commerce business strategies available in real world.**	**2**
		• **B2B (Business to Business):** This transaction is between businesses. It is between the wholesaler and the retailer or between the manufacturer and the wholesaler. • **B2C (Business to Consumer):** This transaction is between businesses and consumers. In this type of transaction, merchants sell products to consumers through shopping cart software. • **C2C (Consumer to Consumer):** In this type of transaction, one consumer or customer interacts with other consumers through internet. • **C2B (Consumer to Business):** This transaction is between the consumer or the customer and businesses or organizations where the consumer makes a product that the organization uses it to complete the business.	
	b)	**Describe the key features of Magento2 components**	**4**
		Each point 1 point • **Increased Speed** –The full page caching provides an immense boost in loading speed on sequential page visits while the optimized code makes Magento 2 25% faster right after installation compared to version 1.9 • **Increased Security** – The strengthened hashing algorithms (SHA-256) help in password management while the X-Frame-Options HTTP request header provides protection against clickjacking attacks. • **Improved Scaling Potential** – Database separation allows for dedicated databases servicing specific store features thus increasing the potential load the platform can take. Overall Scalability of the Catalog has been improved by more than 1800% • **Simpler and Faster Checkout Process** – During our tests, we managed to checkout from Magento 2 via a credit card in around 40 seconds from start to finish plus the loading times which is extremely fast.	
2.	a)	**Describe in brief "how to perform E-commerce website management for a global site".**	**1**
		In Magento, a **website** is a collection of **stores**, which themselves are collections of **store views**. A **website** is made up of one or more stores, which share the same customer information, order information and shopping cart. **Store Views** are the actual store instances in Magento.	

b)	Draw a neat Magento architectural diagram and explain.	3+2

Each explanation:0.5 marks, diagram: 3 marks

- **User Request:** The user sends a request to a server in the form of request message where web browsers, search engines, etc. act like clients.

- **View:** View represents the data in particular format. It is the user interface which is responsible for displaying the response for user request. It specifies an idea behind the presentation of the model's data to the user. Views are used to reflect "how your data should look like".

- **Controller:** The controller is responsible for responding to user input and perform interactions on the data model objects. It uses models to process the data and send responses back to the view.

- **Model:** The model is responsible for managing the data of the application. It contains logic of the data and represents basic data object in the framework. It responds to request from the view and to the instructions from the controller to update itself.

- **Database:** Database contains the information which is requested from the user. When the user requests data, view sends requests to the controller, the controller requests from the model and the model fetches the required information from the database and responds to the user.

- **WSDL**: WSDL stands for Web Services Description Language. It is used for describing web services and how to access them.

The Magento architecture comes with Models, Views and Controllers.

3.	a)	What is E-commerce?	1

E-commerce (Electronic Commerce) is a type of business that involves the commercial transaction or purchasing or selling of goods and services through electronic channels known as internet.

	b)	What are the different product types available in Magento? Explain with example.	5

Each point explanation with example: 0.5 + 0.5 Mark

- **Simple Products:** These are general product type, which are the most used products. In this section, there are no options for selecting size or color of the product.

  Example: Coffee cup, DVD's, Camera lens, etc.

- **Grouped Products:** This is a group of simple products. In this type, you cannot specify a specific price for a product; you can just specify the discount.

  Example: Cell phone + Memory card + Earphone

- **Configurable Products:** In this type, customers can select products according to their color and size before purchasing.

  Example: Cell phones obtained in different colors and sizes.

- **Virtual Products:** Those which do not have physical counterpart, i.e. these are used for virtual items. These products cannot be shipped or stocked.

  Example: Online training course.

- **Bundled Products**

  Bundled products are those products, which cannot be sold separately and doesn't give any choice to the end user.

  Example: Consider you want to buy a cell phone which includes earphone, memory card, battery, charging cable, etc. These are together called bundled products. These products cannot be sold individually but can be sold within the bundle product.

- **Downloadable Products:** Products which are available for download are known as downloadable products.

  Example: MP3 file, ebook, documents, etc.

4.	a)	Write the menu option to enable review and ratings can be configured from Magento admin panel.	2

Each correct path: 1 Mark

Navigate to **Stores>Rating** from the main admin panel.

Click on the **Add New Rating** button. Navigate to the **Marketing>Reviews** section of your admin panel.

Select a review and click its **edit** button. Click the **Save Review** button to add the review. This will make it visible on the front-end in the Reviews tab below the product

b)	Write the steps to perform portability of products list with its data attributes from one magento server application to other.	5

Identifying functionality: 1 Mark, Each correct steps: 2 Marks

Import and Export Product list

The Magento administrator area and go to **System** menu > **Data transfer** section > **Import.** Now select **Products** from the **Entity Type** dropdown. After that select **Products** from Entity Dropdown, and **Add/Update** from **Import Behaviour** dropdown. Now upload the CSV file by clicking on the **Browse** button next to **Select File to Import.**

If you have added images, you should also specify the path on the server where you uploaded them. Add the corresponding path to the **Images File Directory** section. To initiate the process click on the **Import** button. When the import completes you will get the *Import successfully done* message.

In the Magento administrator area go to **System** menu > **Data transfer** section > **Export.** This would redirect you to a new page where you should select **Products** from **Entity Type** Dropdown and **CSV** from **Export File Format.**

Now you should exclude the unnecessary attributes from the list by selecting them and then click on **Continue** from the bottom of the page. .The file will include columns for each of the attributes you have defined for your products.