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Smart Professional – eCommerce (OV – 5017)

Duration:	10 Months*	**Fee:**	**LUMPSUM**	**INSTALLMENT**

Eligibility:	10th /Undergraduates/ Commerce graduates/ BBA / MBA / working professionals
Job opportunities:	Smart Pro E-commerce gives you the required training to build a successful career as: ➢ **Open-source application developer** ➢ **E-commerce programmer** ➢ **Drupal web developer**

Evaluation Strategy:

***Award of* Grades**

PASS	CREDIT	DISTINCTION
Overall Weighted Marks >= 40% but < 60% qualifies for **PASS**	Overall Weighted Marks >= 60% but < 75% qualifies for **CREDIT**	Overall Weighted Marks >= 75% but < 60% qualifies for **DISTINCTION**

Note: To attain a PASS/CREDIT/DISTINCTION grade, a student should achieve at least 40% in Final Examination; otherwise he/she will be declared as 'Referred'.

Learner's Guide (eBook)

Course Content

OOP Concepts

1. Define Object-oriented Programming (OOP)
2. Differentiate between Object-oriented and Object-based programming
3. Explain Object-oriented design (OO Design)
4. Describe Responsibility-driven Design (RDD)
5. Explain Agents, Classes, and Instances
6. Describe Methods, Responsibilities, and Modules
7. Explain Generalization, Specialization, and Patterns
8. Explain Coupling and Cohesion
9. Explain Class and Methods
10. Explain Static data fields and Constant data fields
11. Describe Accessor, Mutator, and Forward declaration
12. Define Abstraction
13. Define Inheritance
14. Explain Variants in Inheritance
15. List the Advantages of Inheritance
16. Describe Multiple Inheritance
17. List the problems associated with Multiple Inheritance
18. Describe Interface
19. Explain Multiple Inheritance using Interfaces
20. Explain constructor execution in Multiple Inheritance
21. Explain Polymorphism
22. List the different forms of Polymorphism
23. Define Overloading and Overriding
24. Define Polymorphic variable and Generics
25. Explain Static and Dynamic Polymorphism
26. Explain Overloading
27. List the different forms of Overloading
28. Explain Method Overloading
29. Explain Constructor Overloading and Operator Overloading
30. Explain Overriding
31. Explain Abstract method and Pure virtual methods
32. Explain Replacement and Refinement
33. Differentiate between Overriding and Shadowing
34. Differentiate between Overriding and Overloading
35. Explain polymorphic variable
36. Explain pseudo-variable
37. Explain Reverse polymorphism
38. Explain Generics
39. Explain Templates
40. Explain Software framework
41. Explain Microsoft .NET framework and Java AWT API
42. Explain Reflection
43. Explain Java and C# Reflection API
44. Explain Design Patterns
45. Explain the Factory and Singleton Patterns
46. Explain the Composite and Decorator Patterns
47. Explain the Proxy and Facade Patterns

Building Next Generation Web Sites

1. List the uses of HTML
2. Describe the structure of a HTML document
3. Understand the working of CSS
4. Describe the various JavaScript elements
5. Create HTML documents
6. Understand HTML element markup
7. Describe working with sections, tables, forms, and input validation
8. Explain CSS Selectors
9. Use borders and backgrounds
10. Create layouts and styles
11. Implement transitions, animations and transforms
12. Explain other CSS properties and features
13. Explain DOM
14. Work with the Window object
15. Work with DOM Elements
16. Work with Events
17. Use the Element-Specific Objects
18. Explain the Canvas
19. Use drag and drop
20. Use Geolocation
21. Use Web Storage
22. Create offline applications

Querying with MySQL

1. List the features of MySQL.
2. State the advantages of MySQL over other RDBMS.
3. Compare MySQL with other RDBMS.
4. State the advantages of PHP in MySQL.
5. Explain open source software licenses.
6. Explain the various distribution options of MySQL.
7. Explain the installation process of MySQL on Microsoft Windows.
8. Explain the installation process of MySQL on Red Hat Enterprise Linux.
9. Explain the configuration process of MySQL using Scripts.
10. Explain initialization of MySQL at startup.
11. Explain database.
12. Explain the data types.
13. Identify the different types of data.
14. Explain the creation of a table.
15. Explain Normalization.
16. Identify the different forms of normalization.
17. Explain Indexes and Referential Integrity.
18. Describe the commands to view and alter a database.
19. Explain the commands to retrieve data from a table.
20. Describe the commands to modify the table definitions.
21. Describe the commands to delete the table definitions.
22. Explain the use of keys in a table
23. Explain the use of indexes in a table
24. Explain modification of tables
25. Explain the use of the ORDER BY command
26. Explain the use of the GROUP BY command
27. Explain the different types of table joins in MySQL
28. Explain the use of Equi-Join
29. Explain the use of Inner Join
30. Explain the use of Outer-Join
31. Explain the use of Self-Join
32. Explain the use of multiple SELECT queries in a single SELECT query
33. Explain the use of UNION with the query
34. Use the Aggregate functions in MySQL.
35. Use the Mathematical functions in MySQL.
36. Describe the use of Date functions in MySQL.
37. Describe the use of String functions in MySQL.
38. Describe the use of System Information functions in MySQL.
39. Describe the creation of user accounts in MySQL.
40. Identify the privileges in MySQL.
41. Explain the privileges present in MySQL.
42. Explain the commands for setting up of restrictions in MySQL.
43. Describe the new features and enhancements added to MySQL 5.7.
44. Explain Geospatial data and how to use it in MySQL.
45. List and describe spatial data types in MySQL.
46. Identify JSON Data types.
47. Describe Stored Procedures.
48. Explain transactions and how to handle them.
49. Explain the impact of transactions on performance.
50. Describe MySQL support for different languages and timezone.
51. Describe Performance Optimization.
52. Describe Query related functions.
53. Explain capability of MySQL for scaling and availability.
54. Explain replication in MySQL.
55. Explain how to perform data management using replication.
56. Describe concepts of partitioning in MySQL.
57. Describe concepts of Storage Systems and Management

Web Application Development using PHP	Working with Drupal
1. Understand the need and history of PHP 2. Configure PHP 7 3. Learn the new features of PHP 7 4. Use Form Handling in PHP 5. Use Variables and Expressions in PHP 6. Use various types of operators in PHP 7. Use conditional and flow control statements in PHP 8. Use functions in PHP 9. Create and use arrays in PHP 10. Describe usage of scalar type declarations in PHP programs 11. Describe usage of anonymous classes in PHP programs. 12. Implement database management in PHP 13. Use cookies in PHP 14. Perform session management in PHP 15. Manage e-mails using PHP 16. Explain OOPS concepts 17. Explain generators and generator return expressions 18. Configure PHP 7.0.4 19. Explain exception handling and changes in exceptions in PHP 7	1. Extend Drupal through contributed or custom modules and themes 2. Develop an internationalized website with Drupal's multilingual tools 3. Integrate third-party front-end and back-end libraries with Drupal 4. Turn Drupal into a web services provider using REST 5. Create a mobile-first responsive Drupal application 6. Run SimpleTest and PHPUnit to test Drupal 7. Understand the plugin system that powers many of Drupal 8's new APIs to 8. extend its functionality 9. Get to grips with the mechanics of the configuration management system and the 10. ability to import and export site configuration

Building eCommerce sites using Magento	Project-eCommerce
1. Set up the development and production environment of Magento 2 2. Understand the new major concepts and conventions used in Magento 2 3. Build a miniature yet fully-functional module from scratch to manage your ecommerce platform efficiently 4. Write models and collections to manage and search your entity data 5. Dive into backend development such as creating events, observers, corn jobs, 6. logging, profiling, and messaging features 7. Get to the core of frontend development such as blocks, templates, layouts, 8. and the themes of Magento 2 9. Use token, session, and Oauth token-based authentication via various flavors 10. of API calls, as well as creating your own APIs 11. Get to grips with testing Magento modules and custom themes, which forms an 12. integral part of development	

Documents Required:

1. All educational certificates
2. Age proof
3. Residential address proof (Permanent and Current)
4. Two Passport size Photograph

Pay your fee Offline as well as Online, For Online Payment Scan QR Code