LONDON CAPITAL COMPUTER COLLEGE

Diploma in Database Developer (991) – Oracle Developer Reports

Prerequisites: Basic knowledge of relational databases; for example, Access.	**Corequisites:** A pass or higher at Diploma level
Aim: This is an intensive Oracle Developer Reports course where the candidate will be able to develop and maintain various types of reports using Oracle Report Builder. The candidate will develop reports in a graphical user interface (GUI) environment and will learn to incorporate graphic images as well as customize reports using PL/SQL. Oracle Reports is one of the most functionally rich, and therefore complex, products available from Oracle Corporation. There is virtually no limit to the combination of options and features that can be used to produce reports. Within this course, candidates are introduced to this tool and will explore some of the most commonly used techniques for publication of information. The major objectives of this course are: consideration of the structure of Oracle Reports, the Oracle Development Suite (ODS) and the overall Oracle enterprise architecture; distribution of reports in all supported formats including HTML, HTML with embedded Java Server Pages, PDF and hardcopy; Quickly building prototypes with the various wizards of the Oracle Reports Builder tool; customizing prototypes using the Report Editor; Individual field formatting for both web and paper layout; advanced customization of the data model; advanced customization of the layout objects; utilizing specialty techniques such as parameters, reusable PL/SQL programs and template files.	
Required Materials: Recommended Learning Resources.	**Supplementary Materials:** Lecture notes and tutor extra reading recommendations.
Special Requirements: The course requires a combination of lectures, demonstrations, discussions, and hands-on labs.	

Intended Learning Outcomes:	Assessment Criteria:
1. Define key concepts used in the Report Builder and describe the variety of terms used to describe a report.	1.1 Analyse the features and functionality in Reports Builder 1.2 Compare new features and enhancements in Web based Reports 1.3 Analyse data model objects 1.4 Analyse layout objects 1.5 Analyse parameter form objects 1.6 Discuss the Property Inspector in Reports Builder 1.7 Explore Oracle Reports executables 1.8 Outline Web Reports 1.9 Discuss the use of PL/SQL in Reports Builder 1.10 Explore the use of templates in Reports Builder 1.11 Analyse the various output formats and capabilities in Reports Builder 1.12 Describe how to access other data sources in Reports Builder. 1.13 Be able to debug reports in Reports Builder 2.1 Outline how to set Properties and Preferences
2. Describe the procedures for using Oracle Reports to create objects and design reports.	2.2 Be able to perform common tasks like: Connecting to a database; Opening a

Outline how to Set Properties and Preferences.		report; Saving a report; Renaming a report; Deleting a report; Archiving a report; Selecting and deselecting objects; Deleting an object; Hiding or showing components
	2.3	Be able to perform data model procedures including: Creating a query; Modifying a query; Using Query Builder; Creating a break group; Creating a matrix (cross-product) group; Creating a data link; Creating or editing a formula column; Creating a summary column; Creating or editing a placeholder column
	2.4	Be able to access non-Oracle data sources
	2.5	Explore how to set database roles
3. Outline how Reports Builder enables to create any type of report that displays barcodes used to make tasks like tracking shipping orders and employee identification numbers easier.	3.1	Analyse how to use the Java importer to add the barcode JavaBean for a paper report.
	3.2	Explore how to create a package to store information
	3.3	Outline how to create a Report trigger
	3.4	Outline how to use the Data Model view and toolbar to create a data model with a formula column for a paper report.
	3.5	Describe how to create a simple JSP-based Web report.
	3.6	Explore how to create formula columns to call the barcode data for a Web report.
	3.7	Be able to edit the JSP code in the Web source view.
	3.8	Be able to run report to the Web
	3.9	Explore bursting and distributing reports
4. Describe how to create reports that include the PL/SQL datatype REF CURSOR, when to base a query on a REF CURSOR and the benefits of storing program units in the Oracle database.	4.1	Define a ref cursor type
	4.2	Explore the process of creating a ref cursor query
	4.3	Analyse how create links between ref cursor queries
	4.4	Outline how to create columns to summarize the data
	4.5	Explore the process to create a paper layout
	4.6	Be able to move the SELECT statement into a package
	4.7	Analyse the process of moving packages into a library
5. Building a Report with an XML Pluggable Data Source	5.1	Describe how to create a report manually with SQL and XML queries
	5.2	Analyse how to use the Data Wizard to create an XML query.
	5.3	Explore how create a data link between a SQL query and an XML query.
	5.4	Analyse how use the Report Wizard to create a layout for a report.
	5.5	Outline how to use format triggers and

			procedures to apply alternating row colors.
		5.6	Be able to use a group filter to sort XML data.
6.	Building a Report Using Express Data	6.1	Outline how to use the Report Wizard to define the Express query.
		6.2	Be able to streamline the Express query by specifying dimension values.
		6.3	Explore how add summary and calculated totals using the Data Model view
		6.4	Be able to re-arrange the report layout, add the summary and custom measure columns
7.	Building a Report with a Text Pluggable Data Source	7.1	Be able to set up the text PDS configuration file (textpds.conf)
		7.2	Be able to use the Report Wizard to create a report
		7.3	Be able to use the Report Wizard to create a tabular report with a paper layout.
		7.3	Be able to use the Report Wizard to create a mailing label report
		7.4	Be able to use the Report Wizard to create a form letter report
8.	Building a Master-Master Report	8.1	Explore how to create a new report manually
		8.2	Be able to use the Data Wizard to create queries
		8.3	Be able to use the Report Wizard to layout the data
		8.4	Be able to use the Paper Layout view to add white space
		8.5	Outline how to format fields in monetary values
9.	Building a Single-Query/Two-Query Group Report	9.1	Explore how to use the Report Wizard to create the data model and layout simultaneously.
		9.2	Be able to assign a format mask to monetary values
		9.3	Be able to use the Property Inspector to add white space
		9.4	Analyse how to add a column to the break group
		9.5	Explore how to re-default the layout with the Report Wizard
10.	Building a Summary Report	10.1	Be able to create a data model with summaries and lay out the data with the Report
		10.2	Explore how to format fields in the Paper Design view
		10.3	Be able to examine the summaries and their properties
11.	Building a Header and Footer Report	11.1	Explore how to create a data model and a

			layout
		11.2	Analyse how to move data summary closer to its label
		11.3	Outline how to add a heading that repeats on all pages
		11.4	Describe how to add white space and format monetary values
12.	Building a Report with Graphics, Text and Color	12.1	Analyse how use the Report Wizard to create a simple report definition.
		12.2	Explore how to modify the appearance of a report in the Paper Layout view: adding a border around the report; changing the font size and style; adding bullets a report; displaying a line between each record; adding a title to the report
13.	Creating a matrix report	13.1	Analyse how to create a matrix report with a single/multiple query data model
		13.2	Explore how to add summaries and format monetary values
		13.3	Be able to substitute zeroes for blanks in a matrix layout
		13.4	Outline how to add a grid.
14.	Building a Cheque Printing Report with Spelled-Out Cash Amounts	14.1	Be able to use the Report Wizard to create a simple form report.
		14.2	Analyse how use the PL/SQL Editor to create a PL/SQL function and the DataModel view to create a formula column.
		14.3	Outline how to use the DataModel view to create a second query and link the two queries together.
		14.4	Be able to use the Paper Layout view to import a blank cheque image and add fields necessary for printing the cheque and cheque stub. Use the Paper Design view to arrange the new fields on the blank cheque image.
		14.5	Analyse how to use the Paper Design view to create a check stub and the Report Block Wizard to create a simple tabular report that displays order details.
15.	Building an Invoice Report	15.1	Explore how to create a new, empty report
		15.2	Be able to create two queries with a data link between them
		15.3	Outline how to add two summary columns and a formula column to the data model to include on the invoice
		15.4	Analyse how to prepare the layout for inserting the invoice information
		15.5	Be able to create new fields for the invoice information, positioning them in the correct locations on the invoice form

Recommended Learning Resources: Oracle Developer Reports

Text Books	• Oracle Reports: Oracle Reports Certification Review by Mark Schmitz. ISBN-10: 1603320660 • Crystal Reports on Oracle by Marie Annette Harper. ISBN-10: 0072230797 • Crystal Reports Professional Results by George Peck. ISBN-10: 0072229519
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	Oracle Database