Seva Mandal Education Society's
Smt. Kamlaben Gambhirchand Shah Department of Computer Applications under
Dr. Bhanuben Mahendra Nanavati College of Home Science (Autonomous) NAAC
Re-Accredited 'A+' Grade with CGPA 3.69 / 4
UGC Status: College with Potential for Excellence
Selected under "Enhancing Quality and Excellence in select Autonomous College" by Rashtriya Ucchatar Shiksha Abhiyan (RUSA)
'Best College Award 2016-17' adjudged by S.N.D.T. Women's University
Smt. Parmeshwari Devi Gordhandas Garodia Educational Complex
338, R.A. Kidwai Road, Matunga, Mumbai - 400019. Tel: 24095792 Email: smesedu@gmail.com

VALUE ADDED COURSE

COURSE NAME: COMPETITVE EXAM TRAINING
CREDITS: 2 DURATION: 60 HOURS

Objectives:

- To enhance the employability quotient of the students
- To think critically and apply basic mathematics skills to interpret data, draw conclusions and solve problems
- To develop proficiency in numerical reasoning
- To help apply quantitative reasoning in aptitude tests.

Outcomes:

on successful completion of the course the students will be able to:

- Understand the basic concepts of quantitative ability
- Understand the basic concepts of logical reasoning
- Acquire satisfactory competency in use of verbal reasoning
- Solve campus placements aptitude papers covering Quantitative Ability, Logical Reasoning and Verbal Ability
- Compete in various competitive exams like CAT, MH-CET, CMAT, GATE, GRE, GATE, UPSC, MPSC etc.

Code No.	Course	TC	Th C	Tu C	Int	Ext	Total
-	**Competitive Exam Training**	**2**	**2**	**-**	**-**	**50**	**50**

Module No.	Objective	Content	Evaluation
1	Students will understand the basic concepts of Quantitative Ability	**1. Basics of Quantitative Ability** • Number system • HCF and LCM • Percentage • Ratio and Proportion and Partnership	50 marks test will be conducted at the end of the course
	Students will learn various arithmetic topics which will enable them to solve the advance level problems.	**2. Arithmetic Quantitative Ability** • Mixtures and Alligation • Average • Profit and Loss • Time, Speed and Distance • Time and Work, Pipes and Cisterns • SI and CI, Number Series • Permutations and Combinations • Probability • Set Theory • Clock and Calendar	
2	Students will be able to analyse analyze situations, check for limitations, and examine appropriate methods of solutions using trigonometry & Mensuration	**3. Basic Geometry** • Trigonometry • Mensuration	
	Students will be able to identify logical relations among statements; and analyze logically	**4. Logical Reasoning** • Linear and Circular arrangements and case-based puzzles, • Data Interpretation • Blood Relations • Direction Sense • Arithmetic Reasoning • Logical Word Sequence	

	complex statements.		
	Students will be able to define syllogism, describe the deductive	**5. Verbal Reasoning** • Syllogisms • Data Sufficiency	

	reasoning used in syllogism and identify true and false conclusions in syllogism		

EVALUATION:

1) 50 marks test will be conducted at the end of the course and certificate will be given to only those who pass the exam.

TEXT AND REFERENCE BOOKS:

1. Arun Sharma, 6th June 2019, *Teach Yourself Quantitative Aptitude: Useful for all competitive examinations.* McGraw Hill; Second edition
2. Aggarwal R. S., 2020, *Quantitative Aptitude for Competitive Examinations - Quantitative Aptitude (English, Paperback, Aggarwal R. S.) - Quantitative Aptitude R.S Agrawal, S.Chand, English Medium with 0 Disc (English, Paperback, Aggarwal R. S.).* S. Chand Publishing
3. Aggarwal R. S., 1 January 2018, *A Modern Approach to Verbal & Non-Verbal Reasoning.* S Chand Publishing; 2nd edition

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COURSE: ORACLE PL/SQL PROGRAMMING (SEM IV)

CREDIT : 2 DURATION : 60 HOURS

Objectives:

- To help students to enhance the knowledge and understanding of PL/SQL.
- To enable the students to use the Relational model and how it is supported by SQL and PL/SQL.
- To know the use of the PL/SQL code constructs of IF-THEN-ELSE and LOOP types as well as syntax and command functions.

OUTCOME:

The students will be able to

- Learn the basics of PL/SQL.
- Understand how to implement PL/SQL structures.
- Use stored procedures, functions and packages in PL/SQL.
- Learn the concepts of the Cursors.

	Oracle PL/SQL Programming	**-**	**-**	**2**	**25**	**25**	**50**

Module No	Objective	Content	Evaluation
1	Students will be able to learn the basic of PL/SQL. Students will be able to understand how to implement PL/SQL Structures. Students will be able to develop logic within PL/SQL program blocks.	**1.1. BASICS OF PL/SQL** · PL/SQL architecture · PL/SQL and SQL*Plus · PL/SQL Basics, Variables, Constants, data types & error handling · PL/SQL wrapper utility **1.2. PL/SQL STRUCTURES** · Simple blocks · Control structures · PL/SQL records · Recognizing the Basic PL/SQL Block and Its Sections · Describing the Significance of Variables in PL/SQL · Distinguishing Between PL/SQL and Non PL/SQL Variables · Declaring Variables and Constants · Executing a PL/SQL Block	Viva will be conducted . (Marks 5)

2	Students will be able to handle program exceptions. Students will be able to develop logic within PL/SQL program blocks.	**2.1. ERROR CHECKING – EXCEPTION HANDLING** · Defining exceptions · Using the when others clause · Ensuring complete error checking · Passing error messages to calling routine **2.2. BOOLEAN LOGIC IN PL/SQL** · Identifying the Uses and Types of Control Structures · Constructing an IF Statement · Constructing and Identifying Different Loop Statements · Controlling Block Flow Using Nested Loops and Labels · Using Logic Tables · If-then-else structure · Testing for numbers characters and Booleans **2.3. ITERATION IN PL/SQL** · For loop · While loop	Quiz on Using ICT Tool EDMODO (Marks 5)
3	Students will be able to learn how to use explicit and implicit database cursors. Students will be able to understand PL/SQL Tables. Students will be able to know how to use the advanced features of nested blocks and subprograms.	**3.1.CURSORS IN PL/SQL** · Cursor basics · Using a cursor for a multi-row SQL query **3.2.PL/SQL TABLES** · Defining PL/SQL tables · Reasons to use PL/SQL tables · Populating a PL/SQL table · Retrieving from a PL/SQL table **3.3.NESTED BLOCKS IN PL/SQL** · Creating nested blocks · Understanding scope in nested blocks	Students will be given Assignment (Marks 5)

4	Students will be able to know how to create stored procedures and	**4.1.TRIGGERS IN PL/SQL** · Triggers and database events · Defining a trigger · Timing a trigger	Practical Test (Marks 10)
	functions for reuse and maintenance. Students will be able to use packages in PL/SQL.	· Enabling and disabling a trigger **4.2.STORED PROCEDURES, FUNCTIONS AND PACKAGES** · Basics of stored procedures · Basics of functions · Basics of packages · Defining stored procedures & functions · Function and stored procedures prototypes · Passing arguments to functions and stored procedures · Recompiling functions and stored procedures · Pinning packages in the SGA with dbms_shared_pool.keep · Package forward declaration · Package dependency · Package overloading · Listing package information	

EVALUATION:

1) On Four Modules of 25 marks
2) Final Practical Examination of 25 marks
3) Total marks = Internal 25 + External 25 = 50

REFERENCE BOOKS:

1. Bayross, I. (2010). SQL, PL/SQL the Programming Language of Oracle Paperback – 1 . USA: BPB Publications.
2. Feuerstein, S., & Pribyl, B. (2014). Oracle PL/SQL Programming (SIXTH ed.). USA: O'Reilly Media.
3. Forta, B. (2016). Oracle PL/SQL Training Guide Paperback (FIRST ed.). USA: BPB Publications.
4. Rosenzweig, B. (n.d.). Oracle PL/SQL by Example (FIFTH ed.). USA: Prentice Hall Professional Oracle.
5. Urman, S. (1997). Oracle8 PL/SQL Programming (SECOND ed.). USA: Osborne McGraw-Hill.

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