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Reg. No.:									•

# Question Paper Code: 95333

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

#### Elective

#### Software Engineering

### ESE 512 — CLIENT SERVER COMPUTING

(Regulations 2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

 $PART A - (10 \times 2 = 20 \text{ marks})$ 

- 1. What is right sizing? List out any four benefits of it.
- 2. What is middleware? State its importance.
- 3. What is a trigger? Give the general format of a CREATE trigger.
- 4. Distinguish between chained and nested transactions.
- 5. What is ODBC?
- 6. List any four special features available only in ODBC 3.0.
- 7. What is the function of graphics device interface?
- 8. State the advantages of dynamic link libraries available in windows.
- 9. What is MDI? Mention the limitations of MDI.
- 10. What is OLE? What is its use?

## PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	(i)	Explain the building blocks of client / server.	(8)				
		(ii)	Explain the working method of remote procedure calls. Enumer their advantages.	ate (8)				
			$\mathbf{Or}$					
	(b)	Expl (i) (ii) (iv)	lain the functions of the following servers  Database server  Transaction server  Groupware server  Web server.	<ul><li>(4)</li><li>(4)</li><li>(4)</li><li>(4)</li></ul>				
12.	(a)	(i)	Explain the following architectures:  (1) Multithread architecture.  (2) Hybrid architecture.	(8)				
		(ii)	Briefly discuss about transaction processing monitors.	(8)				
			Or					
	(b)	(i)	Draw the block diagram for client / server transaction process model. Explain the functions of each component in the model.	sing (8)				
		(ii)	Briefly explain the transaction management standards.	(8)				
13.	(a)	(i)	Draw ODBC architecture and explain the functions of excomponent in the architecture.	ach (8)				
		(ii)	Explain the functions of ODBC driver manager.	(8)				
$\cdot$ Or								
	(b)	(i)	What are the types of ODBC driver? Explain the functions of extype of the driver.	ach (8)				
		(ii)	Enumerate the types of data source and explain each one of them.	(8)				
14.	(a)		cribe the visual C++ application build process with a suitable bl gram.	lock (16)				
			Or					
	(b)	(i)	Write a VC++ program to draw a clock shape.	(8)				
		(ii)	Write a VC++ program with menu to calculate simple interest a compound interest. Assume suitable data on your own.	and (8)				

15. (a) Illustrate the procedure and necessary code to create a MDI in VC++ for a banking application. Assume suitable conditions on your own and present the same. (16).

Or

- (b) Illustrate the procedure and necessary code in VC++ to connect a student database with student data entry program. The program should have the following options.
  - (i) Add student record.
  - (ii) Delete student record.
  - (iii) Modify student record.
  - (iv) Exit.

(16)