E			Reg. No. :								
			Question Pa	per Code	e: 56l	J <b>01</b>					
Ph.D. COURSE WORK EXAMINATION, MAY 2018											
Elective											
Structural Engineering											
15PSE601 – RESEARCH METHODOLOGY											
(Common to PED & CAD/CAM)											
			Question Paper Code: 56U01Ph.D. COURSE WORK EXAMINATION, MAY 2018ElectiveStructural Engineering15PSE601 – RESEARCH METHODOLOGY(Common to PED & CAD/CAM)(Regulation 2015)hoursMaximum: 100 MarksAnswer ALL QuestionsPART - A (5 x 20 = 100 Marks)tinguish between research methods and researchCO1- U(5)tout define research problem? Explain the variousCO1- U(15)ortout the variables generally used in hypothesis generationCO1- U(15)a note on how a research plan will be developed fromCO2- U(20)tresearch design. Briefly explain about the various types ofCO2- U(20)								
							ks				
			PART - A (5 x	tion Paper Code: 56U01 WORK EXAMINATION, MAY 2018 Elective Bructural Engineering RESEARCH METHODOLOGY non to PED & CAD/CAM) (Regulation 2015) Maximum: 100 Marks nswer ALL Questions 7 - A (5 x 20 = 100 Marks) earch methods and research CO1- U (5) arch problem? Explain the various CO1- U (15) ng a problem. Or nerally used in hypothesis generation CO1- U (15) metally used in hypothesis generation CO1- U (5) search plan will be developed from CO2- U (20) on. Or fly explain about the various types of CO2- U (20) ors influencing the research design. Ethniques used for data collection. CO3- Ana (20) Or easis? Explain how it is useful for CO3- U (20)							
1.	(a)	(i) Distinguish betw methodology.	ween research meth	hods and re	esearch			CC	)1- U	J	(5)
	<ul><li>(ii) How do you define research problem? Explain the various techniques used in defining a problem.</li></ul>							CC	)1- U	J	(15)
			Or								
	(b)	.,		ed in hypot	hesis g	enerati	on	CC	)1- U	J	(5)
		(ii) Explain in detai	l the types of resea	arch.				CC	)1- U	J	(15)
2.	(a)		*	an will be	e devel	oped	from	CC	)2- U	J	(20)
			Or								
	(b) Define research design. Briefly explain about the various types or research designs and the factors influencing the research design.							CC	)2- U	J	(20)
3.	(a)	Discuss about the va	arious techniques u	used for dat	a colle	ction.		CC	)3- A	na	(20)
			Or								
	(b)	What is testing of	f hypothesis? Exp	plain how	it is	useful	for	CC	)3- U	J	(20)

illustrating a research problem with two examples.

4. (a) Enumerate briefly the mechanism of report writing and underline CO4- Ana (20) the precaution to be taken at the time of report writing.

Or

- (b) Write the different steps involved in writing the research reports CO4- U (20) and give the layout of research report.
- (a) Identify and explain any six ethical considerations in research. CO5- Ana (20) Discuss the possible consequences of violating research ethics.

Or

(b) Write an elaborate note on plagiarism and citation basics. CO5- Ana (20)