Reg. No. :			

Question Paper Code: S 4669

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2009.

Eighth Semester

Civil Engineering

GE 406 — TOTAL QUALITY MANAGEMENT

(Common to all Branches of B.E./B.Tech. except Metallurgical Engineering)

(Regulation 2001)

Time: Three hours

Ma cim im: 100 marks

Answer ALL questions.

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

- What are the basic concepts required for TQM?
- 2. Why is it difficult to change organisation of coats re?
- 3. Name the 5's (five's).
- 4. Define Kaizen.
- 5. Distinguish between control charte for variables and attributes.
- Define process capability.
- 7. What are the objective, f QFD?
- 8. Why TPM is req : 1?
- Indicate the importance of documentation while developing the quality system in an organisation.
- 10. What are the stages of audit?

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

11.	(a)	Expl	clain Deming's philosophy for the improvement of quality, productivity															
		and	competitive position.												(16)			
									C	r								
	(b)	Disc of su						min	ıg a	nd	list	out	the c	hara	cteri	stic 1		riors +8)
12.	(a)	(i)	What is the concern of most consumer? Is it price of the service? Explain in detail.													the p	rodu	ct or (4)
		(ii)			are fee					vays	of r	eceiv	ing c	U 1607	er f	eedba	ack? l	How (12)
									C)r								
	(b)	(i)			are ns c							JE.	ın i	indus	tries	? Die	cuss	the (8)
		(ii)	Ho	w is	PD	SA	cycl	e us	ed?	Dis	сь'. ₄	with	a cas	e stu	dy.			(8)
13.	(a)	(i)	Exq	Explain the tree diagra, and arrow diagram. (8)														
		(ii)	Explain the stages of biv sigma in process improvement. (8)										(8)					
								7	C)r								
	(b)	In the	d in	the	e in	PL	rtio	of	15	ng i sar	rod a nples	ssem of a	bly, t i0 ite	he n ms i	umbe n eac	er of c	lefect mple	ives are
	Sample	No.		4	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	No. of defective	ves:	1	8	7	5	4	8	7	9	21	12	10	9	8	16	15	17
		(2)									imits trol.	, con	struc	t the	np c	hart	and s	tate (8)
-	7	(ii)									e con		imite	, det	ermi	ne th	e rev	rised (8)
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14.	(a)	(i)	Explain how the Taguchi loss function differences function assumed from specifications and		nal (8)					
		(ii)	Explain FMEA with an example.		(8)					
			Or							
	(b)	(i)	Explain the six major losses of TPM.		(8)					
		(ii)	Explain the House of Quality.		(8)					
15.	(a)	Explain Quality Function Deployment (QFD) with a gritable example what are its advantages and limitations?								
			Or							
(b)	Write short notes on									
		(i)	Taguchi's quality loss function.		(8)					
		(ii)	FMEA.		(8)					