		Reg. No.											
प्रज्ञानं ब्रा Manipa NSPIRED B	Manipal Instit (A Constitu	t ute of Te ent Institute of	ech Man	n (ipal)lo Un	gy iver	7 , N sity)	/Ia	nij	pa]		CNOWLEDGE IS P CNOWLEDGE IS P	OWER ASO
١	/I SEMESTER B.TECH (II		AND	PR	OD	UC	TIO	N) E	ENG	INE	ER	ING	
	END SEMESTE	ER EXAMINA	ΤΙΟΝ	۱S,	JU	NE/	JUL	Y 2	016				
	SUBJECT: COMPUTER IN	EGRATED M	ANU	FAC	TU	RIN	G S`	YST	EMS	6 [M	ME	320]	
-	R Fime: 3 Hours	EVISED CREI	DIT S	SYS	TEN	1		I	MAX	. MA	RKS	S: 50	
	Ir	structions to	Cano	dida	ites	:							
	Answer ANY FIVMissing data may	E FULL questible suitably assu	ons. med.										
1A.	With neat sketches explain	bridge and gar	ntry c	onfi	gura	atior	n of (CMN	1.			04	
1B.	With a neat sketch explain manufacturing process model.											03	
1C.	List and explain any three of	lata files of flex	ible r	man	ufa	cturi	ng s	yste	m.			03	l
2A.	Draw the structure of MRP	system and ex	plain	the	inp	uts.						04	
2B.	List and explain four methods of evaluating investment alternatives.											04	
2C.	With neat sketches explain	process type la	ayout	t.								02	
3A.	Sketch the cycle of activiti system. List eight problems	es in a traditic associated wit	nal p h it.	orod	lucti	on p	olanı	ning	and	d co	ntrol	04	
3B.	Explain eight functions of computer in computer integrated manufacturing systems.										04		
3C.	The production machine is rate is 25 units / hour. Du good parts and was idle for a) Production capacity	operated 60 h Iring a certain remaining peri of the machine	/wee wee od. [k at k, tl Dete	t ful he i ermii	l cap maci ne	bacit hine	y. It pro	s pr duc	oduc ed 1	tion	02	
	b) Utilization of the made	chine during the	e wee	ək									
4A.	Explain with sketches the c	lassification of	NC/C	CNC	; ma	achir	ne to	ols.				05	
4B.	Write a CNC part program	for the workpie	ce as	s sh	own	in F	ig. (Q 4E	8.			05	
5A.	Sketch and explain shop flo	or control syste	em.									05	
5B.	Write a CNC part program	for the workpie	ece a	as s	how	'n in	Fig	. Q	5B.	Wid	th of	05	
Ν	/ME 320								Р	age 1	l of 2	2	

the slot is 5mm. Drill 4 holes of diameter 14mm.

- 6A. Explain Opitz classification and coding system with its basic structure and an example
- 6B Discuss the advantages of Dovetail and V- type guideways. Draw sketches. 04
- 6C Justify the use of flexible couplings in CNC machines



Fig. Q 4B



Fig. Q 5B

02