Ha	all Ticket Number :	R-20		
Cod	le: 20A343T (SS)		<u> </u>	
	III B.Tech. I Semester Regular Examinations Dec 2022/Jan Design of Machine Elements-I	2023		
	(Mechanical Engineering)			
Max	«. Marks: 70	Time: 3	Hours	
NT /	******			
Note	 2: 1. Question Paper consists of two parts (Part-A and Part-B) 2. In Part-A, each question carries Two mark. 			
	3. Answer ALL the questions in Part-A and Part-B			
	PART-A			
	(Compulsory question)			
1. Answ	ver all the following short answer questions $(5 \times 2 = 10M)$		СО	BL
a)	What are the uses of preferred numbers?		1	L1
b)	Explain about endurance limit.		2	L2
C)	Explain stresses in lab welded joint.		3	L1
d)	What are the types of cotter joints?		4	L1
e)	What are the stresses induced in shafts subjected to bending and twisting.		5	L1
	PART-B			
Ar	nswer <i>five</i> questions by choosing one question from each unit (5 x 12		-	
		Marks	CO	BL
0)	UNIT-I	014		
2. a)	Discuss the steps involved in design of machine elements.	6M	1	L2
b)	Classify the different types of loads and explain corresponding stresses induced in machine members in brief.	6M	1	L2
	OR	0	·	
3. a)	Explain any two theories of failures.	6M	1	L2
b)	Find the diameter of a round rod subjected to a combined bending moment	t		
	of 2 kNm and a torque of 1.2 kNm? The allowable normal and shear			
	stresses for the material are 120 MPa and 75 MPa respectively	6M	1	L4
	UNIT–II		_	
4. a)	Describe Goodman's criteria.	6M	2	L1
b)	A Connecting rod of a steam engine is subjected to an axial load of 70kN which is completely reversed. Determine the required diameter of rod			
	using a factor of safety 2.6. For material of the rod yield strength: 310MPa			
	ultimate strength: 580MPa, surface finish factor: 0.78, size factor: 0.81.	6M	2	L4
	OR			
5. a)	Explain the following terms: (i) Stress concentration (ii) Endurance limit	4M	2	L2
b)	.	•		
	stress of 250 N/mm ² . The bar is made of steel 40C8 ($S_{ut} = 600 \text{ N/mm}^2$) Calculate the life of the bar for a reliability of 90%.	8M	2	L4
		0.71	-	

L5

L4

L4

L4

L2

L4

L4

3

4

5

5

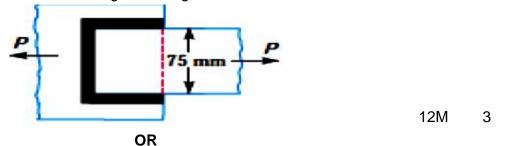
5

12M

6M

UNIT–III

6. A plate 75mm wide and 12.5mm thick is joined with another plate by a single transverse weld and a double parallel fillet weld as shown in fig. The maximum tensile and shear stresses are 70 MPa and 56 MPa respectively. Find the length of each parallel fillet weld, if the joint is subjected to both static and fatigue loading.



The cylinder head of effective diameter 300mm for a steam engine is subjected to 1.2 MPa. It is held in position by means of 12 studs. A soft copper gasket is used to make joint leak proof. Determine the size of blots or studs, so that the stress should not exceed 100 MPa.

UNIT–IV

- Design a knuckle joint to transmit 150 kN. The design stresses may be taken as 75 MPa in tension, 60 MPa in shear and 150 MPa in compression.
 12M 4
- 9. A 15 kW, 960 r.p.m. motor has a mild steel shaft of 40 mm diameter and the extension being 75 mm. The permissible shear and crushing stresses for the mild steel key are 56 MPa and 112 MPa. Design the keyway in the motor shaft extension. Check the shear strength of the key against the normal strength of the shaft.

UNIT–V

- 10. a) How the shaft is designed when it is subjected to twisting moment and bending moment?
 - b) A shaft is transmitting 100 kW at 180 r.p.m. If the allowable shear stress in the material is 60 MPa, find the suitable diameter for the shaft. The shaft is not to twist more that 1° in a length of 3 m. Take C = 80 GPa.
 6M

OR

11. Design and draw a cast iron flange coupling for a mild steel shaft transmitting 90 kW at 250 r.p.m. The allowable shear stress in the shaft is 40 MPa and the angle of twist is not to exceed 1° in a length of 20diameters. The allowable shear stress in the coupling bolts is 30 MPa. 12M *** End ***

\sim	ode: 20A353T	20		
C	III B.Tech. I Semester Regular Examinations Dec 2022/Jan 2023			
	Design of Machine Elements - II			
	(Mechanical Engineering)			
N	Nax. Marks: 70 Time:	3 Hou	Jrs	
ЪT				
IN	ote: 1. Question Paper consists of two parts (Part-A and Part-B) 2. In Part-A, each question carries Two mark.			
	3. Answer ALL the questions in Part-A and Part-B			
	PART-A			
	(Compulsory question)			
1	L. Answer all the following short answer questions $(5 \times 2 = 10M)$		СО	Ε
	a) Define creep & slip in belts.		CO1	L
	b) Define bearing characteristic number.		CO2	
	c) Why are the ball & roller bearing called anti-friction bearing?		CO3	L
	d) Define module and circular pitch.		CO4	L
	e) What are the commonly used materials for piston?		CO5	L
	PART-B	•		
	Answer <i>five</i> questions by choosing one question from each unit ($5 \times 12 = 60$ Mar	ks) Marks	со	
	UNIT–I	Marks	00	
	A leather belt 9mm x 250mm is used to drive a CI pulley 900 mm in diameter at			
	336 rpm. If the arc of contact on smaller pulley is 120° and the stress in the tight			
	side is 2 MPa, find the power capacity of the belt. The density of the leather may	1014	~~~	
	be taken as 980 kg/m ³ and coefficient of friction of leather on CI as 0.35.	12M	CO1	
	OR A safety valve of 60 mm diameter is to blow off at a pressure of 1.2 N/mm ² . It is			
	held on its seat by a close coiled helical spring. The maximum lift of the valve is			
	10 mm. Design a suitable compression spring of spring index 5 and providing an			
	initial compression of 35 mm. The maximum shear stress in the material of the			
	wire is limited to 500 MPa. The modulus of rigidity for the spring material is 80			
	kN/mm ² . Calculate : 1. Diameter of the spring wire, 2. Mean coil diameter, 3. Number of active turns, and 4. Pitch of the coil.	12M	CO1	
		12101	001	
a)		02M	CO1	
b)				
	Journal is 20kN. Shaft material is C40. Length of journal is 90mm.	10M	CO2	2
	OR			
	A 49.9 mm diameter hardened and ground steel journal rotates uniformly at 1500			
	rpm in a lathe turned stationary bronze journal bearing, which is 50 mm in length. The temperature of the oil is 65°C. Determine			
	i. Max. Radial load that the journal can carry.			
	ו. ועמא, ולמעומו ועמע נוומן נווק ועטווימו טמון טמו ע.			

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6.	UNIT–III Specify a suitable deep groove ball bearing for radial load of 2.5kN, and thrus load of 0.9kN. The operating speed is 3000 rpm. Assume steady load and life or 15000 hours at 95% reliability. Recommend the bearing with the maximum	f		
	possible bore size.	12M	CO3	L6
	OR			
7.	Specify a suitable single row deep groove ball bearing with bore size of 40 mm and is required to resist a radial load of 4 kN and axial load of 3 kN. The shaf rotates at 1400 rom. The bearing is required to be in operation for 12000 hours with 90% reliability.	t	CO3	L6
_	UNIT–IV			
8.	Design a straight spur gear to transmit power of 8 kW. The pinion speed is 720 rpm and the speed ratio is of 2. Both the gears are made up of same surface hardened carbon steel with 55 RC and core hardness less than 350BHN Ultimate strength is 720 N/mm ² and yield strength is 360 N/mm ² .)	CO4	L6
0		¢		
9.	Design a pair of helical gears to transmit 30kW power at a speed reduction of 4:1. The input shaft rotates at 2000 rpm. Take helix angle and normal pressure angle equal to 25° and 20° respectively. Both pinion and gear are made up of steel. The number of teeth on the pinion may be taken as 30. Name of the part permissible stress BHN Pinion 55MPa 340	9		
	Gear 40MPa 300	12M	CO4	L6
	UNIT–V			
10.	Design a connecting rod for a single acting 4-S diesel engine that runs at 600 rpm and develops a maximum pressure of 3.4 MPa. Other particulars of the engine are 140 mm bore, 190mm stroke and length of the connecting rod 380 mm. The weights of the reciprocating parts may be taken as 4 kg. Use suitable values of the stresses. The connecting rod is made up of alloy steel 37Mn2. Take I/d ratio for the crank pin and wrist pin as 1.5 and the corresponding allowable bearing pressure as 10MPa and 50MPa. Take =0.008kg/m ³ and allowable stress in bolts as 60MPa and in cap as 80MPa. Draw a neat sketch of the)))))	005	
	connecting rod designed. OR	12101	CO5	LO
11.	Design a C.I trunk type piston for a single acting four stroke petrol engine	د		
	developing 5kW at 600 rpm. Diameter of piston is 120 mm and the maximum explosion pressure is 4.5MPa Heat supplied to the engine is 19000KJ/kWh. About 6% of heat is conducted through the piston crown. The heat conduction factor for C.I engine may be taken as 46 W/m/°C. The temperature difference between the centre and edge of the	 	005	
	crown may be taken as 250°C. *** End ***	12M	CO5	Lb

UNIT-I2. a)Write a short note on low level arrays. And Referential arrays6M1Lb)Explain the concept of compact array in python6M1Lb)Explain the concept of python sequence types.12M1LUNIT-ICor3.Discuss the efficiency of python sequence types.12M1LUNIT-II4. a)Implement Stack ADT using single linked list.8M2LOR2UNIT-II4M2LUNIT-II4M2LCorUNIT-III6a)Oefine and explain queue ADT. Write a program to remove the node from single linked list using tail reference.8M2LDefine and explain queue ADT. Write a program for factorial using recursion. OR6M3LOR3LVINIT-VI83Write a program for merge sort to sort the list of elements shown below in ascending order 23 113477866504312M3LUNIT-V8.Write an algorithm to insert an element in binary search tree. UNIT-V6M4LUNIT-V9.a)Differentiate standard and compressed tries. Components. What is the largest number of edges it might have?6		Ha	III Ticket Number :	20	7		
Data Structures using Python (Mechanical Engineering) Max. Marks: 70 Time: 3 Hours Mark. Marks: 70 Time: 3 Hours Note: 1. Question Paper consists of two parts (Part-A and Part-B) 2. In Part-A, each question carries Two mark. 3. Answer ALL the questions in Part-A and Part-B 2. In Part-A, each question carries Two mark. 3. Answer ALL the questions in Part-A and Part-B Computatory question 0 BL a Note: 1. Question Paper consists of two mark. 3. Answer all the following short answer questions (5 X 2 = 10M) CO BL a) Discuss Built-in Data Structures in python 1 L2 c) List the advantages of recursion. 3 L1 OK Answer five questions by choosing one question from each unit (5 x 12 = 60 Marks) Marks CO E Answer five questions by choosing one question from each unit (5 x 12 = 60 Marks) Marks CO Constructure And Referential arrays. 6M 1 L <td colspan<="" th=""><th></th><th>Co</th><th>de: 20A55FT</th><th>-20</th><th></th><th></th></td>	<th></th> <th>Co</th> <th>de: 20A55FT</th> <th>-20</th> <th></th> <th></th>		Co	de: 20A55FT	-20		
[Mechanical Engineering] Max. Marks: 70 Time: 3 Hours Item: 1. Question Paper consists of two parts (Part-A and Part-B) 2. In Part-A, each questions in Part-A and Part-B PART-A Compulsory question CO BL Compulsory question CO BL Compulsory question CO BL Compulsory question CO BL I Answer all the following short answer questions (5 X 2 = 10M) CO CO EXET to the advantages of recursion. 3 L1 I Explain the functionality of priority queue. 3 L2 CO EXET to Marks Marke questions by choosing one question from cach unit (5 x 12 = 60 Marks) Marks CO INIT-I CO EXET to Marks Marks CO INIT-I CO CO <			III B.Tech. I Semester Regular Examinations Dec 2022/Jan 202	3			
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PART-B Marks CO Marks CO Image: CO UNIT—I 2. a) Write a short note on low level arrays. And Referential arrays 6M 1 L Discuss the efficiency of python sequence types. 12M 1 L UNIT—I 4. a) Implement Stack ADT using single linked list. 8M 2 L Discuss the efficiency of python sequence types. 12M 1 L UNIT—I 4. a) Implement Stack ADT using single linked list. 8M 2 L D OR San Define and explain queue ADT. 4M 2 L DNIT—II 6 3 L UNIT—II 6 3 L D Vrite a program for factorial using recursion. 6M 3 L D Write a program for merge sort to sort the list of elements shown below in ascending order 23 11 34 7 8				4	L1		
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b) Draw standard trie for following set of strings { abab, baba, ccccc, bbaaaa} 2M 4 L			OR				
	11.	a)	Explain graph ADT with suitable examples.	10M	3	L2	
*** End ***		b)		2M	4	L4	
			*** End ***				

	На	all Ticket Number :			
		ode: 20A35CT	R-20)	
	CO	III B.Tech. I Semester Regular Examinations Dec 2022/Jan	2023		
		Industrial Management			
	140	(Mechanical Engineering) ax. Marks: 70	Time: 3		
	1010	4X. MUIKS. 70 *******	nine. 5	10013	
	No	te: 1. Question Paper consists of two parts (Part-A and Part-B)			
		 In Part-A, each question carries Two mark. Answer ALL the questions in Part-A and Part-B 			
		PART-A			
		(Compulsory question)			
	1	. Answer <i>all</i> the following short answer questions (5 X 2 = 10M)	CO	BL	
		a) Difference between Line and Staff Organizations	1	L2	
		b) How plant location is different from the plant layout?	2	L1	
		c) What are the various method study chart symbols?	3	L1	
		d) Differentiate PERT and CPM.	4		
		e) List various types of wage incentive schemes.	5	L1	
	^	<u>PART-B</u> Answer <i>five</i> questions by choosing one question from each unit (5 x 12	- 60 Mar	·ke)	
	-	diswer <i>inve</i> questions by choosing one question nom each unit (3 x 12		-	וח
		UNIT–I	Marks	CO	BL
2	a)		6M	4	
۷.			OW	1	L2
	b)	Explain theory x and theory y and show as a manager how you would apply them to motivate your staff.	6M	4	
		OR	OW	1	L2
0	-)		CN 4		
3.	,	Write about departmentation. State its aims and advantages.	6M	1	L2
	b)	Explain features of "functional organization" with suitable			
		example.	6M	1	L2
	、	UNIT-II			
4.	a)	What are the factors affecting the plant location. Explain	784		
		with any one specific industry.	7M	2	L3
	b)	Differentiate between process layout and product layout.	5M	2	L2
		OR			
5.	a)	Name various purchasing procedures and explain any two			
		in detail.	6M	2	L2
	b)	Describe various types of Inventories with suitable examples.	6M	2	L1
		UNIT–III			
6.	a)	Define Work Study. State its objectives. Differentiate			
		between Method Study and Work Measurement	8M	3	L2

b)	Explain the steps involved in method study procedure. OR	4M	3	L2
7. a)	Explain different methods of performance rating in			
·	conducting tine study.	6M	3	L2
b)	Discuss briefly the functions of marketing.	6M	3	L2
	UNIT–IV			
8.	A project consists of nine jobs (A, B, CI) with the following precedence relations and time estimates. Job : A B C D E F G H I Pred : A,B A,B B D,E C,F D,E G,H Ecessor Time : 15 10 10 10 5 5 18 9 15 (days)			
	(i) Draw the project network ; (ii) identify the critical path	12M	4	L3
	OR			
9.	A small project is composed of 7 activities whose time estimates are listed in the table below.			

A otivity	Estimated duration (weeks)									
Activity	Optimistic	Most likely	Pessimistic							
1-2	1	1	7							
1-3	1	4	7							
1-4	2	2	8							
2-5	1	1	1							
3-5	2	5	14							
4-6	2	5	8							
5-6	3	6	15							

a) Find the expected duration and variance for each activity.

b) Calculate the project duration time

UNIT–V

- 10. a) Explain the functions of HRM.
 - b) Discuss the need and significance of merit rating to a modern industrial enterprise.

OR

What is Corporate Strategy Planning Process? Why is this important for long term success of any business organization?
 12M 5

12M

8M

4M

4

5

5

L3

L2

L3

L2

	На	Il Ticket Number :			
		e: 20A352T	R-20)	
	Cou	III B.Tech. I Semester Regular Examinations Dec 2022/Jan 2	2023		-
		Machining Processes			
		(Mechanical Engineering)			
	Max	Marks: 70	Time: 3	HOUIS	
	Note	: 1. Question Paper consists of two parts (Part-A and Part-B)			
		 In Part-A, each question carries Two mark. Answer ALL the questions in Part-A and Part-B 			
		PART-A			
		(Compulsory question)			
1.	Ans	wer <i>all</i> the following short answer questions (5 X 2 = 10M)	СО	BL
	a)	What do you understand by "Tool Signature"?		1	L1
	b)	Differentiate semi-automatic and automatic lathe		2	L2
	c)	Write any one operation on shaper with neat diagram.		3	L1
	d)	How do you Specify a Grinding Wheel		4	L1
	e)	Why should jigs and fixtures be rigid?		5	L1
		PART-B			
	An	swer <i>five</i> questions by choosing one question from each unit (5 x 12 :		-	
		UNIT-I	Marks	CO	BL
1.		Draw Merchants force diagram. State the assumptions			
1.		made in the development of such a diagram.	12M	1	L2
		OR		•	
2	a)	A carbide-cutting tool lasted for 150 min while machining			
	,	M.S at 35 m/min. If a similar tool is used at 30% higher			
		speed to machine M.S. Calculate the tool life. Also			
		calculate the value of cutting speed if the tool is to machine			
		for 2 hours. Assume n=0.3 in Taylors tool life equation			
		VT ⁿ =C.	6M	1	-
	b)	Write the various functions of cutting fluids	6M	1	L1
_		UNIT–II			
3.	a)	How Lathe is specified explain briefly the operations that			
	L-	are performed on Lathe	6M	2	L1
	b)	Diagrammatically explain the thread cutting on the lathe machine.	6M	~	
				2	L2

	OR			
4. a)	Compare automatic and semi-automatic Lathes	6M	2	L2
b)	Explain the working of a multi spindle lathes and applications	6M	2	L2
5	UNIT-III Explain the working of a quick return mechanism of a			
-	shaper and various operations performed on it	12M	3	L2
	OR			
6.	What is the principle of working of milling machines? How do you classify the milling machine? Explain	12M	3	L1
7	What are surface grinding machine, explain various surface grinding machines	12M	4	L2
	OR			
8.	How broaching machine specified? Discuss about push and pull broach	12M	4	L2
9	UNIT-V What are the common types of drill jigs? How does a			
9	template jig differ from a plate jig?	12M	5	L1
	OR			
10.	Explain with neat sketch any two types of clamping device. *** End ***	12M	5	L2

Code: 20A352T

Н	all Ticket Number :													
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	de: 20A351T III B.Tech. I Se	mester	Requ	lar Fx	ami	natic	ons I	Dec	: 202	2/10	un 20'	23		
			plied						202	2,50	20	20		
		(Mech	anico	al Eng	ginee	ring)						
Mo	ax. Marks: 70			* * * *	*****	ĸ					Tim	e: 3 Ho	Urs	
No	te: 1. Question Paper	consists	of two	parts ((Part-	A and	d Pa	rt-B))					
	2. In Part-A, each	•												
	3. Answer ALL the	e questior	ns in Pa		and P RT-A									
			(Com				on)							
1.	Answer all the foll	owing s	•	•	•••			(5 X	2 = 1	OM)		со	BL
	List the advantag				•			,			,		1	L1
	State the effect o		• •					stea	am n	ozzle).		2	L2
	How would you c												3	L2
d)	State the merits of	of gas tu	urbine	s ove	er ste	eam	eng	lines	5				4	L1
e)	Define tonne of re	efrigera	tion				0						5	L2
		C		ΡΑ	RT-B									
A	nswer five question	s by cho	osing	one q	luesti	ion fre	om e	each	unit	(5 x 1	2 = 60) Marks)	
												Marks	CO	BL
				NIT-										
2.	What is meant b				? Ex	plair	n ar	ny o	ne o	of the	efire	4014		
	tube boiler with	a neat s	sketcr									12M	1	L4
				OR										
3.	A simple Rankir					•								
	0.06 bar, the ir							U						
	calculate the cy consumption.	cie em	Icienc	y, wo	ork i	ratio	an	a sp	peci	IC SU	eam	12M		10
	consumption.												1	L2
4	A ourfood cond			NIT-			~ ~ ~	f oto		nor	hour			
4.	A surface conder at a pressure of						-			-				
	temperature at								-					
	36°C. The air le									• •				
	(i) the surface re	-					-							
	is 3.97 kJ/m ² pe	er secor	nd; (ii)) the	cylir	nder	dia	met	er fo	or the	e dry			
	air pump, if it is		-		-		-			strok	te to			
	bore ratio of 1.2	5 and v	olume	etric	effici	iency	y of	0.8	5.			12M	2	L4

0.	belive the general relationship between area, velocity and		
	pressure in nozzle flow.	12M	2 L2
	UNIT–III		
6.	Explain the impulse turbine with a velocity profile diagram.	12M	3 L4
	OR		
7.	In an impulse turbine (with a single row wheel) the mean diameter of the blades is 1.05 m and the speed is 3000 rpm. The nozzle angle is 18°, the ratio of blade speed to steam speed is 0.42 and the ratio of the relative velocity at outlet from the blades to that at inlet is 0.84. The outlet angle of the blade is to be made 3° less than the inlet angle. The steam flow is 10 kg/sec. Draw the velocity diagram for the blades and derive the following: (i) tangential thrust on the blades (ii) axial thrust on the blades (iii) resultant thrust on the blades (iv) power developed in the blades (v) blading efficiency.	12M	3 L4
	UNIT-IV		
8.	A gas turbine unit has a pressure ratio of 6:1 and maximum cycle temperature of 610 °C. The isentropic efficiencies of the compressor and turbine are 0.80 and 0.82 respectively. Calculate the power output in kWs of an electric generator geared to the turbine when the air enters the compressor at 15 °C at the rate of 16 kg/s. Take $c_p = 1.0005$ kJ/kg K and =1.4 for the compression process, and take $c_p = 1.11$ kJ/kg K		
	and $= 1.333$ for the expansion process.	12M	4 L5
	OR		4 LO
9.	Explain the working principle, advantages and limitations of		
0.	ram jet and pulse-jet engine with neat sketch	12M	4 L2
	UNIT–V		
10.	Derive an expression for COP for air refrigeration system working on reversed Brayton cycle.	12M	5 L3
	OR		
11.	Describe briefly with a neat sketch a winter type air conditioner.	12M	5 L3
	*** End ***		

Derive the general relationship between area, velocity and

5.

*** End ***

	Hall Ticket Number :													D 20		
C	Code: 20A15FT													R-20		
	III B.Tech. I S	eme			-						c 20	22/Jo	an 20	23		
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	Max. Marks: 70			(Me	cha	nicc	l Eng	gine	ering])			Tie	ne: 3 Ho		
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N	Note: 1. Question Pape	r con	nsists	s of t	wo p	oarts	(Par	t-A a	nd I	Part-	B)					
	2. In Part-A, each	-														
	3. Answer ALL	the q	uest	ions	in P a				t-B							
							RT-A	-								
^	nower all the following	مامح	+		-		ry qı		· ·	1014	`			<u> </u>	וס	
	nswer all the following							(5X	2 =	TUN)				BL L1	
	a) List the different typ							S?						CO1 CO2	L1	
	b) Show the causes of				•				4 0							
	c) Discuss the emerge	•	stage	e in c	lisas	ter m	anag	jeme	nt <i>?</i>					CO3	L2	
	d) List DRR programs.													CO4	L2	
(e) Define post-disaster	stag	jes.											CO5	L1	
	A (* 4*						RT-B				•4 (- 10				
	Answer <i>five</i> questi	ons d	by ch	100511	ng or	ie qu	estio	n iro	m ea	cn u	nit (:	5 X 12	= 60 F	Marks) Marks	со	
					U	NIT-I								IVIAI NS	00	
	Discuss the various t	ypes	ofr	natura	al dis	aste	rs an	d hig	hligh	t the	spe	cific ef	forts t	0		
	mitigate disasters in	India												12M	CO1	
						OR				_						
	Define vulnerability a	nd de	escri	ibe it			-	with o	capa	city				12M	CO1	
	Summarize a note or	n mar	nma	de ha		NIT—I Is in		I						12M	CO2	
		i inai	iiiia			OR	uotai	••						12101	002	
	Explain the necessity	∕ of d	isast	ter w			stem	s in I	ndus	tries				12M	CO2	
					UN	IIT-II	I									
	Explain in detail abou	ut Me	ethoc	ls of			nage	ment	•					12M	CO3	
	Evalois is datail about	moth		-f		OR								4014	000	
	Explain in detail about	metrio	ousi	or em	-	icy m II T–I V	-	emer	l.					12IVI	CO3	
	Define Total Disaster	[.] Risł	k Ma	inade	-			:h an	d exa	amin	e its	pertine	ence t	0		
	Disaster Managemer			0								•			CO4	
					(OR										
	Discuss about state a	and n	natio	nal le		disas NIT-N		anag	jeme	nt pi	ogra	mmer	s?	12M	CO4	
	Describe the various	s ma	nag	emei	nt gu	uideli	nes	for te	empo	orary	she	lter pr	ovisio		o o -	
	during disasters.													12M	CO5	
	India has witnessed	a chi	ift fra				tianti		- h	·000.	odaa	مور ماد	nnina	,		
	Discuss.	a sili				0 111	uyau	ona	iu pi	epai	GUILE	iss his	unnng		CO5	
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