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Name of the Candidate:	
Roll No:	
H	Date: 19-03-2024
	TECHNOLOGY WING
	tute for Medical Sciences & Technology hiruvananthapuram-695012
1 oojappura, 1	nn uvanantnapuram-033012
MFCP-Jr.Technical Assis	tant (Machine Operation) A to Technical
<u>Assistant</u>	(Machine Operation)-A.
Wri	tten Examination
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Total number of questions: 50	Maximum duration: 60 min
	æ
Instructions to Candidates:	,
1. All questions carry equal r	narks.
2. For each question, choose	e the most suitable answer among the choice.
given and write the corres at its right side.	ponding letter A, B, C or D in the box provided
3. Make relevant assumption	s if necessary.
For office use	
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	Marks scored
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Question Paper for MFCP -Jr. Technical Assistant (Machine Operation) A to Technical Assistant (Machine Operation) A.

Date- 19-03-2024

Sl.No		Questions				
1.	In Wire cut EDM, the absolute minimu	im inner corner radius	is			
	a) the wire radius minus the sparking g	ap width				
	b) the sparking gap width minus the wi					
	c) the wire radius plus the sparking gap					
	d) double of the wire radius					
	a) addie of the wife radius					
2.	The crank pin of a shaping machine is	set closer to the centre	of the bull gear. How			
	does it affect the movement of shaper's	s ram movement?				
	a) the ram does not move					
	b) the ram movement will be shorter					
	c) the ram movement will be longer					
	d) it does not affect the ram movement					
	d) it does not affect the fam movement	•				
3.	Which one of the following is used to i	rectify damaged or rust	ted threads?			
	a) Die nut b) circular split di					
	, , , , , , , , , , , , , , , , , , , ,	J come Personal				
4.	An operation performed for enlarging a	an existing hole up to o	only a limited length			
	from its one end is called					
	a) Boring b) drilling c) of	counter boring d)	counter sinking.			
5.	Which mechanism is used for converti-	ng linear motion into r	otary motion in plunge			
	dial					
	gauge?					
		b) Scroll and pinion m	echanism			
		d) Lever and scroll med				
		A STATE OF THE PROPERTY OF THE PARTY OF THE				
6.	Which is the cause of small particles o	Which is the cause of small particles of the material become embedded in the space				
	between the grains of the grinding who		•			
	a) Glazing b) loading	c) Dressing	d) Grooving			
		,	-,			
7.	Down milling is also called					
	a) climb milling	b) conventional milling	ng			
	c) end milling	d) face milling	=			
8.	The abrasive recommended for grinding		nsile strength			
	is	8	8			
	a) silicon carbide					
	b) sand stone					
	c) aluminium oxide					
	d) diamond					
	d) diamond					
9.	In the drawing the dimension of a shaft is shown Ø50.00 +0.069/-0.042 which					
•	size of shaft is not within the tolerance		ooz, orona miller			
	a) 50.068 b) 49.957	c) 50.000	d) 49.990			
	0) 49.937	c) 50.000	uj 75.330			
	Included angle of Asma thread is					
~10	Included angle of Acme thread is					
~10.	Included angle of Acme thread is a) 60° b) 55°	c) 30°	d) 45°			

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12	a) dial caliper c) outside micrometer. b) dial test indicter. d) venier caliper. Which of the following is not a specification of lathe machine? a) Swing over diameter b) chuck size c) distance between centres d) bed length
	Which of the following is not a specification of lathe machine? a) Swing over diameter b) chuck size
	a) Swing over diameter b) chuck size
	c) distance between centres d) bed length
	Which one of the following symbols indicates the finest surface?
13	a) $\nabla\nabla\nabla\nabla$ b) $\nabla\nabla\nabla$ c) $\nabla\nabla$ d) ∇
14	Which of the following is un-conventional machining process?
	a) Grinding b) Milling
	c) Electro chemical machining d) CNC turning
15	In CNC machines, Miscellaneous Code M03 describes;
	a) Spindle ON clockwise
	b) Spindle ON counter clockwise
	c) Coolant ON
	d) Coolant OFF
	a) Coolant Of 1
16	A dimension is stated as 25 ± 0.02 mm in a drawing. What is the tolerance?
	a) 25.00 mm b) +0.02 mm c) -0.02 mm d) 0.04 mm
17	A dimension is stated as 25 H7 in a drawing. The lower limit is
	a) 24.75 mm
	b) 24.85 mm
	c) 25.00 mm
	d) 25.021 mm
18	In CNC field DNC stands for
10	a) Direct Numerical Complain b) Direct Numerical Control
	c) Direct Note Control d) Direct Note Complain
19	The main advantage of boring over reaming in the lathe is that
	a) better finish is obtainable
	b) the process of finishing the bore to a precision diameter can be done more quickl
	c) boring correct any eccentricity in the bore while reaming does not
	d) none of the above
20	While facing a job in lathe, a pip left in the centre is caused due to
	a) blunt tool
	b) carriage is not locked
	c) tool is not set in centre
	d) improper clamping of tool

12 - Ronnfeld 124

Sl.No	Questions
21.	Back gear mechanism provided in the cone pulley head stock to ?
	a) increase the speed of the spindle
	b) decrease the speed of the spindle
	c)change the direction of rotation of the lead screw
	d) changing the direction of the spindle
22.	The carriage of a lathe travel along which axis?
	a) 'B' axis b) 'X' axis c) 'Y' axis d) 'Z' axis
23.	What is the name of part marked as 'X' in
	plunger type dial test indicator?
	a) Bezel
	b) Plunger
x a	c) Stem
	d) Anvil
24.	What is the name of lathe accessory shown in the picture?
	a) Lathe travelling steady
	b) Lathe fixed steady
	c) Mandrel
tr _g ,	d) Lathe carrier
2.5	
25.	What is the name of the lathe accessoray shown in the picture?
	a) Lathe Mandrel
	b) Driving plate
	c) Catch plate
26	d) Magnetic chuck
26.	The ductile materials, during machining, produces
	a) continuous chips b) discontinuous chips
	c) continuous chips with built up edge d) no chip
27.	After originating from a supply spool, the wire in Wire EDM is passed through
21.	a) a chamber filled with special stones b) diamond guides
	c) a furnace d) a container filled with anti-oxidant
	d) a container fined with anti-oxidant
28.	As per Indian Standards the grain size '46' comes under the group
	a) Coarse b) Medium c) Fine d) Very Fine
20	***************************************
29.	Which of the following point angles of a twist drill is used for general purpose work in
	Engineering workshops and Tool room.
	The function of independent programming of the U & V axes in wire cut EDM machines i
	a) 128°
~	b) 108°
	c) 118°
	d) 138°
20	Will call the state of the stat
30.	Which of the following is not a good quality cutting fluid?
~	a) High heat absorption b) High flash point c) Good hybricating quality b) High principles
	c) Good lubricating quality d) High viscosity
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Sl.No	Questions
31.	Clapper box in shaper is used in order to
	a) to ensure cutting action
	b) to avoid length of tool
	c) to lift the tool during return stroke
	d) to lift the tool during cutting stroke.
32.	Circularity (roundness) of a circle is specified in a drawing as 0.2. It means
52.	a) the centre of hole can vary by 0.2
	b) the radius of hole can vary by 0.2
	c) the diameter of hole can vary by 0.2
	d) the entire circle should lie between two concentric circles, which are radially 0.2 apart.
33.	Which of the following cutting condition greatly affects the tool wear?
	a) depth of cut b) feed c) cutting speed d) size of the job.
34.	A micrometer having a negative error of 0.03mm shows a reading 0f 27.32. The correct
	dimension is
	a) 27.37mm
	b) 27.35mm
	c) 27.40mm
No.	d) 27.29mm
35.	18-8 Stainless Steel means
	a) 18% tungsten and 8% chromium
	b) 18% chromium and 8% cobalt
	c) 18% chromium and 8% nickel
	d) 18% nickel and 8% chromium
36.	The programme code for absolute co-ordinate system in CNC is
	a) G00 b) G01 c) G90 d) G91
37.	The tool made of cemented carbide wear out faster at
	a) slow speeds b). medium speeds
	c) fast speeds d) very fast speed
38.	The amount by which the actual size of a shaft is less than the actual size of mating hole in
	an assembly
	a) Clearance b) Interference c) Allowance d) None of the above
39.	Only two perpendicular components of cutting force act on the tool in case of
	Cutting.
	a) oblique
	b) orthogonal
-	c) 3d
	d) Inclined
40.	Determine the height of slip gauges for an angle of 30° using a sine bar of 200mm length
	a) 100mm b) 150mm
^	c) 200mm d) 250mm
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Sl.No			Questions		
41.	41. Vernier bevel protractor is a precision instrument meant for measuring angle			measuring angles precisely to	
	an accuracy of				
	a) 1' b) 5'		c)1°	d) 5°	
	31				
42.	Height of the center meas	ured from the	bed of the lathe as co	ompared to swing diameter	
	over the bed is				
	a) double b))	four times	c) half	d) same	
43.	In CNC wire cut EDM, th	e electrical co	nductivity of the wat	ter is maintained by passing	
	the water through the deic	onization bottle	e. The electrical cond	ductivity of the water is	
	measured in				
	a) micro Siemens	b) pH	c) mV	d) ppm	
44.		rk mounted in	an independent chuc	k can be determined by using	
	a				
	a) centre gauge b)	height gauge	c) dial indicator	d) micrometer.	
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45.	The included angle of the countersinking portion of a centre drill of type 'B' used for				
6	protecting the centre hole		1000	1) 1200	
	a) 75° b)	90°	c) 100°	d) 120°	
46.	The most important quali	ty of any lubri	cont is		
40.	a) Specific heat	b) Viso			
	c) Emulsification		cific Gravity		
	c) Emuisineation	d) Spec	clife Glavity		
47.	For achieving a specific surface finish in a single point turning the most important factor				
	to be controlled is	,	a a singre point tarin	ing the most important factor	
	a) feed		b) cutting speed		
	c) depth of cut		d) tool rake angle	e	
	o) depin of ear		a) tool rane ung.		
48.	What is the first step to st	op the CNC m	nachine when an acci	ident happens while working	
	on the machine?			11	
	a) switch off regulator	b) press em	nergency switch		
	c) reset the machine	/ *	e cnc program.		
			1 0		
49.	Which G Code description	n gives maxin	num spindle speed se	etting?	
	a) G50 b) G71		c)G72	d) G42	
50.	A grinding wheel marked with C is made with theabrasive.				
	a) aluminium oxide				
	b) Silicone carbide				
	c) Diamond				
	d) Corundum				
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Answer Key – MFCP - -Jr.Technical Assistant (Machine Operation) A to Technical Assistant (Machine Operation) A.

Date- 19-03-2024

Question Answer Number		Question Number	Answer
1	С	26	а
2	b	27	b
3	а	28	b
4	с	29	С
5	С	30	d
6	b	31	С
7	а	32	d
8	С	33	С
9	b	34	b
10	С	35	С
11	b	36	С
12	b	.37	а
13	а	38	а
14	С	39	b
15	а	40	а
16	d	41	b
17	С	42	С
18	b	43	а
19	С	44	C
20	С	45	d
21	b	46	b
22	d	47	а
23	b	48	b
24	d .	49	а
25	С	50	b

