Name:	ID N	o:
-------	------	----

PART-I

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE PILANI

First Semester 2022-23

Workshop Practice (ME F112) Comprehensive Examination (Regular, Closed Book) Date: 23-02-2023 Maximum Time: 30 min. Maximum Marks: 30				
Q1.	Which one of the following motors machine? a) Servomotor	s is the most suitable for driving the axis of a CNC b) Induction motor		
	c) Synchronous motor	d) Hydraulic motor		
Q2. Which one of the following codes is used in CNC part programming for circular interpolation?				
	a) G01 c) G03	b) G02 d) G04		
Q3.	,	tools is a special purpose machine tool? b) Milling d) Shaper		
Q4.	What type of cutting tool is general workpiece? a) Right hand tool c) Neutral tool	ally used for a CNC turning center for turning of a b) Left hand tool d) None of the above		
Q5.	The rake angle of a single point cutti a) Positive c) Neutral	ng tool can be b) Negative d) All of the above		
Q6.	In metal cutting, the uncut chip thick a) Speed c) Depth of cut	ness parameter is directly related to b) Feed d) Width of cut		
Q7.	Continuous chip can be formed during a) Ductile materials c) Brittle materials	ng cutting of b) Any material at low cutting speeds d) Any metal at high depth of cut		
Q8.	General purpose machine tools are use a) For high production rates c) For large production volumes	sed b) In normal workshops and repair shops d) For automated production		
Q9.	V-slideway is preferred in lathe bed (a) Is easy to manufacture c) Is easy to design	because it b) Adjusts clearance of the moving member d) Does not have specific advantage		

Name:	ID No:	
Q10. Ribs are provided in machine tool struc		
a) The weight of the structurec) The storage capacity of chips	b) The rigidity of the structured) The machine handling capacity	
Q11. Which one of the following processes p a) Turning c) Boring	by Shaping d) Milling	
Q12. Special purpose machine tools are gene a) Small batch production c) Mass production	rally used for b) Job production d) Production of complex geometries	
Q13. 4-jaw chuck is used in a lathe to clamp a) Only for cylindrical workpiece c) Only for eccentric workpiece	b) Only for square bard) Any type of workpiece	
Q14. Facing operation in a lathe is used for pa) Cylindrical surfacec) Tapered surface	ucing a b) Plane surface d) Hole	
Q15. Taper turning using the taper turning ata) Only small tapers over the lengthc) Only small and steep tapers	tachment in lathe is used for b) Only large and steep tapers d) All types of tapers	
Q16. The intermediate molding flask used in a) Cope c) Cheek	sand casting is called b) Drag d) Core	
Q17. In sand casting, shrinkage allowance is a) Liquid shrinkage c) Liquid and solid shrinkage	ed to pattern dimensions to take care of b) Solid shrinkage d) Either liquid or solid shrinkage q	
Q18. Permeability of green molding sand ind a) Green strength c) Gas evaluation capability	b) Dry strength d) Moisture content	
Q19. Which one of the following items is not a) Coal dust c) Clay	t an additive that is mixed with green molding sand? b) Saw dust d) Iron oxide	
Q20. To reduce the mold erosion in a sand ma) Taper sprue is usedc) Sprue base well is provided	olding b) Cylindrical sprue is used d) Trapezoidal runner is used	
Q21. Riser is used in a sand casting toa) To reduce the slag inclusionc) To reduce mold erosion	b) To reduce air aspiration effectd) To reduce shrinkage cavities	
Q22. Hot working of metal in metal forming a) Above the melting point c) Below the ambient temperature	is conducted b) Above the recrystallization temperature d) Below the recrystallization temperature	

Name:	ID No:	
Q23. Which one of the following operation	is always a cold working operation?	
a) Rolling	b) Wire drawing	
c) Forging	d) Extrusion	
Q24. Which one of the following steel items	s is generally made a square cross section?	
a) Slab	b) Billet	
c) Bloom	d) Ingot	
Q25. Which one of the following mechanica	al properties is relevant to formability of metal?	
a) Ductility	b) Brittleness	
c) Hardness	d) Toughness	
Q26. The fuel gas that has the highest flame	e temperature in gas welding is	
a) Propylene	b) Propane	
c) Acetylene	d) Hydrogen	
Q27. The flame type that is normally used to method is	o weld high carbon steels in oxy-acetylene welding	
a) Neutral flame	b) Natural flame	
c) Oxidizing flame	d) Reducing flame	
Q28. Straight polarity in electric arc welding		
a) Electrode positive with AC	b) Electrode positive with DC	
c) Electrode negative with AC	d) Electrode negative with DC	
Q29. Welding is a	h) Comi normanant joint	
a) Permanent joint	b) Semi-permanent joint	
c) Temporary joint	d) Temporary or semi-permanent joint	
Q30. Which one of the following welding p		
a) Oxy-acetylene welding	b) Electric arc welding	
c) Resistance welding	d) Oxy-hydrogen welding	
***************************************	est of luck******************	