BAE358C Question Paper Version: C Third Semester B.E./B.Tech. Degree Examination, Dec.2023/Jan.2024 **Digitalization in Aeronautics** Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

- Answer all the fifty questions, each question carries one mark.
- Use only Black ball point pen for writing / darkening the circles. 2.
- 3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
- 4. Darkening two circles for the same question makes the answer invalid.
- 5. Damaging/overwriting, using whiteners on the OMR sheets are strictly

414	prohibited.	
1.	Digital representation of a physical object at a certa	nin moment is
1. 14.	a) Digital Thread b) Dig	gital Twin
	c) Digital product d) No	one of these
2.	5 1	ycle data up and down the extended
	supply chain,	rital Tyrin
		gital Twin nerative AI
	c) 101	nerative Ar
3.	This technology allows engineers to examine a v	ariety of design options and come up
	with the optimum product design,	
	a) Additive manufacturing	b) 3D printing
	c) Artificial Intelligence and Generative design d) Internet of things
4.	The benefit of Aerospace engineering digitalization	
		proving the quality of final product
	c) Shortening the product development time d)	All of these
5.	The following are the challenges of Aeronautical E	ngineering Digitization
285		ck of digital talent
		l of these
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Possible solutions to resistance to change are,

- Develop own solution to overcome resistance
- Facilitate training of employees b)
- Both (a) and (b) c)
- d) None of these

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7.	A evaluation simulates hacket	r's attack in a website or network and detects
	vulnerabilities and weaknesses in them. a) White hat	b) Black hat d) Red hat
	c) Blue hat	d) Red Hat
8.	Line maintenance is also known as, a) General maintenance c) Heavy maintenance	b) Routine maintenance d) Electrical maintenance
9.	ICAO refers to, a) International Commercial Aviation Organ b) Indian Civil Aviation Organization c) International Civil Aviation Organization d) Indian Commercial Aviation Organization	n
10.	Pre flight Inspection is conducted by, a) Pilot c) Ground Staff	b) Co-pilot d) Purser
11.	When did the 3 rd Industrial revolution pron a) 1950's c) 1970's	opted? b) 1960's d) None of these
	manufacturing industry? a) 2013 b) 2014	fodi launch Make in India to promote India's c) 2015 d) 2016
13.	Which country government introduced the a) United states of America c) Germany	Industry 4.0 concept? b) France d) Great Britan
14.	Who invented assembly line?	
	a) Andrew Cornegicc) John D Rockefeller	b) Cornebus Vanderbiltd) Henry ford
15.	This company was the first to utilize robot a) Ford motor Co. c) General Motors	ics system in the production line, b) Volkswagen d) Toyota
16.	The Internet of Things (IoT) clients to a physical systems mark the big change for ta a) 3 rd Industrial revolution c) Manufacturing Age	real time data and the introduction of cyberhis era, b) Industry 4.0 d) Industrial revolution
17.	IIOT stands for a) Industrial Internet of Things c) Intelligence Internet of Things	b) Internet Internet of Things d) Internal Internet of Things
18.	What are the objectives of Industry 4.0? a) Enabled self controlling c) Reduce complexity	b) Increase efficiency d) All of these

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19.	What are the electrical components of a a) Smart machines c) Trained personnel	smart factory? b) People at work d) All of these
20.	What are the applications of AI in Airbu a) Improve the productivity of the manu b) Improve the amount of raw materials c) Decrease the cost of per unit product d) Minimize the time required for product	facturing process. required
	servicing which downtime. a) Reduces c) Remains same	b) Increases d) Cannot be determined
22.	The D-Check is heavy maintenance com a) Disassemblyc) Anticorrosion Inspection	b) Structure inspection d) All of these
23.	What are the essential components of a sa a) Smart machines c) Trained personnel	smart factory? b) People at work d) All of these
24.	Which is/are of the automation pyramida) Controlc) Manufacturing Execution system	of a smart factory? b) ERP d) All of these
25.	Flipkart is looking at robotics to improve a) Production c) Warehouses	
26.	SCADA is the aeronym of, a). Supervision Control and Data Acqu b) Supervision and Control of Data Acqu c) Supervisory Control and Data Acqu d) None of these PLC is abbreviated as, a) Performance Logic Computer c) Programmable Logic Computer	uire
28.	Why do we need Industry 4.0? a) Detecting machine failure c) Improving safety	b) Preventing machine failure d) All of these
29.	ILS stands for, a) Instrument Landing System c) Inner Landing System	b) Intelligent Landing Systemd) None of these
30.	CPS refers to, a) Centre Physical Systems c) Center Portable Systems	b) Cyber Physical Systemd) None of these

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31.	Aircraft maintenance is divided into three tiers:				
	a) Line maintenance	b) Base maintenance			
	c) Depot maintenance	d) All of these			
32.	CD stands for				
32.	SB stands for, a) Service Bulletins	b) Short Bulletins			
	c) Service Basics	d) Short Basics			
16.00	Service Basies				
33.	AMM stands for,				
	a) Aircraft Manual and Maintenance				
	c) Aircraft Maintenance Manual	d) None of these			
34.	Maintenance Interval most common in	b) Hard time			
	a) On-condition	d) None of these			
W.	c) Condition monitoring	d) None of these			
35.	PIC stands for				
55.	a) Pilot in command	b) Part In Control			
	c) Pilot in Control	d) Part in Command			
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36.	The whole design philosophy of an air	craft is termed as,			
	a) Anatomy	b) Design of Evaluation			
	c) Design wheel	d) Sizing			
37	What is meant by Lofting?				
31.	a) Conceptual design	b) Mathematical modeling of skin			
	c) Specification and requirement	d) None of these			
- 6					
38.	Initial phase of an aircraft design is,				
	a) Conceptual design	b) Preliminary design			
	c) Detail design	d) Sizing			
39.	What is FBW?				
37.	a) Fly back wire system	b) Fly by wire system			
	c) Flight Board wire	d) None of these			
40.	Which of the following is not a techno	ology in Industry 4.0?			
	a) Digital Twin	b) Digital Thread			
	c) Internet of Things	d) Block chain			
yan V	When does Dolla Dovla improve ralish	ility in aircraft angines?			
41.	How does Rolls-Royle improve reliab a) Predictive maintenance	b) Prescriptive analysis			
	c) Deployment of valuable devices	d) All of these			
	c) Deproyment of valuable devices				
42.	Which of the mentioned resources is n	not managed by a Company's KRP system?			
	a) Wages of workers	b) Stock of material			
	c) Credit balance of the company	d) Passport data of CEO			
43.					
1	a) The atmosphere pressure in differ	tent geographical location			
	b) The pressure in hydraulic systemc) Both (a) and (b)	는 사람들이 이번 경에 가장 되었다. 그 사람들이 되었다고 있다면 그렇게 되었다. 그 하는 사람들이 가장 있는 사람들이 바람들이 하는 사람들이 하는 사람이 하였다.			
	c) Both (a) and (b) d) None of these				
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44.	a) Additive manufacturing	b) Layer manufact	turing
	c) Direct CAD manufacturing	d) All of these	
45.	In India, which organization prov a) EASA b) FAM	ides approval for commercial c) DGCA	aircrafts? d) CASA
46.	MRO stands for a) Man Repair and Overhaul c) Maximum Repair and Overhau		epair and Overhau ir and Overhaul
47.	OEM stands fora) Overall Equipment Maintenance) Original Equipment Manufactu		oment Manual
48.	Which of the following issue Airva) CASA b) DGCA	worthiness Directives of USA c) ICAO	? d) FAA
49.	The main goal of maintenance is	to ensure,	
	a) Airworthiness	b) Safety	
	c) Operation	d) Cost	
50.	MPD stands for a) Maintenance Planning Docuce Minimum Planning Docume		ng Document
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