## University of Mumbai Online Examination 2020

Program: BE Automobile Engineering

Curriculum Scheme: Revised 2012

Examination: Fourth Year Semester VII

Course Code: AEC704 and Course Name: Product Design and Development

Time: 1 hour Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	Which among the following are shopping goods
Option A:	Furniture, clothing, video games, mobile phones
Option B:	Stamps and artefacts
Option C:	Candy
Option D:	CNC Machines
Q2.	What is the primary responsibility of a product designer?
Option A:	To make the product
Option B:	To buy raw materials for the product
Option C:	To make a design of the product and to reiterate if there is an error in the
	product design
Option D:	To select supplier
Q3.	Which of the following is (are) closely related to the INTRODUCTION stage of the
	Product Life Cycle
Option A:	Demand is high
Option B:	Advertisement and promotion are required
Option C:	Product cost is high
Option D:	Competition is high
Q4.	refers to the number of product lines offered by the company
Option A:	Product mix
Option B:	Product line
Option C:	Product width
Option D:	Product length

Q5.	The use of same component or chunk in multiple products is known as
Option A:	Component differentiation
Option B:	Component standardization
Option C:	Component sorting
Option D:	Component planning
Q6.	The process in which the each member of the team votes for several concepts is
	known as
Option A:	Prototype
Option B:	Multivoting
Option C:	Decision matrices
Option D:	Intuition
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Q7.	The concept scoring is done in
Option A:	Concept generation
Option B:	Concept testing
Option C:	Concept selection
Option D:	Concept planning
Q8.	The combination table is used during
Option A:	Concept generation
Option B:	Concept testing
Option C:	Concept selection
Option D:	Concept Tracking
Q9.	Which of these is an example in material stage of life cycle
Option A:	Reduce the use of raw materials
Option B:	Select processes with high energy efficiency
Option C:	Extend useful product life
Option D:	Eliminate emissions and reduce energy consumption during use
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Q10.	Profit Margin is difference between
Option A:	Machining cost and manufacturing cost
Option B:	Product price and machining price
Option C:	Manufacturer's selling price and the cost of making the product
Option D:	Maintenance cost and labour cost
Q11.	Which of these does not include in design for manufacturing
Option A:	Design for casting
Option B:	Design for sheet metal
Option C:	Design for welding
Option D:	Design for maintenance
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Q12.	The team of Design for manufacturing and design for assembly consist of
۷.1.	following members
Option A:	Sales and labour
option A.	Juica ana labout

Option B:	Labour and design
Option C:	Manufacturing managers, cost accountants, and marketing and sales
	professionals
Option D:	Marketing and sales professionals
Q13.	Which of the following is not included in guidelines for DFA and DFM
Option A:	Design the mating parts for easy insertion
Option B:	Standardize parts to reduce variety
Option C:	Parts should easily indicate orientation for insertion
Option D:	Defective parts to be included
Q14.	Which of the following helps to eliminate unnecessary features and functions?
Option A:	Value analysis
Option B:	FMEA
Option C:	DFE
Option D:	DFA
Option 5.	
Q15.	Which of the following is not a method of waste control?
Option A:	Waste prevention
Option B:	Waste reduction
Option C:	To cut the salary of an operator responsible for creating waste.
Option C:	Reuse or recycling of waste
Орион Б.	Reuse of recycling of waste
Q16.	Value analysis does not refer to which of the following value?
Option A:	Functional value
Option B:	Spiritual value
Option C:	Esteem value
Option D:	Exchange value
Q17.	Which of the following statement is false about value analysis?
Option A:	Value analysis results in cost reduction without sacrificing the functional
	attributes of a product.
Option B:	Value analysis reduces cost and increases the quality of a product first providing
	maximum satisfaction to customers.
Option C:	Value analysis increases the cost of the product
Option D:	Value analysis reduces the cost through research in alternative materials,
	simplifying the process and effective services.
Q18.	ensures that manufacturing concerns are systematically
	incorporated into the design process.
Option A:	design for manufacture
Option B:	modular design
Option C:	design for robustness
Option D:	quality function deployment
Q19.	The objective of failure mode and effects analysis is to
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Option A:	anticipate product failures and prevent them from occurring
Option B:	devise ways of minimizing the cost of product
Option C:	Improve ergonomics
Option D:	Improve asthetics
Q20.	To improve the performance of the system from ergonomics point of view, it is important to understand which of the following
Option A:	Energy consumption
Option B:	Quality aspects
Option C:	Cost aspects
Option D:	User, Product and Environment
Q21.	A chair that isn't adjustable or supportive is most likely to lead to which of these
	health problems?
Option A:	Eye strain
Option B:	Headaches
Option C:	Back problems
Option D:	Leg problem
Q22.	Which one of these factors is associated with ergonomics?
Option A:	Fatigue
Option B:	DFM
Option C:	Cost
Option D:	Product value
Q23.	CAM stands for
Option A:	Computer Adapter Machining
Option B:	Computer Aided Mapping
Option C:	Computer Access Mode
Option D:	Computer Aided Manufacturing
Q24.	Technique in which the group leader opens the session with a statement of the
	broad area to be discussed, not pinpointing to the actual problem is
Option A:	Checklisting technique
Option B:	Synectics technique
Option C:	Attribute listing technique
Option D:	Gorden technique
Q25.	Which is not a functional area of a modern CAD system ?
Option A:	Geometric modelling
Option B:	Engineering drawing
Option C:	Automated drafting
Option D:	Geographical modelling