Product Design and Development

UNIT 4

MCQ's ON REVERSE ENGINEERING

1.	In reverse engineering process, what refers to the sophistication of the design information that can be extracted from the source?	
	a) interactivity b) completeness c) abstraction level d) direction level	c
2.	In reverse engineering, what refers to the level of detail that is provided at an abstraction level?	
	a) interactivity b) completeness c) abstraction level d) directionality	b
3.	The core of reverse engineering is an activity called	
	a) restructure code b) directionality c) extract abstractions d) interactivity	c
4.	Forward engineering is also known as	
	a) extract abstractions b) renovation c) reclamation d) both renovation and reclamation	d
5.	Which of the following is not an objective of reverse engineering?	
	a) to reduce maintenance effort b) to cope with complexity c) to avoid side effects d) to assist migration to a CASE environment	d
6.	_ is the process of taking something (a device, an electrical component, a software program, etc.) apart and analyzing its workings in detail.	
	a) mechanical Engineering b) reverse engineering c) chemical engineering d) structural engineering	b
7.	The steps in the reverse-engineering process are:	
	a) Observation, Disassemble, Analyze, Test, Prediction, Documentation b) Prediction, Disassemble, Observation, Analyze, Documentation, Test c) Prediction, Observation, Disassemble, Analyze, Test, Documentation d) Documentation, Observation, Prediction, Disassemble, Analyze, Test,	c
8.	Which of the following questions should be asked in the prediction step?	
	a) Any surprises? b) What is the purpose of this product? c) How many moving parts?	b

	d) How does it meet design objectives (overall)?	
9.	Which event in history was an example of reverse engineering	
	a) Chinese Copied America's Best Bomber During WWII b) Soviets Copied America's Best Bomber During WWII c) None of the Above d) Kong Copied America's Best Bomber During WWII	b
10.	In the observation stage of reverse engineering you should ask all the following questions EXCEPT which?	
	a) What is this? b) How does it meet design objectives (overall)? c) Why is it designed the way it is? d) How do you think it works?	a
11.	In documentation one should.	
	a) Construct Schematic diagrams b) Do a backflip because of the excitement! c) Evaluate d) Brainstorm	a
12.	Engineers have to be able to _____ the design problem to solve and decide whether or not to address it.	
	a) Evaluate b) Identify c) Understand d) Express	b
13.	systems _____ because they have faulty or poorly matched parts, are used in ways that exceed what was intended by the design, or were poorly designed to begin with.	
	a) fail b) fumble c) improve d) grow	a
14.	Define a system by identifying its _____, their relationship to other systems, and the intended input and output of the system.	
	a) Criteria b) solution c) subsystems d) problems	c
15.	The following type of layout is preferred to manufacture a standard product in large quantity	
	a) Product layout b) Process layout c) Fixed position layout d) Combination layout	a
16.	The following type of layout is preferred for low volume production of non standard products	
	a) Product layout b) Process layout c) Fixed position layout d) Combination layout	b

17.	1-The following is the preliminary stage of Production planning	
	a) Capacity planning b) Material requirements planning c) Scheduling d) Product development and design	d
18.	The following is the source(s) for developing new or improved product	
	a) Research and Development department of the enterprise b) Consumer suggestions and Complaints c) Other competitive products in the market d) All of the above	d
19.	Product cost can be reduced by considering the following aspect(s) at the design stage	
	a) Minimum number of operations b) Unnecessary tight tolerance should not be provided c) Design should consist of standard parts d) All of the above	d
20.	The ultimate objective of the product is	
	a) To provide a new look b) Utilizing existing manpower c) To monopolize the market d) All of the above	c
21.	Based on their field of application, manufactured goods can be classified as	
	a) Primary, Secondary and Tertiary b) Consumer, Capital and Defense c) Essential, Market and Standard d) Primary, Luxury and Consumer	b
22.	The following aspect of product is concerned with the ease and efficiency of the product performance	
	a) Functional aspect b) Operational aspect c) Durability aspect d) Aesthetic aspect	a
23.	The “simplicity to operate and easy to understand” of product is concerned with its following aspect	
	a) Functional aspect b) Operational aspect c) Durability aspect d) Aesthetic aspect	a
24.	_____ helps in establishing the interchangeability of products	
	a) Standardization b) Simplification c) Diversification d) Specialization	a
25.	In which of the following type the manufacturing cost may go up	
	a) Standardization b) Simplification c) Diversification d) All of the above	c
26.	Product _____ is the ultimate objective of variety reduction	

	a) Simplification b) Standardization c) Specialization d) All of the above	c
27.	The following eases the process of stock control	
	a) Standardization b) Simplification c) Both 'A' and 'B' d) None of the above	c
28.	The following is the Durability aspect(s) of a product	
	a) Efficiency of the product b) Easy to understand c) Ease with which a product can be maintained d) All of the above	c
29.	_____ is a new-product development approach in which one company department works to complete its stage of the process before passing the new product along to the next department and stage.	
	a) Sequential product development b) Product life-cycle analysis c) Team-based product development d) Simultaneous product development e) Micromarketing	a
30.	A detailed version of a new idea stated in meaningful customer terms is called a _____	
	a) Product proposal b) Product concept c) Product image d) Product movement e) Product idea	b
31.	A manufacturer with a product in the decline stage of the product life cycle might decide to _____ if it has reason to hope that competitors will leave the industry.	
	a) drop the product b) maintain the product without change c) delay planning d) search for replacements e) harvest the product	b
32.	After concept testing, a firm would engage in which stage in developing and marketing a new product?	
	a) marketing strategy development b) product development c) idea screening d) business analysis e) test marketing	a
33.	An attractive idea must be developed into a _____	
	a) product idea b) test market c) product concept d) product image	c

	e) product strategy	
34.	During which stage of new-product development is management most likely to estimate minimum and maximum sales to assess the range of risk in launching a new product?	
	a) test marketing b) product development c) business analysis d) concept testing e) marketing strategy development	c
35.	In the _____ stage of new-product development, products often undergo rigorous tests to make sure that they perform safely and effectively or that consumers will find value in them.	
	a) concept development and testing b) idea generation c) business analysis d) product development e) marketing mix	d
36.	In the concept testing stage of new-product development, a product concept in _____ form is presented to groups of target consumers.	
	a) market-tested b) prototype c) commercial d) physical or symbolic e) final	d
37.	In which stage of the PLC will promotional expenditures be high in an attempt to react to increasing competition?	
	a) introduction b) maturity c) decline d) product development e) growth	e
38.	Most products in the marketplace are in the _____ stage of the product life cycle.	
	a) decline b) growth c) introduction d) maturity e) development	d
39.	The advantages of standardizing an international product include all of the following except _____	
	a) the development of a consistent image b) the adaptation of products to different markets c) decreased manufacturing costs d) lower product design costs e) lower marketing costs	b
40.	The creation of a successful new product depends on a company's understanding of its _____ and its ability to deliver _____ to customers.	
	a) customers, competitors, and markets; superior value b) product, marketing mix, and marketing strategy; functional features	a

	c) competitors, distributors, and employees; new styles d) product life cycle, legal responsibilities, and social responsibilities; innovations e) customers, brands, products; product images	
41.	What does top down process follow?	
	a) The overall flow of activity during product design resolution is from higher to lower levels b) The overall flow of activity during product design resolution is from lower to higher levels c) All of the mentioned d) None of the mentioned	a
42.	Lower level of abstraction includes?	
	a) Product features b) Functions c) Properties d) All of the mentioned	d
43.	Which of the following is not true of trend analysis? (several possible answers)	
	a) It uses changes in euro amount and percentage terms to identify patterns b) It examines the relationships of percentage changes to each other c) It concentrates on different geographic segments of production d) It examines changes over time e) It concentrates on the relative size of current assets	b, c
44.	A _____ is a detailed version of the idea stated in meaningful consumer terms.	
	a) product idea b) product image c) product concept d) product feature	c
45.	In the _____ stage of new-product development, products often undergo rigorous tests to make sure that they perform safely and effectively or that consumers will find value in them	
	a) concept development and testing b) product development c) business analysis idea d) generation marketing	b
46.	The collection of businesses and products that make up a company is called its	
	a) strategic business unit b) mission statement c) strategic plan d) business portfolio e) operational factor	d
47.	Which best describes the process of benchmarking?	
	a) Comparison of actual performance with budget b) Comparison of the costs of one product with another c) Comparison of direct competitors' performance d) Comparison of the performance of one operation or business with another	b