

Program: BE Electrical Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VIII

Course Code: EEC801

Course Name: Design Management and Auditing of Electrical Systems (DMAES)

Time: 1 hour

Max. Marks: 50

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

Q1.	The primary industry standard used in electrical design is
Option A:	IESNA
Option B:	EASA
Option C:	NEC
Option D:	NEMA
Q2.	Distribution system in a large consumer premises has?
Option A:	Single feeder
Option B:	Two feeders
Option C:	Three feeders
Option D:	Floor wise feeders
Q3.	A transformer is installed in a consumer distribution system is generally having primary voltage of _____
Option A:	400 KV
Option B:	132 KV
Option C:	66 KV
Option D:	11 KV
Q4.	The effect of diversity and load factor on transformer rating is?
Option A:	Reduced rating (Optimized)
Option B:	Increased rating
Option C:	Load unbalancing
Option D:	Load balancing
Q5.	Distribution transformer are designed for maximum efficiency at?
Option A:	50 to 60% load
Option B:	20to 30% load
Option C:	100% load
Option D:	Any load

Q6.	Which of the following circuit breakers has the lowest operating voltage?
Option A:	SF6 circuit breaker
Option B:	Air Circuit breaker
Option C:	Air blast
Option D:	Minimum oil circuit breaker
Q7.	Distribution of power is technically difficult if the feeder length is beyond
Option A:	35 to 45 km
Option B:	500 km
Option C:	300 km
Option D:	800 km
Q8.	Following is not the type of configuration of UPS system
Option A:	online double conversion
Option B:	line-interactive
Option C:	Standby
Option D:	Back to Back Conversion
Q9.	Which of the following prevents moisture entry into the cable?
Option A:	Armor
Option B:	bedding
Option C:	conductor surface
Option D:	lead sheath
Q10.	Illumination level required for precision work is around
Option A:	50 lm/ sq-m
Option B:	100 lm/ sq-m
Option C:	200 lm/ sq-m
Option D:	500 lm/sq-m
Q11.	What is the function of an Isolator?
Option A:	Break Short circuit current
Option B:	Making under fault conditions
Option C:	Breaking the circuit under no load condition
Option D:	Operate when lightning surge strikes
Q12.	MCCB used for the protection of three phase delta connected motor should have_____
Option A:	Two pole
Option B:	Triple pole
Option C:	Four pole
Option D:	Triple pole with neutral link
Q13.	If the supply frequency to the transformer is decreases, the iron loss will _____

Option A:	Not change
Option B:	Decrease
Option C:	Increase
Option D:	Cannot be determined
Q14.	When the plant is adopting automatic power factor controller (APFC), it results into
Option A:	reduced active power drawn from grid
Option B:	reduced the reactive power drawn from grid
Option C:	reduced the voltage of the plant
Option D:	increased the load current of the plant
Q15.	Under no change in the efficiency scenario A CUSUM graph follows a random fluctuation trend and oscillates around.
Option A:	100
Option B:	100%
Option C:	50
Option D:	0
Q16.	Following should not the characteristic of Energy audit instruments
Option A:	Easy to operate
Option B:	Cheaper
Option C:	Data Recording
Option D:	Bulky and heavy
Q17.	“The judicious and effective use of energy to maximize profits and enhance competitive positions”. This can be the definition of:
Option A:	Energy conservation
Option B:	Energy policy
Option C:	Energy management
Option D:	Energy Audit
Q18.	An energy policy does not include
Option A:	Targeting energy consumption reduction
Option B:	Time period for reduction
Option C:	Declaration of top management commitment
Option D:	Future production projection
Q19.	Which instrument is used to monitor O ₂ , CO in flue gas?
Option A:	Combustion analyzer
Option B:	Power analyzer
Option C:	Pyrometer
Option D:	Fyrite
Q20.	Which among the following lamps is not an energy efficient lamp?
Option A:	Incandescent Lamp

Option B:	LED lamp
Option C:	T5 Tube Light
Option D:	Compact Fluorescent Lamp
Q21.	The HVAC system is designed with a capacity based on
Option A:	System performance with low life-cycle cost
Option B:	median conditions under which they are expected to operate
Option C:	Physical characteristic of building
Option D:	Estimated maximum heating and cooling loads
Q22.	Electronic variable frequency drive (VFD) connected to motors:
Option A:	provide variable speed with high efficiency
Option B:	induces eddy-current in the secondary member of the clutch mechanism
Option C:	is not suitable for variable torque load
Option D:	does not provide variable speed and has low-efficiency
Q23.	What's the main reason why LEDs are more energy efficient compared to other lighting options?
Option A:	The process they use to convert electricity into light is more effective
Option B:	They are made of higher quality materials
Option C:	They use alternating current instead of direct current
Option D:	They absorb less heat
Q24.	In case of EEM motors hysteresis losses are reduced in comparison to standard motor
Option A:	By using large rotor bars of copper conductor
Option B:	by using high grade silicon steel
Option C:	using thicker laminations
Option D:	using low loss fan design
Q25.	What the word 'BMS' stands for
Option A:	Building Management System
Option B:	Brain Monitoring System
Option C:	Best Monitoring System
Option D:	Big Management System

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	C
Q2.	D
Q3.	D
Q4	A
Q5	A
Q6	B
Q7	A
Q8.	D
Q9.	D
Q10.	D
Q11.	C
Q12.	B
Q13.	B
Q14.	B
Q15.	D
Q16.	D

Q17.	C
Q18.	D
Q19.	A
Q20.	A
Q21.	D
Q22.	A
Q23.	A
Q24.	B
Q25.	A