

These are sample MCQs to indicate pattern, may or may not appear in examination

University of Mumbai
Online Examination 2020

Program: BE Automobile Engineering

Curriculum Scheme: Revised 2012

Examination: Fourth Year Semester VIII

Course Code: AEE8022 and Course Name: Vehicle Safety

Max Marks: 50

Time: 1 hour

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

Q1.	Identify the approach which focus on undesirable behaviour and unsafe acts, then attempt to develop safer people, achieve zero defects, and strive for error-free human performance.
Option A:	The passive approach
Option B:	The active approach
Option C:	The behavioural approach
Option D:	The normal approach
Q2.	Putting the wrong plug into an electrical or electronic receptacle may be considered as
Option A:	Language-induced errors
Option B:	Braking errors
Option C:	Over steering errors
Option D:	Mismatch errors

Q3.	A crash test in which Dummies were used to gather human data is called.....
Option A:	Volunteer testing
Option B:	Cadaver testing
Option C:	Dummies Testing
Option D:	Crashworthiness
Q4.	Clumsy instrumental Panel is an example of
Option A:	Judgmental errors
Option B:	Anthropometrically induced errors
Option C:	Braking errors
Option D:	Language-induced errors
Q5.	If something is, it has been designed so that if one part of it does not work, the whole thing does not become dangerous
Option A:	Alternative Design
Option B:	Derating
Option C:	Fail Safe
Option D:	Redundancy
Q6.	Calculate the change in momentum in (kgm/s) of a car of mass 800 Kg when it's speed increases from 40 m/s to 50 m/s uniformly?
Option A:	4000
Option B:	8000
Option C:	12000
Option D:	16000
Q7.	Calculate the average impact load in KN for following Conditions ($m=1000\text{kg}$, $v=60\text{km/hr.}$, d is the distance travelled during collision= 1m)
Option A:	150
Option B:	139

Option C:	180
Option D:	120
Q8. built the first dummy designed for the automotive industry.
Option A:	Elon Musk
Option B:	James Hackett
Option C:	Mary Barra
Option D:	Robert Oppenheimer
Q9.	It is a the 50th percentile male dummy which made its first appearance in 1976, is the familiar crash test dummy.
Option A:	Sierra Sam
Option B:	Hybrid I
Option C:	THOR
Option D:	Hybrid III
Q10.	Which of the following is having less strength?
Option A:	Tempered glass
Option B:	Laminated Glass
Option C:	Regular Glass
Option D:	GRP
Q11.	It is critical that once a pretensioner has been deployed, the entire seat belt and pretensioner is
Option A:	OK
Option B:	not damaged
Option C:	rebuilt/repared
Option D:	in good condition
Q12.	Child's car seat should be placed, away from active
Option A:	air bags

Option B:	Bumper
Option C:	Collapsible Steering Column
Option D:	ABS
Q13.	A restraint should be at least as high as the centre of gravity.
Option A:	head's
Option B:	Hand's
Option C:	Leg's
Option D:	Chest's
Q14. is the process using scientific methodology to determine the circumstances, mechanics, and contributing factors associated with a collision.
Option A:	Accident reconstruction
Option B:	Vehicle Design
Option C:	Crash Test
Option D:	Crash Simulation
Q15.	Forces that act for a very short time are called
Option A:	impulse forces
Option B:	Normal forces
Option C:	Drag forces
Option D:	Cornering forces
Q16.	Most pedestrians are killed by a impact.
Option A:	side
Option B:	frontal
Option C:	rollover
Option D:	rear

Q17.	The outside front tire usually leaves the mark, because the lateral weight shift due to inertial force acting on the vehicle's CG.
Option A:	No
Option B:	Heaviest
Option C:	Lighter
Option D:	Softer
Q18.	What is ACC?
Option A:	Adaptive cruise control
Option B:	Adaptive collision control
Option C:	Active cruise control
Option D:	After cruise control
Q19. alerts the driver if they start to drift out of their marked highway lane.
Option A:	Low departure warning
Option B:	Lane different warning
Option C:	Lane departure warning
Option D:	Lane direct warning
Q20.	An automotive system uses a thermographic camera to increase a driver's perception and seeing distance in darkness or poor weather beyond the reach of the vehicle's headlights.
Option A:	day vision
Option B:	rear vision
Option C:	night vision
Option D:	front vision
Q21.	Which of the following is radar based system?
Option A:	Traction control
Option B:	Collision avoidance system
Option C:	Anti-lock brakes

Option D:	Active roll control
Q22.	The National Highways Authority of India set up in
Option A:	1970
Option B:	2000
Option C:	1990
Option D:	1988
Q23.	ARAI stands for ...
Option A:	Automotive Rural Association of India,
Option B:	Automotive Research Association of India,
Option C:	Automatic Research Association of India,
Option D:	Automotive Redesign Association of India,
Q24.	TED 30 is related to
Option A:	Railway Applications
Option B:	Automotive Braking Systems
Option C:	Automotive Tyres, Tubes And Rims
Option D:	Transport Tractors and Trailers
Q25.	AIS-101 and Amd. 1 is related to
Option A:	Requirements for the Protection of Fuel System in the Event of Rear Impact of a Motor Vehicle
Option B:	Automotive Vehicles - Speed limitation Devices – Specifications
Option C:	Passive Safety Crash Protection Systems
Option D:	Automotive Tyres, Tubes And Rims

