

Unit 5 - Week-3 : Introduction to Automotive Ergonomics - III

Course outline
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Week-3 : Introduction to Automotive Ergonomics - III
<ul style="list-style-type: none"> Lec-1: Vehicle Entry and Exit :: Basics and Details Lec-2: Driver Distraction and Driving Performance Measurement Lec-3: Driver Workload Measurement
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Assessment 3

The due date for submitting this assignment has passed. **Due on 2019-08-21, 23:59 IST.**
 As per our records you have not submitted this assignment.

ASSIGNMENT 3

- In context of measuring driver's workload; _____ is the specification of the amount of information processing capacity that is used for task performance. **1 point**
 - Physical workload
 - Attention
 - Alertness
 - Temporal demand
 - Mental workload
 - Dizziness

No, the answer is incorrect.
Score: 0
Accepted Answers:
Mental workload
- Typing a text message while driving is an example of _____ distraction. **1 point**
 - Habitual
 - Voluntary
 - Rapid
 - Involuntary
 - Common
 - Temporal

No, the answer is incorrect.
Score: 0
Accepted Answers:
Voluntary
- In context of measuring driver's workload; which one of the following is not a valid subscale used in the measurement of the NASA-Task Load Index? **1 point**
 - Comfort level
 - Frustration Level
 - Effort
 - Physical Demand
 - Mental Demand
 - Performance

No, the answer is incorrect.
Score: 0
Accepted Answers:
Comfort level
- Which one of the following is not a valid driver distraction measurement technique? **1 point**
 - Test Track Studies
 - Revolving Time
 - Lane Change Test
 - Driving Simulation
 - Peripheral Detection
 - On Road Studies

No, the answer is incorrect.
Score: 0
Accepted Answers:
Revolving Time
- During entry/ exit drivers with long legs do not feel that
 - Seat and top of rocker panel is too high
 - Insufficient space between the opened door and vehicle body
 - Wide step-over
 - Insufficient legroom
 - Insufficient rearward extend of the seat track
 - B-pillar position is appropriate

No, the answer is incorrect.
Score: 0
Accepted Answers:
Seat and top of rocker panel is too high
Wide step-over
- For ensuring the easy entry and exit in a vehicle the height of the outside door handle should not be above the standing _____ height of the 5th percentile female **1 point**
 - Head
 - Shoulder
 - Waist
 - Wrist
 - Knee
 - Trunk

No, the answer is incorrect.
Score: 0
Accepted Answers:
Shoulder
- For ensuring the easy entry and exit in a vehicle the door opening angle should be _____ degree for the front door **1 point**
 - 15-35
 - 0-30
 - 90-110
 - 120-180
 - 65-80
 - 180

No, the answer is incorrect.
Score: 0
Accepted Answers:
65-80
- Unintentionally glancing at a cell phone in response to a notification is an example of _____ distraction. **1 point**
 - Natural
 - Habitual
 - Spontaneous
 - Curiosity
 - Environmental
 - Triggered

No, the answer is incorrect.
Score: 0
Accepted Answers:
Habitual
- Which one of the following not a valid technique for measuring Driver's Workload? **1 point**
 - NASA-TLX
 - DALI
 - WP
 - SWOT
 - SAE Total Task time
 - ISO-LCT

No, the answer is incorrect.
Score: 0
Accepted Answers:
SWOT
- Height of the 'Running boards' from the ground should not be more than **1 point**
 - 45 cm
 - 10 cm
 - 65cm
 - 90 cm
 - 5 - 5.5 cm
 - 170 cm

No, the answer is incorrect.
Score: 0
Accepted Answers:
45 cm
- In SWAT workload assessment technique, workload is a function of three dimensions and all these three dimensions further have _____ possible levels. **0 points**

Hint

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Regex Match) hre
- Most driver failures occur due to inability of the driver to make the right decisions at the right time and right place; such failures are well categorized as _____ failures. **0 points**

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: String) information-processing
- For ensuring the easy entry and exit in a vehicle the height of the inside door handle should not be below the _____ height of a seated passenger. **0 points**

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: String) arm-rest
- _____ may be characterized as any activity that takes a driver's attention away from the task of driving. **0 points**

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: String) Driver distraction
- While considering door sill design and seat orientation, it is observed that the large sill widths increases the potential for the _____ leg to collide with the sill during egress. **0 points**

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Regex Match) ef
- Rearward movement of the driver's seat and upward and forward movement of the steering wheel facilitate ingress/egress. **1 point**
 - TRUE
 - FALSE

No, the answer is incorrect.
Score: 0
Accepted Answers:
TRUE
- While entry and exit by the tall drivers having long legs especially the male drivers, the front edge of the B-pillar is too far backward. **1 point**
 - TRUE
 - FALSE

No, the answer is incorrect.
Score: 0
Accepted Answers:
FALSE
- Self-report studies in context of Driver Distraction are much useful for examining social and psychological factors like attitudes which generally cannot be assessed by direct observations. **1 point**
 - TRUE
 - FALSE

No, the answer is incorrect.
Score: 0
Accepted Answers:
TRUE
- The level of performance in the secondary task will indicate the spare capacity of the driver available after maintaining the primary task performance. This is the assumption of 'Secondary task performance measurement' during driver's workload estimation. **1 point**
 - TRUE
 - FALSE

No, the answer is incorrect.
Score: 0
Accepted Answers:
TRUE
- The amount of information processing capacity of the driver remain constant due to changes in number of factors such as attention, distraction, fatigue, roadway and traffic. **1 point**
 - TRUE
 - FALSE

No, the answer is incorrect.
Score: 0
Accepted Answers:
FALSE
- A multidimensional rating scaled based procedure to estimate overall workload score based on a weighted average of ratings on six subscales, is known as **1 point**
 - Workload Profile (WP)
 - Lane Change Test (LCT)
 - NASA-TLX
 - Subjective Workload Assessment Technique (SWAT)
 - Driving Activity Load Index (DALI)

No, the answer is incorrect.
Score: 0
Accepted Answers:
NASA-TLX
- The workload assessment method which is based on the multiple resource model considering eight workload dimensions, is known as **1 point**
 - Workload Profile (WP)
 - Lane Change Test (LCT)
 - NASA-TLX
 - Subjective Workload Assessment Technique (SWAT)
 - Driving Activity Load Index (DALI)

No, the answer is incorrect.
Score: 0
Accepted Answers:
Workload Profile (WP)
- The simple laboratory dynamic dual-task method that quantitatively measures performance degradations in a primary driving task while a secondary task is being performed, is known as **1 point**
 - Workload Profile (WP)
 - Lane Change Test (LCT)
 - NASA-TLX
 - Subjective Workload Assessment Technique (SWAT)
 - Driving Activity Load Index (DALI)

No, the answer is incorrect.
Score: 0
Accepted Answers:
Lane Change Test (LCT)
- A modified NASA-TLX workload measurement technique designed specifically for the driving context, is known as **1 point**
 - Workload Profile (WP)
 - Lane Change Test (LCT)
 - NASA-TLX
 - Subjective Workload Assessment Technique (SWAT)
 - Driving Activity Load Index (DALI)

No, the answer is incorrect.
Score: 0
Accepted Answers:
Driving Activity Load Index (DALI)
- A workload assessment technique in which the workload is a function of three dimensions viz. time load, mental effort load and psychological stress, is known as **1 point**
 - Workload Profile (WP)
 - Lane Change Test (LCT)
 - NASA-TLX
 - Subjective Workload Assessment Technique (SWAT)
 - Driving Activity Load Index (DALI)

No, the answer is incorrect.
Score: 0
Accepted Answers:
Subjective Workload Assessment Technique (SWAT)