MEA ENGINEERING COLLEGE, PERINTHALMANNA

BE-102: Design & Engineering

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- 1. During summer season while parking cars under intense sunlight, the car cabin get over heated. Develop an optimal solution to overcome this problem.
- 2. Make design modification to wheel chair so that they can be easily used to climb steps.
- 3. Wearing ID card is mandatory in institutions, but students often forget to wear ID cards. Develop a solution to overcome this problem.
- 4. Develop some design modification for travel bags, to improve its functionalities as well as product value.
- 5. Teachers facing health issue through chalk powder inhalation while they rubbing board with conventional dust removers. Develop a specially designed duster that can solve this issue.
- 6. Since Mr. Rahul's mother packing his lunch early morning itself, he experiencing difficulties with his lunch that he can't taste the fresh meals. Help him by designing a lunch box that can effectively preserve freshness of food.
- 7. Heavy school bags leads to many health issues to younger students. How can a designer help them? Develop a better solution.
- 8. Helmet provides safety and protection to bike riders, but riders found difficulties to carry helmet with them and hooking it up with bike as well. Develop a solution to solve this problem without sacrificing safety. (Hint. Modular Design)
- 9. After every academic year our institution producing a large quantity of paper wastes even after too many preventive measures. How we can recycle this effectively. (Hint. Suggest waste recycling methods, Possible products from this recycling)
- 10. Modify the design of garment hanger to improve its functionality. (Hint. Multi-functional design, Multiple garments on single hanger)
- 11. You may experience difficulty in locating waste bin at an unfamiliar place or office. Develop a smart solution to tackle this problem.
- 12. Design a candle holder to improve the life of candle and reuse of wax
- 13. Design a dismountable temporary shelter for travellers, so that they can carry their shelter with them. (Hint. Modular design, Design for assembly)
- 14. Students found inconvenience in carrying water bottle and lunch box, a designer try to solve this problem by integrating water bottle with lunch box. Design this product under size constrains and mixing up should be avoided.
 - (Hint. Design should be portable, Separation between food and water)
- 15. Design a baby walker in such a way that it can be easily converted into cradle whenever required.
- 16. In certain situations users requires extra length for their mobile charger cable. But offering extra cable length become an issue while normal usage. Develop a design to effectively solve this problem.
 - (Hint. Adjustable cable length, Avoid entanglement of cable)
- 17. Design a table for ironing garments. (Adding values, Easy handling of iron box, profile of table top)
- 18. Due to heavy weight of filled gas cylinders, Gopal's mother always ask him to help her replace gas cylinder. Design an equipment that can be used to transport cylinders easily by a single person like Gopal's mother.
- 19. Design a juice machine that run with both man power and electricity. (Hybrid design)
- 20. How we can help physically challenging people by improving the functionality and design of passenger seat of a car. So that they can easily enter and sit inside the car.