

## Sample Question Paper 22652

### Unit - 1

1. HEV stands for ----- (1 Mark)
- Hybrid Electronic Vehicle
  - Hybrid Electrical vehicle
  - Hybrid Environmental Vehicle
  - None of the above

**Ans:- b. Hybrid Electrical vehicle**

2. In February 2019, the Union Cabinet cleared Rs 10,000-crore programme under the ----- scheme. (1 Mark)
- FAME II
  - NACP
  - ARAI
  - VRDE

**Ans:- a.FAME II**

3. ACC requires the driver to set the desired ----- (1 Mark)
- Noise
  - Speed
  - Vision
  - All of the above

**Ans:- b.Speed**

4. ----- introduces Active Passive Integration Approach for vehicle (1 Mark)
- SAAB
  - Continental
  - Bosch
  - MCE5

**Ans:- b. Continental**

5. Honda Civic is a ----- Hybrid vehicle (1 Mark)
- Micro
  - Mid
  - Series-Parellel
  - Full

**Ans:- c. Series-Parellel**

6. Mahindra Electric has released ----electric vehicles in the Indian market up to 2020 (1 Mark)
- 2
  - 4
  - 6
  - 8

**Ans:- b.4**

## Unit – 2

1. In Drum type Boiler Feed water flow control by Three element controller (1 Mark)
- Drum level
  - Steam Flow
  - Feed water flow
  - All of above

**Ans:- d. All of above**

2. Low NOx Combustion Technology Regulation in Japan for Coal Firing Boiler has reduced from 400 ppm to \_\_\_\_\_ (1 Mark)
- 100ppm
  - 200ppm
  - 300ppm
  - 400ppm

**Ans:- b. 200ppm**

3. Benefits of Waste Heat Recovery (1 Mark)
- Reduction in pollution
  - Reduction in equipment sizes
  - Reduction in auxiliary energy consumption
  - All of the above

**Ans:- d. All of the above**

4. Exhaust gas energy recovery in Electro turbo compounding (ETC) up to (1 Mark)
- 10% Possible
  - 20% Possible
  - 30% Possible
  - 40% Possible

**Ans:- b. 20% Possible**

5. Factors affecting cooling of water in a cooling tower are: (1 Mark)
- Temperature of air
  - Humidity of air
  - Temperature of hot air
  - All of the above

**Ans:- d. All of the above**

### Unit – 3

1. Smart manufacturing is a convergence of modern data science techniques and artificial intelligence to form the factory of the future. (1 Mark)
- The statement is correct.
  - The statement is partially correct.
  - The statement is wrong.
  - None of them

**Ans:- a. The statement is correct.**

2. IoT can be applicable in----- (1 Mark)
- Predictive and preventative maintenance
  - Supply chain management
  - Inventories and logistics
  - All of them

**Ans:- d. All of them**

3. cause of translational errors occurred in CMM (2 Mark)
- Twisting error
  - Error in scale division
  - Roll error
  - Error in straightness

**Ans:- d. Error in straightness**

4. Software used for reverse engineering after 3D scanning is (1 Mark)
- Maya
  - 3D Max
  - CAD
  - all of the above

**Ans:-**

5. Liquid crystal elastomers 4D printing material achieve their activation due to (2 Mark)
- Light
  - Heat
  - Electrical
  - All of the above

**Ans:- d. All of the above**

## Unit – 4

1. BEE Star rating is based on \_\_\_\_\_ (1 Mark)
- Power consumption
  - Power Input
  - Power Out put
  - none of these

**Ans: - a. Power consumption**

2. \_\_\_\_\_ is essentially aimed at establishing the existing pattern of energy consumption (1 Mark)
- Energy Monitoring
  - Energy Targeting
  - energy audit
  - none of these

**Ans:- a. Energy Monitoring**

3. Detailed energy auditing is carried out in \_\_\_\_\_ phases (1 Mark)
- One
  - Two
  - Three
  - Four

**Ans:- c. Three**

4. \_\_\_\_\_ meter is used to measure Illumination level (1 Mark)
- Pyrometer
  - Wattmeter
  - Lux meter
  - All

**Ans:- c. Lux meter**

5. As star rating \_\_\_\_\_ for energy efficient equipment (1 Mark)
- 1 star
  - 5 star
  - 4 star
  - 2 star

**Ans:- b. 5 star**

## Unit – 5

1. identify the equipment shown in fig

(1 Mark)



- a. Single action disc harrow
- b. Tandem disc harrow
- c. Off-set disc harrow
- d. Double action disc harrow

**Ans:- a. Single action disc harrow**

2. consists of dropping the seeds in furrow lines in a continuous flow and covering them with soil

(1 Mark)

- a. Broadcasting
- b. Drilling
- c. Dibbling
- d. Transplanting

**Ans:- b. Drilling**

3. It is a machine designed for harvesting, threshing, separating, cleaning and collecting grains while moving through standing crops

(1 Mark)

- a. Combine
- b. Thresher
- c. Harvestor
- d. all of the above

**Ans:- a. Combine**

4. is also called as knife harrow.

(1 Mark)

- a. Spring tooth harrow
- b. Acme harrow
- c. Spike tooth harrow
- d. none of the above

**Ans:- b. Acme harrow**

5. India is the largest producer of -----in the world.

(1 Mark)

- a. Tractor
- b. Bus
- c. Truck
- d. none of the above

**Ans:- a. Tractor**