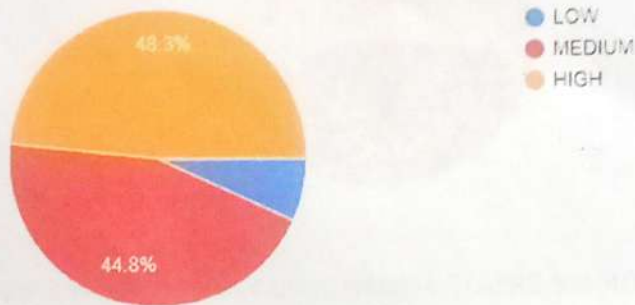**Department: Mechanical Engineering** **Academic Year: 2021-2022** **Term: I**
Year: TE
Course Exit Survey of Subject: Numerical and Statistical Methods [2019 Pattern]
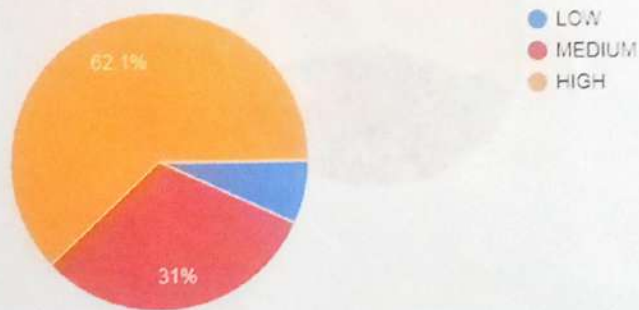
Total no. Of Students - 43

Q.1 CO1. SOLVE system of equations using direct and iterative numerical methods

29 responses

CO2. ESTIMATE solutions for differential equations using numerical techniques
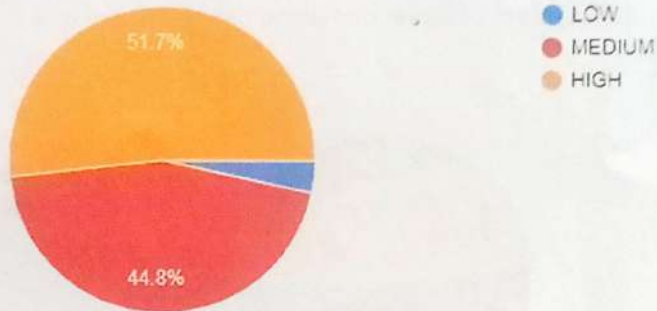
29 responses

CO3. DEVELOP solution for engineering applications with numerical integration.

29 responses

- LOW
- MEDIUM
- HIGH

51.7%
44.8%

CO4. DESIGN and CREATE a model using a curve fitting and regression analysis

29 responses
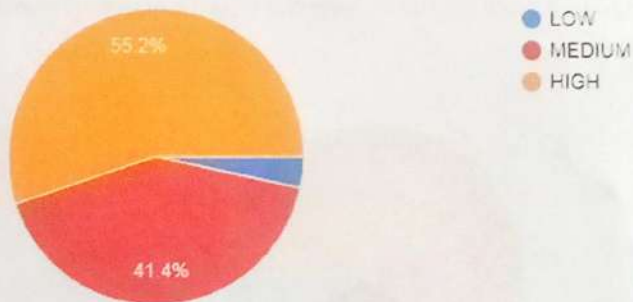
- LOW
- MEDIUM
- HIGH

55.2%
41.4%

CO5. APPLY statistical Technique for quantitative data analysis

29 responses

- LOW
- MEDIUM
- HIGH

62.1%

37.9%
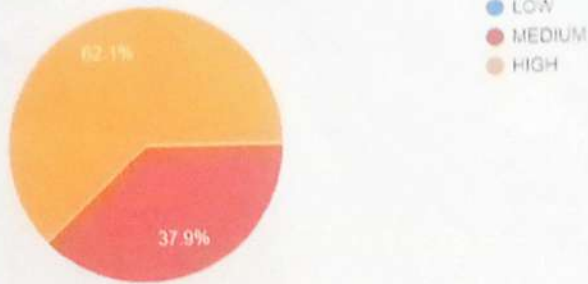
CO6. DEMONSTRATE the data, using the concepts of probability and linear algebra

29 responses

- LOW
- MEDIUM
- HIGH

75.9%

10.3%

13.8%
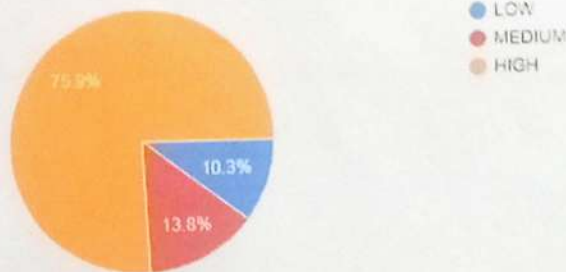
Prof. N.A.Jadhav

Subject Teacher

Prof. G.E.Kondhalkar

HOD

Principal

Department: Mechanical Engineering   **Academic Year: 2021-2022**
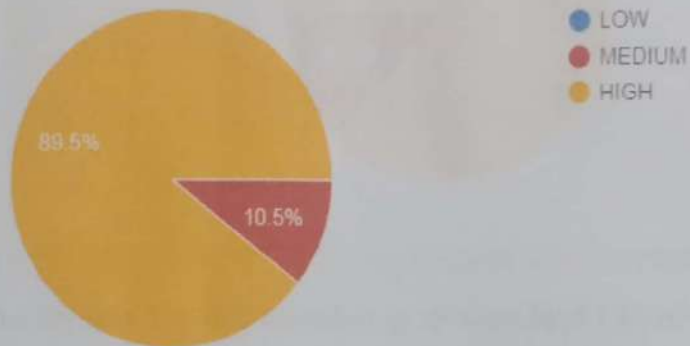**Year: TE   Term: I**   **Total Students: 43**
Course Exit Survey of Subject: Heat and Mass Transfer (302042)[2019 Pattern]

Q.1. CO1. ANALYZE & APPLY the modes of heat transfer equations for one
dimensional thermal system.

38 responses

- LOW
- MEDIUM
- HIGH

89.5%

10.5%

Q.2. CO2. DESIGN a thermal system considering fins, thermal insulation and &
Transient heat conduction.

38 responses

- LOW
- MEDIUM
- HIGH

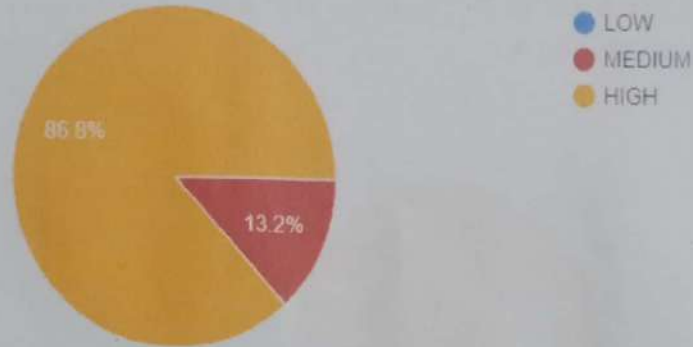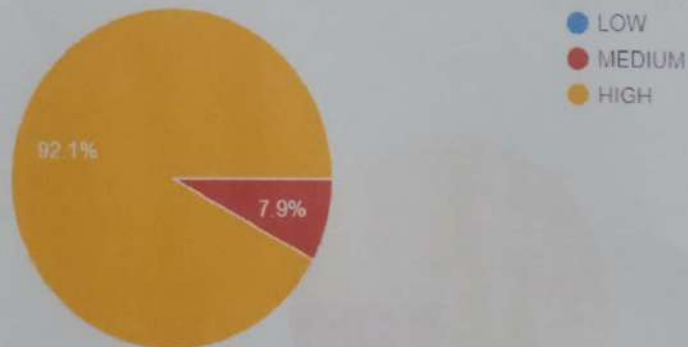81.6%

18.4%

Q.3 CO3. EVALUATE the heat transfer rate in natural and forced convection & validate with experimentation results.

38 responses

- LOW
- MEDIUM
- HIGH

86.8%

13.2%

Q.4. CO4. INTERPRET heat transfer by radiation between objects with simple geometries, for black and grey surfaces.

38 responses

- LOW
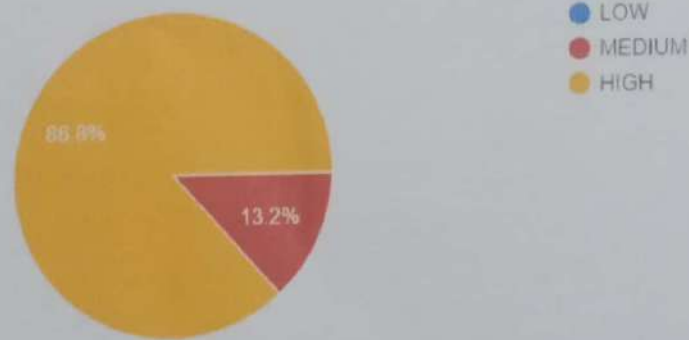- MEDIUM
- HIGH

92.1%

7.9%

Q.5. CO5. ABILITY to analyze the rate of mass transfer using Fick's Law of Diffusion and understands mass diffusion in different coordinate systems.
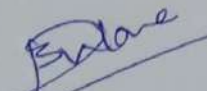
38 responses

- LOW
- MEDIUM
- HIGH

84.2%

15.8%
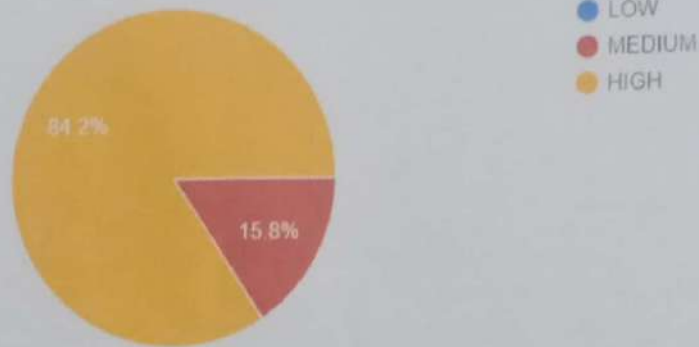
Q.6. CO6. DESIGN & ANALYSIS of heat transfer equipment's and investigation of its performance.

38 responses

- LOW
- MEDIUM
- HIGH

86.8%

13.2%

Subject Teacher   **Head of Department**   4 **Principal**

Department: Mechanical Engineering   **Academic Year:** 2021-2022   **Term: I**
Year: TE
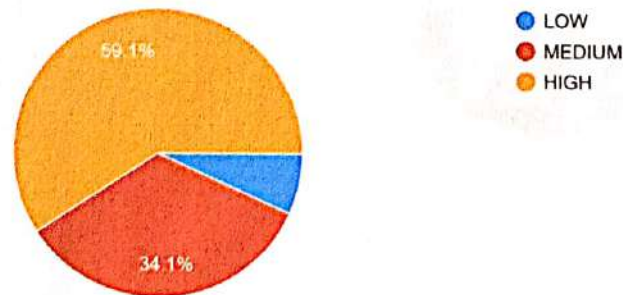**Course Exit Survey of Subject: TE – Design of Machine Element [2019 Pattern]**

Q.1 CO1. . DESIGN AND ANALYZE the cotter and knuckle Joints, levers and components subjected to eccentric loading.

44 responses

- LOW
- MEDIUM
- HIGH

50%
45.5%

CO2. . DESIGN shafts, keys and couplings under static loading conditions
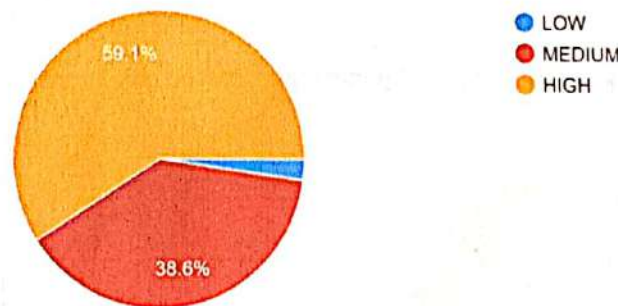
44 responses

- LOW
- MEDIUM
- HIGH

59.1%
34.1%

CO3. . ANALYZE different stresses in power screws and APPLY those in the procedure to design screw jack.

44 responses

- ● LOW
- ● MEDIUM
- ● HIGH

63.6%
31.8%
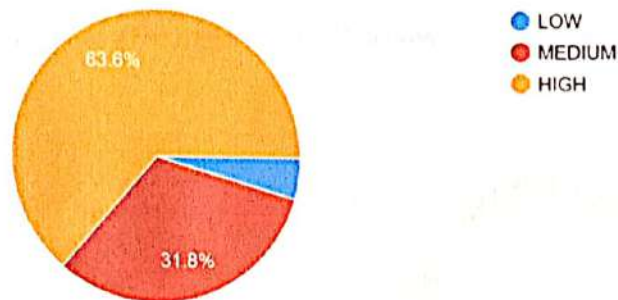
CO4. EVALUATE dimensions of machine components under fluctuating loads.

44 responses

- ● LOW
- ● MEDIUM
- ● HIGH

59.1%
38.6%

CO5. .EVALUATE & INTERPRET the stress developed on the different type of welded and threaded joints
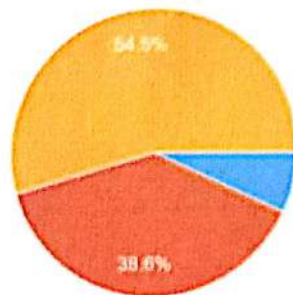
44 responses

- LOW
- MEDIUM
- HIGH

54.5%
36.4%
9.1%
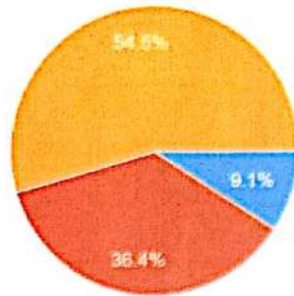
CO6 APPLY the design and development procedure for different types of springs.

44 responses

- LOW
- MEDIUM
- HIGH

54.5%
38.6%

Subject Teacher

Head of Department

Principal

Department: Mechanical Engineering   **Academic Year: 2021-2022**   **Term: I**
Year: TE
Course Exit Survey of Subject: TE – Advanced Forming and Joining Processes [2019 Pattern]
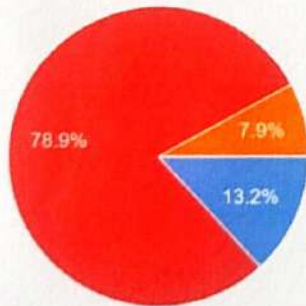
Studying Year
38 responses

- Second Year
- Third Year
- Forth Year

100%
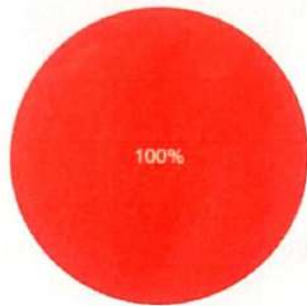
Q.1 CO1 :- ANALYSE the effect of friction in metal forming deep drawing and IDENTIFICATION of surface defects and their remedies in deep drawing operations.
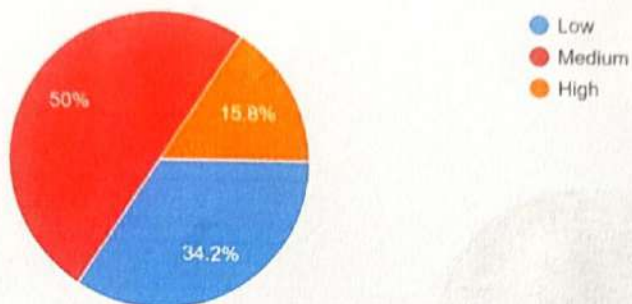38 responses
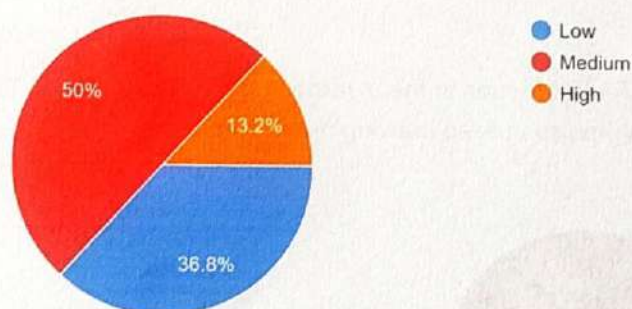

- Low
- Medium
- High

78.9%   7.9%   13.2%

Q.2 CO2 :- ASSESS the parameters for special forming operation and SELECT appropriate special forming operation for particular applications.
38 responses

Q.3 CO3 :- ANALYSE the effect of HAZ on microstructure and mechanical properties of materials.
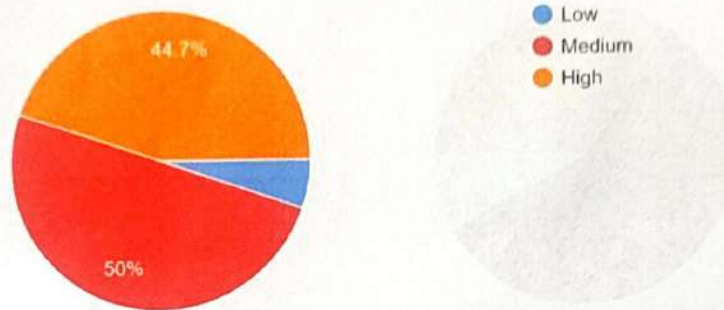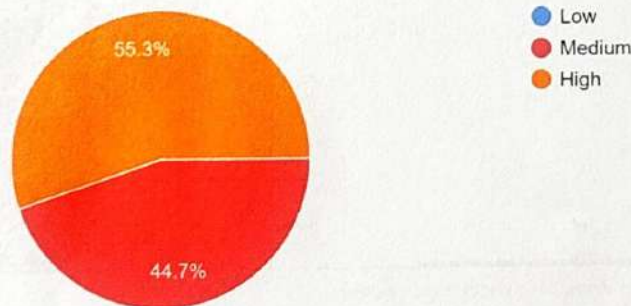38 responses

Q.4 CLASSIFY various solid state welding process and SELECT suitable welding processes for particular applications.

38 responses

- ● Low
- ● Medium
- ● High

Q.5 CO5 :- CLASSIFY various advanced welding process and SELECT suitable welding processes for particular applications.
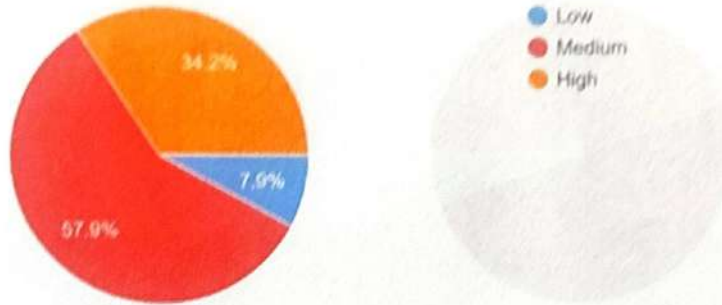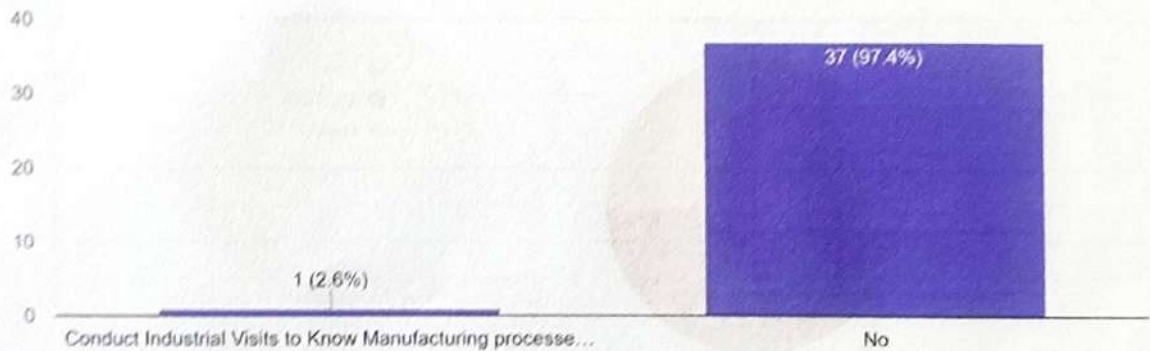
38 responses

- ● Low
- ● Medium
- ● High

Q.6 CO6 :- INTERPRET the principles of sustainable manufacturing and its role in manufacturing industry.

38 responses

- Low
- Medium
- High

34.2%

7.9%

57.9%

What additions or changes do you think would you improve this course?

38 responses

37 (97.4%)

1 (2.6%)

Conduct Industrial Visits to Know Manufacturing processe...

No

Subject Incharge   **Head of Department**   **4 Principal**

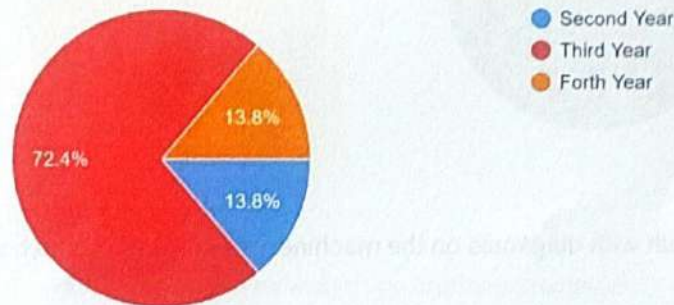**Department: Mechanical Engineering**   **Academic Year: 2021-2022**   **Term: I**
Year: TE
Course Exit Survey of Subject: TE – Digital Manufacturing [2019 Pattern]
Total No. of students = 39

Studying Year
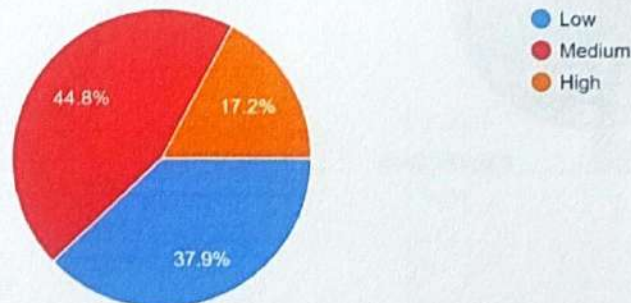29 responses

- ● Second Year
- ● Third Year
- ● Forth Year

13.8%
72.4%
13.8%

Q.1 CO1 :- APPLY& DEMONSTRATE procedure of assembly & disassembly of various machines.
29 responses

- ● Low
- ● Medium
- ● High

44.8%
17.2%
37.9%

Q.2 CO2 :- DESIGN & DEVELOP a working/model of machine parts or any new product.
29 responses

- Low
- Medium
- High

34.5%
13.8%
51.7%
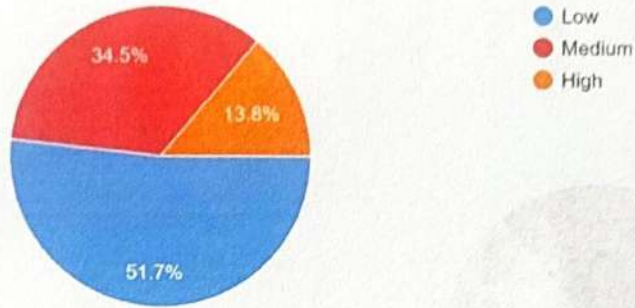
Q.3 CO3 :- EVALUATE fault with diagnosis on the machines, machine tools and home appliances.
29 responses

- Low
- Medium
- High

31%
13.8%
55.2%
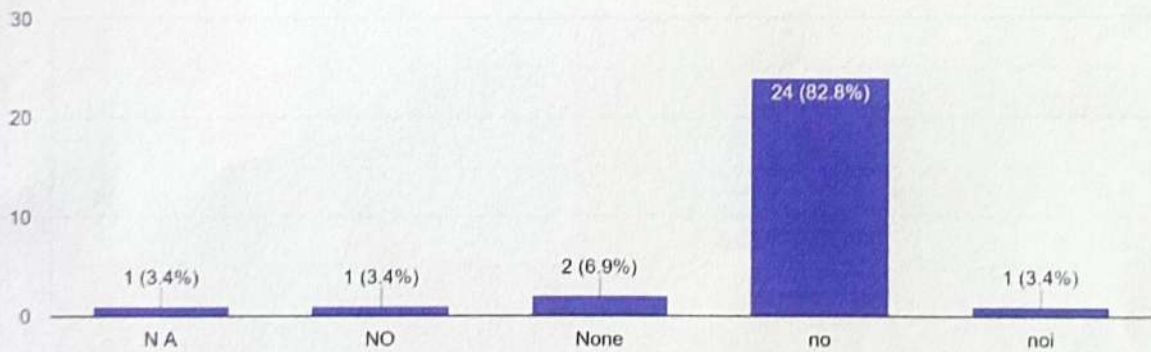
Q.4 CO4 :-IDENTIFY & DEMONSTRATE the various activities performed in an industry such as maintenance, design of components, material selection.

29 responses
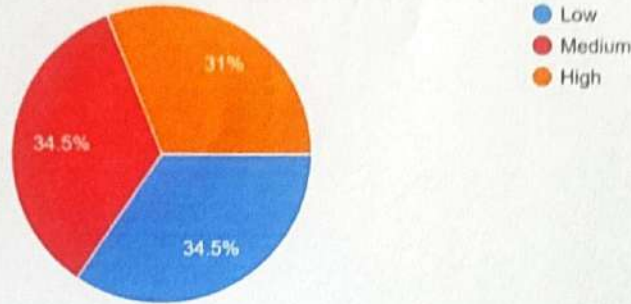
What additions or changes do you think would you improve this course?
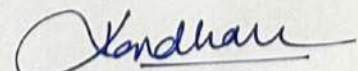
29 responses

Subject Incharge   **Head of Department**   **Principal**

Department: Mechanical Engineering   **Academic Year: 2022-2023**   **Term: I**
Year: TE
Course Exit Survey of Subject: TE – Skill Development [2019 Pattern]

Q.1 CO1. APPLY& DEMONSTRATE procedure of assembly & disassembly of various machines
40 responses

- LOW
- MEDIUM
- HIGH

65%
35%
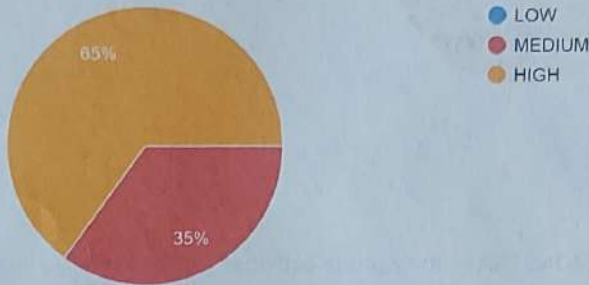
Q.2 CO2. DESIGN & DEVELOP a working/model of machine parts or any new product
40 responses
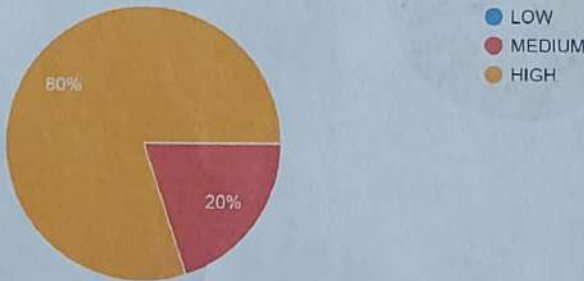
- LOW
- MEDIUM
- HIGH

80%
20%

Q.3 CO3. EVALUATE fault with diagnosis on the machines, machine tools and home appliances
40 responses
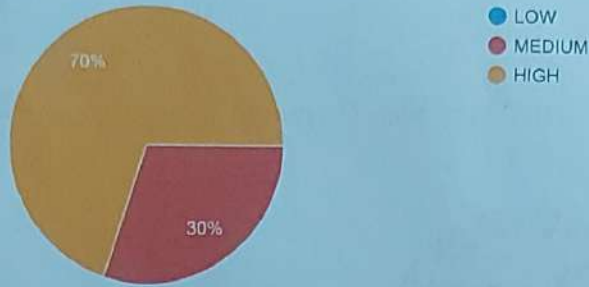
- LOW
- MEDIUM
- HIGH

70%

30%

Q.4 CO4. IDENTIFY & DEMONSTRATE the various activities performed in an industry such as maintenance, design of components, material selection
40 responses

- LOW
- MEDIUM
- HIGH

62.5%

37.5%

Subject Teacher

Head of Department

Principal

Course Exit Survey

Department: Mechanical Engineering   **Academic Year: 2021-2022**   **Term: I**
Year: TE
Subject: e Vehicle Technology [2019Pattern]
Total No. of Students : 43 .
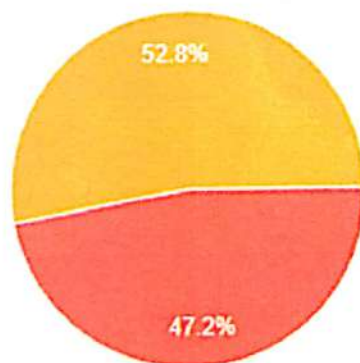
Q.1 CO1 UNDERSTAND the basics related to e-vehicle

36 responses

- LOW
- MEDIUM
- HIGH

66.7%
33.3%
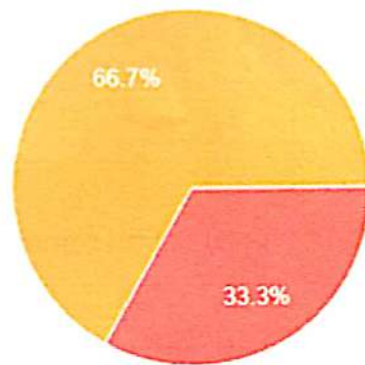
CO2. CLASSIFY the different hybrid vehicles

36 responses

- LOW
- MEDIUM
- HIGH

52.8%
47.2%

CO3. IDENTIFY and EVALUATE the significance of Lithium batteries and BMS

36 responses

- LOW
- MEDIUM
- HIGH

47.2%

52.8%

CO4. ILLUSTRATE the issues related to batteries and remedial measures

36 responses

- LOW
- MEDIUM
- HIGH

50%

50%

CO5. EVALUATE the different driving systems for e-vehicles

36 responses

- ● LOW
- ● MEDIUM
- ● HIGH
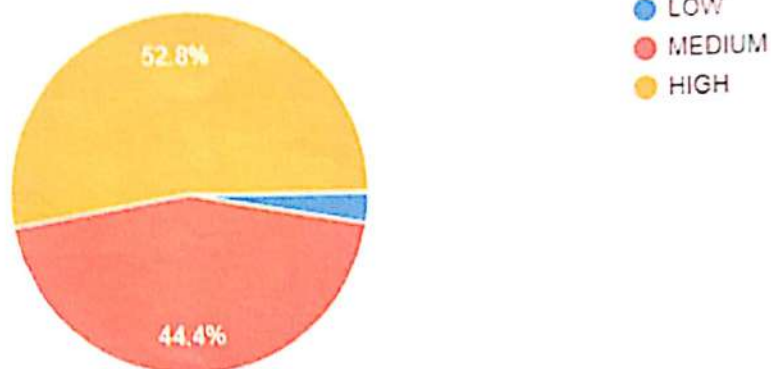
CO6. DISCOVER and CORRELATE the advancement in e-vehicles

36 responses

- ● LOW
- ● MEDIUM
- ● HIGH

Subject Teacher   Head of Department   ⁴⁄ Principal