



Mechanical Engineering Department

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| Academic Year – 2020-21 | Class: TE DIV. A |
| Semester – I | Date : 18/07/2020 |
| Subject: Theory of Machines-II | |
| CO: CO1 | PO: PO1 |

Innovative Teaching Methods

Title of Innovation method/activity: Innovative Teaching Learning Method: Cross word Puzzle activity

1. Name of Faculty: Mr.D.D.Kulkarni
2. Subject: Theory of Machines-II
3. Objective of Method:
 1. To understand the concept of Gear.
 2. To evaluate the perception of the students

4. Topic Covered through Activity:

Spur Gear

5. Description of method with Benefits (8 – 10 lines):

The crossword puzzle is a teaching tool and an active learning strategy. A crossword is a word puzzle that usually takes the form of a square or a rectangular grid of white and black-shaded squares. The game's goal is to fill the white squares with letters, forming words or phrases, by solving clues, which lead to the answers.

Benefits of method:

- It gives great satisfaction and confidence
- It helps students to get instant feedback.
- It enhances skills like reasoning, problem-solving and developing solutions.
- It helps focus attention and engage students.
- It helps teacher to collect on spot formative assessment.

The method:

With the help of this method students have shown that word search and other puzzles can help improve memory, focus, vocabulary, and overall mental acuity.

Roles and Responsibilities

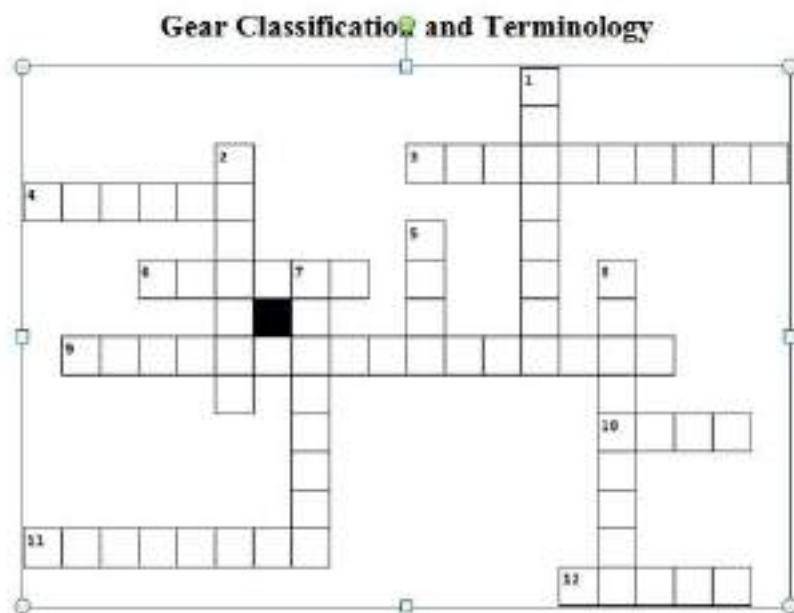
Teacher

- Teacher has to prepare questionnaire consist of MCQs.
- Teacher has to explain the method to the students in detail.

Student

- Students have to solve the puzzle
- Student need to spell the words correctly.
- The student has to accurately fill in all the blank squares with letters those form words or answer.

6. Assessment Tools



Across

3. Common point of contact
4. Ratio of D/T
6. Non parallel non intersecting
9. High gear reduction (Type of gear)
10. Transmit reciprocating motion (Type of gear)
11. Radial distance below pitch circle
12. Axis are intersecting (Type of gear)

Down

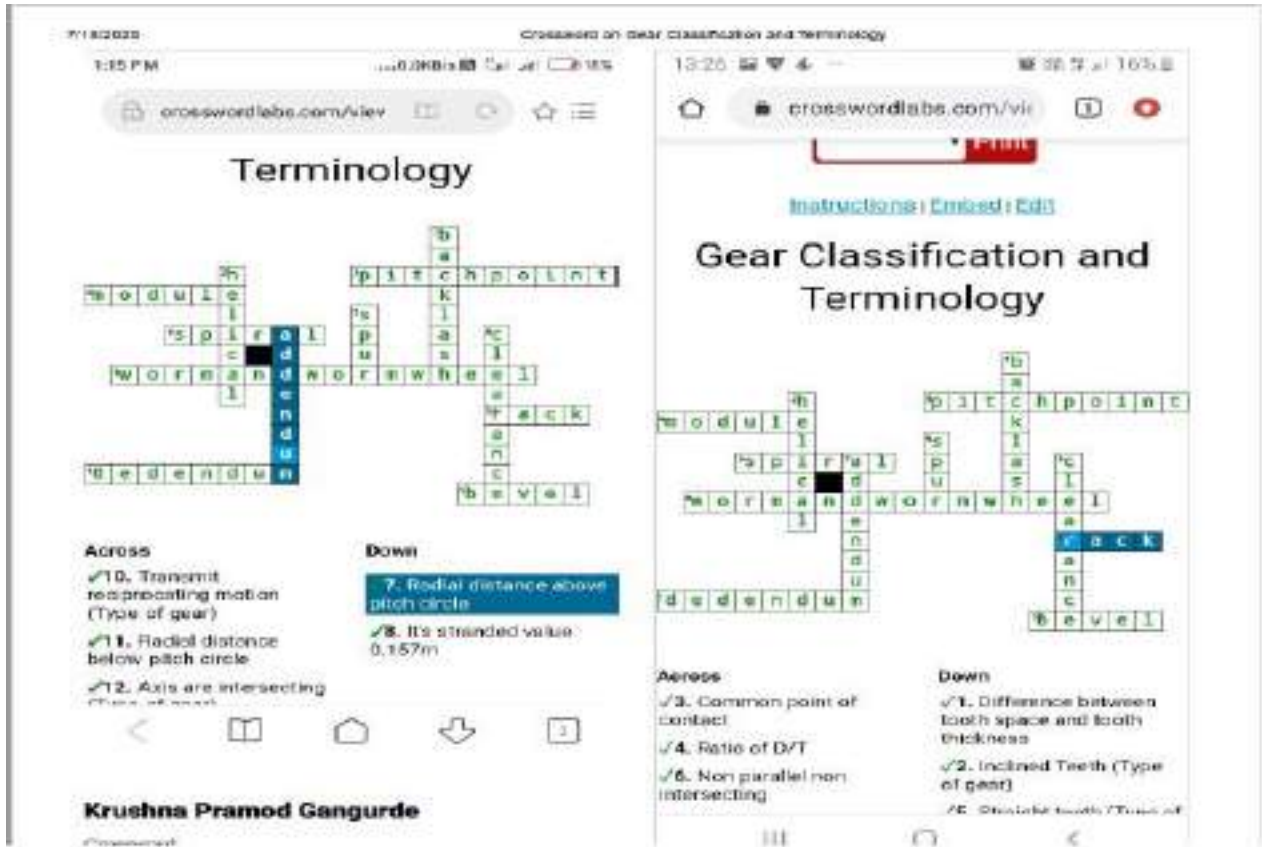
1. Difference between tooth space and tooth thickness
2. Inclined Teeth (Type of gear)
5. Straight teeth (Type of gear)
7. Radial distance above pitch circle
8. It's standard value 0.157m

7. Evaluation sheet of attendee

| Roll No. | Name of Student | crossword puzzle marks |
|----------|------------------------------|------------------------|
| 1 | ABHANG VISHVAJEET RAMDAS | AB |
| 2 | ADOLE GIRISH PANDURANG | 12 |
| 3 | AHER PRERANA BHAUSAHEB | 12 |
| 4 | AHIRE SHUBHAM BALCHANDRA | 12 |
| 5 | AHIRRAO ABHISHEK MAHENDRA | AB |
| 6 | AMBEKAR KRISHNA SANJAY | 12 |
| 7 | AMRUTKAR ATHARVA PRAMOD | 12 |
| 8 | AVHAD ABHISHEK ANIL | AB |
| 9 | AVHAD PRASAD SANTOSH | 12 |
| 10 | BADGE PARAG SUNIL | 12 |
| 11 | BAIRAGI PRIYA NARAYANDAS | 12 |
| 12 | BAVISKAR SIDDHI VIKAS | 12 |
| 13 | BHALEKAR YASH KIRAN | 12 |
| 14 | BHALERAO RAJ AJAY | 12 |
| 15 | BHAMARE VIVEK ANIL | 12 |
| 16 | BHANGARE PRAMILA SUBHASH | 12 |
| 17 | BHOSALE HARSHAL SAMBHAJI | AB |
| 18 | BODKE PRAJWAL DIPAK | AB |
| 19 | BODKE YASH SHIVAJI | 12 |
| 20 | BONDE CHETAN MOHAN | 12 |
| 21 | BORSE MAYUR SANJAY | AB |
| 22 | BRAHMANKAR TEJAS SOMNATH | 12 |
| 23 | BUWA ANIRUDDHA SANJAY | AB |
| 24 | CHANDWADKAR ASHUTOSH SANTOSH | 12 |
| 25 | CHAUDHARI ABHISHEK SATISH | 12 |
| 26 | CHAUDHARI ANUJA NITIN | 12 |
| 27 | CHAUDHARI PRATIK KANHAIYALAL | 12 |
| 28 | CHAUDHARI UMESH SANJAY | 12 |
| 29 | CHAVAN RUTUJA VILAS | 12 |
| 30 | CHOPDA YASH RAJESH | 12 |
| 31 | DANGARE SAURABH BALASAHEB | 12 |
| 32 | DAWANGE SATISH TRAMBAK | 12 |
| 33 | DEORE CHIRAG MADHUKAR | AB |
| 34 | DESHMUKH PRATHMESH RAVINDRA | 12 |
| 35 | DHANAIT SACHIN MADHAVRAO | 12 |
| 36 | DHANWATE ASHWINI BHAUSAHEB | 12 |
| 37 | DHOMSE RUSHIKESH PRAKASH | 12 |
| 38 | GAIKWAD NINAD AVINASH | 12 |
| 39 | GAIKWAD SHRIKANT ANIL | 12 |
| 40 | GANGURDE KRUSHNA PRAMOD | 12 |
| 41 | GHOLVE SACHIN BABAN | 12 |
| 42 | HARAK SUSHANT ARUN | 12 |
| 43 | HATKAR VAIBHAV MADHUKAR | AB |
| 44 | JADE SHWETA SANJAY | AB |

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| 45 | JADHAV ANIRUDDHA DILIP | 12 |
| 46 | JADHAV PRAJAKTA UTTAM | 12 |
| 47 | JADHAV TRUPTI SANJAY | 12 |
| 48 | JANGLE RAHUL DNYANESHWAR | 12 |
| 49 | JOSHI DHRUV HEMANT | AB |
| 50 | JOSHI SIDDHARTH NITIN | AB |
| 51 | KADAM PRATHAMESH PARASHARAM | 12 |
| 52 | KADAM SANDESH SURESH | 12 |
| 53 | KALE SATISH GANPAT | 12 |
| 54 | KAPADNIS NIKITA YADAV | 12 |
| 55 | KHAIRNAR SWAPNIL DEVIDAS | 12 |
| 56 | KOLHE MAYURESH VISHNU | 12 |
| 57 | LODAWARA CHIRAYU JAGDISH | 12 |
| 58 | LOHAKANE VEDANT ASHOKRAO | 12 |
| 59 | MAHALE HARDIK SUBHASH | 12 |
| 60 | MAHALE SHRUTI RAJESH | 12 |
| 61 | MAHATME OM KIRAN | 12 |
| 62 | MEDHANE AKSHAY NITIN | 12 |
| 63 | METKAR SHANTANU HEMANT | AB |
| 64 | MHASKE SHREYAS BHALCHANDRA | AB |
| 65 | BADHE NIKHIL LALIT | 12 |
| 66 | BHADAGE RITIK PRASHANT | 12 |
| 67 | CHAUDHARI CHINMAY PRASHAT | 12 |
| 68 | DESALE AAYUSH DEEPAK | 12 |
| 69 | DHOTRE SATISH SURESH | 12 |
| 70 | GANGURDE ROHIT NARENDRA | 12 |
| 71 | GANGURDE SARTHAK SUBHASH | AB |
| 72 | KATHE VINAMRA ANIL | AB |
| 73 | NIKHIL CHAVAN | AB |

8. Activity Picture



9. For review and critique contact: e-mail address of faculty and HOD

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