



## Department of Information Technology

Academic Year – 2019-2020	Class: Third Year
Semester – I	Date : 16/09/2019
CO : 4,5,6	PO: 1,2,9,10,12

### Innovative Teaching Methods

#### Title of Innovation method/activity: Think-Pair-Share

1. **Name of Faculty:** Mrs. Bhawana A. Ahire

2. **Subject:** Database Management Systems

#### 3. Objective of Method:

- Collecting data.
- Breeding fresh ideas and taking inputs from a particular group.
- Perception of common people on a particular topic.
- Identify a solution to a specific problem or issue.

#### 4. Topic Covered through Group Discussion Activity:

1. Lock Based Protocols
2. Deadlock detection & Prevention
3. Two-Phase Locking Protocol
4. Lock Conversion
5. Deadlock Prevention Strategies & Lock Table
6. Shadow Paging & Copy
7. Log Based Recovery
8. Centralized & Client-Server Database Architectures
9. Parallel & Distributed Database Architecture
10. Performance Measure of Parallel Database Systems
11. Types of Parallel Database System Architecture
12. Analysis of all Database System Architectures

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

In this method problem or question related to the subject are given to the group of students. Sufficient time is given to the students to think and gather their thoughts. After this they pair themselves and exchange their thoughts with each other and prepare summary report. Finally they share their solution in front of class members.

The method Impact:

This activity helps students to enhance communication skills, interpersonal skills, self-learning, analytical skills.

#### Roles and Responsibilities

- **Teacher**
  - Develop a Clear Goal for the Discussion.

- Problematize the Topic
- Select a Discussion Format
- Choose a Method to Assign Students to Groups
- Prepare assessment methodology.
- **Student**
  - Go through the provided topic.
  - Understand and gain expertise on topic through collaboration.
  - Actively participate in group and contribute by means of discussion.
  - Share the expertise at a time of group discussion.
- **Group**
  - Develop the guidelines to establish group.(i.e. Decide the roll of all participants)
  - Every group should gain the expertise on particular topic.
  - Appropriate references should be given.
  - Grammatical mistake should be checked.
  - Develop the guidelines with which every group member can share the topic they learn.

#### 6. Assessment Tools & Rubrics:

- **Level of Engagement**
  - Individual performance would be checked through the Group Discussion
- **Preparedness**
  - Good knowledge, Good presence of mind should be checked.
- **Attitude**
  - Positive Attitude & Patience Listening.

#### Rubrics for Assessment of Group Discussion

Sr. No	Name of Method	Evaluation Criteria	SC	Excellent (100%)	Satisfactory (60%)	Poor (20%)
01	Think Pair Share (TPS)	Understanding	10	<ul style="list-style-type: none"> <li>• Quality knowledge sharing</li> <li>• Confidence</li> <li>• Quality Summary Report</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate knowledge sharing</li> <li>• Confidence</li> <li>• Quality Summary Report</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate knowledge sharing</li> <li>• Confidence</li> <li>• Quality Summary Report</li> </ul>
		Team work	10	<ul style="list-style-type: none"> <li>• Team work skill</li> <li>• Active Participation</li> <li>• On time completion</li> </ul>	<ul style="list-style-type: none"> <li>• Team work skill</li> <li>• Active Participation</li> <li>• On time completion</li> </ul>	<ul style="list-style-type: none"> <li>• Team work skill</li> <li>• Active Participation</li> <li>• On time completion</li> </ul>
		Question-Answer	5	<ul style="list-style-type: none"> <li>• Appropriate Answers to Questions.</li> </ul>	<ul style="list-style-type: none"> <li>• Answers questions, but often with little</li> </ul>	<ul style="list-style-type: none"> <li>• Inappropriate Answer</li> </ul>

7. Evaluation Sheet

 <b>KARMAVEER ADV. BABURAO GANPATRAO THAKARE COLLEGE OF ENGINEERING</b> Department Of Information Technology TE IT [Academic Year 2019-20] Subject : Database Management Systems Innovative Teaching Method : Think-Pair-Share Method Date : 16/09/2019							
Roll No.	Name of Student	Capacity for teamwork enforcing positive interdependence regarding teammates	Capacity for learning from other team-mates	Cooperati on & Helping others	Capacity to summarize with quality	Total	Sign
1	RENU GANGARAM ASWANI	10	10	10	9	39	<i>[Signature]</i>
2	GANESH SHARAD BAHALKAR	9	10	9	9	37	<i>[Signature]</i>
3	RONAK HEMANT BAVISKAR	10	10	10	10	40	<i>[Signature]</i>
4	TUSHAR SAMPAT BEJEKAR	9	10	9	10	38	<i>[Signature]</i>
5	VEDANT VIJAY BHAMARE	10	10	10	10	40	<i>[Signature]</i>
6	DIVYA JAYANT BHAMRE	10	9	10	9	38	<i>[Signature]</i>
7	DISHA MANOJ BHAVSAR	10	10	10	10	40	<i>[Signature]</i>
8	MANSI AMIT BORA	10	10	10	10	40	<i>[Signature]</i>
9	SHUBHAM PRASHANT BORSE	7	8	7	7	29	<i>[Signature]</i>
11	RISHIKESH DAWALKAR	10	10	10	10	40	<i>[Signature]</i>
12	AKASH SANJAY DEORE	10	10	9	10	39	<i>[Signature]</i>
13	RUPALI RAJESH DHAVALE						-AB-
14	BHAKTI RAJENDRA DHAWALE	10	10	10	10	40	<i>[Signature]</i>
15	PALLAVI R. DHOKANE	9	10	9	9	37	<i>[Signature]</i>
16	SHIVAM K. DUMBARE	9	10	10	10	39	<i>[Signature]</i>
17	HARSHAL DILIP GAIKWAD						-AB-
18	BHAVANA ANIL GANGURDE						-AB-
19	AKANKSHA GAWALE						-AB-
20	CHINMAY DEEPAK GHODKE	10	10	10	10	40	<i>[Signature]</i>
21	PRANJAL PRATAP GHULE	9	10	8	9	36	<i>[Signature]</i>
22	DEVESH GUJARATHI	7	8	8	8	31	<i>[Signature]</i>
23	PRATIK VIJAY GULAVE	8	6	5	9	28	<i>[Signature]</i>
24	DHANASHRI JADHAV						-AB-
26	ABHINANDAN JAGTAP						-AB-
27	ANUSHREE S. JHAVAR	10	10	10	10	40	<i>[Signature]</i>
28	SIDDHANT PRAKASH KADAM	7	9	8	8	32	<i>[Signature]</i>
29	SAURABH CHANGDEO KAKAD	10	9	9	9	37	<i>[Signature]</i>
30	APURVA RAJENDRA KALE	9	8	10	9	36	<i>[Signature]</i>
31	SHUBHAM KANGANE	10	8	9	9	36	<i>[Signature]</i>
32	SANKET KANKARIYA						-AB-
33	ANUJA MUKUND KARPE	8	10	6	10	34	<i>[Signature]</i>
35	DHANALI VIJAY KHAIRNAR	10	8	10	8	36	<i>[Signature]</i>
36	ROHIT SHANKAR KHAIRNAR	10	9	10	10	39	<i>[Signature]</i>
37	SHRUTIKA KINGE	10	9	9	10	38	<i>[Signature]</i>
38	TEJAL RAJENDRA KUWAR						-AB-

✓ 39	ATHARVA RAJENDRA LANGHE	9	10	10	10	39	Always
40	KOMAL RAVINDRA MAHAJAN						-AB-
✓ 41	KANCHAN MAKNOR	9	10	9	9	37	Always
✓ 42	ABHISHEK MORANKAR	10	10	10	8	38	ADU
43	VISHAKHA SANJAY MORE	9	9	7	7	31	Always
✓ 44	RIDDHI SUNIL NAHAR	10	10	10	10	40	Always
45	SHUBHAM VASANT NIKUMBH						-AB-
✓ 46	JASWANTSING V. PATIL	9	10	10	10	39	ADU
✓ 49	SUSHANT PARAG PATIL	9	9	7	6	23	ADU
✓ 50	REVATI PANDIT PEKHALE	9	7	7	6	28	ADU
✓ 51	PRANJAL ANIL PINGLE	9	7	8	5	27	ADU
✓ 52	PRATIBHA BALASAHEB PINGLE	9	8	7	9	32	ADU
✓ 53	NIKHIL VITTHAL RAHANE	9	9	9	8	34	ADU
✓ 54	MADHURI SHANKAR SANAP	9	8	9	7	33	ADU
✓ 56	SNEHAL RAMRAO SARODE	10	8	9	9	36	ADU
57	OWAIS SHARFRAZ SHAH						-AB-
58	SHARDUL SHWETA						-AB-
✓ 59	SALIL DARSHAN SHINDORE	8	8	7	7	30	ADU
60	ANKITA KASHINATH SHIVADE						-AB-
61	SACHIN AJAB NARAYAN SINGH						-AB-
✓ 62	SARANG SURYAWANSH	9	10	10	9	38	
✓ 63	RIDDHI KHEMCHAND TARWANI	10	9	10	10	39	ADU
✓ 64	DHANASHRI THOMBARE	9	9	10	9	37	ADU
✓ 65	SIMRAN MANGESH UPASANI	9	7	8	8	31	ADU
✓ 66	SANKET SOMNATH VIDHATE	9	7	9	8	32	ADU
67	ROHIT VISHWAKARMA						-AB-
✓ 68	BHUMIKA RAJNISH VYAS	10	9	10	10	39	ADU
69	CHANDAN PREM WAGH						-AB-
✓ 70	RENUKA SHIVAJI WAGH	9	9	10	10	38	ADU
✓ 71	UTKARSHA WAVDHANE	9	10	10	10	39	ADU
72	AMAN PRABHAKAR ZAMBARE						-AB-
73	AMOL BHOSALE						-AB-
74	NIKHIL SHINDE						-AB-
75	ROSHNI MORE						-AB-
76	PRERNA GANGURDE						-AB-
77	AKANKSHA KOTWAL						-AB-
47	Bagati Patil	8	8	8	7	31	Patil

Mrs. B. A. Ahire  
Subject Incharge

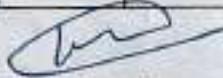
Dr. V. R. Sonawane  
HOD(IT)

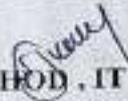


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42			✓		✓		✓	Alind
43			✓		✓		✓	Ving
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Subject Teacher  
Mrs. B. A. Ahire

  
HOD . IT  
Dr. V. R. Sonawane



## 9. Activity Picture

**KARATHA VIDYA PRASARAK SAMAJ'S**  
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**Department of Information Technology**

**Innovative teaching method: Think-Pair-Share Method      Date: 16/09/2019**

**Group No. 2**

**Group Members Name: 1. Kanchan H. Maknor 2. Anuja M. Karpe**  
**3. Bhakti R. Dhawale 4. Renuka S. Kalghe**

**Topic of Discussion: Deadlock Detection & Prevention**

**Report:**

- Deadlocks - A deadlock is condition where two or more transactions are waiting for one another to give lock.
- Deadlock detection - When transaction wait indefinitely obtain a lock then the DBMS should detect whether the transaction is involved in deadlock or not.
- Deadlock Prevention - protocols ensure that system will never enter into a deadlock state. There are two strategy for deadlock prevention -  
1) Wait die scheme      2) Wound-wait

deadlock:-

```
graph TD
    Student[Student] -- hold --> T1[T1]
    T1 -- request --> Grade[Grade]
    Grade -- hold --> T2[T2]
    T2 -- request --> Student
```

Deadlock Detection :-

```
graph TD
    T1((T1)) -- "wait for lock (R1)" --> T2((T2))
    T2 -- "wait for lock (R2)" --> T1
```

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

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