MARATHA VIDYA PRASARAK SAMAJ'S

KARMAVEER ADV. BABURAO GANPATRAO THAKARE

COLLEGE OF ENGINEERING

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AISHE Code – C-41622

Electronics & Telecommunication Engineering

Academic Year – 2020-2021	Class: B.E.
Semester – I	Date :25 Nov. 2020 onwards
CO: C402.5	PO: 1,2,8,9,10,12

Innovative Teaching Methods

Title of Innovation method/activity: Collaborative Jigsaw

(CO 5_Analyze & Compare various Protocols suitable at applications Layer)

1. Name of Faculty: Dr. Vijay M. Birari.

2. Subject: Computer Networks & Security

3. Objective of Method:

   1. To analyze different services, interfaces, protocols used at Application Layer.
   2. To analyze World Wide Web, its architecture & its interface (CGI).
   3. To understand HTTP Principle, & compare Non Persistent & persistent Messages.
   4. To analyze Telnet.
   5. To analyze DNS & it's working, security of DNS (DDNS).
   6. To analyze Network management system, SNMP & its concept.

4. **Topic Covered through Activity**:

Unit V - Application Layer					
	TOPIC	TEACHINGCONTENTS	BT	BTL	PO / PSO
Unit V7 Hrs	T1	Introduction to Application Layer: services, different protocols (std, non-std), paradigm (Traditional, new, mixed), types of interfaces, socket interface, address at client, server site, use of Transport layer services like UDP, TCP, SCTP, Std client server applications Standard Client Server Protocols:	Analyze	4	2
					1
	T2	World Wide Web, web from user & server side, architecture, browser, server, URL, cookies, web documents (static, dynamic, HTML), common gateway interface (CGI), active documents	Analyze Draw Compare	4 4 5	2,5,8,10,12
					1
	T3	HTTP Principle, The web & HTTP, Non Persistent & persistent , Messages, Methods, response, headers, proxy server	Analyze Compare	4	1,2,3

	T4	4. Telnet NVT, security prob, security shell, port forwarding, SSH packet format		4	1, 2,8,9,1 0,12
	T5	5. DNS (domain name system) Working, NAME SPACE, full name space, hierarchical name space. DNS(domain name space), DNS in the internet, Name address resolution (Recursive, iterative, message format, caching), DNS records (question records, re-source, records, encapsulation, Registrars), security of DNS (DDNS)	Analyze	4	,8,9,10, 12
	T6	6.Network Management: Introduction, Network management system, fault management, performance management, security management, accounting management, SNMP & its concept, Managers & Agents, Management components, structure (SMI), MIB, SNMP message	Analyze	4	,8,9,10, 12
C402.5	Analyze & Compare various Protocols suitable at applications Layer.				

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

- Jigsaw is a collaborative learning technique that gives students practice in the acquisition and **presentationofnewmaterial**, in **review**, and in **informed** debate. **Interdependence** and **statusequalization** are developed.

- **The method** :

    - Each student on the team becomes an "expert" on one topic

    - "Experts" group with members from other teams assigned the corresponding expert topic.
    - Upon returning to their teams, each one, in turn, teaches the group.

Roles and Responsibilities

- **Teacher**

    - Provide the Introduction to the entire topic.

    - Aware the student about the length, Breadth, Depth of Topic

    - Provide the Study Material and appropriate guide lines at every stage

    - Remain available all the time during all stages of process.

    - Prepare assessment methodology.

Student

- Go through all the material provided on particular topic
- Once topic assigned understand and gain expertise on topic through collaboration.
- Actively participate in group and contribute by means of discussion, hand-out
- Share the expertise topic when joins a new group.

- **Group**
  - Develop the guidelines to establish group.(i.e. Decide the roll of all participants)
  - Every group should gain the expertise on particular topic.
  - Prepare at least one page Hand-out / Report which cover all the details corresponding to the topic.
  - While preparing the report make sure all the content are covered.
  - 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:

- **Quiz**(60 %) :
  - Individual performance would be checked through the quiz.
- **One Page Report / Hand out (20 %)**
  - Group performance would be checked by teacher according to the rubrics.
- **Polling** (20 %)
  - Every student would rate understanding of the entire topic which reflects the communication skill of particular group through polling.

- **Overall Individual Performance**

- Final Marks Obtained = (0.6 *Quiz Marks + 0.2 * Report Marks +0.2* Polling Marks)
- Rubrics for Assessment of One Page Report / Hand out
  - Topic Content (60 %)
  - (20 %)

Criteria	3- High	2- Moderate	1- Slight
Topic Content	Highly Relevant	Moderately Relevant	Slightly Relevant
References	Highly Relevant	Moderately Relevant	No / Wrong References
Presentation and Writing Skill	Neat , Clean &Grammatically Correct	Neat & clean	Poorly Written

SN	Group No	Topic Content (60 %)	References (20 %)	Presentation and Writing Skill (20 %)	Final Marks
GR 1	A	5	2	2	9
	B	4	2	2	8
GR 2	A	4	1	2	7
	B	4	2	2	8
GR 3	A	5	2	2	9
	B	5	2	2	9
GR 4	A	4	2	2	8
	B	4	2	2	8
GR 5	A	5	2	2	9
	B	5	2	2	9
GR 6	A	5	1	2	8
	B	5	2	2	9

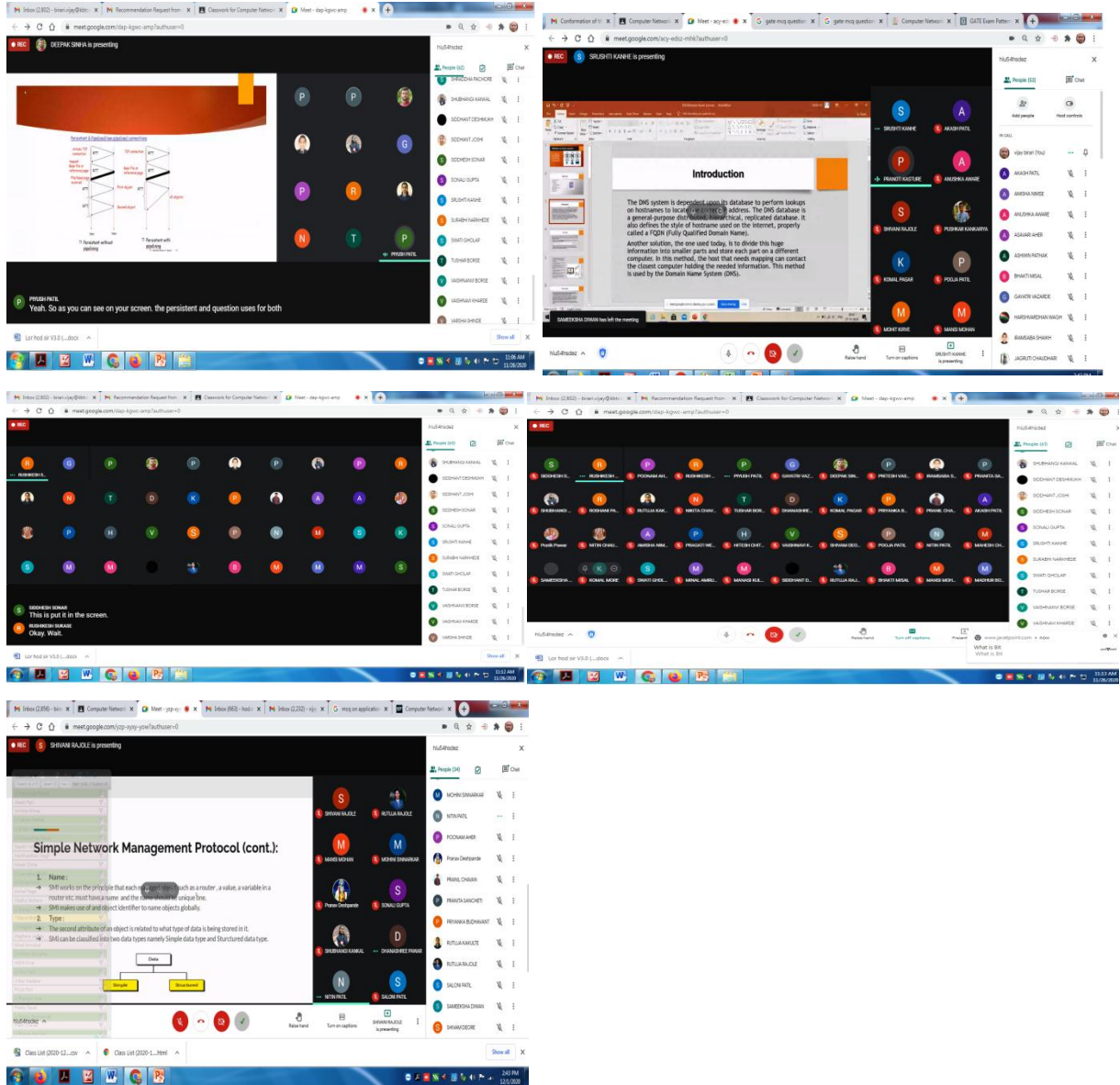| Criteria	5- Excellent	4- Very Good	3-Good	2-Average	1-Poor
Presentation Skill	Highly Relevant	Moderately Relevant	Relevant	Slightly Relevant	Not Satisfied
Communication Skill (Voice Modulation, Pronunciations)	Highly Relevant	Moderately Relevant	Relevant	Slightly Relevant	Not Satisfied
Presentation and Writing Skill	Neat , Clean &Grammatically Correct	Neat , Clean &Grammatically Correct	Neat , Clean	Neat & clean	Poorly Written

7. **Evaluation Sheet**

Sn	Name	Topic & Group (2)	Quiz (6)	Report (2)	Final Marks
1	Aher Asavari Manik	2	5.5	2	9.5
2	Amrutkar Minal Ramesh	2	5.5	2	9.5
3	Avhad Dipali	2	5	2	9
4	Aware Anushka Machindra	2	5	2	9
5	Borse Tushar shyamkumar	2	6	2	10
6	Bare Priyadarshani Jalindranath	1.5	4	1.5	7
7	Changle Alisha	2	5	2	9
8	Chaudhari Jagruti Bharat	1	3	1	5
9	Chavan Pranil Sunil	2	6	2	10
10	Deore Shivam Sanjay	2	5	2	9
11	Deshmukh Siddhant vilasrao	2	6	2	10
12	Deshpande Pranav Sunil	1.5	4.5	1.5	7.5
13	Gupta Sonali Raj	2	5	2	9
14	Siddhant Sunil Joshi	1	3	1	6
15	Kankal Shubhangi Kailas	1	3	1	6
16	Kharde Vaishnavi Mahendra	1	3	1	6
17	Misal Bhakti Sanjay	1.5	4.5	1.5	7.5
18	More_Komal_Popat	1	3	1	6
19	Nimse Amisha Anil	2	6	2	10
20	Pagare Sakshi Sunil	1.5	4.5	1.5	7.5
21	Patil Akash Laxmikant	2	5.5	2	9.5
22	Patil Piyush Rajesh	2	5.5	2	9.5
23	Patil Pooja Ravindra	2	6	2	10
24	Patil Saloni Sanju	1.5	4.5	1.5	7.5
25	Patil Vaishnavi Rajendrasingh	1	3	1	6
26	Pawar Roshani Sanjay	1	3	1	6
27	Sancheti Pranita Prashant	2	6	2	10
28	Shaikh Iramsaba Mushir	2	6	2	10
29	Sinha Deepak Vijay	2	5	2	9
30	Sonar_Siddhesh_Ajay	2	6	2	10
31	Sukase Rushikesh Rambhau	1.5	4.5	1.5	7.5
32	Vasani Pritesh Kantilal	2	6	2	10
33	Vazarde Gayatri Keshav	2	6	2	10
34	Wagh Harshvardhan Sanjay	2	6	2	10
35	Weljali Pragati Dilip	2	6	2	10
36	Aher Poonam Ramesh	2	6	2	10
37	Borse Vaishnavi Vyankat	1.5	4.5	1.5	7.5
38	Bothara Madhur Sanjay	1	3	1	6
39	Budhavant Priyanka Rajendra	2	6	2	10

40	Chaudhari Nitin Ravindra	1	3	1	6
41	Chavan Nikita Raju	1	3	1	6
42	Chitte Hitesh Ghanshyam	1	3	1	6
43	Chokhande Mahesh Dnyandeo	1	3	1	5
44	Devanhalli Sanket Rajendra	2	5.5	2	9.5
45	Diwan Sameeksha Ramesh	1	3	1	6
46	Gaikwad Akash	1	3	1	6
47	Gavali Pradip Ramrao	1	3	1	6
48	Gholap Swati Babulal	2	6	2	10
49	Ghuge Meghali Subhash	1.5	4.5	1.5	7.5
50	Jadhav Meghana Ramkrushna	2	5.5	2	9.5
51	Jagtap Sayali Sanjay	2	5.5	2	9.5
52	Kakulte Rutuja Dnyandeo	2	6	2	10
53	Kanhe Srushti Santosh	2	6	2	10
54	Kankariya Pushkar Sunil	1.5	4.5	1.5	7.5
55	Kasture Pranoti Dilip	1	3	1	6
56	Kirve Mohit Dattatray	1.5	4.5	1.5	7.5
57	Kulkarni Manasi Yashwant	2	6	2	10
58	Mohan Mansiravindra	2	6	2	10
59	Narkhede Surabhi Rajendra	2	6	2	10
60	Nikalje Aishwarya Bhagchand	1	3	1	6
61	Pachore Shraddha Kailas	1	3	1	5
62	Pagar Komal Muralidhar	2	5	2	9
63	Pathak Ashwin Mandar	2	5	2	9
64	Patil Nitin Sarjerao	1	3	1	5
65	Pawar Dhanshree Harishchandra	2	5	2	9
66	Pawar Pratik	1	3	1	6
67	Rajole Rutuja Sanjay	2	6	2	10
68	Rajole Shivani Anil	2	6	2	10
69	Rathod Payal	1	3	1	6
70	Shinde Varsha Narendra	2	6	2	10
71	Shirude Shubham	1	3	1	6
72	Sinnarkar Mohini Vasant	1	3	1	6
73	Wadekar Onkar Santosh	1	3	1	6
74	Rushikesh Charaskar	0	0	0	0

8. **Impact Analysis**

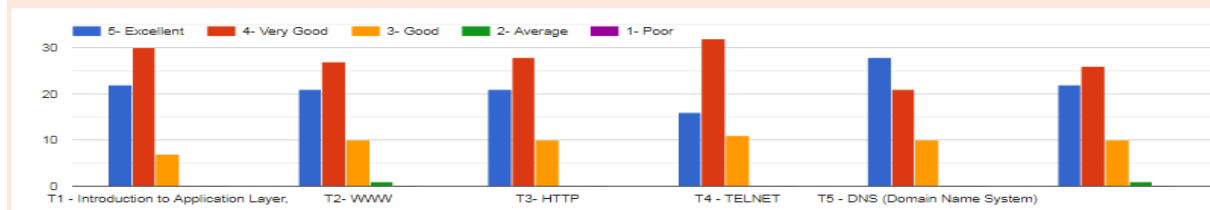| SN	3- High	2- Moderate	1- Low
Do you find Methodology Helpful	**3**	**2**	**1**
Does this helps for building a good team	**3**	**2**	**1**
Does the content covered are relevant	**3**	**2**	**1**
Would you like to participate in activity again	**3**	**2**	**1**

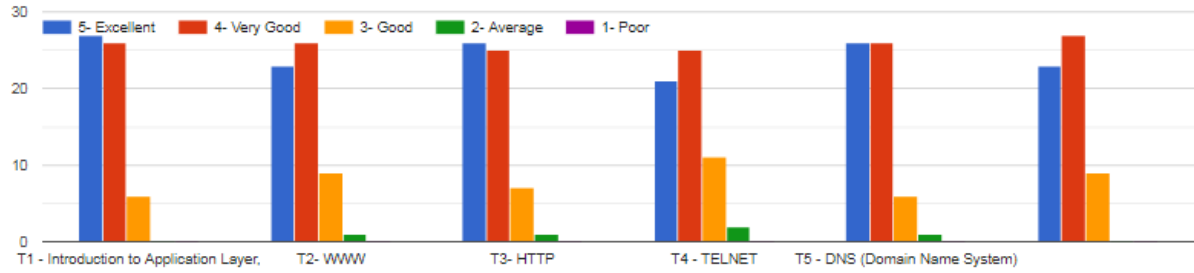## 9. Activity Picture

10. For review and critique contact: e-mail address of faculty and HOD
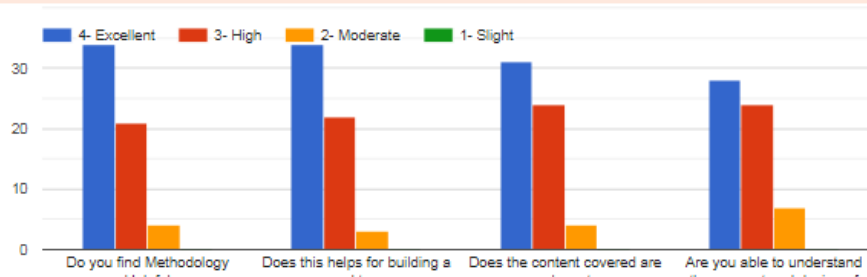birari.vijay@kbtcoe.org

How much do you find explanation or notes or presentation material OR Video of particular topic helpful (CO 5_Analyze & Compare various Protocols suitable at applications Layer)

How Much do would rate understanding of topic (CO 5_Analyze & Compare various Protocols suitable at applications Layer)
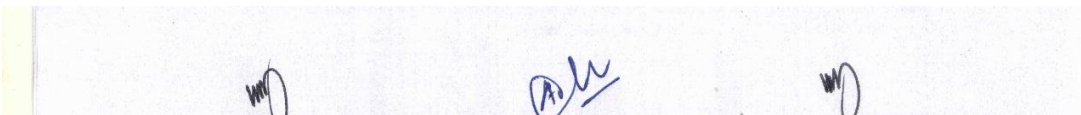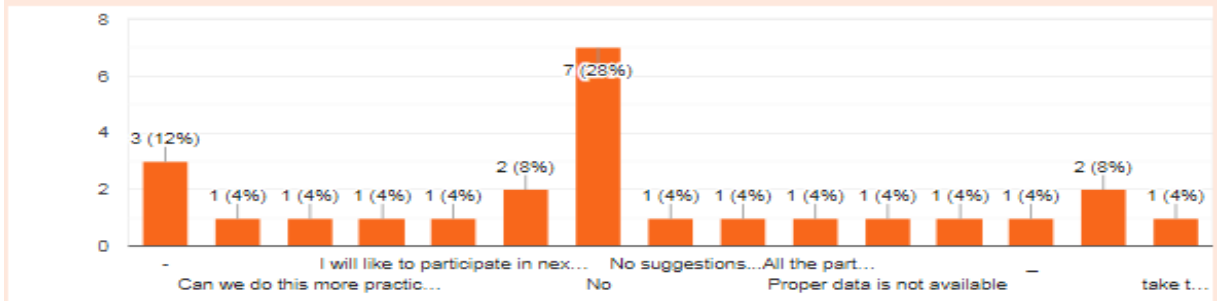

Innovative Teaching Learning Feedback
Rate Your Learning Experience

Would You Like To Participate in This Methodology again59 responses

Any Suggestion or feedback 25 responses

Dr. V. M. Birari	Mr. A. R. Chaudhari	Dr. V. M. Birari
Subject In charge	Module Coordinator	HoD