



## OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

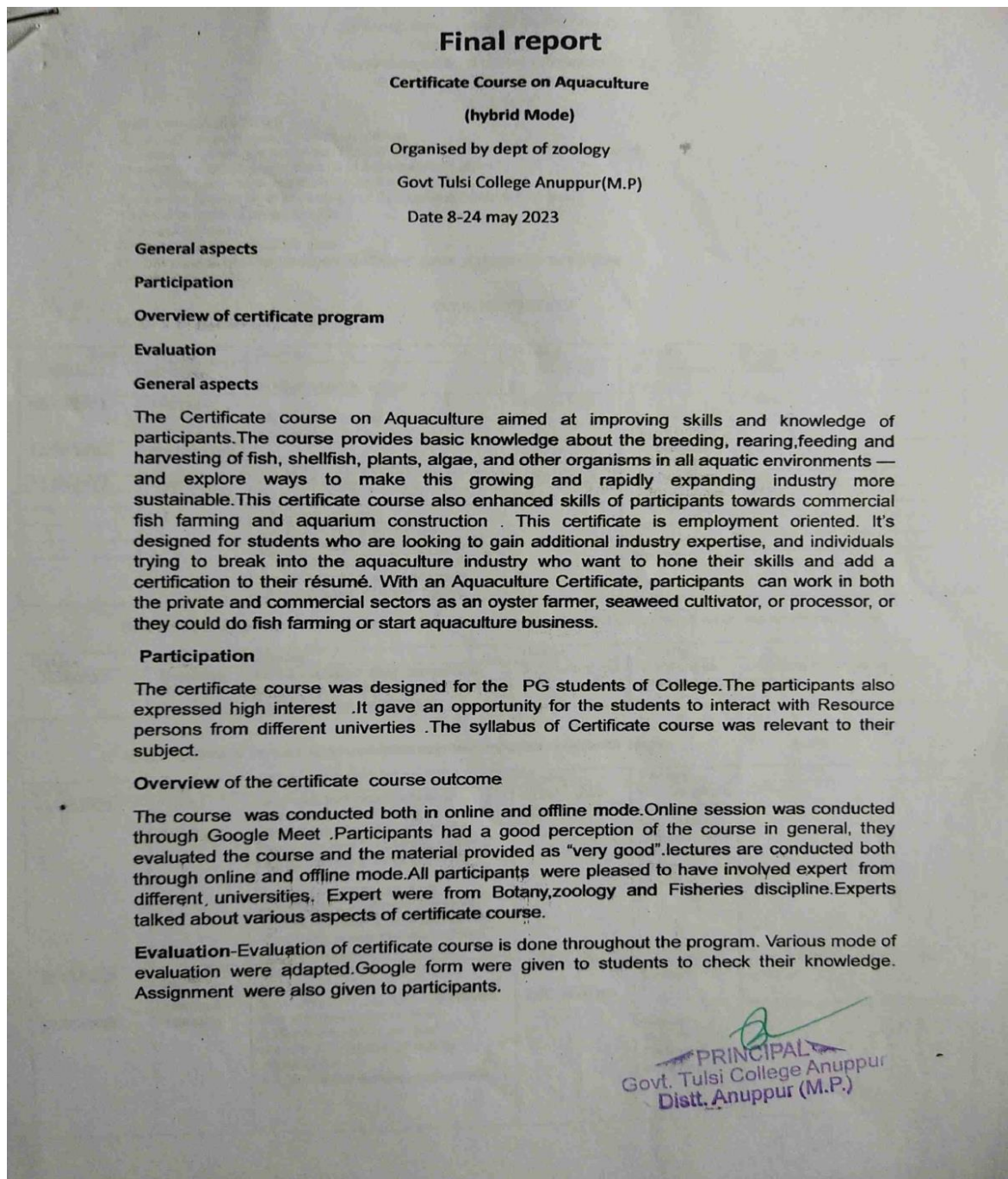
Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: [hegtcdcano@mp.gov.in](mailto:hegtcdcano@mp.gov.in)

9893076404

### Ad on Course of Department of Zoology





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**Syllabus & Schedule of Certificate Course**  
**Department of Zoology**  
**Government Tulsi College Anuppur (M.P.)**  
**Certificate course (Aquaculture)**  
**32 hours**

**COURSE OBJECTIVES**  
To provide basic Knowledge of aquaculture  
To provide knowledge about food materials for fishes at different growth stage  
Enhancing skills of youth towards commercial fish farming  
To provide basic knowledge about construction of aquarium  
To provide ground level knowledge of fish farming through field visit  
To provide training on aquaculture  
**Course Outcome**  
Get employment in specific area  
Get knowledge of different types of different types of aquaculture practices  
Get skills in aquaculture

**COURSE CONTENT**

**Unit 1 : Definition & Principle** 5hrs


Date	Day	Course	Timing	Faculty	Mode of Teaching
08/05/2023	Monday	(a) Definition & Scope	12:30 – 1:30 pm	Mr. Gangesh kumar	Offline
09/05/2023	Tuesday	(B) Present global & national scenario	12:30 – 1:30 pm	Mr. Satyendra Singh	Offline
10/05/2023	Wednesday	(c) System of culture -	12:30 – 1:30 pm	Dr. Sunaina chaudhary	Offline
11/05/2023	Thursday 1 <sup>st</sup> Session	(i) Pond culture	12:30 – 2:30 pm	Mr. Gangesh kumar	Offline
		(ii) Pen culture		Mrs. Sangita basrani	Offline
		(iii) Cage culture		Mr. Anupam Gautam	
		(iv) Running water culture			
		(v) Zero Water Exchange system			
		(d) Semi intensive, intensive & Super intensive aquaculture in different types of water bodies			

**Unit 2 Standard physicochemical properties of water and soil required for fresh water aquaculture** 2 hrs

Date	Day	Course	Timing	Faculty	
11/05/2023	Thursday 2 <sup>nd</sup> Session	Unit 2 Standard physicochemical properties of water and soil required for fresh water aquaculture	2:30 – 4:30 pm	Mrs. Sangita basrani	<a href="https://meet.google.com/oyg-pksq-wty">https://meet.google.com/oyg-pksq-wty</a>

**Unit 3 Culture of various food materials required for different growth stages** 5 hrs

Date	Day	Course	Timing	Faculty	
12/05/2023	Friday 1 <sup>st</sup> Session	(a) Nutritional requirement of cultivable fish & shellfish form of feeds:-wet feeds, moist feeds, dry feeds, mashes, pelleted feeds, floating & sinking pellets (b) Food additives:- binders, antioxidants, enzymes pigments, growth promoters, feed stimulants, feed storage use of preservatives and antioxidants.	12:30 – 2:30 pm	Mr. Gangesh kumar Mrs. Sangita Basrani Mr. Anupam Gautam	Offline
12/05/2023	Friday 2 <sup>nd</sup> Session	(c) 1. Feeding devices and methods. Non -conventional feed ingredients and anti nutritional factors	2:30 – 4:30 pm	Dr. Sangita basrani	<a href="https://meet.google.com/oyg-pksq-wty">https://meet.google.com/oyg-pksq-wty</a>
23/05/2023	Tuesday	2. Digestive enzymes, feed digestibility, factors affecting digestibility~ (d) Nutritional deficiency diseases	7:00 pm-8:pm	Expert lecture Dr Sudha srivastava	<a href="https://meet.google.com/rkj-nifb-fkh">https://meet.google.com/rkj-nifb-fkh</a>

  
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Unit 4 Culture					
Date	Day	Course	Timing	Faculty	4hrs
20/05/2023	Saturday 1 <sup>st</sup> Session	Sea weeds	12:30 – 2:30 pm	Botany department Faculty- Dr Shaily Agarwal	<a href="https://meet.google.com/got-jovi-yhj">https://meet.google.com/got-jovi-yhj</a>
	Saturday 2 <sup>nd</sup> Session	Common cultivated fish species	2:30 – 4:30 pm	Mr. Gangesh kumar  Mr. Satyendra Singh	offline

Unit 5 Design and construction of fresh water aquarium on commercial scale					
Date	day	Course	Timing	faculty	5hrs
15/05/2023	Monday	Aquarium-aquarium maintenance &management	12:30 pm- 1:30pm	Mr Gangeshku mar	Offline
16/05/2023	Tuesday	Aquarium-aquarium maintenance &management	12:30 pm- 1:30pm	Mr Anupam Gautam	Offline
17/05/2023	Wednesday	Aquarium-aquarium maintenance &management	12:30 pm- 1:30pm	Mrs. Sangita basrani	Offline
18/05/2023	Thursday	b) Fresh water aquaria c) Commercial scale of fish(aquarium or culturemarketing)	2:30 pm-4:30pm	Mrs. Sangita basrani	<a href="https://meet.google.com/hhs-rceh-wzc">https://meet.google.com/hhs-rceh-wzc</a>

Unit 6					
Day	Course	Timing	Faculty	6 hrs	
18/05/2023	Thursday	(a) Fish landing center	7:20 pm-9:20pm	Mr. Satyendra Singh	<a href="https://meet.google.com/hhs-rceh-wzc">https://meet.google.com/hhs-rceh-wzc</a>
19/05/2023	Friday	(b) Fish market	7:15– 9:15 pm		<a href="https://meet.google.com/pah-xqza-eme">https://meet.google.com/pah-xqza-eme</a>
20/05/2023	saturday	(c) Processing Industry (d) Fish Pond	7:15– 9:15 pm		<a href="https://meet.google.com/got-jovi-yhj">https://meet.google.com/got-jovi-yhj</a>

Unit 7					
Day	Course	Timing	Faculty	Mode of Teaching	5 hrs
20/05/2023	Saturday 1 <sup>st</sup> Session	(a) Artificial pond culture	12:30 – 2:15pm	Mrs. Sangita Basrani	Offline
20/05/2023	Saturday 2 <sup>nd</sup> Session	(b) Aquarium construction	2:30 – 3:45 pm	Dr. Sunaina Chaudhary Mr. Anupam Gautam Mr. Gangesh kumar Mr. Satyendra Singh	Offline
23/05/2023	Tuesday	(c) Concepts for fish marketing	12:30 – 1:15 pm	Dr. Sunaina Chaudhary	Offline
24/05/2023	Wednesday	Aquaculture-an overview	12:30 PM-1:15 PM	Expert lecture Dr. Vandana ram	offline

Mrs Sangita basrani  
Certificate course Coordinator

Mr. Ajay raj singh rathour  
H.O.D.  
Department of Zoology

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List Of participants who completed certificate course

S.No	Name of Participant	Class	Subject
1	Deepika Dwivedi	M.Sc fourth sem	Zoology
2	Najiya Parvin	M.Sc fourth sem	Zoology
3	Sneha Sharma	M.Sc fourth sem	Zoology
4	Sajiya Khatoon	M.Sc fourth sem	Zoology
5	Anuradha dwivedi	M.Sc fourth sem	Zoology
6	Gulfasa bano	M.Sc fourth sem	Zoology
7	Laxmi devi	M.Sc fourth sem	Zoology
8	Rajkali kewat	M.Sc fourth sem	Zoology
9	Parwati kewat	M.Sc fourth sem	Zoology
10	Asha kol	M.Sc fourth sem	Zoology
11	Tirasa kewat	M.Sc fourth sem	Zoology
12	Asha kol	M.Sc fourth sem	Zoology
13	Ankrisha tiwari	M.Sc fourth sem	Zoology
14	Dilraj	M.Sc fourth sem	Zoology
15	Sumitra bai	M.Sc fourth sem	Zoology
16	Kiran singh	M.Sc fourth sem	Zoology
17	Pinki rathour	M.Sc fourth sem	Zoology
18	Jeetu Yadav	M.Sc fourth sem	Zoology
19	Sakshi vishwakarma	M.Sc fourth sem	Zoology
20	Laxmi Kewat	M.Sc fourth sem	Zoology
21	Bindu devi	M.Sc fourth sem	Zoology
22	Rajkumari sahu	M.Sc fourth sem	Zoology
23	Chitrlekha singh	M.Sc fourth sem	Zoology
24	Karuna manjhi	M.Sc fourth sem	Zoology
25	Simran soni	M.Sc fourth sem	Zoology
26	Khushbu padwar	M.Sc fourth sem	Zoology
27	Shakshi	M.Sc fourth sem	Zoology
28	Kajal Kewat	M.Sc fourth sem	Zoology
29	Kanchan Kewat	M.Sc fourth sem	Zoology
30	Upendra Kumar sahu	M.Sc fourth sem	Zoology

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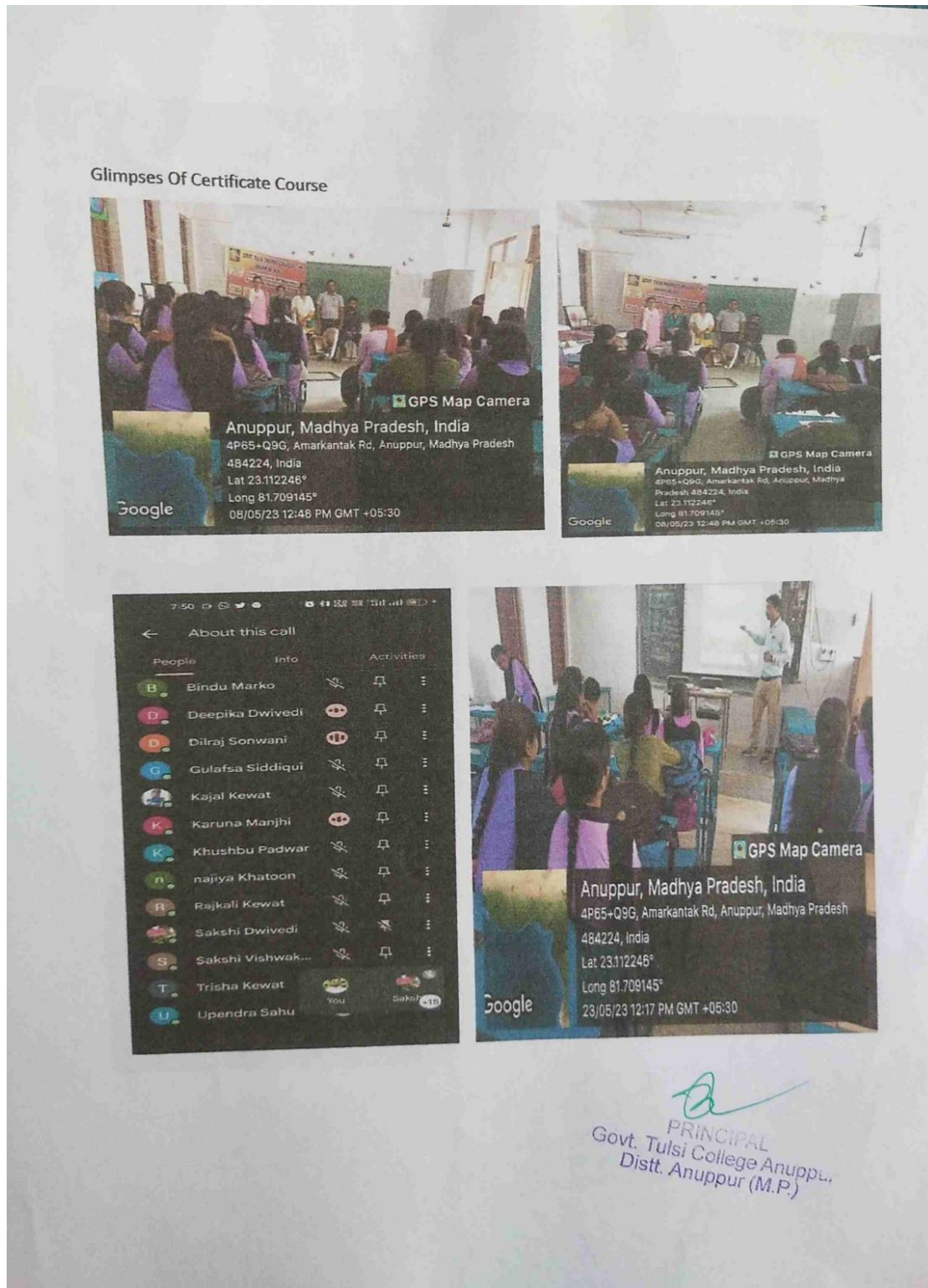
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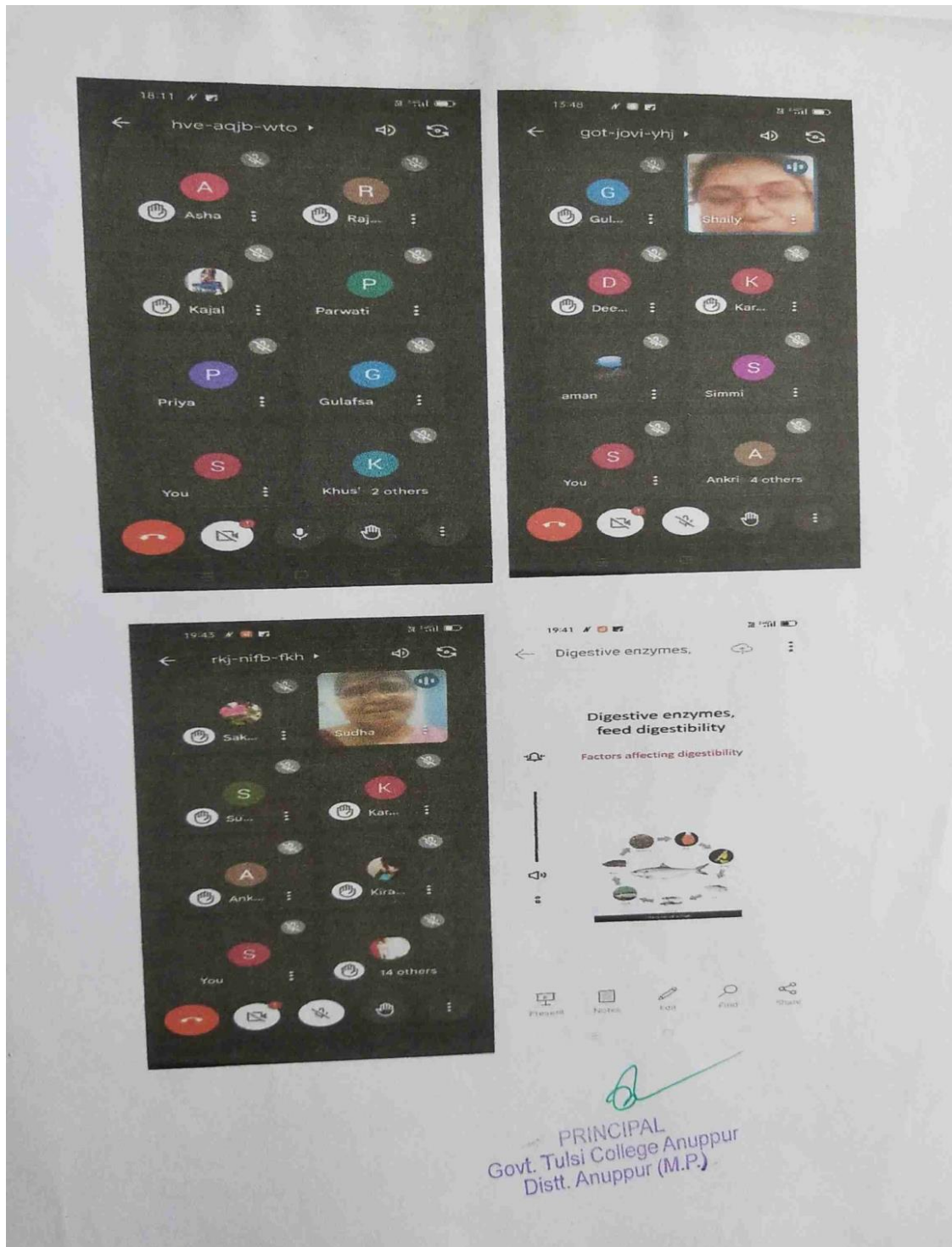
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