







#### SHIVAJI COLLEGE (UNIVERSITY OF DELHI)

#### DETAILS OF THE EVENT

TITLE OF THE EVENT:	Visit to IVF CENTRE, Rajouri Garden, New Delhi	
DATE AND TIME:	9tt/April/2024 at 10AM	
NATURE:	OFFLINE √	
VENUE:	AVEYA IVF CENTRE, Rajouri Garden, New Delhi	
DEPARTMENT/COMMITTEE/SOCIETY:	Zoology	
TIC/CONVENER NAME:	Dr. Deepika Yadav, Dr. Samya Das	
NUMBER OF PARTICIPANT:	21	
FINANCIAL ASSISTANCE (IF ANY):		
(i) Amount:	-	
(ii) Funding agency details:	NA	

#### BRIEF WRITEUP ABOUT THE INVITED SPEAKER(S)

NAME & DESIGNATION	AFFILIATION	РНОТО	
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LEARNING OBJECTIVES:	A visit to IVF center is enlisted in the syllabus of cell and Developmental Biology, Life Science, semester II practical. During the visit, students engaged in various activities and observed firsthand the of the IVF clinic:
OUTCOME:	Technological advancements: Students gained insights into the cutting- edge technologies and innovations driving advancements in assisted reproductive techniques, including time-lapse imaging systems for embryo monitoring and genetic screening techniques.  Ethical considerations: The visit sparked discussions among students regarding the ethical dilemmas surrounding IVF, including issues related to embryo selection, genetic manipulation, and the commodification of human reproduction.

#### BRIEF REPORT OF THE EVENT:

# THE REPORT MUST INCLUDE THE FOLLOWING DOCUMENTS AND PROOF IN THE GIVEN ORDER:

	(D. L. signed): V
1.	Permission letter (Duly signed): √
2.	Poster/invites : NA
3.	Photos(geotagged):
4.	Link of video clip (If any):
5.	Attendance sheet:
6.	Feedback form and analysis: NA
7.	MoU/ Collaboration Proof (If any): NA
8.	None None
9.	
10.	Financial assistance/sponsorship proof(1 and)
	's given to participants
11.	A scan of blank certificate, if given to participants winners: NA
12.	Any other document : NA

#### (For Office use only)

	IQAC/SH/2023-2024/	
IQAC Document No:	Society/Dept./Committee / SH/2023-24/	
IQAC file No:		

## TICK MARK (√): The relevant NAAC criteria pertaining to the event.

Criterion I	Curricular Aspects (planning & Implementation)  Teaching Learning & Evaluation	Criterion V	Student Support & Progression
Criterion II		Criterion VI	Governance
Criterion III	Research, Innovations & Extension	Criterion VII	Institutional Values & Best Practices
Criterion IV	Learning Resources and Infrastructure		

(NAME & SIGNATURE)

75 min Sei 1 Q and. IQAC COORDINATOR (SIGNATURE)

P/1832/24 04/04/24

To The Principal Shivaji College University Of Delhi Raja Garden New Delhi-110027 A MM 04/04/2024

Subject: Permission for Life Science students (IV Semester) visit to In Vitro Fertilization (IVF) Center (Aveya IVF center)

Respected sir,

I am writing to request your approval for a student visit to an In Vitro Fertilization (IVF) center (Aveya IVF center, B-8, Vishal Enclave, Rajouri Garden, New Delhi-110027. This visit is intended to provide our students with an educational opportunity to understand the processes and technologies involved in assisted reproductive techniques.

The visit is planned to take place on 9th of April 2024 (timing 9:30am to 11:30 in two batches) and will include a guided tour of the IVF facility, informative sessions on fertility treatments. This experience aims to broaden our students' knowledge of reproductive health and the advancements in modern medical science.

Dr. Samya Das and Dr. Tsewang Namgial from Zoology Department will assist the student during visit. No-financial aid for the same is required. Before visit consent letter form the parents will be collect.

Thank you for considering our request. We look forward to your positive response.

Sincerely,

Dr. Deepika Yadav Associate Professor TIC, Life-Science

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#### Report on Student Visit to IVF (In Vitro Fertilization)

#### **Introduction:**

On 9<sup>th/</sup>April/2024, students from Life Science, semester II, Batch-B3, Shivaji college, University of Delhi had the opportunity to visit an IVF (In Vitro Fertilization) centre, AVEYA IVF CENTRE, Rajouri Garden, as part of their educational experience. This report provides a comprehensive overview of the visit, highlighting the key observations, learnings, and insights gained during the excursion.

Overview of the IVF Centre: AVEYA IVF CENTRE is a renowned facility specializing in reproductive medicine and assisted reproductive technologies. The clinic boasts state-of-the-art infrastructure, experienced fertility specialists, and a dedicated team of professionals committed to helping couples achieve their dream of parenthood through assisted reproductive techniques.

#### **Activities and Observations:**

During the visit, students engaged in various activities and observed firsthand the following aspects of the IVF clinic:

Laboratory tour: Students were given access to the IVF laboratory, where they witnessed the handling of gametes, embryo development under controlled conditions, and techniques such as intracytoplasmic sperm injection (ICSI) and embryo biopsy.

Equipment demonstration: The clinic staff demonstrated the use of advanced equipment such as incubators, microscopes, and cryopreservation devices used in various stages of the IVF process.

#### **Learnings and Insights:**

Technological advancements: Students gained insights into the cutting-edge technologies and innovations driving advancements in assisted reproductive techniques, including time-lapse imaging systems for embryo monitoring and genetic screening techniques.

Ethical considerations: The visit sparked discussions among students regarding the ethical dilemmas surrounding IVF, including issues related to embryo selection, genetic manipulation, and the commodification of human reproduction.

#### **Conclusion:**

The visit to AVEYA IVF CENTRE, Rajouri Garden proved to be an enriching and enlightening experience for the students, offering them valuable insights into the world of assisted reproduction, technological innovations, and ethical considerations surrounding IVF. The first hand exposure to the IVF process and interactions with fertility specialists and patients fostered a deeper appreciation for the complexities and challenges associated with infertility treatments.

#### **Acknowledgments:**

We extend our gratitude to the staff and management of AVEYA IVF CENTRE, Rajouri Garden for their hospitality and for facilitating an informative and engaging visit for our students. We specially would like to thanks college principal for his permission for visit to AVEYA IVF CENTRE, Rajouri Garden

Visited by Dr.Samya Das, Department of Zoology, Shivaji College, Delhi University

# Visit Report Fortilisation (IVF)

Name: Anjali Kumani

Course: Bsc. life

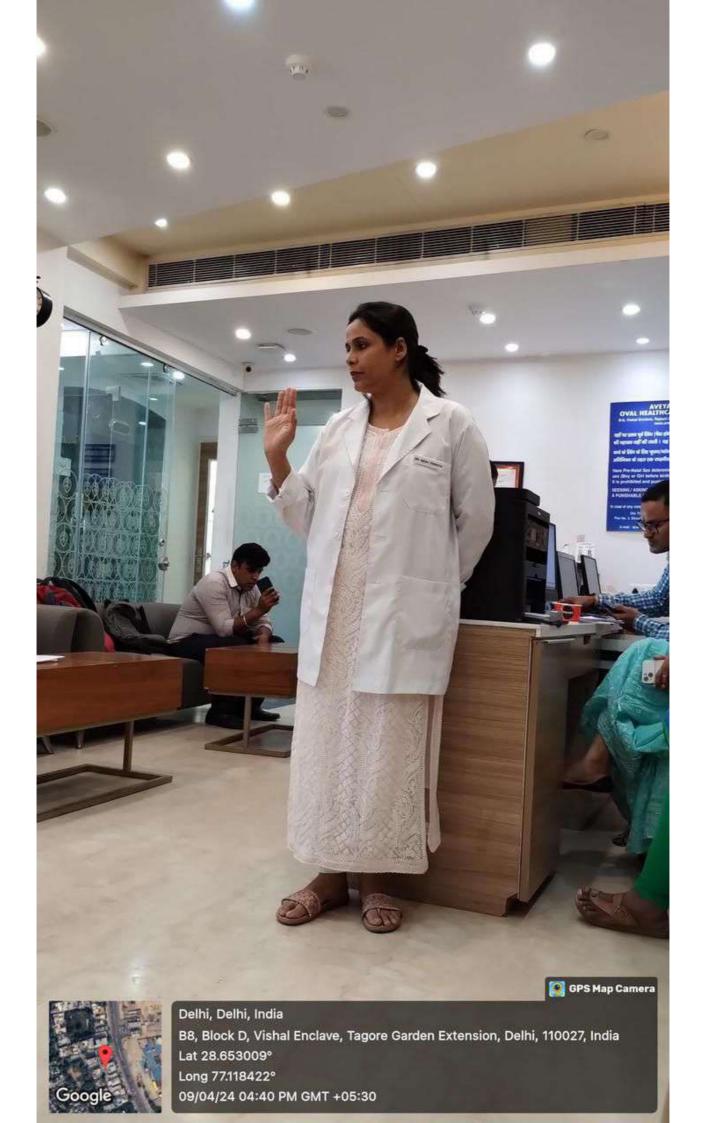
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# Shivaji college, University of Delhi Date,time and Place of visit: 09.04.2024; 4:30 PM/ Aveya IVF center Class: BSc. Life Science, Section A, Semister: II (B1) Cell and Developmental Biology of Animals

Visited By: Dr. Samya Das

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Dr SAMYA DAS

### GLABUS OF Zoo-LS-DSC-06

Types of animal cells and tissues, Mitosis, meiosis, Cell cycle regulation, Cell-cell communication, Stem cells, Differential gene expression.

UNIT-II: Scope and History of Developmental Biology

Historical perspective including contributions by eminent scientists and tandmark: experiments in the field of Developmental Biology, Concepts of Epigenesis, Preformation, Von Baer laws.

UNIT-III: Early Embryonic Development

Gametogenesis: Spermatogenesis and Oogenesis in mammals; Types of Eggs and Egg membranes Fertilization: External (amphibians) and Internal (mammals), Fast and slow blocks to Polyspermy; Types and Patterns of cleavage; Types of morphogenetic movements; Early development of frog and chick up to gastrulation. Fate maps

UNIT-IV: Late Embryonic Development

Fate of Germ Layers; Formation of neural tube, Extra-embryonic membranes in birds

VNIT-IV: Post Embryonic Development

02 Hours

Metamorphic events and its hormonal regulation in amphibians. Prokaryotic and Eukaryotic cells; Various models of plasma membrane structures, Transport across membranes: active and passive transport, facilitated transport; Cell-cell junctions, structures, and flunctions: Tight junctions, adherens junctions, gap junctions.

Practical Component - 60 Hours

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Study of the various stages of meiosis through permanent slides. Micros Cope -8 / Meioslo S.L. de
 Frog-Study of developmental stages - whole mounts and sections through permanent slides - cleavage stages, blastula, gastrula, neurola, tail bud stage, tadpole external and internal gill stages.

 Chick—Study of Whole Mounts of developmental stages of Chick through permanent slides (HH stages)- 13 hrs, 18hrs, 24hrs, 28hrs, 33hrs, 36hrs, 48hrs, 72hrs and 96hrs.

4. Study of the different types of placenta along with its function-through permanent slides /

5. Study of various developmental stages in the life Cycle of Drosophila using stock culture/

6. Visit to IVF centre/ Poultry Farm.

7. Project report on IVF Centre! Poultry farm! Drosophila culture! Zebru fish culture.