

Enrollment No. \_\_\_\_\_



**NAVACHANA  
UNIVERSITY**  
a UGC recognized University

**School:** School of Science  
**Program/s:** Biomedical Science  
**Year:** 2nd **Semester:** III  
**Examination:** End Semester Examination  
**Examination year:** December - 2022

**Course Code:** BM511 **Course Name:** Reproductive Biomedicine IV

**Date:** 02/12/2022

**Time:** 11:30 am to 1:30pm

**Total Marks:** 40

**Total Pages:** 1

**Instructions:**

- Write each answer on a new page
- Draw neat and well-labelled diagrams wherever required

Q. No.	Details	Marks	COs*	BTL#
Q1	<p>Answer the following questions in short : (Any Five)</p> <ol style="list-style-type: none"> <li>1. What is the difference between slow freezing and fast freezing techniques?</li> <li>2. What is the mechanism of cryoprotectant action? How many types of cryoprotectants are known to you?</li> <li>3. Fertility preservation is a boon for cancer survivors? Do you agree, give your opinion for the same.</li> <li>4. Consider the following case and give your opinion for possible treatment option. - A 35-year-old unmarried woman, diagnosed to have a right sided breast carcinoma was referred to IVF specialist prior to neo-adjuvant chemotherapy for fertility preservation.</li> <li>5. What are the challenges faced for blastocyst and embryo vitrification?</li> <li>6. List the medical and social reasons for egg freezing.</li> </ol>	(15M)	CO1 CO2 CO3	BTL1,2 ,3
Q2	<p>Answer the following in detail : (Any Four)</p> <ol style="list-style-type: none"> <li>1. Discuss in detail the highlighting points of the new IVF bill 2021.</li> <li>2. What are the major priorities of ESHRE guidelines?</li> <li>3. Give detailed account of equipment's to be used in IVF for the purpose of cryopreservation.</li> <li>4. What is vitrification? Describe the process in detail for embryo.</li> <li>5. Give an account of all ethical concerns to be taken into consideration while implementing the new IVF bill in India. What could be the concerns arising in case such ethical considerations are not adopted?</li> </ol>	(20M)	CO1 CO2 CO3 CO4	BTL1,2 ,3,4

Q3	<p>Answer any one:</p> <p>Consider that you are an embryologist and you are setting up your IVF lab, what will be the layout of the lab. Give a schematic insight to your plan.</p> <p>Or</p> <p>Consider that you are a policy maker and you have a chance to draft new guidelines for IVF, what would you be considering and why?</p>	(5M)	<p><b>CO3</b></p> <p><b>CO4</b></p> <p><b>CO5</b></p>	<p><b>BTL4.5</b></p> <p><b>.6</b></p>
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