

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST-2 EXAMINATIONS-2022

B.Tech-VIII Semester (BT)

COURSE CODE: 18B1WBT831

MAX. MARKS: 25

COURSE NAME: Genetic Counselling

COURSE CREDITS: 03

MAX. TIME: 1 Hour 30 Min

*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

- Q1 a.- A patient of 62 years age is diagnosed from Alzheimer's disease. Plan a counselling session for him. What are your priorities as a genetic counsellor? CO-1
- b.- Do you feel Non Directive genetic counselling is better to Directive counselling? Create a hypothetical situation to defend your logic. CO-1 [3+2]
- Q 2 a. - Highlight the genetic reasons for Schizophrenia and its' probable cure/prevention. What are the available diagnostic methods to identify Schizophrenia? CO-2
- b. - "Daughters of an affected man will inherit the mutant gene." Is this statement correct? Justify your answer giving reasons. CO-2 [3+2]
- Q3 a. -- You are a genetic counsellor and a lady (28 years) visited you for counselling. She is detected with Huntington disease causing allele. She is normal for the time being without any symptoms. She is planning to have marriage with a 30 years old male having no information about his status of Huntington disease. What is your approach towards genetics counselling? CO-3
- b.- How do you see the scope of gene therapy in India towards curing of genetically inherited diseases? Provide suitable case studies/examples to support your answer. CO-3 [3+2]
- Q4 a. - A haemophilic man whose uncle is suffering from Down syndrome marries normal woman whose father was suffering from haemophilia and mother was normal. What is the probability that out of 03 children; 02 will be normal? Show your work. CO-4
- b.- How will you do counselling of Thalesemia-minor woman who would like to marry with a normal man having Thalesemia history in his family? What are the chances of their first child to be suffering from this disease? Support your argument logically. CO-4 [3+2]
- Q5 a. -- How does a genetic counsellor identify the X linked recessive pattern linked to a disease? CO-2
- b. - What is the probability that 03 out of 04 children will be normal of a couple who are carriers of cystic fibrosis? CO-4 [3+2]