Indian Institute of Technology, Kharagpur

Date_____FN/AN Time: 2 hours Full Marks: 30 No of Students: 64
Mid Spring Semester 2023 Deptt: HSS Sub No: HS50026
5-Year Integrated M.Sc in Economics Sub Name: Behavioural Finance
Answer all the questions.

Q1: Compare and contrast the different building blocks of neo classical and behavioural finance. There is violation of expected utility theory in the decision making process. Justify this statement in the context of Allias paradox, Ellsberg paradox and Friedman-Savage double inflection utility function. (6 Marks)

Q2: How do you define the concept of market efficiency? Do you think that the concept of market efficiency was discarded by the traditional finance theories even before the emergence of behavioural finance theories? If yes, then how? Further, how the advocators of behavioural finance theories have challenged the notion of market efficiency. (6 Marks)

Q3: Explain the concepts of efficient and optimal portfolio in the context of Markowitz portfolio theory. Show that capital market line is a special case of security market line. What are the motives behind the development of multi factor asset pricing models and provide a synoptic view of Fama-French five factor model? (6 Marks)

Q4: Explain the key tenets of prospect theory with the help of value and weighting functions suggested by Kahneman and Tversky and compare the expected utility theory and prospect theory. (6 Marks)

Q5: (i) How the concepts of framing, integration, segregation, and mental accounting affect the decision making process of the individuals? Explain these with suitable examples. (4 Marks)

(ii) Mr. Hari has the following value function as per prospect theory:

$$V(w) = w^{0.6} \text{ if } w \geq 0$$

$$V(w) = -1.8\,(-w)^{0.5} \text{ if } w < 0$$

(a) Do you think Mr. Hari is loss averse? Explain.

(b) Mr. Hari's weighting function is as follows for gains as well as losses:

$$W(p) = p^{\gamma} / [p^{\gamma} - (1-p)^{\gamma}]^{1/\gamma} \text{ where, } \gamma = 0.5$$

Which of the following prospect should Mr. Hari prefer?

$P_A\,(0.02, -10000), P_B\,(-70)$ (2 Marks)