Indian Institute of Technology, Kharagpur FN/AN Time: 2 hours No. of Students: 76 Full Marks: 30 Mid Autumn Semester Examination 2022 Sub No: EM21205/HS21205 Dept: HSS BS/5-Year Integrated M.Sc in Economics Sub Name: Macroeconomics I Instruction: (1) Answer all questions. (2) Illustrate with appropriate diagrams and mathematical derivations wherever necessary. 1. Derive and discuss the circular flow of income diagram under the four-sector model. Based on this, elucidate the central problems of an economy. 2. Define Perfect Competition and discuss its characteristics in the context of a product market Mathematically derive profit maximizing rules under Perfect Competition and prove how these rules are related to each other under both product and labour markets. Accordingly, derive demand curve for labour for an individual firm under the Classical Model. 3. Derive individual and market supply curve of labour and examine the roles of income and substitution effects of wage changes. 4. Derive the demand curve for output under the Classical theory and its significance under this model. 5. Explain how the rigidity in money wage affect full employment equilibrium income in Classical model. Can any measures be effective to arrest the problems associated with rigid money wage. Explain. 6. Following Classical theory, find the impact of an increase in labour demand on equilibrium output. price, money wage, real wage, and supply of and demand for output. Assume that the money supply and its velocity remain unchanged. Illustrate it with the help of appropriate diagrams and a hypothetical example. 7. Explain the following: 3×2 (a) Derivation of the market demand curve for labour (b) Supply curves of output according to varying conditions of an economy