

Birla Institute of Technology and Science, Pilani (Rajasthan)

Second Semester (2022-23)

PHA F417: Pharmacoeconomics

Comprehensive Examination (Closed Book)

Max. Marks: 30

Duration: 120 Min

Make proper assumptions wherever is required to answer the questions (and mention it in your answers).

Q.1. There are two drugs in the market that are used to treat a disease condition. Drug A costs INR 45000 and increases life expectancy by 3 years, whereas drug B costs INR 75000 and increases life expectancy by 4.5 years. The health utility index for drug A is 0.72 and for drug B is 0.85. Calculate both the average and incremental cost-effectiveness ratio for the treatments in terms of QALY. **[5.0 M]**

Q.2. What are the advantages (any 2 each) and disadvantages (any 2 each) of collecting clinical trial data from patients at the hospital and at home? **[4.0 M]**

Q.3. Give a brief description of following aspects of general health concept used in determination of health related quality of life-

(a) Mental health and (b) Physical functioning **[3+3=6.0 M]**

Q.4. Briefly explain (a) Time trade-off (b) Chance node and choice node (c) Criterion validity (d) EuroQol-5D **[6.0 M]**

Q.5. What do you mean by reliability of an instrument used for determination of health related quality of life? Describe in detail different methods to test reliability of the instrument. What is the acceptable reliability coefficient level for individual and group patients? **[5.0 M]**

Q.6. Give a brief description of 'Define the problem' step of cost-effectiveness analysis. **[4.0 M]**

All the Best