

QUESTION BANK 4

- 4.1 When are the goals of a project specified?
- 4.2 How are goals determined?
- 4.3 What should be the characteristics of goals?
- 4.4 What is the difference between main goals and sub-goals? Illustrate with an example.
- 4.5 Once the goals are formulated, what is the next step followed by a system analyst?
- 4.6 Is it essential to use computers in all information systems?
- 4.7 Distinguish between technical, operational and economic feasibility.
- 4.8 What do you understand by the term *feasibility study of a solution*?
- 4.9 Give an example of a solution which is technically feasible, but not operationally feasible.
- 4.10 Give an example of a technically feasible solution which is not economically feasible.
- 4.11 Give an example of an operationally feasible solution which is not economically feasible.
- 4.12 Is it essential that an operationally feasible solution should be technically feasible? Discuss with examples.
- 4.13 What is the difference between tangible and intangible benefits?
- 4.14 Give examples of tangible and intangible benefits.
- 4.15 For the problem of periodical information system (Exercise 4.23 below), specify tangible and intangible benefits.
- 4.16 What is meant by cost-benefit analysis?

4.17 A system costs Rs.1 lakh to install and Rs.10,000 per month as recurring expenses. The benefit per year is Rs.1.5 lakhs. Assuming an interest rate of 12%, what is the pay back period of the investment?

How does inflation affect pay back period?

Is it essential to have tangible benefits to justify an information system? If you answer is no, justify your answer by giving an example.

4.18 A project costs Rs.2 lakhs and the net benefits are Rs.50,000 (1st year), Rs.80,000 (2nd year), Rs.90,000 (3rd year), Rs.70,000 (4th year), Rs.50,000 (5th year), and Rs.30,000 (6th year). Assuming 10% interest rate, would you proceed with this project if your criterion is cost/benefit?

4.19 A manager states the following as the goals of a production planning system:

- 1 Reduce stock of semi-finished products.
- 2 Provide better information for the production planning.
- 3 Prevent overproduction.

How would you quantify the goals? How would you obtain sub goals and quantify them if appropriate?

4.20 A university administrator calls a systems analyst to improve the administration of sponsored research projects. The main problems are delay in obtaining latest financial position to project coordinators, reconciliation of advances given to coordinators, prompt demands not sent to sponsors to collect promised grants and lack of information to answer following questions:

Which areas of research get maximum grants?

Which agency aids which type of projects?

What trends can be seen in the nature of grants?

Now:

1. Classify the above problems into missing functions, unsatisfactory performance and excessive cost of operation.
 2. How would you get goals to meet the deficiencies?
 3. How would you quantify them?
- 4.21 A library receives 1300 journals of varying periodicities. The journals received have to be recorded and displayed. Action has to be taken when journals are not received in time or lost in mail. Unless request for replacement is sent quickly, it may not be possible to get the replacement. Periodicals have to be ordered at different times during the year and subscriptions renewed in time. Late payment of subscription may lead to non-availability of earlier issues or paying higher amounts for those issues. Current manual system is not able to meet these requirements.
1. Specify what should be the goals and sub-goals of an information system for ordering periodicals.
 2. Quantify these goals.
 3. Suggest alternative means of achieving the goals specified by you.
- 4.22 What operational, tactical, and strategic information should be provided by the mess billing system mentioned in the text? (Case study).
- 4.23 When is a detailed system proposal prepared? What are the contents of a system proposal?