

APPLICATION BASED QUESTION

QUESTION city wants to develop an AI-based system to predict traffic congestion and suggest better routes to commuters.

Answer the following:

- a) Identify the problem that needs to be solved. (2 Marks)**
- b) What type of data would be required for this AI project? Give any two examples. (2 Marks)**
- c) How can the collected data be explored and analysed? (2 Marks)**
- d) Why is modelling required in this project? (2 Marks)**
- e) How would you evaluate whether the AI system is working effectively? (2 Marks)**

QUESTION :

Rohan and his friends noticed that many students in their school forget their homework deadlines. They decided to develop a simple Python-based study planner. First, they identified the problem and discussed possible solutions. They used an AI tool to get ideas and help with Python coding, but they checked and understood the information before using it. The team divided the work among themselves, communicated through email, and stored their project files using cloud storage. After testing the application, Rohan thought about selling it to other schools as a small business.

Questions

- 1. (2 marks) Which stage of the Project Cycle did Rohan's team follow when they identified the problem? Explain briefly.**
- 2. (2 marks) How did the team demonstrate ethical and responsible use of AI?**
- 3. (2 marks) Mention two skills from communication and self-management that helped the team complete the project successfully.**
- 4. (2 marks) How were Python and ICT skills useful in this project?**
- 5. (2 marks) Rohan wants to sell the application to other schools. Identify two entrepreneurial skills he would need.**

QUESTION

Ananya noticed that students in her school were wasting a lot of paper. She and her team decided to create a digital notice-board application. They used AI to generate ideas, Python to develop some features, and cloud storage to save their files. The team divided the work and set deadlines. Before launching the application, they tested it and collected feedback from students.

1. What problem did Ananya's team identify? (1 mark)
2. Which stage of the Project Cycle involves identifying the problem? (2 marks)
3. Why should the team verify information generated by AI? (2 marks)
4. Mention one use of Python in this project. (1 mark)
5. Name two self-management skills that helped the team. (2 marks)
6. Why is collecting feedback important? (2 marks)

QUESTION

Rahul wants to start a small business selling healthy snacks in his school. He first conducts a survey to find out what students like. He prepares a budget, decides the price, and promotes his products through digital posters. He communicates politely with customers and maintains the sales information in a spreadsheet. When customers suggest changes, Rahul improves his products.

1. What entrepreneurial opportunity did Rahul identify? (1 mark)
2. Why is conducting a survey useful before starting a business? (2 marks)
3. Which ICT tool can Rahul use to maintain sales records? (1 mark)
4. Mention two qualities of a successful entrepreneur shown by Rahul. (2 marks)
5. How does effective communication help Rahul's business? (2 marks)
6. Why should Rahul consider customer feedback? (2 marks)

QUESTION

Meera has an examination next week. She has to complete a Python assignment, prepare a presentation, and attend a group meeting. Instead of doing everything at the last moment, she prepares a timetable and gives priority to important tasks. During the group meeting, she listens carefully to her classmates and expresses her ideas politely. She uses online resources to research information for her presentation.

1. Which self-management skill is Meera using when she prepares a timetable? (1 mark)
2. Why is prioritizing tasks important? (2 marks)
3. Give two examples of effective communication shown by Meera. (2 marks)
4. Which ICT skills are being used for the presentation? (2 marks)
5. How can time management help Meera complete her Python assignment successfully? (1 mark)
6. Why should Meera check whether information found online is reliable? (2 marks)

QUESTION

Vikram is developing a Python program that calculates students' average marks. He asks an AI tool to suggest some code. The AI provides code, but Vikram tests it and makes corrections when necessary. His team members disagree about some features of the program. Instead of arguing, Vikram listens to their opinions and discusses the

problem. After completing the program, the team tests it with several students.

1. What is the purpose of testing the Python program? (2 marks)
2. Why should Vikram understand the AI-generated code before using it? (2 marks)
3. Which communication skill does Vikram demonstrate when he listens to his team members? (1 mark)
4. What should the team do if the program gives incorrect results? (1 mark)
5. Mention two benefits of teamwork in a project. (2 marks)
6. Which stage of the Project Cycle includes testing and checking the solution? (2 marks)

Sana and her friends want to develop an app that helps elderly people order medicines and groceries easily. They interview elderly people to understand their difficulties. They use AI for brainstorming but avoid entering users' personal information into the AI tool. They create a simple prototype and test it with users. Sana plans to approach a local organization to support the project financially.

1. Why did Sana's team interview elderly people? (2 marks)
 2. Why should personal information not be shared carelessly with AI tools? (2 marks)
 3. What is a prototype and why is it useful? (2 marks)
 4. Mention one ethical consideration in this project. (1 mark)
 5. Which entrepreneurial skill is needed when Sana approaches an organization for financial support? (1 mark)
 6. Why is user testing important before launching the app? (2 marks)
- Total: 10 Marks

QUESTION What is the AI Project Cycle? What are the Stages of the AI Project Cycle?