Question Answer of Types of Ethical Framework

1. How does fairness play a role in AI ethics?
Ans. Fairness ensures AI does not discriminate against individuals or groups. It prevents biased decision-making in areas like hiring, banking, and law enforcement.

2. How is transparency ensured in AI systems?
Ans. Transparency ensures that AI decisions are understandable. Users and supervisors should know how AI arrives at its conclusions, helping build trust and accountability.

3. How is accountability and responsibility for AI decisions?
Ans. Accountability ensures that someone is held responsible for AI actions. Developers, users, or regulators must ensure AI follows ethical standards and correct mistakes when necessary.

4. Explain the concept of safety in AI ethics.
Ans. Safety in AI means AI systems should not harm humans. Self-driving cars should avoid collisions, and AI in medical AI must correct diagnoses and treatments.

5. What does 'Respect for Privacy' mean in AI ethics?
Ans. Respect for privacy means AI must follow privacy laws. It should not misuse or collect excessive personal data and should ensure data security and user trust.

6. What is Consequentialism, and how does it apply to AI?
Ans. Consequentialism states that the morality of an action is determined by its outcomes. In AI, it means AI systems should be built to maximize benefits, such as optimizing traffic to reduce pollution.

7. What is Utilitarianism's goal in AI decision-making?
Ans. Utilitarianism suggests that decisions are ethical if they maximize happiness for the most people. AI should make choices that benefit society, like improving healthcare or reducing pollution.

8. Describe Deontological Ethics and its role in AI.
Ans. Deontological Ethics is the idea of moral rules and duties rather than consequences. AI must follow ethical standards even if the result isn't the most beneficial. For example, it should not lie, even to protect someone.

9. How does Virtue Ethics influence AI behavior?
Ans. Virtue Ethics emphasizes moral character traits like honesty, kindness, and fairness. AI systems should be built to reflect human virtues, such as being truthful in journalism or empathetic in customer service.

10. What is Human-centered AI, and why is it important?
Ans. Human-centered AI ensures AI is designed to assist rather than replace humans. It prioritizes human well-being and ethical decision-making, supporting fairness and collaboration.

11. How can governments and developers ensure ethical AI use?
Ans. Governments can regulate AI by creating laws to ensure fairness, privacy, and safety. Developers must test AI for bias, transparency, and accountability to make it trustworthy.

Assertion & Reasoning

In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:

(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false (or partly true).
(d) A is false (or partly true) but R is true.
(e) Both A and R are false or not fully true.

1. Assertion (A): AI should be designed with fairness to avoid bias.
   Reason (R): AI bias only occurs if developers intentionally add it.

   Answer - c

2. Assertion (A): Transparency in AI builds trust among users.
   Reason (R): People trust AI more when they understand how it makes decisions.

   Answer - a

3. Assertion (A): AI should always prioritize safety over efficiency.
   Reason (R): An unsafe AI system can harm people and cause loss of trust.

   Answer – a

4. Assertion (A): AI should not be regulated by governments.
   Reason (R): AI systems can self-regulate and follow ethical principles.

   Answer - c

5. Assertion (A): Human-centered AI helps people make better decisions.
   Reason (R): Human-centered AI ensures that AI works alongside humans instead of replacing them.

   Answer - a

6. Assertion (A): AI-powered hiring should follow anti-discrimination laws.
   Reason (R): AI should be designed to comply with legal and ethical standards.
   Answer - a

7. Assertion (A): AI decision-making should be completely automated.
   Reason (R): AI always makes better decisions than humans.
   Answer - c

8. Assertion (A): AI can reduce job loss in certain industries.
   Reason (R): AI can create new job opportunities while automating repetitive tasks.
   Answer – a

Competency Based Questions

1. A company uses AI to screen job applicants. The AI system rejects applicants from a certain ethnic background at a higher rate.

   (i) Which ethical principle is violated?
   (a) Fairness   (b) Transparency   (c) Accountability   (d) Privacy

   (ii) What should the company do to fix this issue?
   (a) Keep using the AI as it is
   (b) Train the AI with more diverse data
   (c) Stop hiring people altogether
   (d) Remove AI from the process completely

2. A hospital AI recommends a treatment plan without explaining its reasoning to doctors.

   (i) Which ethical principle is being ignored?
   (a) Privacy   **(b) Transparency**   (c) Fairness   (d) Safety

   (ii) How can this issue be fixed?
   (a) Make AI provide detailed explanations for decisions
   (b) Remove AI from healthcare completely
   (c) Use AI only for administrative tasks
   (d) Allow AI to operate without human intervention

3. An AI-controlled self-driving car must choose between hitting a pedestrian or crashing into a wall, potentially harming the passenger.

   (i) Which ethical framework does this situation relate to?
   (a) Virtue Ethics   **(b) Utilitarianism**
   (c) Deontological Ethics   (d) Transparency

   (ii) What should AI developers consider?
   (a) The consequences and safety of all involved
   (b) Let AI decide randomly
   (c) Always prioritize passengers
   (d) Disable AI in cars

4. A government installs AI-powered cameras in public places to monitor crime. The system identifies people based on their faces and records their activities.

   (i) Which ethical principle is most relevant in this situation?
   (a) Safety   **(b) Privacy**   (c) Fairness   (d) Utilitarianism

   (ii) How can AI surveillance be made more ethical?
   (a) Allow AI to record and store unlimited personal data
   (b) Allow AI to follow strangers without public consent
   (c) Ensure AI follows strict data protection laws
   (d) Remove all AI-powered surveillance cameras

5. A military AI system is designed to identify and attack enemy targets without human intervention.

(i) Which ethical concern is most prominent in this case?

(a) Transparency   (b) Fairness

(c) Accountability   (d) Job loss

(ii) How can governments ensure ethical AI use in warfare?

(a) Allow AI to make all battlefield decisions

(b) Ban AI in all military applications

(c) Ensure AI can only operate under human supervision

(d) Let AI train itself without human input