QUESTION BANK
Chapter 3: Candle Animation in Krita:

✅1. Multiple Choice Questions (MCQ)

1. What type of animation is used in this chapter?
- **a) 3D Animation**
- **b) Frame-by-frame animation ✅**
- **c) Stop motion**
- **d) Motion capture**

2. Which software is used in this project?
- **a) Photoshop**
- **b) Blender**
- **c) Krita ✅**
- **d) Canva**

3. What is the recommended resolution for print?
- **a) 72 DPI**
- **b) 150 DPI**
- **c) 300 DPI ✅**
- **d) 600 DPI**

4. Which tool is used to draw the candle?
- **a) Fill Tool**
- **b) Brush Tool ✅**
- **c) Text Tool**
- **d) Crop Tool**

5. The flame is usually drawn in which shape?
- **a) Circle**
- **b) Square**
- **c) Teardrop ✅**
- **d) Triangle**

6. What does DPI stand for?
- **a) Dots Per Inch ✅**
- **b) Data Per Image**
- **c) Display Pixel Index**
- **d) Digital Print Ink**

7. Which option is used to export animation?
- **a) Save As**
- **b) Render Animation ✅**
- **c) Export Image**
- **d) Quick Save**

8. What is the ideal frame rate?
- **a) 5–10 FPS**
- **b) 12–24 FPS ✅**
- **c) 30–60 FPS**
- **d) 1–5 FPS**

9. Which tool is used for glow effect?
- **a) Pencil Tool**
- **b) Airbrush Tool ✅**
- **c) Eraser**
- **d) Shape Tool**

10. What creates the illusion of movement?

a) Layers
b) Frames ✓
c) Colours
d) Brushes

2. Fill in the Blanks

a. Krita is a _____ application. (graphics)
b. Animation is made of a series of _____. (frames)
c. The flame is drawn in a _____ shape. (teardrop)
d. DPI means _____ Per Inch. (Dots)
e. The candle wick is drawn using a _____ line. (thin)
f. Glow is added using _____ tool. (Airbrush)
g. Animation workspace is selected from _____ menu. (Window)
h. Frame duplication helps in _____ animation. (smooth)
i. Animation can be exported as _____ or MP4. (GIF)
j. Timeline is opened from _____ settings. (Dockers)

3. Name the Following

a. A single still image → Frame
b. Software used for animation → Krita
c. Thin line on candle → Wick
d. Flickering effect process → Frame-by-frame animation
e. Light effect around flame → Glow
f. Tool for soft lighting → Airbrush Tool
g. Workspace for animation → Animation Workspace
h. Panel to manage frames → Timeline
i. File format for animation → GIF
j. Measurement of resolution → DPI

4. One Word Answers

a. Candle base colour → White
b. Animation type → Frame
c. Flame colour → Yellow
d. Frame rate unit → FPS
e. Tool for drawing → Brush
f. Software → Krita
g. Effect → Glow
h. Shape of flame → Teardrop
i. Panel → Timeline
j. Output format → GIF

5. Application-Based Questions

1. Why do we slightly change the flame in each frame?
→ To create a flickering effect and realistic animation.
2. What will happen if all frames are identical?
→ There will be no animation; it will look static.
3. Why is Airbrush tool used for glow?
→ It creates soft and smooth lighting effects.
4. Why do we use layers in animation?
→ To separate elements like candle, wick, and flame for easy editing.
5. Why is frame rate important?

→ It controls how smooth the animation looks.

□ 6. True and False

a. **Krita is used for animation. (True)**
b. **DPI means Dots Per Image. (False)**
c. **Flame is drawn as a square. (False)**
d. **Animation is made using frames. (True)**
e. **Timeline is used to manage frames. (True)**
f. **GIF cannot be exported. (False)**
g. **Airbrush tool adds glow effect. (True)**
h. **Layers are not needed in animation. (False)**
i. **Frame rate affects smoothness. (True)**
j. **Candle wick is drawn thick. (False)**

? 7. Short Answer Questions (Inside Questions)

1. **What is a frame?**
   → A single still image in an animation sequence.
2. **What is animation?**
   → A sequence of frames creating movement illusion.
3. **What is DPI?**
   → Dots Per Inch, used to measure resolution.
4. **What is keyframe?**
   → A frame defining start/end of animation change.
5. **What is frame-by-frame animation?**
   → Drawing each frame individually to create motion.

Chapter 4: Looping Statements (MakeCode Arcade):

✓1. Multiple Choice Questions (MCQs)

1. What is the purpose of loops?
a) To stop code
b) To repeat instructions ✓
c) To delete data
d) To print only once
Answer: b

2. Which loop runs a fixed number of times?
a) While loop
b) Forever loop
c) For loop ✓
d) Repeat loop
Answer: c

3. Which loop runs until a condition becomes false?
a) For loop
b) While loop ✓
c) Repeat loop
d) Forever loop
Answer: b

4. Which block runs code continuously?

a) Repeat

b) While

c) Forever ✓

d) Break

Answer: c

5. Which statement is used to exit a loop?

a) Continue

b) Break ✓

c) Stop

d) Exit

Answer: b

6. Which statement skips the current iteration?

a) Break

b) Stop

c) Continue ✓

d) Exit

Answer: c

7. Repeat block is used for:

a) Infinite loop

b) Fixed repetition ✓

c) Conditional loop

d) Exit loop

Answer: b

8. A loop that runs forever is called:

a) Infinite loop ✓

b) Fixed loop

c) Conditional loop

d) Temporary loop

Answer: a

9. While loop depends on:

a) Number

b) Condition ✓

c) Time

d) Input

Answer: b

10. Console log is used to:

a) Stop loop

b) Display output ✓

c) Delete data

d) Run code

Answer: b

□ 2. Fill in the Blanks

a. Loops are used to _____ instructions.

Answer: repeat

b. A _____ loop runs a fixed number of times.

Answer: for

c. A _____ loop runs based on a condition.

Answer: while

d. The _____ block runs continuously.

Answer: forever
e. The _____ block repeats instructions multiple times.
Answer: repeat
f. The _____ statement is used to exit a loop.
Answer: break
g. The _____ statement skips one iteration.
Answer: continue
h. A loop that never ends is called an _____ loop.
Answer: infinite
i. The _____ log block shows output.
Answer: console
j. Loops help to reduce _____ in code.
Answer: repetition

3. True and False

a. **Loops are used to repeat code. True**
b. **For loop runs infinitely. False**
c. **While loop depends on a condition. True**
d. **Forever loop stops automatically. False**
e. **Break statement exits the loop. True**
f. **Continue stops the loop completely. False**
g. **Repeat block runs code multiple times. True**
h. **Infinite loop ends on its own. False**
i. **Console log displays output. True**
j. **Loops make programs shorter and efficient. True**

4. Short Answer (5 Questions)
1. What is a loop?
A loop is a programming structure used to repeat a set of instructions.
2. What is a for loop?
A loop that runs a fixed number of times.
3. What is a while loop?
A loop that runs as long as a condition is true.
4. What is a break statement?
It is used to exit a loop immediately.
5. What is a continue statement?
It skips the current iteration and moves to the next.

5. Application-Based Questions
1. You want to print numbers from 1 to 10. Which loop will you use? Why?
Use a for loop because the number of repetitions is known.
2. A game runs continuously until the player loses. Which loop is suitable?
Use a while loop or forever loop.
3. You want to stop a loop when a score reaches 100. Which statement will you use?
Use break statement.
4. You want to print only even numbers and skip odd numbers. What will you use?
Use continue statement.
5. Why are loops important in programming?
They reduce repetition and make code efficient and shorter.

Chapter 5: Iterative Statements in Python :

✅1. MCQ (Multiple Choice Questions)

1. **Which loop is used when the number of iterations is known?**
   - **a) while**
   - **b) for ✅**
   - **c) do-while**
   - **d) infinite**
2. **Which keyword is used to start a loop in Python?**
   - **a) loop**
   - **b) for ✅**
   - **c) repeat**
   - **d) iterate**
3. **What does range(5) generate?**
   - **a) 1 to 5**
   - **b) 0 to 5**
   - **c) 0 to 4 ✅**
   - **d) 1 to 4**
4. **Which loop runs based on a condition?**
   - **a) for**
   - **b) while ✅**
   - **c) range**
   - **d) break**
5. **What will 10 in [1,2,3,10] return?**
   - **a) False**
   - **b) True ✅**
   - **c) Error**
   - **d) None**
6. **Which statement stops the loop completely?**
   - **a) continue**
   - **b) stop**
   - **c) break ✅**
   - **d) exit**
7. **Which statement skips current iteration?**
   - **a) skip**
   - **b) break**
   - **c) continue ✅**
   - **d) pass**
8. **Infinite loop means:**
   - **a) loop runs once**
   - **b) loop runs fixed times**
   - **c) loop never ends ✅**
   - **d) loop stops automatically**
9. **range(1,5) gives:**
   - **a) 1–5**
   - **b) 0–5**
   - **c) 1–4 ✅**
   - **d) 2–5**
10. **Which loop supports else?**

a) for
b) while ✓
c) both
d) none

2. Fill in the Blanks

a. Looping statements are also called iterative statements.
b. Python has two main loops: for and while.
c. The range() function generates numbers.
d. The in operator checks membership.
e. A loop that never ends is called an infinite loop.
f. The break statement exits the loop.
g. The continue statement skips current iteration.
h. The while loop runs based on condition.
i. The for loop works with sequences.
j. A tuple is an immutable sequence.

3. True / False

a. For loop runs fixed number of times. → True
b. While loop always runs once. → False
c. range() includes the last number. → False
d. break stops loop immediately. → True
e. continue ends the loop. → False
f. Infinite loop never stops. → True
g. "in" checks value existence. → True
h. Tuple elements can change. → False
i. while loop checks condition first. → True
j. else can be used with while loop. → True

4. One Word Answers

a. Loop that never ends → Infinite loop
b. Membership operator → in
c. Function for sequence numbers → range
d. Exit loop → break
e. Skip iteration → continue
f. Fixed loop → for
g. Condition-based loop → while
h. Immutable sequence → tuple
i. Loop repetition → iteration
j. Sequence type → list

5. Name the Following

a. Statement used to repeat tasks → Loop / Iterative statement
b. Loop using condition → while loop
c. Loop using sequence → for loop
d. Statement to exit loop → break
e. Statement to skip iteration → continue
f. Function generating numbers → range()
g. Operator to check membership → in operator
h. Loop that never stops → infinite loop
i. Sequence that cannot change → tuple

j. **Block executed repeatedly → loop body**

6. Application-Based Questions

1. **Write a program to print numbers from 1 to 10.**
   - **Use a for loop with range()**
2. **Print multiplication table of a number.**
   - **Use for or while loop**
3. **Check if a number exists in a list.**
   - **Use in operator**
4. **Print even numbers from 1 to 20.**
   - **Use loop + condition**
5. **Print a triangle pattern.**
   - **Use nested loops**

7. Short Answer (Inside Questions & Answers)

1. **What is a loop?**

A loop is used to repeat a set of instructions.

2. **What is a for loop?**

It repeats code for a fixed number of times.

3. **What is a while loop?**

It runs as long as condition is true.

4. **What is break?**

It stops the loop immediately.

5. **What is continue?**

It skips current iteration and moves to next.