

Unit 8 - Week 6

Course outline

How does an NPTEL online course work?

Assignment Zero

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Inkjet Technologies: drop-on-demand

Inkjet Technologies: Machines

Quiz : Assignment 6

Week 6 Feedback Form

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Assignment 6

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-03-11, 23:59 IST.

Note: Choose correct options. More than one answer may be correct. All questions carry 2 marks.

1) In a 4x4 matrix the maximum possible tones with a single colour is 2 points

- 5
- 11
- 17
- 23

No, the answer is incorrect.
Score: 0

Accepted Answers:
17

2) If the distance between the fabric surface and print head of inkjet printer is increased, the 2 points

- Drop size would increase
- Dot size would increase
- Drop size would not change
- Dot size would not change

No, the answer is incorrect.
Score: 0

Accepted Answers:
Dot size would increase
Drop size would not change

3) 20 pL ink droplet compared to 40 pL droplet will 2 points

- Give sharper image
- Show higher depth of shade if resolution is the same
- Show lighter depth of shade if resolution is the same
- Consume less ink to print the same design

No, the answer is incorrect.
Score: 0

Accepted Answers:
Give sharper image
Show lighter depth of shade if resolution is the same

4) If the frequency of jetting is increased from 1 MHz to 1.5 MHz, the percentage change in the throughput of ink (vol/unit time) jetted would be 2 points

- 1.5
- 5.0
- 25.0
- 50.0

No, the answer is incorrect.
Score: 0

Accepted Answers:
50.0

5) In the multiple deflection continuous ink-jet system the 2 points

- Drop volume is dependent on the drop placement
- Drop volume is independent of the drop placement
- Dot area changes based on the placement of the drop
- Dot remains circular irrespective of where the drop falls

No, the answer is incorrect.
Score: 0

Accepted Answers:
Drop volume is independent of the drop placement
Dot area changes based on the placement of the drop

6) Consider the following assertion (A) and reason (R) in the context of inkjet printing 2 points

(A) Light lemon coloured design cannot be printed over a jet black ground colour
(R) In ink-jet printing discharging of ground colour can't be done

Choose the correct option.

- Both (A) and (R) are correct
- Both (A) and (R) are wrong
- (A) is correct (R) is wrong
- (A) is wrong (R) is correct

No, the answer is incorrect.
Score: 0

Accepted Answers:
(A) is wrong (R) is correct

7) Consider the following assertion (A) and reason (R) in the context of piezo crystals 2 points

(A) PZT based piezo crystals are a preferred over barium titanate based crystals for the manufacture of piezo based devices
(R) The change in dimension per unit applied voltage for PZT is significantly higher compared to the other material

Choose the correct option.

- Both (A) and (R) are correct
- Both (A) and (R) are wrong
- (A) is correct (R) is wrong
- (A) is wrong (R) is correct

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both (A) and (R) are correct

8) Consider the following assertion (A) and reason (R) in the context of thermal bubble jet printer 2 points

(A) On application of voltage heat is generated and ink drop is jetted out
(R) Heating increases the volume of the ink in the chamber

Choose the correct option.

- Both (A) and (R) are correct
- Both (A) and (R) are wrong
- (A) is correct (R) is wrong
- (A) is wrong (R) is correct

No, the answer is incorrect.
Score: 0

Accepted Answers:
(A) is correct (R) is wrong

9) Consider the following assertion (A) and reason (R) in the context of ink jet printing 2 points

(A) The surface area of the actuators based on piezo crystal as compared to that of thermal ones is less
(R) The displacement in piezo based actuators is higher.

Choose the correct option.

- Both (A) and (R) are correct
- Both (A) and (R) are wrong
- (A) is correct (R) is wrong
- (A) is wrong (R) is correct

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both (A) and (R) are wrong

10) Consider the following assertion (A) and reason (R) in the context of ink-jet printing 2 points

(A) CIJ print heads are more productive compared to DoD print heads
(R) The operating frequency of CIJ printers is very high

Choose the correct option.

- Both (A) and (R) are correct
- Both (A) and (R) are wrong
- (A) is correct (R) is wrong
- (A) is wrong (R) is correct

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both (A) and (R) are correct