Unit 10 - Week 8

Assignment 8

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

Due on 2020-03-25, 23:59 IST.

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

1) Formation of satellite drops can be reduced by *2 points*

- [ ] Increasing the viscosity of the ink
- [ ] Decreasing the viscosity of the ink
- [ ] Increasing the surface tension of the ink
- [ ] Decreasing the surface tension of the ink

No, the answer is incorrect.
Score: 0
Accepted Answers:
Increasing the viscosity of the ink
Decreasing the surface tension of the ink

2) Printing of cotton fabric with reactive ink is accomplished only if it is *2 points*

- ( ) Pretreated with acidic solution
- ( ) Pretreated with alkaline solution
- ( ) Mercerized
- ( ) Bleached

No, the answer is incorrect.
Score: 0
Accepted Answers:
Pretreated with alkaline solution

3) Shear viscosity has a direct bearing on the flow properties of the ink *2 points*

- ( ) True
- ( ) False
- ( ) True only if viscosity is very low
- ( ) True only if surface tension is very high

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

4) Pigment inks can be printed onto *2 points*

- [ ] Cotton
- [ ] Cotton / polyester
- [ ] Acrylic
- [ ] Silk

No, the answer is incorrect.
Score: 0
Accepted Answers:
Cotton
Cotton / polyester
Acrylic
Silk

5) 2-pyrolidone *2 points*

- [ ] Is a good dispersant
- [ ] Is a good solvent
- [ ] Has one nitrogen atom
- [ ] Has two oxygen atoms

No, the answer is incorrect.
Score: 0
Accepted Answers:
Is a good solvent
Has one nitrogen atom

6) Consider the following assertion (A) and reason (R) in the context of surface tension of the printing ink, *2 points*

(A) Higher surface tension of the ink facilitates the formation of spherical drops.
(R) Spherical drops reduce the interface energy.

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

7) Consider the following assertion (A) and reason (R) in the context of rheology of ink *2 points*

(A) Printing ink encounters a high shear rate
(R) The diameter of the print head nozzle is very small

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 rheology of ink *2 points*

(A) High frequency rheometers are more appropriate for evaluation of flow properties of printing ink
(R) This simulates the actual ink ejection

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

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

(A) Binders should have high T_g
(R) This gives a soft feel to the printed area

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 pigment ink formulation *2 points*

(A) Low HLB surfactants help to wet the nozzle capillary
(R) Surfactants increase the surface tension of the ink

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