



+1/9/52+

Computing Infrastructures - July 10, 2024

Answer Sheets (Page 3)

Student ID (Codice Persona):

SOLUTIONS

True/False Questions

Question 01 : ☒ A ☐ B

Question 02 : ☐ A ☒ B

Question 03 : ☒ A ☐ B

Question 04 : ☒ A ☐ B

Question 05 : ☐ A ☒ B

Question 06 : ☒ A ☐ B

Question 07 : ☐ A ☒ B

Question 08 : ☐ A ☒ B

Question 09 : ☐ A ☒ B

Question 10 : ☐ A ☒ B

Exercises

Question 11 : Disk Rotation Speed [RPM] = 10000

Question 12 : Number of I/O operations = $2R + 2W = 4$

Question 13 : Minimum $MTTF_{ServerC}$ [hours] = > 2400 h

Question 14 : Maximum number of servers = $8 \times 4 = 32$

Question 15 : $D_{S1} = 0.75$, $D_{S2} = 2.25$, $U_{S1} = 0.25$, $U_{S2} = 0.75$

Question 16 : $N_{S1} = 4$, $N_{S2} = 11$ 12



+2/9/42+

Computing Infrastructures - July 10, 2024

Answer Sheets (Page 3)

Student ID (Codice Persona):

SOLUTIONS

True/False Questions

Question 01 : ☐ A ☒ B

Question 02 : ☐ A ☒ B

Question 03 : ☐ A ☒ B

Question 04 : ☐ A ☒ B

Question 05 : ☒ A ☐ B

Question 06 : ☒ A ☐ B

Question 07 : ☐ A ☒ B

Question 08 : ☒ A ☐ B

Question 09 : ☒ A ☐ B

Question 10 : ☐ A ☒ B

Exercises

Question 11 : Disk Rotation Speed [RPM] = 6000

Question 12 : Number of I/O operations = $2R + 2W = 4$

Question 13 : Minimum $MTTF_{ServerC}$ [hours] = > 1800

Question 14 : Maximum number of servers = $6 \times 3 = 18$

Question 15 : $D_{S1} = 1.5s$, $D_{S2} = 2.125s$, $U_{S1} = 0.5$, $U_{S2} = 0.708$

Question 16 : $N_{S1} = 8$, $N_{S2} = 11$



+3/9/32+

Computing Infrastructures - July 10, 2024

Answer Sheets (Page 3)

Student ID (Codice Persona):

SOLUTIONS

True/False Questions

Question 01 : ☐ A ☒ B

Question 02 : ☒ A ☐ B

Question 03 : ☐ A ☒ B

Question 04 : ☐ A ☒ B

Question 05 : ☐ A ☒ B

Question 06 : ☒ A ☐ B

Question 07 : ☐ A ☒ B

Question 08 : ☐ A ☒ B

Question 09 : ☒ A ☐ B

Question 10 : ☒ A ☐ B

Exercises

Question 11 : Disk Rotation Speed [RPM] = 6000

Question 12 : Number of I/O operations = $3R + 3W = 6$

Question 13 : Minimum $MTTF_{ServerC}$ [hours] = 1800

Question 14 : Maximum number of servers = $8 \times 4 = 32$

Question 15 : $D_{S1} = 1.5s$... $D_{S2} = 2.125s$... $U_{S1} = 0.5$... $U_{S2} = 0.708$

Question 16 : $N_{S1} = 8$... $N_{S2} = 11$



+4/9/22+

Computing Infrastructures - July 10, 2024

Answer Sheets (Page 3)

Student ID (Codice Persona):

SOLUTIONS

True/False Questions

Question 01 : ☐ A ☒ B

Question 02 : ☐ A ☒ B

Question 03 : ☐ A ☒ B

Question 04 : ☐ A ☒ B

Question 05 : ☐ A ☒ B

Question 06 : ☐ A ☒ B

Question 07 : ☒ A ☐ B

Question 08 : ☐ A ☒ B

Question 09 : ☐ A ☒ B

Question 10 : ☒ A ☐ B

Exercises

Question 11 : Disk Rotation Speed [RPM] = 6000

Question 12 : Number of I/O operations = $2R + 2W = 4$

Question 13 : Minimum $MTTF_{ServerC}$ [hours] = > 1800

Question 14 : Maximum number of servers = $8 \times 4 = 32$

Question 15 : $D_{S1} = 0.375s$... $D_{S2} = 0.56s$... $U_{S1} = 0.25$... $U_{S2} = 0.375$

Question 16 : $N_{S1} = 2$... $N_{S2} = 3$



+5/9/12+

Computing Infrastructures - July 10, 2024

Answer Sheets (Page 3)

Student ID (Codice Persona):

SECTIONS

True/False Questions

Question 01 : ☒ A ☐ B

Question 02 : ☒ A ☐ B

Question 03 : ☐ A ☒ B

Question 04 : ☒ A ☐ B

Question 05 : ☐ A ☒ B

Question 06 : ☐ A ☒ B

Question 07 : ☒ A ☐ B

Question 08 : ☐ A ☒ B

Question 09 : ☒ A ☐ B

Question 10 : ☐ A ☒ B

Exercises

Question 11 : Disk Rotation Speed [RPM] = 10000

Question 12 : Number of I/O operations = $2R + 2W = 4$

Question 13 : Minimum $MTTF_{ServerC}$ [hours] = > 1800

Question 14 : Maximum number of servers = $6 \times 3 = 18$

Question 15 : $D_{S1} = 1.5s$ $D_{S2} = 2.125s$ $U_{S1} = 0.5$ $U_{S2} = 0.708$

Question 16 : $N_{S1} = 8$ $N_{S2} = 11$



+6/9/2+

Computing Infrastructures - July 10, 2024

Answer Sheets (Page 3)

Student ID (Codice Persona):

SOLUTIONS

True/False Questions

Question 01 : ☒ A ☐ B

Question 02 : ☒ A ☐ B

Question 03 : ☒ A ☐ B

Question 04 : ☒ A ☐ B

Question 05 : ☒ A ☐ B

Question 06 : ☐ A ☒ B

Question 07 : ☒ A ☐ B

Question 08 : ☐ A ☒ B

Question 09 : ☐ A ☒ B

Question 10 : ☒ A ☐ B

Exercises

Question 11 : Disk Rotation Speed [RPM] = 10'000

Question 12 : Number of I/O operations = $2R + 2W = 4$

Question 13 : Minimum $MTTF_{ServerC}$ [hours] = > 2600

Question 14 : Maximum number of servers = $8R4 = 32$

Question 15 : $D_{S1} =$ 0.375 $D_{S2} =$ 0.5625 $U_{S1} =$ 0.25 $U_{S2} =$ 0.375

Question 16 : $N_{S1} =$ 2 $N_{S2} =$ ~~2~~ 3