SET NO - 1

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)

II.B.Tech. II MID Exam Objective

Branches: CSE,MECH & CE

Sub: Probability & Statistics **Date:08-05-2017**

Time: 20 min **Max.Marks:10**

Roll no: **Signature of the Faculty:**

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CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

1. In a $t-$ distribution of sample size n, the degrees of freedom are [ ]
   a) n b) $n-1$ c) $n-2$ d) $n+1$
2) The shape of $t-$ distribution is similar to that of [ ]
   a) Chi-square distribution b) F-distribution
   c) Normal distribution d) None
3) If $\bar{x}=47.5, \mu=42.1, S=8.4$ *and* $n=25$ *then* $t_{cal}=$ [ ]
   a) 3.2 b) 4.5 c) 3.12 d) None
4) Which distribution is used to test the equality of population means [ ]
   by comparing sample variances

   a) Chi-square distribution b) F-distribution c) $t-$ distribution d) None
5) Chi-square distribution is [ ]
   a) Continuous b)Symmetrical c)Multimodal d)None
6) Range of $t-$ distribution is [ ]
   a) $(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None
7) The $t-$ test is applicable to samples for which n is [ ]
   a) $n>30$ $b)n=30$ $c)n<30$ d)None
8) Range of $F-$ distribution is [ ]
   a) $(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None
9. If $\bar{X}=42.8, \bar{R}=4.8, A_2=0.577$ *then* Upper control limit for $\bar{\bar{X}}=$ [ ]
   a) 47.2 b) 44.88 c) 42.12 d) 39.35
10. If $\bar{R}=0.286, n=4$ *then LCL of* $\bar{R}$= [ ]
   a) 4.2 b) 2.3 c) 0 d) 1

SET NO - 1

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)

II.B.Tech. II MID Exam Objective

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Sub: Probability & Statistics **Date:08-05-2017**

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CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

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   a) n b) $n-1$ c) $n-2$ d) $n+1$
2) The shape of $t-$ distribution is similar to that of [ ]
   a) Chi-square distribution b) F-distribution
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3) If $\bar{x}=47.5, \mu=42.1, S=8.4$ *and* $n=25$ *then* $t_{cal}=$ [ ]
   a)3.2 b) 4.5 c) 3.12 d) None
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   a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None
7) The $t-$ test is applicable to samples for which n is [ ]
   $a)n>30$ $b)n=30$ $c)n<30$ d)None
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   a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None
9. If $\bar{X}=42.8, \bar{R}=4.8, A_2=0.577$ *then* Upper control limit for $\bar{\bar{X}}=$ [ ]
   a) 47.2 b) 44.88 c) 42.12 d) 39.35
10. If $\bar{R}=0.286, n=4$ *then LCL of* $\bar{R}$= [ ]
   a) 4.2 b) 2.3 c) 0 d) 1

11. Paired sample t_{cal} is ----------

12. The control limits for C- chart ----------

13. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

14. Degree of freedom for F-test is ----------

15. The control limits for np- chart ----------

TRUE/ FALSE

16. The degree of freedom for t-test for different means is $n_1 + n_2 - 2$ [T / F]

17. The np- chart is also called as fraction defective chart [T / F]

18. Every arrival is treated as a birth [T / F]

19. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

20. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ *is not known*) [T / F]

11. Paired sample t_{cal} is ----------

12. The control limits for C- chart ----------

13. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

14. Degree of freedom for F-test is ----------

15. The control limits for np- chart ----------

TRUE/ FALSE

16. The degree of freedom for t-test for different means is $n_1 + n_2 - 2$ [T / F]

17. The np- chart is also called as fraction defective chart [T / F]

18. Every arrival is treated as a birth [T / F]

19. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

20. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ *is not known*) [T / F]

SET NO-2

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)

II.B.Tech. II MID Exam Objective

Branches: CSE,MECH & CE

Sub: Probability & Statistics **Date:08-05-2017**

Time: 20 min **Max.Marks:10**

Roll no: **Signature of the Faculty:**

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CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

1) Chi-square distribution is [ ]
a)Continuous b)Symmetrical c)Multimodal d)None

2) Range of $t-$ distribution is [ ]
a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None

3) The $t-$ test is applicable to samples for which n is [ ]
$a)n>30$ $b)n=30$ $c)n<30$ d)None

4) Range of $F-$ distribution is [ ]
a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None

5). If $\bar{X}=42.8,\bar{R}=4.8,A_2=0.577$ $then$ Upper control limit for $\bar{\bar{X}}=$ [ ]
a) 47.2 b) 44.88 c) 42.12 d) 39.35

6) If $\bar{R}=0.286,n=4$ $then\ LCL\ of\ \bar{R}=$ [ ]
a) 4.2 b) 2.3 c) 0 d) 1

7). In a $t-$ distribution of sample size n, the degrees of freedom are [ ]
a) n b) $n-1$ c) $n-2$ d) $n+1$

8) The shape of $t-$ distribution is similar to that of [ ]
a) Chi-square distribution b) F-distribution
c) Normal distribution d) None

9) If $\bar{x}=47.5,\mu=42.1,S=8.4$ and $n=25$ $then$ $t_{cal}=$ [ ]
a)3.2 b) 4.5 c) 3.12 d) None

10) Which distribution is used to test the equality of population means [ ]
by comparing sample Variances
a) Chi-square distribution b) F-distribution c) $t-$ distribution d) None

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SET NO - 2

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)

II.B.Tech. II MID Exam Objective

Branches: CSE,MECH & CE

Sub: Probability & Statistics **Date:08-05-2017**

Time: 20 min **Max.Marks:10**

Roll no: **Signature of the Faculty:**

==========

CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

1) Chi-square distribution is [ ]
a)Continuous b)Symmetrical c)Multimodal d)None

2) Range of $t-$ distribution is [ ]
a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None

3) The $t-$ test is applicable to samples for which n is [ ]
$a)n>30$ $b)n=30$ $c)n<30$ d)None

4) Range of $F-$ distribution is [ ]
a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None

5). If $\bar{X}=42.8,\bar{R}=4.8,A_2=0.577$ $then$ Upper control limit for $\bar{\bar{X}}=$ [ ]
a) 47.2 b) 44.88 c) 42.12 d) 39.35

6) If $\bar{R}=0.286,n=4$ $then\ LCL\ of\ \bar{R}=$ [ ]
a) 4.2 b) 2.3 c) 0 d) 1

7). In a $t-$ distribution of sample size n, the degrees of freedom are [ ]
a) n b) $n-1$ c) $n-2$ d) $n+1$

8) The shape of $t-$ distribution is similar to that of [ ]
a) Chi-square distribution b) F-distribution
c) Normal distribution d) None

9) If $\bar{x}=47.5,\mu=42.1,S=8.4$ and $n=25$ $then$ $t_{cal}=$ [ ]
b) 3.2 b) 4.5 c) 3.12 d) None

10) Which distribution is used to test the equality of population means [ ]
by comparing sample
Variances
a) Chi-square distribution b) F-distribution c) $t-$ distribution d) None

11. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

12. Degree of freedom for F-test is ----------

13. The control limits for np- chart ----------

14. Paired sample t_{cal} is ----------

15. The control limits for C- chart ----------

TRUE/ FALSE

16. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

17. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ *is not known*) [T / F]

18. Every arrival is treated as a birth [T / F]

19 The degree of freedom for t-test for different means is $n_1 + n_2 - 2$ [T / F]

20. The np- chart is also called as fraction defective chart [T / F].

11. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

12. Degree of freedom for F-test is ----------

13. The control limits for np- chart ----------

14. Paired sample t_{cal} is ----------

15. The control limits for C- chart ----------

TRUE/ FALSE

16. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

17. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ *is not known*) [T / F]

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19 The degree of freedom for t-test for different means is $n_1 + n_2 - 2$ [T / F]

20. The np- chart is also called as fraction defective chart [T / F].

SET NO –3

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)
II.B.Tech. II MID Exam Objective
Branches: CSE,MECH & CE

Sub: Probability & Statistics **Date:08-04-2017**
Time: 20 min **Max.Marks:10**
Roll no: **Signature of the Faculty:**

==========

CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

1) If $\bar{x} = 47.5, \mu = 42.1, S = 8.4$ *and* $n = 25$ *then* $t_{cal} =$ [ ]
c) 3.2 b) 4.5 c) 3.12 d) None

2) Which distribution is used to test the equality of population means by comparing sample Variances [ ]
a) Chi-square distribution b) F-distribution c) $t-$ distribution d) None

3) Chi-square distribution is [ ]
a)Continuous b)Symmetrical c)Multimodal d)None

4) Range of $t-$ distribution is [ ]
a)$(-\infty, \infty)$ b)$(-\infty, 0)$ c)$(0, \infty)$ d)None

5) The $t-$ test is applicable to samples for which n is [ ]
$a)n > 30$ $b)n = 30$ $c)n < 30$ d)None

6) Range of $F-$ distribution is [ ]
a)$(-\infty, \infty)$ b)$(-\infty, 0)$ c)$(0, \infty)$ d)None

7). In a $t-$ distribution of sample size n, the degrees of freedom are [ ]
a) n b) $n-1$ c) $n-2$ d) $n+1$

8) The shape of $t-$ distribution is similar to that of [ ]
a) Chi-square distribution b) F-distribution
c) Normal distribution d) None

9. If $\bar{X} = 42.8, \bar{R} = 4.8, A_2 = 0.577$ *then* Upper control limit for $\bar{\bar{X}} =$ [ ]
a) 47.2 b) 44.88 c) 42.12 d) 39.35

10. If $\bar{R} = 0.286, n = 4$ *then LCL of* $\bar{R}$= [ ]
a) 4.2 b) 2.3 c) 0 d) 1

SET NO - 3

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)
II.B.Tech. II MID Exam Objective
Branches: CSE,MECH & CE

Sub: Probability & Statistics **Date:08-04-2017**
Time: 20 min **Max.Marks:10**
Roll no: **Signature of the Faculty:**

==========

CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

1) If $\bar{x} = 47.5, \mu = 42.1, S = 8.4$ *and* $n = 25$ *then* $t_{cal} =$ [ ]
d) 3.2 b) 4.5 c) 3.12 d) None

2) Which distribution is used to test the equality of population means by comparing sample Variances [ ]
a) Chi-square distribution b) F-distribution c) $t-$ distribution d) None

3) Chi-square distribution is [ ]
a)Continuous b)Symmetrical c)Multimodal d)None

4) Range of $t-$ distribution is
a)$(-\infty, \infty)$ b)$(-\infty, 0)$ c)$(0, \infty)$ d)None

5) The $t-$ test is applicable to samples for which n is [ ]
$a)n > 30$ $b)n = 30$ $c)n < 30$ d)None

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a) n b) $n-1$ c) $n-2$ d) $n+1$

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9. If $\bar{X} = 42.8, \bar{R} = 4.8, A_2 = 0.577$ *then* Upper control limit for $\bar{\bar{X}} =$ [ ]
a) 47.2 b) 44.88 c) 42.12 d) 39.35

10. If $\bar{R} = 0.286, n = 4$ *then LCL of* $\bar{R}$= [ ]
a) 4.2 b) 2.3 c) 0 d) 1

11. The control limits for C- chart ----------

12. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

13. Degree of freedom for F-test is ----------

14. The control limits for np- chart ----------

15. Paired sample t_{cal} is ----------

TRUE/ FALSE

16. The degree of freedom for t-test for different means is $n_1 + n_2 - 2$ [T / F]

17. The np- chart is also called as fraction defective chart [T / F]

18. Every arrival is treated as a birth [T / F]

19. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

20. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ is not $known$) [T / F]

11. The control limits for C- chart ----------

12. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

13. Degree of freedom for F-test is ----------

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TRUE/ FALSE

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SET NO –4

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)

II.B.Tech. II MID Exam Objective SET NO –4

Sub: Probability & Statistics **Date:08-04-2017**

Time: 20 min **Max.Marks:10**

Roll no: **Signature of the Faculty:**

==========

CHOOSE THE CORRECT ANSWER. **20x1/2=10M**

1) Which distribution is used to test the equality of population means by comparing sample Variances [ ]

a) Chi-square distribution b) F-distribution c) $t-$ distribution d) None

2) Chi-square distribution is [ ]

b) Continuous b)Symmetrical c)Multimodal d)None

3) Range of $t-$ distribution is [ ]

a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None

4) In a $t-$ distribution of sample size n, the degrees of freedom are [ ]

a) n b) $n-1$ c) $n-2$ d) $n+1$

5) The shape of $t-$ distribution is similar to that of [ ]

a) Chi-square distribution b) F-distribution

c) Normal distribution d) None

6) If $\bar{X}=42.8, \bar{R}=4.8, A_2=0.577$ *then* Upper control limit for $\bar{\bar{X}}=$ [ ]

a) 47.2 b) 44.88 c) 42.12 d) 39.35

7) If $\bar{R}=0.286, n=4$ *then LCL of* $\bar{R}$= [ ]

a) 4.2 b) 2.3 c) 0 d) 1

8) The $t-$ test is applicable to samples for which n is [ ]

$a) n>30$ $b) n=30$ $c) n<30$ d)None

9) Range of $F-$ distribution is [ ]

a)$(-\infty,\infty)$ b)$(-\infty,0)$ c)$(0,\infty)$ d)None

10) If $\bar{x}=47.5, \mu=42.1, S=8.4$ *and* $n=25$ *then* $t_{cal}=$ [ ]

a)3.2 b) 4.5 c) 3.12 d) None

SET NO –4

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY (AT)

II.B.Tech. II MID Exam Objective

Sub: Probability & Statistics **Date:08-04-2017**

Time: 20 min **Max.Marks:10**

Roll no: **Signature of the Faculty:**

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a)3.2 b) 4.5 c) 3.12 d) None

11. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

12. Degree of freedom for F-test is ----------

13. Paired sample t_{cal} is ----------

14. The control limits for C- chart ----------

15. The control limits for np- chart ----------

TRUE/ FALSE

16. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

17. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ *is not known*) [T / F]

18. The degree of freedom for t-test for different means is $n_1 + n_2 - 2$ [T / F]

19. The np- chart is also called as fraction defective chart [T / F]

20. Every arrival is treated as a birth [T / F]

11. The probability that the system is idle (M/M/1:$\infty/FIFO$)----------

12. Degree of freedom for F-test is ----------

13. Paired sample t_{cal} is ----------

14. The control limits for C- chart ----------

15. The control limits for np- chart ----------

TRUE/ FALSE

16. Average queue length is $L_q = \frac{\rho}{1-\rho}$ [T / F]

17. The LCL limit for $\bar{X}$ −chart is $\bar{\bar{X}} - A_2\bar{R}$ (when σ *is not known*) [T / F]

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19. The np- chart is also called as fraction defective chart [T / F]

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