



قائمة الاسئلة

امتحان نهاية الفصل الدراسي الثاني - للعام الجامعي 1446 هـ - الموافق 2024/2025 مكلية الحاسوب وتكنولوجيا المعلومات ::

Laialy S alzaimy

- 1) if all enteries below the main digonal are zeros
 - 1) ☒ upper tringular
 - 2) ☐ lower tringular
- 2) if all enteries above the main digonal are zeros
 - 1) ☐ upper tringular
 - 2) ☒ lower tringular
- 3) let A and B be two matrices if A is invertible and $AB=0$ then $B=0$
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 4) the inverse of E is E
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 5) if A and B are two matrices such that $AB=0$ then $A=0$ or $B=0$
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 6) if $A \neq 0$, B and C are matrices that $AB=AC$, then $B=C$
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 7) $AX=0$ has only the trivial solution
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 8) $AB \neq BA$
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 9) let A be a squer matrix, we say A is diagonal matrix if all the entties not on the diagonal are zeros
 - 1) ☐ identity matrix
 - 2) ☒ diagonal matrix
- 10) if $\det(A)=0$ then A is singular
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 11) if $\det(A) \neq 0$ then A is non singular (invertible)
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 12) if any square matrix A and scalar k
 - 1) ☒ $\det(kA)=k \det(A)$
 - 2) ☐ $\det(kA) \neq k \det(A)$
- 13) if $U \cdot V=0$ then
 - 1) ☒ U, V are orthagonal vectors
 - 2) ☐ U,V are parallel vwctors
- 14) two equivalent vectors must have the same intial point
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 15) $|U+V+W| \leq$
 - 1) ☒ $|U| + |V| + |W|$
 - 2) ☐ $|U+V| + |W|$
 - 3) ☐ $|U| + |V+W|$





- 16) $(U.V)+W=U.(V+W)$
1) - TRUE.
2) ☒ FALSE.
- 17) A is 3×6 matrix, what is the largest value for rank(A)
1) - 6
2) - 18
3) ☒ 3
- 18) $\langle 1 \rangle$ is an identity matrix
1) ☒ TRUE.
2) - FALSE.
- 19) the system $x+2y=3$, $-x+ay=b$, if $a=-2$, $b=-3$ the system
1) - has no solution
2) ☒ has infinitely many solution
3) - has one solution
- 20) the system $x+2y=3$, $-x+ay=b$, if $a=-2$, $b=0$ the system
1) ☒ has no solution
2) - has infinitely many solution
3) - has one solution

