

# Instituto Tecnológico Superior de Jerez



**Jerez de García Salinas a 07 de febrero del 2020**

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**S17070162**

**INGENIERÍA EN SISTEMAS COMPUTACIONALES**

**Administración de Bases de Datos.**

**6to. SEMESTRE.**

**Tema 1**

**Cuadro Comparativo.**

**I.S.C. Salvador Acevedo Sandoval.**

	MySQL	Oracle	SQL Server	PostgreSQL	SQLite
<b>SO en los que trabaja.</b>	Windows, MacOS, Linux, BSD, UNIX, AmigaOS, z/OS, IOS, Android	Windows, MacOS, Linux, UNIX, z/OS, OpenVMS	Windows, Linux	Windows, MacOS, Linux, BSD, UNIX, AmigaOS. Android	Windows, MacOS, Linux, BSD, UNIX, AmigaOS, z/OS, IOS, Android
<b>ACID.</b>	Si	Si	Si	Si	Si
<b>Permite Integridad Referencial.</b>	Si	Si	Si	Si	Si
<b>Permite Transacciones.</b>	Si	Si	Si	Si	Si
<b>Max DB Size</b>	Ilimitado	2PB (with standard 8k block)  8PB (with max 32k block) 8EB (with max 32k block and BIGFILE option)	524,272 TB (32 767 files * 16 TB max file size)  16 ZB per instance	Ilimitado	128 TB (231 pages * 64 KB max page size)
<b>Max Table Size</b>	MyISAM storage limits: 256 TB; Innodb storage limits: 64 TB	4 GB * block size (with BIGFILE tablespace)	524,272 TB	32 TB	Limited by file size
<b>Max Row Size</b>	64 KB	8 KB	8,060 bytes/2TB	1.6 TB	Limited by file size
<b>Max Columns per Row</b>	4,096	1,000	1,024/30,000(with sparse columns)	250–1600 depending on type	32,767
<b>Max CHAR Size</b>	64 KB (text)	32,767 B	2 GB	1 GB	2 GB
<b>Max NUMBER Size</b>	64 bits	126 bits	126 bits	Ilimitado	64 bits
<b>Min DATE Value and Max Date Value</b>	1000-9999	-4712-9999	0001-9999	-4,713-5,874,897	No DATE type
<b>Max Column Size</b>	64	128	128	63	Ilimitado
<b>Tipos de particionamiento</b>	Static	Static + Dynamic (through ANYDATA)	Static	Static	Dynamic
<b>Permite Uso de</b>	Si	Si	Si	Si	Si

<b>Triggers</b>					
<b>Permite uso de Procedimientos Almacenados</b>	Si	Si	Si	Si	No
<b>Tipos de Datos ENTEROS</b>	TINYINT (8-bit), SMALLINT (16-bit), MEDIUMINT (24-bit), INT (32-bit), BIGINT (64-bit)	NUMBER	TINYINT, SMALLINT, INT, BIGINT	SMALLINT (16-bit), INTEGER (32-bit), BIGINT (64-bit)	INTEGER (64-bit)
<b>Tipos de Datos de Punto Flotante</b>	FLOAT (32-bit), DOUBLE (aka REAL) (64-bit)	BINARY_FLOAT, BINARY_DOUBLE	FLOAT, REAL	REAL (32-bit), DOUBLE PRECISION (64-bit)	REAL (aka FLOAT, DOUBLE) (64-bit)
<b>Tipos de Datos Cadena</b>	CHAR, BINARY, VARCHAR, VARBINARY, TEXT, TINYTEXT, MEDIUMTEXT, LONGTEXT	CHAR, VARCHAR2, CLOB, NCLOB, NVARCHAR2, NCHAR, LONG	CHAR, VARCHAR, TEXT, NCHAR, NVARCHAR, NTEXT	CHAR, VARCHAR, TEXT	TEXT
<b>Tipos de Datos Fecha y Hora</b>	DATETIME, DATE, TIMESTAMP, YEAR	DATE, TIMESTAMP (with/without TIMEZONE), INTERVAL	DATE, DATETIMEOFFSET, DATETIME2, SMALLDATETIME, DATETIME, TIME	DATE, TIME (with/without TIMEZONE), TIMESTAMP (with/without TIMEZONE), INTERVAL	N/A
<b>Tipos de Datos Booleanos</b>	BIT(1), BOOLEAN	N/A	BIT	BOOLEAN	N/A
<b>Otros tipos de Datos</b>	ENUM, SET, GIS data types (Geometry, Point, Curve, LineString, Surface, Polygon, GeometryCollection,	SPATIAL, IMAGE, AUDIO, VIDEO, DICOM, XMLType	CURSOR, TIMESTAMP, HIERARCHYID, UNIQUEIDENTIFIER, SQL_VARIANT, XML, TABLE,	ENUM, POINT, LINE, LSEG, BOX, PATH, POLYGON, CIRCLE, CIDR, INET, MACADDR, BIT, UUID, XML,	N/A

	MultiPoint, MultiCurve, MultiLineString, MultiSurface, MultiPolygon)		Geometry, Geography, Custom .NET datatypes	JSON, JSONB, arrays, composites, ranges, custom	
<b>Tipos de ÍNDICES que maneja</b>	Spatial Indexes MEMORY, Cluster (NDB), InnoDB, tables only	R-/R+ tree, Expression, Partial, Reverese, Bitmap	Hash, Expression, Partial, Full Text, Spatial	R-/R+ tree, Hash, Expression, Partial, Reverese, Bitmap, GiST, GIN, Full- Text	R-/R+ tree, Expression, Partial, Full-Text

## Referencias Bibliográficas.

Wikipedia. (N.E.). Comparison of relational database management systems. 04-febrero-2020, de Wikipedia Sitio web:  
[https://en.wikipedia.org/wiki/Comparison\\_of\\_relational\\_database\\_management\\_systems](https://en.wikipedia.org/wiki/Comparison_of_relational_database_management_systems)