Chapter 6

The Production Process

The Production Process: consists of the steps and activities involved with the manufacture or assembly of finished goods and semifinished goods.

غرضها تحويل ال raw material ل finished او semi-finished goods

Types of Manufacturing:

1- Repetitive Manufacturing:

- The same material is produced repeatedly over a period of time at a relatively constant rate.

بنتج باستمرار كمية معينة علي مدار فترة زمنية محددة وثابتة . مثلا بصنع 1000 شاشة في السنة بمعدل 3 شاشات كل يوم مثلا.

2- Discrete Manufacturing:

- The company produces different materials over time in batches.

بنتج علي فترات مختلفة بكميات مختلفة او علي حسب الطلب ومعنديش معدل ثابت.

Note: Repetitive and discrete manufacturing produce Tangible products in individual units.

في الاتنين دول بنتج منتجات ملموسة ويمكن عدها .

3- Process Manufacturing:لا يمكن عدها

- the production of materials such as paint, chemicals, and soft drinks that are not manufactured in individual units, they are measured in quantities such as gallons and liters, and cannot be counted.

المنتجات التي لا تعد, زي مقدرش اعد شوال الرز فيه كام رزاية او البيبسي فيه كام قطرة او المكرونة.

منتجات بنتجها علي بعضها وبعدين اعبيها مثلا في كياس بالكيلو او ازايز باللتر او الجالون.

Organizational Data:

1- Client

2- Company Code

3- Plant

4- Storage Location

دول اتكلمنا عنهم قبل كدا بالتفصيل

Master Data:

1-Bill of materials (BOM)

2-Work center

3-Product routing

4-Material master

5-Production resource tools (PRT)

1-Bill of materials (BOM)

- Identifies the components needed to produce a material.

المكونات الداخلة في تصنيع المنتج, ممكن يكون مكون واحد او عدة مكونات.

BOMs are used in :

- Material Planning.

- Production.

- Procurement. اني لما اعرف المكون الناقص ابدأ اطلبه, مش هعرف اشتري غير لما اعرف المكونات ال عايزها للمنتج.

- Product Costing. اعرف تكلفة كل مكون داخل في تصنيع المنتج واجمعه وازود ربحي

- BOMS can be single level or multi-level.

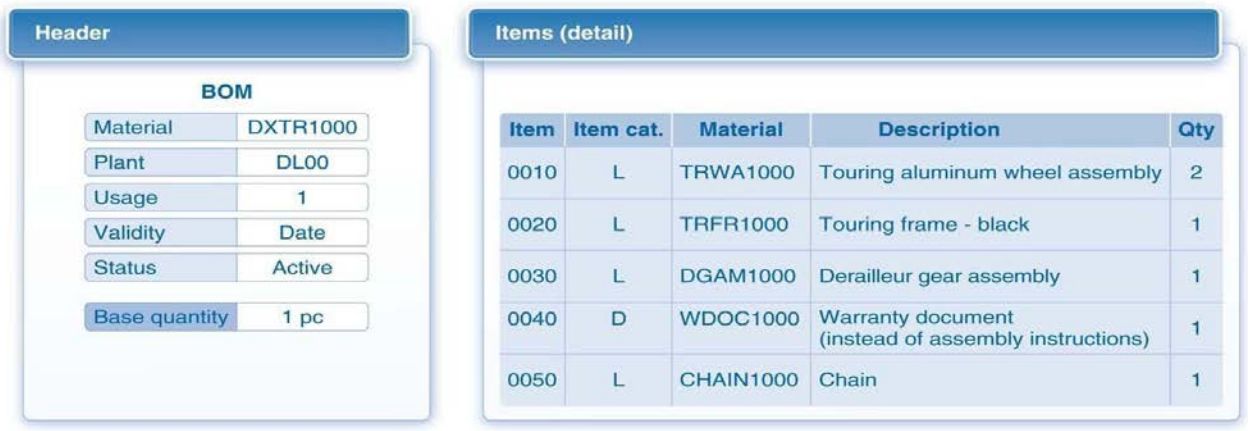
زي التيشرت بيتصنع من قماش بس.

لكن العربية بتتصنع من حديد و اطارات و جلد و زجاج ومكونات تانية فرعية كتيرة اكني بعمل شجرة مكونات.

- A component can have its own BOM to create a multi-level BOM.

يعني اطار العربية نفسه دا بيدخل في تصنيعه مكونات زي العجلة والحديدة المدورة والمسامير.

BOM Structure:



1-Header:

- The header section includes data that apply to the entire BOM, such as:

1- material number: identifies the finished good or semifinished good described in the BOM.

عبارة عن كود بيشير الي اسم المنتج الي بعمله BOM

2- Base Quantity: indicates the quantity of goods that will be produced by the materials specified in the BOM.

بتعرفني المكونات دي لازمة لتصنيع كام وحدة من المنتج.

3- Usage: identifies the purpose of which the BOM can be used.

بستخدم المكون ف ايه, مثلا كود 1 يعني ال BOM هستخدمها في الإنتاج. و ممكن مكونات تانية استخدمها في ال planning او engineering او sales وغيرها.

4- Status: Active or inactive.

an active BOM can be used in the production of a material, an inactive BOM cannot.

مثلا عندي منتج بصنعه بطريقتين وكل طريقة ليهاBOM

ف لو دلوقتي بستخدم الطريقة الاولي هتكون هتكون active و التانية inactive.

و بعد سنة مثلا جيت استخدم الطريقة التانية ف الطريقة الاولي هتكون inactive والتانية active.

5- Plant: each plant can have a different BOM.

يعني نفس المنتج ممكن يكون ليه مكونات وطريقة تصنيع مختلفة من مصنع ل مصنع تاني, مثلا مصنع بيستخدم مسامير في تصنيع الكرسي و التاني بيستخدم خيط او شمع في التقفيل.

6- Validity: Date Range.

مثلا أقول المنتج دا هفضل اصنعه بالمكونات دي لحد اخر السنة بعد كدا هوقف انتاجه او هشوف مكونات تانية.

2-items: معلومات خاصة بكل مكون علي حدا

- identifies all the materials needed to make the finished good or semi-finished good identified in the header and include data Applied to these specific materials in the BOM, such as:

- Material number. اسم المكون الداخل في تصنيع المنتج

- Quantity. محتاج منه اد ايه

- item category: identifies the type of material and how the material used in the BOM, Common item categories are:

✓A stock item (L): is a material for which stock or inventory is maintained, it must have a material master. مكون بستخدمه باستمرار ف بيكون عندي منه علي طول في المخزن وبيكون عندي ماستر داتا له.

✓Nonstock item (N): for which inventory is not maintained, it does not need a material master مكون مش بخزنه عندي , بشتريه لما احتاجه بس

✓Variable-sized item (R): If a material is available in different sizes or dimensions. لو بتكلم علي مادة خام عليها ابعاد او احجام ف لازم احرف هحتاج انهي حجم

✓A document item (D): is used to include documents such as engineering drawings, assembly instructions, and photographs.

فيه تعليمات عن ازاي استخدم المكون في تصنيع المنتج وطريقة التجميع او صور للشرح

2- Work Center

- is a location where value-added work needed to produce a material is carried out. لوكيشن بصنع في المنتج

- A work center can be a machine or a group of machines, an entire production line, a work area or a person or group of people who are responsible for completing operations.

- the data associated with a work center are:

1-Basic Data:

- the name and description of the work center. اسم المكان ووصف ليه

- The person or people responsible for maintaining the master data for the center.الناس المسؤلة عن تخزين الماستر داتا الخاصة بالمكان زي مسؤول الورشة او رئيس العمال

- Which task lists can use the work center. قائمة المهام والعمليات المطلوب إنجازها في الwork center

2-Available capacity:

defines how much work can be performed at the work center during a specified time. مقدار الشغل الي اقدر أقوم بيه في الورك سنتر خلال وقت محدد

3- scheduling تقسيم المهام وترتيبها في وقت معين

4- Cost Center.

الحاجة الي بحمل عليها تكلفة الإنتاج الي بقوم بيه, فلما أتكلم علي workcenter لازم احدد هي مرتبطة ب انهي cost center عشان احمل تكاليف الإنتاج الي هتحصل عليه.

مثلا لو بصنع تيشرتات ف كل العمليات ال هتمر جوا ال workcenter الي بصنع فيه التيشرتات هحمل تكلفتها علي ال cost center الخاص بإنتاج التيشرتات مثلا.

3- Product Routing:

*Steps necessary to produce a material :

- a list of operations that a company must perform to produce a material.

الخطوات الفعلية الي همشي عليها عشان اصنع منتج.

- the product routing specifies the sequence in which these operations must be carried out, the work center where they are to be performed, and the time needed to complete them.

بعد ما احدد الخطوات الي همشي عليها للإنتاج, هبدأ احدد ترتيبهم و هيتنفذو فين و الوقت الي هحتاجو عشان اخلص.

Note:

Sequence can be:

- Standard الخطوات بتحصل بشكل عادي ومتسلسل
- Alternate احط خطوة بديلة عشان لو واحدة باظت
- Parallel ان يكون في خطوتين او اكتر بيحصلو مع بعض بالتوازي

The time includes:

- Setup وقت تجهيز المعدات
- Machine الوقت الي بتحتاجه الأله عشان تنتج
- Labor وقت العمالة البشرية الي بحتاجه في الإنتاج

4- Component Assignment: انهي مكون هستخدمه في انهي خطوة

- A technique that assigns components in a BOM to a routing or to a specific operation in the routing.

- The routing indicates how to produce a product. The BOM indicates which materials are used to manufacture that product, there is a relationship between a BOM and a routing, this relationship is defined via the component assignment. بعد ما حددت المكونات الي هستخدمها في تصنيع المنتج وحددت الخطوات لازم بعد كدا احدد هستخدم انهي جزء ف انهي خطوة.

5- Production Capability:

is a measure of how many units of a material a plant can produce within a given timeframe. .اقصي كمية اقدر انتجها من منتج معين خلال فترة زمنية معينة

6- Material Master:

Material master views needed for production are: قراءة بس

- Work scheduling –plant specific.
- MRP –plant specific.

7- Production Resource tools:

- are movable resources that are shared among different work center.

بقدر احركها من مكان للتاني عادي مش حجات ثابتة

- Example: Documents (instructions), Materials (calibration tool), Equipment (machine that is not in a fixed location).

الأدوات الي بستخدمها في الإنتاج ومتنقلة مش ثابتة زي المستندات و غيرها.

The production process

1- Request Production:

- Requests for production are usually triggered from another process, they can also be created manually when there is a need to produce materials independent of other requirements.

السيستم تلقائي بيبعت طلب انتاج بناء علي عملية سابقة (زي اني ببيع لعميل و هصنعله الطلب بتاعه) او ممكن انا اعمل طلب الإنتاج بشكل يدوي زي ان المخزون مثلا قرب يخلص ف انا حابب ابدا انتج كمية من دلوقتي, ف هعمل طلب الإنتاج بشكل يدوي.

- the outcome of this step is a planned order, which include:
  - What materials are needed.
  - How many units are needed.
  - When they are needed.

2- Authorize Production:

بعد ما بعت طلب انتاج هيتوافق عليه ويتحول لأمر انتاج

- Triggered by planned order: Convert to production order.

- Triggered Without planned order: Create production order.

ممكن اعمل امر انتاج مباشرة من غير ما يكون عندي طلب انتاج. مثلا ان الإدارة تطلب ينتجو علي طول مش لسا هتعرض عليهم

- Production Order includes:

- What material is to be produce?
- How many?
- Where will they be produced?
- What resources are to be used?
- How much is it expected to cost**?**

The outcome of this step is :

- Scheduling. بعمل جدولة لعملية الإنتاج من حيث المهام و الوقت والكميات
- Availability checks بشوف كل احتياجات الانتاج موجودة ولا لا
- Reservations بعد ما اتاكدت ان المكونات و الالات موجودة هخصصها لعملية الإنتاج دي بحيث ميتمش استخدامهم في عمليات تانية
- Preliminary costing. بحسب التكلفة المبدئية لعملية الإنتاج دي
- Creating necessary purchase requisitions. هنا لو لقيت حجات ناقصة هبعت طلب شراء لقسم المتشريات عشان يشتروها

- Planned cost: planned cost for planned quantity .

التكلفة المتوقعة لكمية افتراضية مثلا أقول لو هنتج 50 عجلة ممكن تكلفني 20000

- Target cost: planned cost for actual quantity هنا التكلفة المتوقعة للكمية الي هنتجها بالفعل يعني انا قررت خلاص اني هنتج 40 عجلة ف أتوقع ان تكلفتهم 10000

- Actual cost: actual cost for actual quantity

التكلفة الفعلية للمنتجات الي انتجتها خلاص يعني لقيت ان ال 40 عجلة كلفوني 15000

3- Order Release

- An order must be released for production before subsequent steps can be carried out.

بعد ما بعت طلب الإنتاج وإدارة الإنتاج وافقت عليه وقالولي هجتاج مواد خام ايه وانهي وورك سنتر هعمل order release

- Release can be Automatic or manual, if no time is needed between creation and release for preparation, then release occurs automatically.

- if the company needs time to verify the order or to prepare for production then the order remains in the created status until it is ready for release. In this case, the order must be released manually.

لو كل متطلبات الإنتاج جاهزة بيتم التأكيد اوتوماتيك ان خلاص الاوردر جاهز للتصنيع لكن لو متطلبات الإنتاج لسة مش جاهزة او محتاج وقت للتجهيز بيفضل الاوردر متعلق لحد ما اكده بشكل يدوي.

Order release outcomes:

- Execution of subsequent steps is possible. اني خلاص اقدر ابدا

- Shop floor papers can be printed. المستندات المرتبطة بعملية الإنتاج

4- Goods Issue:

- materials or components are issued to the production order from storage.

ببدا اطلع المواد الخام الي هستخدمها في التصنيع من المخزن

- Trigger: **By Order release**

- Outcomes:

-Material, FI, CO documents.

-G/L accounts updated.

-Inventory updated. اثبت النقص الي حصل في المخزون

-Reservations updated (reduced). المواد الخام الي كنت حاجزها سحبتها خلاص

-Costs updated (actual cost in order).احسب تكاليف الإنتاج الفعلية

5- Confirmations:

When the finished goods have been produced, we record a confirmation.

بعد ما خلصت تصنيع أأكد ان طلعلي المنتجات الي كنت عوزاها وكلو مشي مظبووط

- Triggered: **by completion of production steps.**

A confirmation indicates how much work was completed, where it was completed (work center), and who completed it.

-Confirmation can be:

- Order level confirmation.الاوردر خلاص اتصنع بالكامل ف باكد علي مستوي الاوردر كله

- Operations level confirmation. بان مثلا في خطوات خلصت ف باكد عليها ولسا في خطوات لسا مخلصتش ف باكد علي الي خلص بس

6- Goods Receipt:

.After production has been completed and confirmed, the materials produced are placed in finished goods inventory.

استلمت المواد الي انتجتها ف هحطها في المخزن.

- Trigger: **By Confirmations.**

Outcomes:

-FI, CO, Material Document. اثبت المنتجات الجديدة

-Update Material Master.

-Update GL Accounts. اضيف الحجات الي صنعتها

-Update Production order. ان الاوردر كله خلص بالكامل

Periodic Processing:

Several steps related to production are completed periodically during the process.

دي خطوات اضافية بحتاج اعملها خلال خطوات عملية الانتاج

Periodic processing includes:

-overhead allocation.

-work-in-process determination.

-order settlement.

1- Overhead Calculations: التكاليف الغير مباشرة

- the costs that are **not directly** associated with production.

- Examples are: the costs associated with the utilities and maintenance, and the salaries of people, such as supervisors and managers, who are not directly involved in the production in the work centers.

التكاليف الغير مباشرة بعملية الإنتاج زي تكاليف صيانة الالات و مرتبات المشرفين, وبيكون بليها طرق محاسبية معينة.

2- Work in progress Determination:

-Inventory between Good Issue and Good Receipt inventory.

-When materials are issued
to production, a reduction in the inventory of these materials must recorded, but the finished goods are not completed and not placed in inventory until a good receipt step, so we record this reduction as WIP.

دلوقتي خلال عملية الإنتاج انا بسحب مواد خام من المخزن ف لازم اثبت النقص دا, ف نفس الوقت مقدرش أقول ان المواد الخام اتحولت لمواد تامة الصنع الا لما عملية الإنتاج تخلص, ف هسجل المواد الي

WIP اتسحبت ف حاجة اسمها

But it Can Be Not Essential If:

- For short production processes.

- Value of materials is not high.

لو بنتج مواد مش بتاخد وقت طويل او قيمتها مش كبيرة زي الأقلام مثلا ف انا مش هحتاج اعمل دا و هثبتها مرة واحدة لما الإنتاج يخلص وتتحول لمواد تامة الصنع.

Essential if:

- When the value of the materials is high
- Production takes weeks, months or years.

3- Settlement:

Settle the difference between the planned cost and the actual cost.(variance)

بعمل تسوية محاسبية للفرق بيت التكاليف الي كنت متوقعها والتكلفة الفعلية

Questions

Choose:

1	Which of the following represent the organizational data that are relevant to the production process? A. Client B. Company Code C. Plant D. Storage Location E. All of the above	E
2	Which of the following represent the master data that are relevant to the production process? A. Bill of Material, B. Work Centers, C. Product Routings, D. Material Master E. All of the above	E
3	Order Release could be a) Automatic b) Manual c) Both A and B d) None of the above	C
4	Steps in "make to stock" the process is triggered by the need to increase inventory include which of the following? a) request production b) Authorize production c) issue raw materials d) create products e) All of the above	E

5	Types of Production Process include which of the following? a) Assembling b) Manufacturing c) Make to Order d) All of the above e) None of the above	D
6	Information from work center include which of the following? a) responsible person b) availability c) cost center number, d) All of the above e) None of the above	D
7	Which of the following are the triggers of the production process? a) Fulfillment, b) material planning, c) project systems d) All of the above e) A and B only	D
8	The steps of the production process include which of the following? a) Request for production (planned order) b) Authorize production (product order, what, how,when) c) Release production order (automatic or manuel) d) Goods issue to production order e) All of the above	E
9	Work Center Data include which of the following: a) Basic Data b) Default values c) Cost center d) HR assignment e) All of the above	E
10	The production order includes which of the following? a) Target Cost b) Actual Cost c) Planned cost d) All of the above	D

True and false:

1- Repetitive manufacturing is the same material is produced repeatedly over an extended period of time at a relatively constant rate. T

2- Discrete manufacturing is the company that produces different materials over time in batches, often alternating between materials on a production line. T

3- Production in bulk that are measured in quantities such as gallons and liters are called process manufacturing T

4- the make-to-stock production strategy is the production process that is triggered by a need to increase inventory. T

5- Production does not begin until the customer orders a product, is the make-to-order production strategy T

6- BOM stands for Bill of Master F

7- Bill of Material (BOM) identifies the components that are necessary to produce a material. T

8- Bill of Material (BOM) includes a complete list of all the materials (raw materials and semi-finished goods) that are needed T

9- A list of operations that are required to accomplish a task is called workload F

10- Task List is a list of operations that are required to accomplish a task. T

11- Specific tasks that must be completed is called Operations. T

12- List of operations that a company must perform to produce a material is called Product Routing. T

13- Component Assignment is the technique that assigns components in a BOM either to a routing or to a specific operation within the routing. T

14- Production Capacity is a measure of how many units of a material a plant can produce within a given timeframe. T

15- Assembling is several component materials that are put together to produce desired finished product. T

16- Release production order is the first step in the production process. F

17- Operations is the last step in producing a material. F

18- Planning an order includes what material to produce, how many, when to produce, where to produce and cost T

19- Client, Company code, Plant, and Storage location are some of the master data components in the production process . F

20- Bill of materials (BOM), Work center, Product routing, and Material master are some of the master data components in the production process.T

21- Bill of materials (BOM), Work center, Product routing, and Material master are some of the master data components in the production process while Client, Company code, Plant, and Storage location are some of the organizational data components in the production process. T

Extraaaaaaaaaa questions

Choose:

1. Which Process consists of the steps and activities involved with the manufacture or assembly of finished goods and semi-finished goods ?

a. Procurement process

b. Fulfillment process

c. Production process

d. Material planning process

2. The Most Common Types of production are :

a. Discrete. b. repetitive. c. process manufacturing

d. all of the above e. b&c only

3. The first step in A Basic production Process is :

a. Authorize production b. create product

c. Request production d. issue material

4. All the following are Organizational Data elements in the Production process except

a. Client b. Company code c. Plant d. Storage location

5. which of the following are Master Data elements in the production

a. Bill of materials (BOM) b. Work center

c. Product routing d. all of the above e. b&c only

6. ……. identifies the components that are necessary to produce a material.

a. Bill of materials (BOM) b. Work center c. Product routing

d. Production resource tools

7. BOM Structure Consists of

a. Header b. Items c. Schedule lines d. all of the above e. a and b

8. is a location where value-added work needed to produce a material is carried out.

a. Plant b. Work Center c. Product routing d. Company code

9. the data associated with a work center are :

a. Basic Data b. Available capacity c. scheduling d. Cost center

10. Which work center data defines how much work can be performed at this during a specified time?

a. Basic Data b. Available capacity c. scheduling d. Cost center

11. ……. Is Steps necessary to produce a material.

a. Bill of materials b. Work center c. Product routing d. tasks list

12. Which of the following Response for determination the work center operations can be performed, and the time needed to complete them ?

a. plant b. product routing c. Tasks list d. work center.

13. relationship between a BOM and a routing is defined via ……

a. Tasks list b. Work center c. Component Assignment

d. Production Capability

14. GBI's Dallas plant can produce 15 bikes , this is an example for :

a. Production Capability b. product routing c. Tasks list

d. Component Assignment

15. Within Production process , Material master data include:

a. material requirements planning b. work scheduling c. sales view

d. all of above e. a & b

16. ……. are movable resources that are shared among different work centers.

a. Production Capability b. product routing

c. Component Assignment d. Production resource tool

17. Which of the following is an example for Production Resource Tools?

a. Documents b. Materials c. Equipment

d. Miscellaneous e. all of the above

18. the outcome of the Request Production step is :

a. planned order b. production order c. Order Release d. Goods issue

19. In which document we can find data about what materials are needed, how many and when

a. sales invoice b. Purchase invoice c. tasks list d. Planned order

20. the outcome of Authorize Production step is :

a. planned order b. production order c. Goods issue d. Goods receipt

21. Order Release can be:

a. automatic b. manually c. a and b d. None of the above

22. within the production process , in which step the inventory is being updated ?

a. Request production b. Authorize production

c. Order Release d. Goods Issue

23. Within the production process , in which step we record that the finished goods have been produced ?

a. Confirmation b. Goods issue c. Shipping d. Completion

24. Within the production process , in which step we record that the materials produced are placed in finished goods inventory ?

a. Goods issue b. Goods Receipt c. Completion d. Shipping

25. within the production process , Periodic processing includes :

a. overhead allocation b. work-in-process determination

c. order settlement d. all of the above

26. the costs that are not directly associated with production is called

a. overhead allocation b. work-in-process determination

c. order settlement d. none of the above

27. Which of the following represent the organizational data that are relevant to the production process?

a. Client b. Company Code c. Plant d. Storage Location

e. All of the above

28. Which of the following are the triggers of the production process?

a. Fulfillment, b. material planning, c. project systems d. All of the above

e. A and B only

29. The production order includes which of the following?

a. Target Cost b. Actual Cost c. Planned cost d. All of the above

e. None of the above

30. Work Center Data include which of the following:

a. Basic Data b. Default values c. Cost center

d. HR assignment e. All of the above

31. Steps in "make to stock" the process is triggered by the need to increase inventory include which of the following?

a. request production b. Authorize production c. issue raw materials
d. create products e. All of the above

Answers

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C	D	C	E	D	A	E	B	E	B	C	B	C	A	E

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
D	E	A	D	B	C	D	A	B	D	A	E	D	D	E	E

True and false

1. when the same material is produced repeatedly over a period of time at a relatively constant rate , this is a discrete production.
2. when the company produces different materials over time in batches , this is a repetitive production.
3. Discrete and repetitive manufacturing involve the production of intangible materials.
4. Discrete and repetitive manufacturing involve the production of materials in individual units and can be counted.
5. process manufacturing involve the production of materials that are in quantities , not in individual units and cannot be counted.
6. BOM can be a single level or multi-levels.
7. Each plant can have a different BOM for the same material.
8. A work center can be a machine or group of machines, an entire production line or a work area.
9. A work center is associated with a cost center.

10. Production Capability is a technique that assigns components in a BOM to a routing.
11. Component Assignment is a measure of how many units of a material a plant can produce within a given timeframe.
12. Production Resource Tools can be a machines that is not in a fixed location.
13. The Production Process can be triggered by a project systems.
14. The Production Process triggered only by a Fulfillment process.
15. Requests for production are usually triggered from another process, But they can also be created manually.
16. in the Authorize Production step , production order is Converted to a planned order.
17. production order can be created without a planned order.
18. planned cost is a planned cost for actual quantity.
19. Target cost: planned cost for actual quantity.
20. An order must be released for production before subsequent steps can be carried out.

21. Confirmation Can Be after completion of all Production or after one steps.

22. Confirmation can be only an Order level confirmation.

23. overhead allocation periodically allocated to the production orders based on predetermined rules.

24. The Inventory between Good Issue and Good Receipt inventory is called Work-in-progress inventory.

25.When the value of materials is high , Work-in-progress inventory is not Essential.

26.Repetitive manufacturing is the same material is produced repeatedly over an extended period of time at a relatively constant rate.

27.Discrete manufacturing is the company that produces different materials over time in batches, often alternating between materials on a production line.

28.Production in bulk that are measured in quantities such as gallons and liters are called process manufacturing.

29.the make-to-stock production strategy is the production process that is triggered by a need to increase inventory.

30.Production does not begin until the customer orders a product, is the make-to-order production strategy.

31.BOM stands for Bill of Master.

32.Bill of Material (BOM) identifies the components that are necessary to produce a material.

33. Bill of Material (BOM) includes a complete list of all the materials (raw materials and semifinished goods) that are needed for produce a product.

34.A list of operations that are required to accomplish a task is called workload.

35.Task List is a list of operations that are required to accomplish a task.

36.Specific tasks that must be completed is called Operations.

37.List of operations that a company must perform to produce a material is Product Routing.

38. Component Assignment is the technique that assigns components in a BOM either to a routing or to a specific operation within the routing.

39.Production Capacity is a measure of how many units of a material a plant can produce within a given timeframe.

40.Release production order is the first step in the production process.

41.Operations is the last step in producing a material.

42.Client, Company code, Plant, and Storage location are some of the master data components in the production process.

43. Assembling is several component materials that are put together to produce desired finished product.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.
F	F	F	T	T	T	T	T	T	F	F	T	T	F	T	F	T	F	T	T	T	F

23.	24.	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.
T	T	F	T	T	T	T	T	F	T	T	F	T	T	T	T	T	F	F	F	T