SAP PP INTERVIEW QUESTIONS & ANSWERS

1. What is SAP Production Planning?

<u>Answer</u>: SAP Production Planning (SAP PP) is one of the key module in ERP Modules System and deals with planning processes like capacity planning and material planning and execution of production order, bill of material and goods movement. SAP PP module handles master data that is required for BOMs activity, work center and routing and keep it in a separate component.

2. What is the difference between Discrete and Repetitive Production?

<u>Answer</u>: Discrete production is known as industry where produce materials changed with each lot and costs are calculated as per orders and lots.

In Repetitive Production, product is not changed for longer time period and production is done as total quantity and not in the form of individual's lots.

3. Explain Production Planning life cycle?

Answer:

- a) <u>Converting planned order to production Order</u>: First step is to convert a planned order to production Order, type is defined in SAP PP system.
- b) <u>Issue the production order</u>: To start the production process, it is necessary to issue Production order. Till a production order is not relaxed, execution of production process is not started.

- c) <u>Issuing goods for production order</u>: Issuing goods is required for providing the goods to execute the production order. Once goods are issues, document number can be updated in the system.
- **d**) <u>Production order confirmation</u>: All the sub processes are executed in accordance with required operations to confirm the production as per production order.
- e) <u>Good receipts w.r.t Production Order</u>: Once production order execution is completed, goods produced w.r.t Production Order are received and placed in storage area.

4. What are the different elements in Org structure under SAP Production Planning?

<u>Answer</u>: In SAP PP module, organization structure defined the location of manufacturing plants and storage locations within the plant. At the top you have company and company code and then each company code contains different plant and storage locations.

5. Which are modules SAP PP is integrated with? Explain the integrated activities that are performed with each module under PP?

Answer:

To perform Production Planning and Control activities, SAP PP is closely integrated with other SAP ERP modules: SAP Sales and Distribution SD, SAP Material Management MM, Quality Management, Finance Accounting and project System.

You can find list of below activities from Production Planning that are related to other SAP modules and integration with other modules.

a) <u>SAP PP and SAP Material Management MM</u>

✓ This involved movement of goods, auto goods receipt.

 \checkmark It includes creating reservation for Production Order/ Planning.

 \checkmark Raising Purchase orders with MRP Run.

 \checkmark Quotations and Vendor selection

b) <u>SAP PP and SAP SD</u>

 \checkmark This is used to check the availability of material for production order.

✓ To perform MRP Run, Requirement Types.

 \checkmark Bill of Material components and operation.

c) SAP PP and SAP FICO

✓Updating price in material master data

✓ Defining activity Type in the Cost Center

✓ Assigning activity type to Work Center

d) Cost Estimation

 \checkmark Production cost controlling

✓Posting accounting activities related to goods movement, material request, etc.

e) SAP PP and Project System

✓ Assigning planning activities to WBS in the Project.

✓Running Material requirement planning at Project level (MD51). The procured material attached to WBS are reserved as project stock against the particular project.

 \checkmark The component attached to network are planned at plant level and are reserved as plant stock.

f) SAP PP and Quality Management

 \checkmark Inspection Type 03 for discrete and repetitive manufacturing.

✓ Inspection Type 04 for both Discrete and Repetitive Manufacturing.

6. What are the different master data exists under Production Planning?

Answer:

- ✓ Bills of Material BOM
- ✓ Material Master
- ✓Work Center
- √Routing

7. What is BOM?

<u>Answer</u>: Bill of Material master data is related to material requirement planning and provides the list of components to produce the product.

To produce a product with different variants, you can create super bills of Material that has list of comments to manufacture different variants of a product and selection of component depends on details mentioned in planning order.

8. What is the difference between Material and Sales order BOM?

Answer:

- a) <u>Material BOM</u>: When a Bill of Material is created for a material is known as a material BOM in the SAP. Material BOMs are mainly used to represent the structure of products manufactured within your company.
- <u>b)</u> <u>Sales order BOM</u>: Sales Order BOM is used when you specially tailor the make-to-order production of products as per requirements of the customers. To meet the customer requirements, you make sales order specific modifications to various assemblies.

9. What are the key characteristics of BOM?

Answer:

You can create Bill of material as single level or multiple level.

BOM type depends on the size, validity dates and production method.

You can create up to 99 Bills of materials as per material type.

You can use material Bill of material for the material available in PP module and equipment Bill of Material are used in plant Maintenance module.

As mentioned you can create super BOM for different variants of a product.

10.What is Work Center under Production Planning? Why do we use Work Center?

Answer:

Work center consists of master data related routing of products. It contains data related to scheduling, capacity planning and production costing.

All the manufacturing activities are performed in Work Center. Work center can be used to monitor these activities –

- a) Scheduling: You can schedule the operations in Production order as per operating times in Routing and formulas mentioned in work center.
- b) Production Costing: You can also check production costing as per formulas mentioned in work center. A Work center. A Work center is also linked to cost center and it defines the cost of operation in Production Order.
- c) Capacity Planning: You can find current capacity and future capacity requirements stored in work center.

11.What is Routing process under Production Planning?

<u>Answer</u>: Routine defines the list of activities to be performed for production process. Routing defines sequence of activities performed at work center. Routing plays in important role in calculating production cost, machine time and labor time.

12.What is the use of routing in PP or explain ley characteristics of Routing under Production Planning?

<u>Answer</u>: To create routing it is mandate that you first define work center.

Multiple material can follow single routing group.

Routing is used for scheduling and costing of operation of raw and finished products.

Routing is used for calculation operation cost for finished product.

13. What are different Planning Strategies?

Answer:

a) Make to stock Planning strategy

This is planning strategy where stock is produced without sales order. It is used to meet customer demands in future.

When you use Planning strategy 10, only PIR quantity is considered for MRP run and sales order are completely ignored. In this PIR requirement type LSF and is reduced when you deliver stock to customer.

When you use Planning strategy 40, for MRP run maximum of 2 PIR and Sales order can be considered and PIR is reduced when enter the Sales order. PIR requirement type is VSF in this case.

b) Make to Order planning strategy

In this planning strategy, finish products are not produced until you receive sales order from a customer. For MRP run, you only consider Sales order.

In MTO strategy, you only products sales order stock and products are delivered as per sales orders from specific customer.

You can Planning strategy 20 for make to order MTO process and planning strategy 25 is used to produce product variants when there is request for variant products from customer.

14. What is Material Requirement Planning under production planning?

Answer:

MRP run or planning run is an engine which is used to fill demand and supply gap. Issues & Receipts are called MRP Elements. Issues include PIRs, Dependent Requirements, Order Reservations, Sales Orders, Issuing stock Transfer Orders, etc. and receipts include production Orders, Purchase Requisitions, Purchase Orders, Open production Orders, Receiving Stock Transfer Order, Schedule Lines, etc.

15. What are the different parameters that are required to run MRP?

Answer:

MRP parameters are required to run material requirement planning to meet Planned Independent Requirement PIR and to use Routing information. Different MRP parameters can be used-

a) NetChange: In this run system consider those materials which has undergoes some changes from the previous MRP run.

- **b)** NetChange in planning horizon: This run considers the requirement in predefined planning horizon and not like net change which check the future requirements. In this run, system consider only those material which has undergoes some changes from their last MRP run.
- **c) Regenerative Planning**: In this run, system consider all the material irrespective and it is time consuming and not common in productive planning.
- **d**) **Basic Scheduling**: It only calculates basic dates for orders in MRP run and in house production time for material master in use.
- **e)** Lead time scheduling: In this MRP, production dates are defined by lead time scheduling for planned orders.

16. What is Long term planning? Can we perform Long term planning for shorter time period?

<u>Answer</u>: Long-time planning in SAP PP is used to check future demands at all Bill of Material level. You can check the current capacity and vendor ability to provide the material in required time period.

This is not actual run but is used to see if all capacity requirement can be fulfilled can be fulfilled and you can transfer simulative area to operative area if requirements are fulfilled.

Also note that is not necessary that you perform simulative planning in long duration, it can be for short time and there is no time restriction.

17. What is Production Order? How do you determine the list of components and operational data in the order?

<u>Answer</u>: A Production order is used to define the material to be produced, plant location where production has to be done, date and time of production, quantity of goods required. A Production Order also defines which components and sequence of operations are to be used and how the order costs are to be settled.

BOM and routing of the materials are copied into the production order which determines the list of components and operational data in the order.

18. What are the key steps under Production Order confirmation?

Answer:

First step is to convert a planned order to production order. When you create a production order, type is defined in SAP PP system.

To start the production process, it is necessary to issue production order. Till a production order is not released, execution of production process is not started.

Issuing goods is required for providing the goods to execute the production order. Once goods are issues, document number can be updated in the system.

All the sub processes are executed in accordance with required operations to confirm the production as per Production order.