

UNIT-4 : Scrum Framework -- Detailed

Notes With Explanation

Subject: Project Management (RGPV)

1. Scrum

Definition

Scrum is an Agile framework used to manage and develop projects through small iterative cycles called sprints.

Easy Introduction

Traditional project methods me pura project ek baar me complete hota tha.

But Scrum me:

- project ko small parts me divide kiya jata hai
- small cycles me work hota hai
- customer feedback continuously liya jata hai

Scrum mostly software development me use hota hai.

Why This Topic is Important

Real Life Importance

Companies like:

- Google
- Amazon
- Microsoft

Scrum use karti hain because:

- ✓ fast delivery
- ✓ better teamwork
- ✓ customer satisfaction

Exam Importance

- ★ Most repeated topic in Unit-4
- 🔥 Frequently asked in RGPV exams
- 🎯 Highly Expected Long Question

Detailed Explanation

Scrum ek Agile framework hai jo teamwork, flexibility aur continuous improvement par focus karta hai.

Scrum me:

- project short cycles me divide hota hai
- each cycle = Sprint
- team daily meeting karti hai
- customer feedback liya jata hai

Main Components of Scrum

Component	Meaning
Sprint	Small work cycle
Product Backlog	Complete task list
Sprint Backlog	Current sprint tasks
Scrum Team	People working on project

Component	Meaning
Increment	Completed working product

Working / Steps of Scrum

Step 1: Product Backlog Create

All requirements list ki jaati hain.

Step 2: Sprint Planning

Team sprint goals decide karti hai.

Step 3: Sprint Execution

Development work hota hai.

Step 4: Daily Scrum Meeting

Daily progress discuss hota hai.

Step 5: Sprint Review

Completed work customer ko dikhaya jata hai.

Step 6: Sprint Retrospective

Team improvement discuss karti hai.

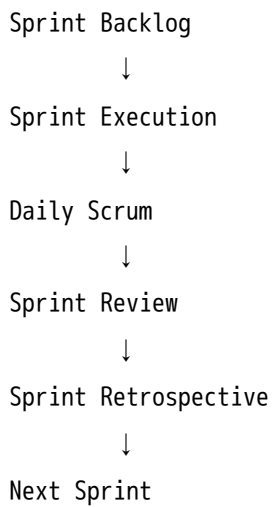
Flow of Process

Product Backlog

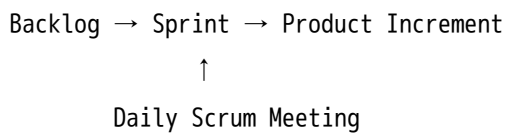


Sprint Planning





Diagram



Real-Life Analogy

Suppose exam syllabus bahut bada hai.

Instead of completing whole syllabus together:

- weekly targets banate ho
- daily progress check karte ho
- weak areas improve karte ho

This is Scrum approach.

Advantages

- Fast delivery
 - Better communication
 - Customer feedback
 - Flexible changes
 - Improved quality
 - Team collaboration
-

Disadvantages

- Requires skilled team
 - Daily meetings consume time
 - Difficult for very large teams
 - Continuous changes possible
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Applications

- Software development
 - Mobile apps
 - Website projects
 - Product development
 - Startup companies
-

Important Keywords for Exam

- Sprint
 - Product Backlog
 - Sprint Backlog
 - Scrum Master
 - Daily Scrum
 - Increment
 - Agile Framework
-

Conclusion

Scrum is one of the most popular Agile frameworks used for fast, flexible, and customer-focused project development.

2. Sprint

Definition

Sprint is a fixed short-duration cycle in Scrum during which a specific set of tasks is completed.

Easy Introduction

Sprint Scrum ka heart hota hai.

Usually sprint:

- 1 week
- 2 weeks
- 4 weeks

ka hota hai.

Each sprint ke end par working product ready hota hai.

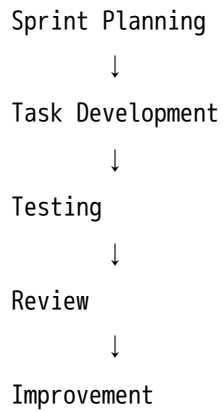
Why Sprint is Important

Sprint helps:

- fast development
- progress tracking
- customer feedback

- easy management
-

Sprint Process



Diagram

Sprint (2 Weeks)

Day 1 → Planning
Day 2-12 → Development
Day 13 → Testing
Day 14 → Review

Example

Suppose food delivery app banana hai.

Sprint-1:

- Login page

Sprint-2:

- Payment system

Sprint-3:

- Order tracking
-

Advantages

- Small manageable work
 - Faster feedback
 - Better quality
 - Reduced risk
-

Disadvantages

- Requires proper planning
 - Team dependency high
-

Important Keywords

- Time-boxed cycle
 - Increment
 - Sprint Goal
 - Agile Iteration
-

Conclusion

Sprint helps divide large projects into small manageable parts for faster development and continuous improvement.

3. Product Backlog

Definition

Product Backlog is the complete prioritized list of all project requirements and tasks.

Easy Introduction

Product backlog me:

- all features
- improvements
- bug fixes
- customer requirements

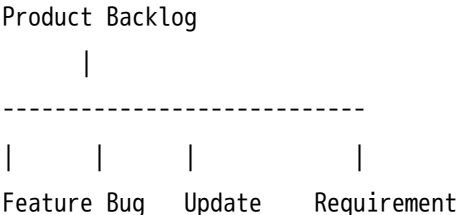
stored hote hain.

Why It Is Important

It helps:

- organize project work
 - prioritize tasks
 - track requirements
-

Diagram



Example

Food delivery app backlog:

- login
- cart
- payment
- tracking
- notifications

Advantages

- Better planning
- Requirement management
- Easy prioritization

Important Keywords

- Prioritized List
- Requirements
- Features
- Task Management

4. Sprint Backlog

Definition

Sprint Backlog is the list of tasks selected from the product backlog for the current sprint.

Easy Introduction

Product backlog me all tasks hote hain.

Sprint backlog me:

only current sprint tasks hote hain.

Example

Product backlog:

- Login
- Payment
- Cart
- Search

Sprint backlog:

- Login only
-

Diagram

Product Backlog



Selected Tasks



Sprint Backlog

Advantages

- Focused work
- Better management

- Clear sprint goal
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Important Keywords

- Sprint Goal
 - Current Tasks
 - Selected Features
-

5. Sprint Review

Definition

Sprint Review is a meeting held at the end of sprint to demonstrate completed work and collect feedback.

Easy Introduction

Sprint complete hone ke baad:
team customer ko product dikhati hai.

Customer feedback deta hai.

Process

Sprint Complete
↓
Demonstration
↓
Feedback
↓
Changes

Advantages

- Customer involvement
 - Better product quality
 - Requirement clarity
-

Important Keywords

- Demonstration
 - Feedback
 - Increment Review
-

6. Sprint Retrospective

Definition

Sprint Retrospective is a meeting where team discusses improvements after sprint completion.

Easy Introduction

Team discuss karti hai:

- kya achha hua?
 - kya problem hui?
 - next sprint me kya improve karna hai?
-

Diagram

What Went Well?



Problems



Improvements



Next Sprint Better

Advantages

- Continuous improvement
 - Better teamwork
 - Problem solving
-

Important Keywords

- Improvement
 - Team Feedback
 - Reflection
-

7. Roles in Scrum

A. Product Owner

Definition

Product Owner is responsible for managing product backlog and customer requirements.

Responsibilities

- requirement collection
 - backlog management
 - priority setting
 - customer communication
-

B. Scrum Master

Definition

Scrum Master is responsible for guiding team and ensuring Scrum practices are followed properly.

Responsibilities

- conduct meetings
 - remove obstacles
 - guide team
 - ensure discipline
-

C. Development Team

Definition

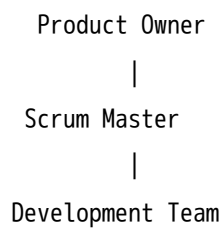
Development Team is responsible for actual product development work.

Responsibilities

- coding

- testing
 - designing
 - implementation
-

Scrum Roles Diagram



Difference Between Roles

Role	Main Work
Product Owner	Requirement handling
Scrum Master	Process management
Development Team	Product development

8. Best Practices of Scrum

Definition

Best practices are recommended methods for effective Scrum implementation.

Important Scrum Best Practices

1. Daily Scrum Meeting

Daily short meeting.

2. Small Sprint Duration

Short cycles improve flexibility.

3. Continuous Feedback

Take customer feedback regularly.

4. Proper Backlog Management

Keep backlog updated.

5. Team Collaboration

Strong communication required.

6. Continuous Improvement

Always improve process.

Flowchart

Planning



Development



Testing



Feedback



Improvement

Advantages

- Better quality
 - Faster delivery
 - Better customer satisfaction
 - Reduced risk
-

Disadvantages

- Requires discipline
 - Frequent meetings
-

Applications

- Software industry
 - App development
 - IT companies
-

Important Keywords

- Sprint
 - Collaboration
 - Feedback
 - Increment
 - Continuous Improvement
-

Conclusion

Scrum best practices improve teamwork, quality, and project success.



MOST IMPORTANT TOPICS

1. Scrum ★★★★★
 2. Sprint ★★★★★
 3. Roles in Scrum ★★★★★
 4. Product Backlog vs Sprint Backlog ★★★★★
 5. Sprint Review & Retrospective ★★★★★
 6. Scrum Best Practices ★★★★★
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MOST IMPORTANT 7-MARK

QUESTIONS

1. Explain Scrum framework.
 2. Explain Sprint and Sprint lifecycle.
 3. Explain Product Backlog and Sprint Backlog.
 4. Explain roles in Scrum.
 5. Explain Scrum best practices.
 6. Explain Sprint Review and Sprint Retrospective.
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MOST IMPORTANT 14-MARK

QUESTIONS

1. Explain Scrum framework in detail with diagram.
 2. Explain Scrum terminology with examples.
 3. Explain Scrum roles and responsibilities.
 4. Explain Scrum process with Sprint lifecycle.
-

PYQ-BASED EXPECTED QUESTIONS

Very High Probability

- ✓ Scrum Framework
 - ✓ Roles in Scrum
 - ✓ Sprint Lifecycle
 - ✓ Product Backlog vs Sprint Backlog
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High Probability

- ✓ Sprint Review
 - ✓ Sprint Retrospective
 - ✓ Scrum Best Practices
-

Medium Probability

- ✓ Scrum Meetings
 - ✓ Increment
-

ONE-NIGHT REVISION NOTES

Topic	Shortcut
Scrum	Agile framework
Sprint	Small work cycle
Product Backlog	Complete task list
Sprint Backlog	Current sprint tasks
Scrum Master	Team guide
Product Owner	Requirement manager



MEMORY TRICKS

Scrum Roles

“PSD”

- P = Product Owner
 - S = Scrum Master
 - D = Development Team
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Sprint Cycle

“PDTFR”

- P = Planning
 - D = Development
 - T = Testing
 - F = Feedback
 - R = Review
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SMART STUDY PLAN

2-Hour Revision Strategy

Time	Topic
30 min	Scrum Framework
20 min	Sprint
20 min	Scrum Roles
20 min	Backlogs
15 min	Review & Retrospective

Time	Topic
15 min	Best Practices

5-Hour Preparation Strategy

Hour	Study
1	Scrum Basics
2	Sprint Lifecycle
3	Roles in Scrum
4	Backlogs + Meetings
5	PYQ Revision



TOPPER ANSWER WRITING TIPS

To Score Maximum Marks

Always Include:

- ✓ Definition
 - ✓ Diagram
 - ✓ Example
 - ✓ Roles Table
 - ✓ Advantages
 - ✓ Conclusion
-

Underline Keywords

- Sprint
- Scrum Master
- Product Owner
- Product Backlog

- Sprint Backlog
 - Increment
 - Agile Framework
-

Draw These Diagrams जरूर

1. Scrum Framework Diagram
 2. Sprint Lifecycle
 3. Scrum Roles Diagram
 4. Product Backlog Flowchart
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FINAL EXAM PREDICTION

MOST EXPECTED LONG QUESTION

- ★ “Explain Scrum framework with roles and Sprint lifecycle.”
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MOST EXPECTED SHORT QUESTION

- ★ “Differentiate between Product Backlog and Sprint Backlog.”