

Project Management Unit-4

Scrum Framework – Important Questions With Easy Explanation

1. Scrum Framework

Introduction

Scrum ek **Agile framework** hai jo project ko small-small cycles me complete karta hai. Scrum ka main focus hota hai: fast delivery, teamwork, feedback, aur continuous improvement.

Definition

Scrum is an Agile framework used to manage complex projects by dividing work into short time-boxed cycles called sprints.

Why It Is Needed

Scrum is needed because modern projects me requirements baar-baar change hoti hain. Traditional method me change handle karna difficult hota hai, but Scrum changes ko easily accept karta hai.

Easy Explanation

Scrum ka simple formula:

Small Work → Short Time → Review → Improve → Next Work

Scrum me pura project ek baar me nahi banate. Project ko small features me divide karke sprint-wise complete karte hain.

Step-by-Step Working

1. **Product Backlog banaya jata hai**

Isme complete project ki requirements hoti hain.

2. **Sprint Planning hoti hai**

Team decide karti hai ki next sprint me kya complete karna hai.

3. **Sprint Backlog select hota hai**

Current sprint ke tasks choose hote hain.

4. **Sprint Execution hota hai**

Development team selected tasks complete karti hai.

5. **Daily Scrum meeting hoti hai**

Team daily progress discuss karti hai.

6. **Sprint Review hota hai**

Completed work customer/stakeholder ko dikhaya jata hai.

7. **Sprint Retrospective hota hai**

Team discuss karti hai ki next sprint me improvement kaise karna hai.

8. **Increment ready hota hai**

Sprint ke end me working product ka part ready hota hai.

Flow of Process

Product Backlog



Sprint Planning



Sprint Backlog



Sprint Execution

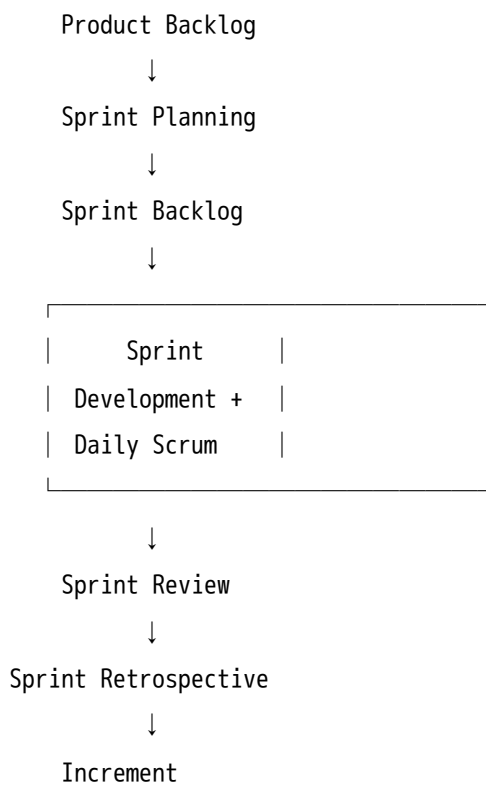


Daily Scrum



Sprint Review
↓
Sprint Retrospective
↓
Product Increment

Diagram



Real-Life Analogy

Exam preparation ko Scrum se samjho.

Full syllabus = Product Backlog

This week ke chapters = Sprint Backlog

7 days preparation = Sprint

Daily self-check = Daily Scrum

Weekly test = Sprint Review

Mistakes analyze karna = Retrospective

Completed chapters = Increment

Advantages

- Fast delivery hoti hai
- Team communication improve hoti hai
- Customer feedback milta hai
- Changes easily accept hote hain
- Risk reduce hota hai
- Quality improve hoti hai

Disadvantages

- Experienced team required hoti hai
- Daily meetings time leti hain
- Poor planning se sprint fail ho sakta hai
- Large teams me difficult ho sakta hai

Applications

- Software development
- Mobile app development
- Website projects
- Startup product development
- IT service projects

Important Keywords

Agile Framework, Sprint, Product Backlog, Sprint Backlog, Daily Scrum, Increment, Scrum Master, Product Owner

Conclusion

Scrum framework project management ka powerful method hai. Ye projects ko short cycles me divide karke fast, flexible aur customer-focused delivery provide karta hai.

2. Roles in Scrum

Introduction

Scrum me team members ke roles clearly defined hote hain. Har role ka apna responsibility area hota hai.

Definition

Roles in Scrum define the responsibilities of people involved in planning, managing, and delivering the product.

Why It Is Needed

Roles clear hone se confusion kam hota hai. Team ko pata hota hai ki requirement kaun manage karega, process kaun guide karega, aur actual product kaun banayega.

Main Scrum Roles

Role	Main Work
Product Owner	Requirements and backlog manage karta hai
Scrum Master	Scrum process follow karwata hai
Development Team	Product develop karti hai

1. Product Owner

Meaning

Product Owner customer aur team ke beech bridge hota hai.

Responsibilities

- Product Backlog manage karna
- Requirements collect karna
- Task priority decide karna
- Customer feedback lena
- Team ko product vision batana

Example

Website project me Product Owner decide karega ki login feature pehle banana hai ya payment feature.

2. Scrum Master

Meaning

Scrum Master team ka guide hota hai. Ye boss nahi hota, but facilitator hota hai.

Responsibilities

- Scrum rules follow karwana
- Daily Scrum conduct karna
- Team ke problems remove karna
- Sprint process smooth rakhna
- Team ko motivate karna

Example

Agar developer ko server access nahi mil raha, Scrum Master problem solve karega.

3. Development Team

Meaning

Development Team actual work karti hai.

Responsibilities

- Design
- Coding
- Testing
- Documentation
- Product increment banana

Example

Developers login page, database, payment system aur testing complete karte hain.

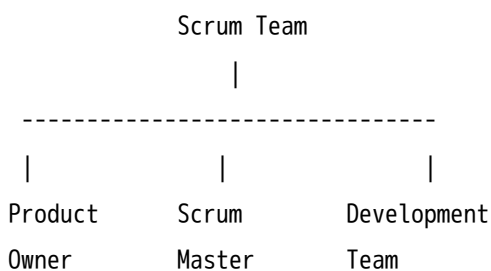
Flow of Process

Product Owner → Requirements

Scrum Master → Process Guidance

Development Team → Product Building

Diagram



Real-Life Analogy

College project me:

- Product Owner = team leader jo teacher/client se requirement leta hai
- Scrum Master = person jo work organize karta hai
- Development Team = members jo actual coding/report banate hain

Advantages

- Responsibility clear hoti hai
- Team coordination improve hota hai
- Decision making fast hoti hai
- Work duplication avoid hota hai

Disadvantages

- Role confusion ho sakta hai agar training na ho
- Product Owner unavailable ho to delay hota hai
- Scrum Master weak ho to process fail ho sakta hai

Important Keywords

Product Owner, Scrum Master, Development Team, Backlog Management, Facilitation, Self-Organizing Team

Conclusion

Scrum roles project team ko organized banate hain. Clear roles se teamwork, productivity aur product quality improve hoti hai.

3. Sprint Lifecycle

Introduction

Sprint Scrum ka main working cycle hota hai. Sprint ek fixed duration hota hai jisme selected tasks complete kiye jaate hain.

Definition

Sprint Lifecycle is the complete sequence of activities performed during a sprint from planning to review and improvement.

Why It Is Needed

Sprint lifecycle project ko systematic banata hai. Ye ensure karta hai ki har sprint ke end me working product ka part ready ho.

Easy Explanation

Sprint ka matlab hota hai short work cycle. Generally sprint 1 to 4 weeks ka hota hai.

Step-by-Step Working

1. Sprint Planning

Team decide karti hai ki sprint me kya kaam hoga.

2. Sprint Backlog Creation

Product backlog se selected tasks sprint backlog me daale jaate hain.

3. Sprint Execution

Development team actual work karti hai.

4. Daily Scrum

Daily short meeting hoti hai.

5. Testing

Completed work test hota hai.

6. Sprint Review

Work stakeholder/customer ko dikhaya jata hai.

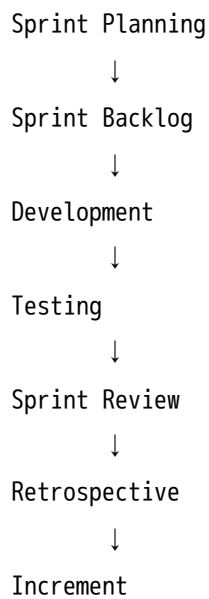
7. Sprint Retrospective

Team improvement points discuss karti hai.

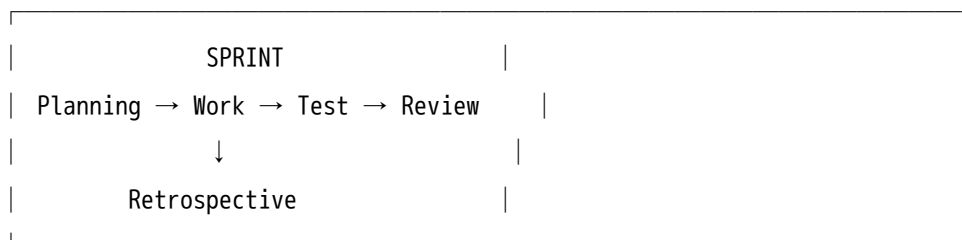
8. Increment Delivery

Working product ka part ready hota hai.

Flow of Process



Diagram



Real-Life Analogy

Agar aap 5 units ka syllabus padh rahe ho, to har din ek unit complete karna sprint jaisa hai. End me test lena review hai, aur mistakes improve karna retrospective hai.

Advantages

- Work manageable hota hai
- Progress visible hoti hai
- Customer feedback fast milta hai
- Quality improve hoti hai

Disadvantages

- Time-box pressure hota hai
- Poor planning se incomplete sprint hota hai
- Continuous discipline required hoti hai

Applications

- Software projects
- Website development
- App development
- Product design

Important Keywords

Sprint Planning, Sprint Backlog, Daily Scrum, Sprint Review, Retrospective, Increment

Conclusion

Sprint lifecycle Scrum ka core process hai. Ye project ko short, controlled aur result-oriented cycles me complete karta hai.

4. Product Backlog vs Sprint Backlog

Introduction

Product Backlog aur Sprint Backlog Scrum ke important artifacts hain. Dono task lists hain, but dono ka purpose different hota hai.

Definition

Product Backlog: Complete prioritized list of all product requirements, features, bugs and improvements.

Sprint Backlog: Selected list of tasks from product backlog that will be completed in current sprint.

Why It Is Needed

Backlogs project ko organized rakhte hain. Product backlog complete direction deta hai, aur sprint backlog current sprint ka focus clear karta hai.

Easy Explanation

Product Backlog = पूरा syllabus

Sprint Backlog = आज/इस week पढ़ने वाले chapters

Comparison Table

Basis	Product Backlog	Sprint Backlog
Meaning	Complete task list	Current sprint task list
Scope	Full project	One sprint
Managed by	Product Owner	Development Team
Changes	Can change anytime	Usually fixed during sprint
Purpose	Product planning	Sprint execution
Contains	Features, bugs, improvements	Selected sprint tasks
Duration	Whole project	Current sprint only

Flow

Product Backlog
↓ Selected high priority items
Sprint Backlog
↓ Work during sprint
Increment

Diagram

Product Backlog
[Login, Payment, Search, Cart, Profile]
↓
Sprint Backlog
[Login, Profile]
↓
Sprint Work

Real-Life Analogy

Full exam syllabus Product Backlog hai. Aaj ke study targets Sprint Backlog hain.

Advantages

Product Backlog

- complete requirements visible
- priority clear hoti hai
- planning easy hoti hai

Sprint Backlog

- team focused rehti hai
- current work clear hota hai
- sprint goal achieve hota hai

Disadvantages

Product Backlog

- continuously update karna padta hai
- large backlog confusing ho sakta hai

Sprint Backlog

- wrong task selection se sprint fail ho sakta hai

Which is Better and Why?

Dono important hain. Product backlog long-term planning ke liye better hai, while sprint backlog short-term execution ke liye better hai. Scrum me dono ek saath use hote hain.

Important Keywords

Product Backlog, Sprint Backlog, Prioritized List, Sprint Goal, User Stories, Backlog Refinement

Conclusion

Product backlog complete project ka roadmap hota hai, while sprint backlog current sprint ka action plan hota hai.

5. Sprint Review

Introduction

Sprint Review sprint ke end me hota hai. Is meeting me completed work stakeholders ko dikhaya jata hai.

Definition

Sprint Review is a Scrum meeting conducted at the end of a sprint to inspect the completed increment and collect stakeholder feedback.

Why It Is Needed

Sprint review se customer ko pata chalta hai ki product me kya progress hui. Feedback ke basis par next sprint improve hota hai.

Easy Explanation

Team apna completed work demo karti hai. Customer/stakeholder bolta hai: “Ye ठीक है, ye change chahiye.”

Step-by-Step Working

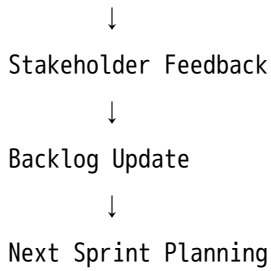
1. Sprint complete hota hai
2. Team completed increment demo karti hai
3. Stakeholder feedback dete hain
4. Product backlog update hota hai
5. Next sprint planning me feedback use hota hai

Flow

Sprint Completed



Product Demo



Diagram

Increment → Demo → Feedback → Backlog Update

Real-Life Analogy

Teacher ko project file dikhana sprint review jaisa hai. Teacher feedback deta hai, phir aap corrections karte ho.

Advantages

- Customer involvement
- Requirement clarity
- Product quality improvement
- Wrong direction me project jane se bachta hai

Disadvantages

- Stakeholder unavailable ho to feedback delay hota hai
- Too many changes confusion create kar sakte hain

Applications

- App demo

- Website demo
- Prototype testing
- Product review

Important Keywords

Increment, Demo, Stakeholder Feedback, Inspection, Backlog Update

Conclusion

Sprint review product progress check karne aur customer feedback lene ka important Scrum event hai.

6. Sprint Retrospective

Introduction

Sprint Retrospective sprint ke baad team improvement ke liye meeting hoti hai. Isme product nahi, team process discuss hota hai.

Definition

Sprint Retrospective is a Scrum meeting where the team reflects on the completed sprint and identifies improvements for the next sprint.

Why It Is Needed

Team ko improve karne ke liye retrospective important hai. Isse pata chalta hai ki kya अच्छा हुआ, kya problem hui, aur next sprint me kya बेहतर karna hai.

Easy Explanation

Sprint Review = product feedback

Sprint Retrospective = team/process feedback

Step-by-Step Working

1. Team sprint experience discuss karti hai
2. Good points identify hote hain
3. Problems discuss hote hain
4. Improvement actions decide hote hain
5. Next sprint me improvements apply hote hain

Flow

Sprint Experience

↓

What Went Well?

↓

What Went Wrong?

↓

What Can Improve?

↓

Action Plan

Diagram

Retrospective

|

|

|

|

Good Points

Problems

Improvements

Real-Life Analogy

Exam test ke baad apni mistakes analyze karna retrospective hai.

Advantages

- Continuous improvement
- Better teamwork
- Problems solve hoti hain
- Future sprint better hota hai

Disadvantages

- Honest discussion na ho to benefit nahi milta
- Time consuming ho sakta hai

Applications

- Software teams
- Project teams
- Startup teams
- Agile organizations

Important Keywords

Reflection, Continuous Improvement, Team Feedback, Action Plan, Process Improvement

Conclusion

Sprint retrospective team performance improve karta hai. Ye Scrum ka improvement-focused event hai.

7. Scrum Best Practices

Introduction

Scrum best practices wo proven methods hain jo Scrum ko successful banate hain.

Definition

Scrum best practices are recommended guidelines that help teams implement Scrum effectively and deliver high-quality products.

Why It Is Needed

Agar Scrum rules properly follow nahi hote, to sprint fail ho sakta hai. Best practices team ko discipline aur direction deti hain.

Important Best Practices

1. Clear Sprint Goal

Sprint start karne se pehle goal clear hona chahiye.

2. Proper Backlog Prioritization

Most important tasks pehle karne chahiye.

3. Daily Scrum Short Rakho

Meeting 15 minutes ke around honi chahiye.

4. Regular Customer Feedback

Customer se feedback regularly lena chahiye.

5. Definition of Done Clear Rakho

Task complete kab maana jayega, ye clear hona chahiye.

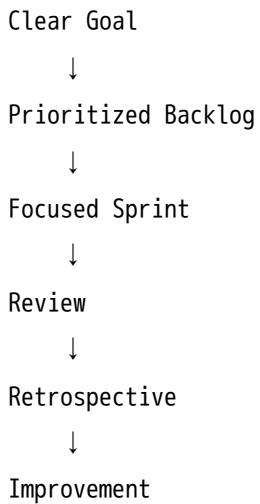
6. Avoid Scope Creep

Sprint ke beech unnecessary changes avoid karo.

7. Continuous Improvement

Har sprint ke baad improvement apply karo.

Flow



Diagram

Best Scrum = Goal + Teamwork + Feedback + Improvement

Real-Life Analogy

Exam prep me best practice hoti hai: timetable banao, important questions pehle padho, daily revision karo, mock test do.

Advantages

- Better productivity
- Faster delivery
- Less confusion
- High quality product
- Improved teamwork

Disadvantages

- Discipline required
- Team training needed
- Regular meetings manage karni padti hain

Applications

- Agile software teams
- Product development
- Website projects
- Mobile apps

Important Keywords

Sprint Goal, Backlog Prioritization, Definition of Done, Customer Feedback, Continuous Improvement

Conclusion

Scrum best practices team ko disciplined, productive aur result-oriented banati hain.

8. Scrum Meetings

Introduction

Scrum meetings ko Scrum events bhi kaha jata hai. Ye meetings communication aur progress tracking ke liye hoti hain.

Definition

Scrum meetings are time-boxed events used to plan, inspect, review and improve work during Scrum project development.

Main Scrum Meetings

Meeting	Purpose
Sprint Planning	Sprint ka work decide karna
Daily Scrum	Daily progress check
Sprint Review	Product demo and feedback
Sprint Retrospective	Team improvement discussion

Step-by-Step Working

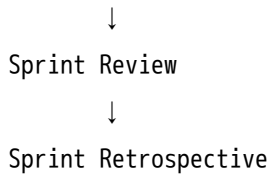
1. Sprint Planning me tasks decide hote hain
2. Daily Scrum me progress discuss hoti hai
3. Sprint Review me work demo hota hai
4. Retrospective me improvement plan banta hai

Flow

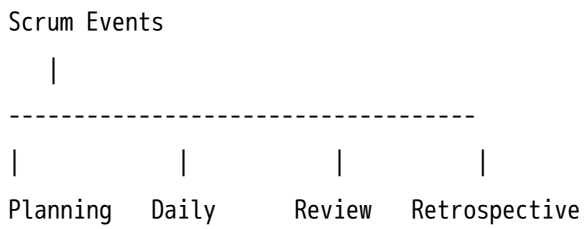
Sprint Planning



Daily Scrum



Diagram



Real-Life Analogy

College project me weekly planning, daily discussion, teacher review, aur final improvement meeting Scrum meetings jaisi hoti hain.

Advantages

- Communication improve hoti hai
- Problems quickly solve hote hain
- Progress visible hoti hai
- Team aligned rehti hai

Disadvantages

- Extra meetings time leti hain
- Poorly managed meetings boring ho sakti hain

Important Keywords

Sprint Planning, Daily Scrum, Sprint Review, Retrospective, Time-boxed Events

Conclusion

Scrum meetings project communication, inspection aur improvement ke liye essential hain.

9. Increment

Introduction

Increment Scrum ka final output hota hai. Har sprint ke end me working product ka ek usable part ready hota hai.

Definition

Increment is the usable and potentially releasable product output completed during a sprint.

Why It Is Needed

Increment se customer ko regular product progress milti hai. Team ko pata chalta hai ki actual working output ready hai ya nahi.

Easy Explanation

Agar website project hai:

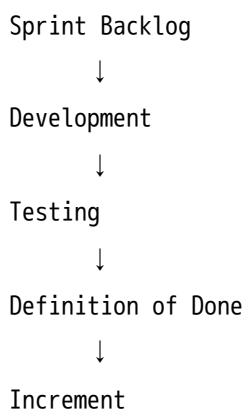
- Sprint 1 output = Login page
- Sprint 2 output = Dashboard
- Sprint 3 output = Payment feature

Ye sab increments hain.

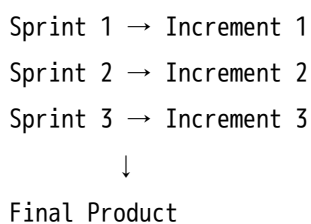
Step-by-Step Working

1. Sprint backlog select hota hai
2. Team tasks complete karti hai
3. Testing hoti hai
4. Definition of Done check hota hai
5. Working product part ready hota hai
6. Increment review me show hota hai

Flow



Diagram



Real-Life Analogy

Assignment me har completed chapter summary ek increment jaisa hai. End me sab summaries milkar complete notes ban jate hain.

Advantages

- Regular delivery
- Product progress visible
- Customer feedback easy
- Risk reduce hota hai

Disadvantages

- Poor quality increment useful nahi hota
- Testing skip karne se problem hoti hai

Applications

- Software modules
- App features
- Website pages
- Product prototypes

Important Keywords

Potentially Releasable, Usable Output, Definition of Done, Sprint Output, Working Product

Conclusion

Increment Scrum ka working result hota hai. Har sprint ka goal ek useful and tested increment deliver karna hota hai.



Comparison Table: Scrum Review vs Retrospective

Basis	Sprint Review	Sprint Retrospective
Focus	Product output	Team process
Participants	Team + stakeholders	Scrum team
Purpose	Feedback on increment	Improve next sprint
Time	End of sprint	After review
Output	Updated backlog	Improvement plan
Example	Demo to customer	Team mistake analysis

Which is Better and Why?

Dono important hain. Sprint Review product ko improve karta hai, while Retrospective team process ko improve karta hai. Product quality ke liye Review important hai, aur team growth ke liye Retrospective important hai.

Comparison Table: Product Backlog vs Sprint Backlog

Basis	Product Backlog	Sprint Backlog
Scope	Full product	Current sprint
Owner	Product Owner	Development Team
Duration	Whole project	Sprint duration
Changes	Frequently updated	Mostly stable during sprint
Purpose	Product roadmap	Sprint execution
Items	All requirements	Selected tasks

Most Important 7-Mark Questions

1. Explain Scrum framework.
2. Explain roles in Scrum.

3. Explain Sprint Lifecycle.
 4. Differentiate between Product Backlog and Sprint Backlog.
 5. Explain Sprint Review.
 6. Explain Sprint Retrospective.
 7. Explain Scrum meetings.
 8. Explain Increment in Scrum.
 9. Explain Scrum best practices.
-

Most Important 14-Mark Questions

1. Explain Scrum Framework in detail with roles, events and artifacts.
 2. Explain Sprint Lifecycle with diagram and example.
 3. Explain Product Backlog, Sprint Backlog and Increment in detail.
 4. Explain Scrum meetings: Sprint Planning, Daily Scrum, Review and Retrospective.
 5. Explain roles in Scrum and best practices of Scrum.
-

PYQ-Based Expected Questions

Very High Probability

- Scrum Framework
- Roles in Scrum
- Sprint Lifecycle
- Product Backlog vs Sprint Backlog

High Probability

- Sprint Review
- Sprint Retrospective
- Scrum Best Practices

Medium Probability

✓ Scrum Meetings

✓ Increment

One-Night Revision Notes

Topic	One-Line Revision
Scrum	Agile framework for short cycles
Sprint	Fixed short work cycle
Product Backlog	Complete requirement list
Sprint Backlog	Current sprint selected tasks
Product Owner	Manages backlog and requirements
Scrum Master	Guides Scrum process
Development Team	Builds product
Sprint Review	Product feedback meeting
Retrospective	Team improvement meeting
Increment	Working product output

Smart Study Plan

2-Hour Plan

Time	Topic
25 min	Scrum Framework
20 min	Roles in Scrum
20 min	Sprint Lifecycle
20 min	Product vs Sprint Backlog
15 min	Review + Retrospective
10 min	Meetings + Increment

Time	Topic
10 min	Best Practices

5-Hour Plan

Time	Topic
1 hour	Scrum Framework
1 hour	Roles + Sprint Lifecycle
1 hour	Backlogs + Increment
1 hour	Meetings + Review + Retrospective
1 hour	PYQ + Revision + Diagrams

One-Night Priority Order

1. Scrum Framework
2. Roles in Scrum
3. Sprint Lifecycle
4. Product Backlog vs Sprint Backlog
5. Sprint Review
6. Sprint Retrospective
7. Scrum Best Practices
8. Scrum Meetings
9. Increment



Memory Tricks

Scrum Roles

PSD

- P = Product Owner
- S = Scrum Master

- D = Development Team

Scrum Events

PDRR

- P = Planning
- D = Daily Scrum
- R = Review
- R = Retrospective

Scrum Artifacts

PBI

- P = Product Backlog
- B = Sprint Backlog
- I = Increment

Sprint Lifecycle

PDTFRI

- P = Planning
- D = Development
- T = Testing
- F = Feedback
- R = Retrospective
- I = Increment



Topper Answer Writing Tips

For 7 Marks

Use this format:

Definition

↓

Easy explanation

↓

Diagram

↓

Example

↓

Advantages

↓

Conclusion

For 14 Marks

Use this format:

Introduction

↓

Definition

↓

Roles / Events / Artifacts

↓

Detailed process

↓

Flowchart

↓

Example

↓

Advantages

↓

Disadvantages

↓

Applications

↓

Conclusion

Keywords to Underline

Scrum, Sprint, Product Owner, Scrum Master, Development Team, Product Backlog, Sprint Backlog, Daily Scrum, Sprint Review, Retrospective, Increment, Definition of Done

Final Exam Tip

Agar time bahut kam hai, to **Scrum Framework + Roles + Sprint Lifecycle + Product Backlog vs Sprint Backlog** जरूर prepare karo. Unit-4 ka maximum paper inhi topics se cover ho sakta hai.