

Part 7 — Concept Drills & MCQs with Explanations

Section A – Core Concepts

1. What is the main objective of Business Process Reengineering (BPR)?

→ To achieve **dramatic improvement** in cost, quality, service, and speed by **radically redesigning** business processes, not by gradual improvement.

Explanation: BPR eliminates unnecessary steps and redesigns the entire workflow from scratch.

2. “Don’t automate, obliterate” – who said it and what does it mean?

→ Hammer & Champy (1993). It means: do not computerize a bad process; remove the step altogether if it adds no value.


3. What is a “process bottleneck”?

→ The slowest or most capacity-constrained step in a workflow that determines the system’s maximum throughput.

Example: In Starbucks, the barista station is the bottleneck.

4. Which of the following represents a Non-Value-Added (NVA) activity?

a) Brewing coffee b) Payment processing c) Standing in line d) Mixing syrup

 **Answer: c) Standing in line** – waiting does not add customer value.

5. In BPR, which metric combines several criteria like cost, time, and error rate into one score?

 **Merit Function.**

Explanation: A weighted composite score used for comparing multiple design options objectively.

6. Efficiency is about “doing things ____”, while Effectiveness is about “doing the ____ things.”

✓ **right / right** → Efficiency = doing things right; Effectiveness = doing the right things.

7. Which law connects Work in Process, Throughput, and Lead Time?

✓ **Little’s Law** → $WIP = Throughput \times Lead\ Time$.

Interpretation: If you speed up throughput or shorten lead time, WIP decreases.

8. If a café serves 180 orders/hour and average lead time is 6 minutes, what’s the average number of customers in system?

→ $180 / 60 = 3$ orders/min; $WIP = 3 \times 6 = 18$ customers.

9. What does “Takt Time” indicate?

→ The *maximum* allowable time per unit to meet demand without delay.

If a barista has 3600 s/hour for 150 orders → $takt = 24$ s/order.

10. Identify which is *not* a principle of BPR:

a) Radical redesign b) Incremental change c) Process orientation d) Information technology enablement

✓ **Answer: b) Incremental change** – that’s TQM or Lean, not BPR.

Section B – Business & Economics Basics

11. What is “Opportunity Cost”?

→ The value of the next-best alternative forgone when a decision is made.

Example: Investing in kiosks means sacrificing potential app development.

12. Macro-economics deals with ____, while Micro-economics deals with ____.

✓ **nations / firms.**

13. Which sector creates *tangible* value – production or financial?

✓ **Production.** The financial sector enables transactions but doesn’t create consumables.

14. When interest rates rise, firms are likely to ___ capital-intensive projects.

☒ **Postpone or avoid** them because borrowing becomes costlier.

15. The “Law of Demand” states:

→ When price rises, quantity demanded falls, *ceteris paribus* (other factors constant).

16. Inflation causes input costs to rise. Which BPR response is most logical?

☒ Reengineer processes to **reduce resource waste** and **maintain profit margins**.

17. GDP represents:

→ The total market value of all final goods and services produced within a country during a year.

18. What is “Elasticity of Demand”?

→ A measure of how sensitive demand is to a change in price or income.

If elasticity < 1 → demand is *inelastic* (e.g., coffee).



Section C – Accounting and Finance Essentials

19. Assets = ?

☒ **Liabilities + Equity.**

20. What is CAPEX?

→ Capital Expenditure – a one-time investment in long-term assets such as machinery or software.

21. What is OPEX?

→ Operating Expenditure – recurring expenses required to run daily operations.

22. ROI (%) = ?

→ $(\text{Gain} - \text{Cost}) / \text{Cost} \times 100$.

Example: Invest ₹400,000, gain ₹800,000 → ROI = 100 %.

23. Break-even Point = ?

→ $\text{Fixed Costs} \div (\text{Selling Price} - \text{Variable Cost per unit})$.

Meaning: Minimum sales required to avoid loss.

24. In BPR, lower OPEX often comes at the cost of higher ____ .

☒ **CAPEX.**

You invest once to save repeatedly.

25. Depreciation means ____ .

→ Gradual loss in value of fixed assets due to use or time.

26. Cash Flow improves when ____ is reduced.

☒ **Lead Time or Accounts Receivable period.**

Faster completion → faster cash inflow.

Section D – Process Design & Measurement

27. Which step should be performed first in any BPR project?

☒ **Process mapping and time-measurement.**

You can't improve what you can't measure.

28. A bottleneck station should ideally run at ____ % utilization to stay stable.

☒ **≈ 80–85 %.** Above that, queues explode.

29. The distinction between As-Is and To-Be processes is ____.

→ As-Is shows current reality; To-Be shows the redesigned, improved future state.

30. How can timestamps help in process improvement?

→ They reveal waiting and service durations at each step, identifying where time is wasted.

31. In a merit function, higher score indicates ____ performance.

✓ **Worse.** (Because normalized “badness” is multiplied by weight.)

32. If throughput increases but lead time doesn’t change, what can you infer?

→ WIP has grown; the system is congested (from Little’s Law).

33. Parallel processing helps by ____ .

→ Sharing load across multiple resources to increase capacity.

34. What is the purpose of rule-based design in a university system?

→ To prevent invalid actions before they occur (e.g., wrong course registration).

35. Which process metric directly reflects customer satisfaction?

✓ **Lead Time.** Shorter lead = happier customer.



Section E – Management & People Dimension

36. Which C-suite executive leads technology strategy in BPR?

✓ **CTO – Chief Technology Officer.**

37. Whose main concern is ROI and financial viability?

✓ **CFO – Chief Financial Officer.**

38. The CHRO focuses on ____ during reengineering.

→ Training, redeployment, and morale (change-management).

39. “Flattening hierarchy” means ____ .

→ Reducing management layers to speed decision-making.

40. Organizational Culture affects BPR success because ____.

→ A resistant culture delays or blocks adoption of new processes.

Section F – Case-Based Mini Drills

41. In Starbucks As-Is, which two steps are critical bottlenecks?

☒ Cashier and Barista.

Cashier slows order feed; barista limits throughput.

42. In To-Be Starbucks design, which process rules changed?

- Payment occurs before arrival.
 - Barista auto-receives order spec.
 - Preparation begins when customer is X minutes away.
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43. In Ford’s A/P case, what radical decision was made?

☒ Eliminate supplier invoices altogether; pay automatically when PO + receiving match in database.

44. In University Fee System, which two integrations gave biggest gain?

☒ Bank API integration + eligibility rule automation.

45. Tesla’s inline sensors eliminated what type of waste?

☒ Rework and waiting for inspection results.



Section G – Reasoning “Why” Questions

46. Why does consistency matter in scaling a business?

→ Because predictable outputs build customer trust and allow replication across locations.

47. Why is “data visibility” considered the backbone of reengineering?

→ It converts hidden manual work into measurable digital events; only visible data can be optimized.

48. Why is CAPEX vs OPEX balance essential?

→ Too high CAPEX delays payback; too low yields negligible OPEX savings. Optimal design pays back quickly and sustains profit.

49. Why should non-value-added work be eliminated before automation?

→ Automating waste still wastes resources—just faster and costlier.

50. Why is staff retraining a mandatory step after reengineering?

→ Because new processes change job roles; untrained employees revert to old habits or make new errors.



Section H – Quick “Fill-the-Blank” Practice

1. Lead Time = _____ – _____ → Finish – Start.
2. WIP = Throughput × _____.
3. Merit Function gives a _____ measure of performance.
4. In BPR, _____ activities should be eliminated first.
5. The 6 C’s are: CEO, COO, CTO, CFO, CHRO, _____.
6. ROI = (Gain – Cost) / Cost × _____.

7. A process with highest utilization becomes the _____.
8. The ideal utilization of a bottleneck is about _____ %.
9. Digitalization = using _____ technology to redesign operations.
10. Little's Law \rightarrow _____ = Throughput \times Lead Time.

(You can test yourself by covering the right column and filling them from memory.)

Section I – Rapid Case Ratta (Write-Once Memory Lines)

1. “Mobile pre-ordering reduced manual entry and stabilized demand pacing.”
 2. “Integrated validation removed redundant approvals.”
 3. “Inline sensors turned quality control from reactive to preventive.”
 4. “Merit function verified quantitative superiority of the To-Be process.”
 5. “ROI recovered within six months under conservative adoption.”
 6. “Cultural alignment ensured process success beyond technology.”
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How to Use This Section

- Re-read these MCQs and short answers nightly before the exam.
- Mark unfamiliar terms; flip back to their detailed explanations in Parts 1–6.
- Practise rewriting 10 random questions from memory each day

Section H – Quick “Fill-the-Blank” Practice (Answers)

1. **Lead Time = Finish – Start.**

2. **WIP = Throughput × Lead Time.**
3. **Merit Function gives a quantitative measure of performance.**
4. **In BPR, non-value-added activities should be eliminated first.**
5. **The 6 C's are: CEO, COO, CTO, CFO, CHRO, CMO.**
6. **ROI = (Gain – Cost) / Cost × 100.**
7. **A process with highest utilization becomes the bottleneck.**
8. **The ideal utilization of a bottleneck is about 80–85 %.**
9. **Digitalization = using digital technology to redesign operations.**
10. **Little's Law → WIP = Throughput × Lead Time.**