1. 1. You are leading a geospatial digital twin with drone surveys plus cloud simulation. To secure field–cloud sync and on‑time sprints, which plan do you adopt?  
   (i) Daily virtual stand‑ups with a shared Kanban; async updates allowed  
   (ii) Mandatory co-location for all sprints, regardless of role  
   (iii) Field pods operate on staggered shifts; cloud team on core overlap hours  
   (iv) Any code merges only during weekend freeze windows  
   (A) (i) and (iii)  
   (B) (ii) and (iv)  
   (C) (i) and (ii)  
   (D) Only (iv)
2. 2. Your twin needs secure OT–IT data ingestion from edge gateways. What operating model best balances speed and risk?  
   (i) Central change board reviews connectors weekly  
   (ii) Ad hoc connector changes by any developer  
   (iii) “Canary” edge nodes for staged rollout before fleet deployment  
   (iv) Disable audit logging during field fixes to save time  
   (A) (i) and (iii)  
   (B) (ii) and (iv)  
   (C) (i) and (iv)  
   (D) Only (ii)
3. 3. LiDAR and photogrammetry crews face weather uncertainty; AI reconstruction runs overnight. Which approach is most effective?  
   (i) Morning in‑person huddles during field weeks only  
   (ii) Dynamic survey roster with weather gates and backup tiles  
   (iii) Force all ML engineers to be on‑site with surveyors daily  
   (iv) Cloud spot instances reserved for nightly batch retrains  
   (A) (ii) and (iv)  
   (B) (i) and (iii)  
   (C) (i) and (iv)  
   (D) (iii) and (iv)
4. 4. Stakeholders demand fortnightly demos while cybersecurity mandates zero‑trust. What governance works?  
   (i) Daily social-media chat for all design decisions  
   (ii) Enforce PR reviews, IaC, and signed artifacts in CI/CD  
   (iii) Sprint reviews with redacted twin slices on a secure tenant  
   (iv) Disable MFA for field tablets to ease check‑ins  
   (A) (ii) and (iii)  
   (B) (i) and (ii)  
   (C) (i) and (iv)  
   (D) Only (iii)
5. 5. A vendor’s SDK for sensor fusion is unstable. You must keep timeline intact.  
   (i) Wrap the SDK behind a feature flag and contract tests  
   (ii) Freeze all integration until vendor releases GA build  
   (iii) Allocate a small strike team to build an internal fallback  
   (iv) Ban remote work until SDK stabilizes  
   (A) (i) and (iii)  
   (B) (ii) and (iv)  
   (C) (i) and (ii)  
   (D) Only (ii)
6. 6. Field data quality is inconsistent; retracing shoots is costly.  
   (i) Create checklists and on‑device validation with pass/fail rules  
   (ii) Centralize all QC to end-of-month reviews  
   (iii) Use differential resurvey triggered by anomaly thresholds  
   (iv) Allow nonstandard naming to speed uploads  
   (A) (i) and (iii)  
   (B) (ii) and (iv)  
   (C) (i) and (ii)  
   (D) Only (iii)
7. 7. The township authority requires daily progress and privacy compliance.  
   (i) Daily in‑person conference-room meet for entire team  
   (ii) Automated dashboards with masked PII and audit trails  
   (iii) Remote work permitted for roles that do not handle raw PII  
   (iv) Upload full-resolution resident footage to speed reviews  
   (A) (ii) and (iii)  
   (B) (i) and (iv)  
   (C) (i) and (ii)  
   (D) Only (iv)
8. 8. Compute costs are spiking due to unbounded simulations.  
   (i) Enforce quota budgets and scheduled compute windows  
   (ii) Permit on-demand GPU jobs without approvals  
   (iii) Introduce scenario libraries and reuse caches  
   (iv) Disable cost alerts to avoid noise  
   (A) (i) and (iii)  
   (B) (ii) and (iv)  
   (C) (i) and (ii)  
   (D) Only (iii)
9. 9. Cross‑functional handoffs are causing rework.  
   (i) Definition‑of‑Done includes data lineage, schema contracts, and test datasets  
   (ii) Rely on verbal handoffs via group chat  
   (iii) Weekly in‑person architecture council; decisions logged  
   (iv) Prohibit WFH for all until rework drops to zero  
   (A) (i) and (iii)  
   (B) (ii) and (iv)  
   (C) (i) and (iv)  
   (D) Only (ii)

10. Mid‑project, scope expands to include underground utilities mapping.  
(i) Replan with a change-control process and timeboxed discovery spike  
(ii) Keep original date; compress testing to fit added scope  
(iii) Hybrid staffing: enable vetted remote experts for utility models  
(iv) Disable code reviews to accelerate merges  
(A) (i) and (iii)  
(B) (ii) and (iv)  
(C) (i) and (ii)  
(D) Only (iii)