■ Techno MR Interview Cheat Sheet – 20 Rapid Fire Q&A;

- 1. **What is FastAPI?**
- A modern Python web framework for building APIs with validation, async support, and docs.
- 2. **Why use FastAPI over Flask/Django?**
- Faster, async, auto docs, Pydantic validation.
- 3. **What is Pydantic used for?**
- Data validation and serialization.
- 4. **What are query parameters in FastAPI?**
- Parameters in URL after `?key=value`.
- 5. **Explain JWT in one line.**
- Secure token format for auth.
- 6. **Main parts of JWT?**
- Header, Payload, Signature.
- 7. **How to protect routes in FastAPI?**
- Use Depends with JWT verifier.
- 8. **How to connect DB in FastAPI?**
- SQLAlchemy + SessionLocal + get_db().
- 9. **Sync vs Async?**
- Sync blocks; async handles concurrency.
- 10. **Async use-case?**
- API calls, DB queries, I/O tasks.
- 11. **What is Dependency Injection?**
- Reusable components (DB, auth).
- 12. **Password hashing method?**
- passlib (bcrypt).
- 13. **Custom error messages?**
- Raise HTTPException(...).
- 14. **What is ORM?**
- Maps Python classes to DB tables.
- 15. **What is Middleware?**

- Runs before/after every request.
- 16. **Testing FastAPI?**
- TestClient + pytest.
- 17. **PUT vs PATCH?**
- PUT = full replace, PATCH = partial update.
- 18. **REST vs GraphQL?**
- REST: multiple endpoints. GraphQL: one endpoint, flexible response.
- 19. **Common status codes?**
- **2**00, 201, 400, 401, 404, 500.
- 20. **Why should we hire you?**
- Strong FastAPI + Python + DB + JWT + teamwork.