Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part   (Compulsory)

Q. 1   Write short answers of the following in 2-3 lines each.   (16*2)

i.   What is Software Refactoring?
ii.   What is embedded system?
iii. What's the difference between Cohesion and Coupling?
iv.   Write down the name of different phases of Rational Unified Process?
v.   What's the difference between Testing and Debugging?
vi.   Differentiate between Iterative Model and Incremental Model?
vii. What is Extreme Programming?
viii. What is CMM?
ix.   What is System Testing?
x.   Differentiate between Project, Process and Product?
xi.   Define Stakeholder?
xii. What is Closed System?
xiii. Define SCM?
xiv. What's a CASE Tool?
xv.   What is Regression Testing?
xvi. What's an 'Inspection'?

Subjective Part   (3*16)

Q.2.   Compare and Contrast between Agile Process Model and Prototyping?

Q.3.   Define Software Design? Explain all sort of design in detail?

Q 4.   A New Branch School District operates a fleet of 40 buses that serve approximately 1,000 students in grades 1 to 12. The bus operation involves 30 regular routes, plus special routes for activities, athletic events, and summer sessions. The district employs 12 fulltime drivers and 25 to 30 part-time drivers. A dispatcher coordinates the staffing and routes and relays messages to drivers regarding students and parents who call about pickup and drop-off arrangements.

a.   Identify possible actors and use cases involved in school bus operations.
b.   Create a use case diagram using any one of the use cases identified in part a
c.   Create a sequence diagram for the use case you selected.

Q.5.   Write a note on different types of software Testing techniques?

Q.6.   What is Fact-Finding Technique? Explain different Fact-Finding Techniques with merits and demerits?