Time: 3 Hrs   Marks: 70

Note: Answer any **FIVE** questions by choosing one from unit.
All questions carry equal marks.

UNIT-I

1. a) Discuss Boehm's top 10 list of Conventional software Management performance. 7M
   b) What are the basic parameters of the software Cost models? Explain three
      generations of software economics.   7M

OR

2. a) How to improve software processes? Explain with different attributes.   7M
   b) Explain how to staff a software project with Staffing principles.   7M

UNIT-II

3. a) Explain principles of conventional software Engineering.   7M
   b) Discuss the top five principles of the modern software Management.   7M

OR

4. a) List primary objectives of Engineering stage and production stage?   7M
   b) Discuss management artifacts.   7M

UNIT-III

5. a) Explain software process workflows with respective artifacts?   7M
   b) What is the difference between Major Milestones and Minor milestones? Explain. 7M

OR

6. a) What is WBS? Explain evolution of planning fidelity in the WBS over the life cycle.7M
   b) What are the two approaches for project plans in cost and schedule estimating
      process? Explain.   7M

UNIT-IV

7. a) Discuss Software Line-of-business organization with an appropriate diagram.   6M
   b) Explain   (i) Round trip engineering   4M
                          (ii) Primitive components of a software change order   4M

OR

8. a) What are the seven core metrics? Explain with appropriate diagrams.   8M
   b) Discuss pragmatic software metrics and Metrics Automation.   6M

UNIT-V

9. a) Draw the diagram of Priorities for tailoring the process framework and explain
      the Scale and stakeholder cohesion or contention.   8M
   b) Discuss continuous integration and early risk resolution with diagrams.   6M

OR

10. a) Explain next generation software cost models in engineering stage and production stage. 7M
    b) Discuss culture shifts in modern process transitions.   7M

Time: 3 Hrs   Marks: 70

Note: Answer any **FIVE** questions by choosing one from unit.
      All questions carry equal marks.

UNIT-I

1.a) What is Image Digitization? Explain Digital Image Properties.   7M
  b) Explain in detail about Traditional Image data structures.   7M.

(OR)

2. Explain in detail about Levels of Image data representation.   14M

UNIT-II

3. a) What is Geometric transformation.   4M
  b) Explain different Noise models.   10M

(OR)

4. a)Explain in detail about Mean filters and median filters.   10M
  b)Write about the model of Restoration process.   .   4M

UNIT-III

5. a)Write about Color Models. .   7M
  b)Define and explain Smoothing and Sharpening.   7M

(OR)

6. Explain about different Morphological Algorithms.   14M.

UNIT-IV

7. a) Define Multi level Thresholding, Local Thresholding.   .   10M
  b) Define pattern fitting approach.   4M

(OR)

8. Explain the way of detecting line and corner.Write about edge detector Performance.   14M

UNIT –V

9. a) Define Fourier Transform and Hadamard Transform.   7M
  b) Mention the applications of Discrete Image Transforms.   7M

(OR)

10. a) Explain In detail about hierarchical and progressive compression methods.   10M
  b) Write about image data properties.   4M

Time: 3 Hrs   Marks: 70

Note: Answer any **FIVE** questions by choosing one from unit.
All questions carry equal marks.

UNIT I

1. a) Explain information gathering methodologies?   9 M
    b) Explain Footprinting tools?   5M

OR

2. a) Explain different phases of attacks?   7 M
    b) Explain different types of hacker attacks?   7M

UNIT II

3. a) Write notes on scanning methodologies?   7 M
    b) Explain any four tools of scanning?   7 M

OR

4. a) Explain any three enumeration techniques?   7 M
    b) Explain any four tools of enumeration?   7 M

UNIT III

5. a) Explain different types of password attacks?   7 M
    b) Explain about password cracking tools?   7 M

OR

6. a) Explain tools on Executing applications?   7 M
    b) Explain any six tools of Keyloggers?   7 M

UNIT IV

7. a) How to run the Windows OS vulnerabilities?   7 M
    b) Write short notes on HTML fundamentals?   .   7 M

OR

8. a) Write any four tools of Linux OS vulnerabilities?   8M
    b) Write short notes on Windows OS countermeasures?   6 M

UNIT V

9. a) Define penetration testing and explain types of penetration testing?   7M
    b) Write any five phases of penetration testing?   7M

OR

10. Write short notes on following tools.   14M
    a) AppScan
    b) HackerShield
    c) SAINT
    d) SecureScan
    e) WebInspect

Time: 3 Hours   Maximum: 70 Marks

Note : Answer FIVE questions, choosing ONE question from each Unit. All questions carry equal marks.

UNIT- 1	MARKS	CO	BLOOMS LEVEL
Explain principles of management as outlined by Henry Fayol.	14	CO2	L3
(OR)			
(a) Explain and evaluate the process of scientific management.	7	CO2	L3
(b) Distinguish line and line and staff organizations.	7	CO3	L2
UNIT- 2			
(a) Discuss the essential steps in corporate planning through a flow chart	7	CO6	L2
(b) What do you understand by SWOT analysis? Illustrate it.	7	CO6	L1
(OR)			
What do understand by plant layout? Explain its systems and evaluate the same.	14	CO5	L3
UNIT- 3			
Explain the stages in manpower planning function.	14	CO4	L1
(OR)			
(a) Write short note on EOQ and ABC analysis.	7	CO5	L1
(b) What is the difference between job evaluation and merit rating	7	CO4	L2
UNIT- 4			
Define Work Study. How do you carry it out?	14	CO5	L3
(OR)			
Explain the concept of statistical control. Explain how can you construct charts for the variables	14	CO5	L4
UNIT- 5			

Assuming that the following expected time normally distributed. You are required to
 	
    a)Construct the network diagram
    b)Find the average time
  c) Determine the critical path and find out the project duration
	14	Co5	L4

Activity	Optimistic time(to)	Pessimistic time(tp)	Most likely time(tm)
1-2	2	5	14
1-3	9	12	15
2-4	5	14	17
3-4	2	5	8
4-5	6	6	12
3-5	8	17	20

	MARKS	CO	BLOOMS LEVEL
(OR)			
Write short on:			
a) PERT versus CPM	7	CO2	L2
b) Cost slope, direct costs and indirect costs	7	CO1	L1