K. K. Wagh Institute of Engineering Education and Research, Nashik

(An Autonomous Institute from A.Y. 2022-23)

Set III Marking Scheme

End-Sem Examination-I, Winter 2025

Academic Year: 2025-2026	Semester: I
Class: FY	Program: B. Tech.
Branch Code: MEC	Pattern: 2023
Name of Course: Fundamentals of Mechanical Engineering	Course Code: 2300114A

Q. No.	Marking Scheme	Max. Marks
Q.1.	a) input power (2M) b) output speed (1M) c) Output power (1M) d) output torque (2M)	[6]
Q.2.	a) Heat Transfer Q (3M) b) Heat Flux (3M)	[6]
Q.3.	a) 1 M x 8 points = 8M **OR** b) 4 marks for diagram showing all terminology i) Compression Ratio (1 marks) ii) Stroke Length (1 marks) iii) Swept Volume (1 marks) iv) Clearance Volume (1 marks)	[16]
	c) 6 marks layout, 2 marks explanation **OR** d) 1 M x 4 points = 4M –Advantage 1 M x 4 points = 4M –disadvantage	
Q.4.	a) 4M-Diagram and 1M x 4=4M for explanation **OR** b) Definition 2M Diagram of Forgings 3 M and 3M for explanation	[16]

	c) 2M for diagram x 2 = 4M 2M for explanation x 2 = 4M **OR** d) 1 M x 8 points = 8M	
Q.5.	a) Line no 1 explanation – 5M Line no 2 explanation – 1 M Line no 3 explanation – 1 M Line no 4 explanation – 1 M **OR** b) Automatic retrieval system -8M	[16]
	c) Define (2 marks) i) In-line FMS (2 marks layout) ii) U-type FMS (2 marks layout) iii) Rotary FMS (2 marks layout) **OR** d) a) Computer Aided Design - 2M b)Computer Aided Process Planning -2M c) Computer Aided Manufacturing - 2M d) Computer Aided Business Planning - 2M	