LIST OF FIGURES

FIG1.1  SIMPLEST EPICYCLIC GEAR TRAIN
FIG1.1a FUNCTIONAL REPRESENTATION OF EGT
FIG1.2  GRAPH REPRESENTATION OF EGT
FIG1.3  ROTATION GRAPH A OF SIMPLE EGT
FIG1.4  SIMPSON GEARBOX
FIG1.4a GRAPH OF SIMPSON GEARBOX
FIG1.4b NEW GRAPH OF SIMPSON GEARBOX
FIG2.1  A SIMPLE PLANETARY GEAR TRAIN
FIG2.2  LEVAI NOTATION OF A PGT
FIG2.3  GRAPH OF A PGT
FIG2.4  SIMPSON GEAR BOX
FIG2.4a ONE GRAPH OF THE PGT OF FIG (2.4)
FIG2.4b ALTERNATIVE GRAPH FOR THE SAME PGT IN FIG 2.4b
FIG2.5  NEW GRAPH REPRESENTATION
FIG2.6  ACYCLIC GRAPH
FIG2.7  SIX LINK WATT CHAIN
FIG2.8  GRAPH OF WATT CHAIN
FIG2.9  EIGHT-LINK CHAIN
FIG2.10 GRAPH OF 8-LINK CHAIN
FIG2.11 A 5-Link PGT
FIG2.11a FCs of PGT in 2.11
FIG2.12 ROTATION GRAPHS OF PGT IN FIG 2.11
FIG2.13 A 5-LINK GRAPH
FIG2.14 FCs of PGT in (2.13)
FIG2.15 ROTATION GRAPHS OF PGT IN FIG 2.13
FIG2.16 GRAPH OF A 5-LINK PGT
FIG2.17 GRAPH OF A 6-LINK PGT
FIG2.18 ROTATION GRAPH OF A 6-LINK PGT IN FIG 2.17
FIG2.19 GRAPH OF A 4-LINK PGT
FIG2.20 GRAPH OF A 5-LINK PGT
FIG2.21 GRAPH OF A 5-LINK PGT
FIG2.22 GRAPH OF A 5-LINK PGT
FIG2.23 ROTATION GRAPH OF A 5-LINK PGT
FIG2.24 GRAPH OF A 4-LINK PGT
FIG2.25 GRAPH OF A 4-LINK PGT
FIG2.26 ROTATION GRAPH OF A 4-LINK PGTs IN FIGs 2.19,2.24
FIG2.27 ROTATION GRAPH OF A 4-LINK PGTS IN FIGs 2.25
FIG3.1a ONE DOF EPICYCLIC GEAR TRAIN
FIG3.1b FUNCTIONAL REPRESENTATION OF ONE DOF EGT
FIG3.1c A BICOLOURED GRAPH WITHOUT LABELING
FIG3.1d ROTATION GRAPH OF A 3-LINK EGT
FIG3.2 GRAPH OF A 4-LINK EGT
FIG3.2a ROTATION GRAPH OF A 4-LINK EGT
FIG3.3 ANOTHER GRAPH OF A 4-LINK EGT
FIG3.3a ROTATION GRAPH OF A 4-LINK EGT IN FIG3.3
FIG3.4 GRAPH OF A THIRD 4-LINK EGT
FIG3.5 GRAPH OF A FOURTH 4-LINK EGT
FIG3.6 FUNCTIONAL DIGRAME OF EGT IN FIG3.2
FIG3.7 FUNCTIONAL DIGRAME OF EGT IN FIG3.5
FIG4.1a SIMPLE EPICYCLIC GEAR TRAIN
FIG4.1b FUNCTIONAL DIAGRAM OF THE PGT IN FIG4.1a
FIG4.2 PGT WITH TWO MORE PLANET GEARS ARE ADDED TO THE PGT SHOWN IN FIG 4.1
FIG4.3 FOUR BAR CHAIN
FIG4.4 WATT CHAIN
FIG4.5 STEPHENSON CHAIN
FIG4.6 PGT WITH 2-GEAR PAIRS
FIG4.7 ANOTHER PGT WITH 2-GEAR PAIRS
FIG4.8 FUNCTIONAL DIAGRAM OF THE PGT IN FIG4.6
FIG 4.9 FUNCTIONAL DIAGRAM OF THE PGT IN FIG 4.7

FIG 4.10 GRAPH OF A 3-LINK PGT

FIG 5.1 ANALOGY OF A CHANNEL IN INFORMATION THEORY TO A MECHANISM

FIG 5.2 RSSR SPATIAL MECHANISM

FIG 5.3a 4-LINK EGT

FIG 5.3b GRAPH OF A 4-LINK EGT

FIG 5.4 GRAPH OF ANOTHER 4-LINK EGT

FIG 5.5a FUNCTIONAL DIAGRAM AND GRAPH OF A 6-LINK PGT

FIG 5.5b FUNCTIONAL DIAGRAM AND GRAPH OF ANOTHER PGT

FIG 6.1a FUNCTIONAL DIAGRAM OF A 4-LINK PGT

FIG 6.1b GRAPH OF A 4-LINK PGT IN FIG 6.1a

FIG 6.2 FULLY CONNECTED GRAPH

FIG 6.3a FUNCTIONAL DIAGRAM OF ANOTHER 4-LINK PGT

FIG 6.3b GRAPH OF A 4-LINK PGT IN FIG 6.3a

FIG 6.4a FUNCTIONAL DIAGRAM OF A 5-LINK PGT

FIG 6.4b GRAPH OF A 5-LINK PGT IN FIG 6.4a

FIG 6.5a FUNCTIONAL DIAGRAM OF SECOND 5-LINK PGT

FIG 6.5b GRAPH OF A 5-LINK PGT IN FIG 6.5a

FIG 6.6 PSEUDO – ISOMORPHIC GRAPH