



## CALCULATOR POLICY

1. Examination Candidates may take a non-programmable calculator into any component of the examination for their personal use.
2. Instruction booklets or cards (eg reference cards) on the operation of calculators are **NOT** permitted in the examination room. Candidates are expected to familiarise themselves with the calculator's operation beforehand.
3. Calculators must have been switched off for entry into the examination room.
4. Calculators will be checked for compliance with this policy by the examination invigilator or observer.
5. Features of approved calculators:
  - 5.1. In addition to the features of a basic (four operation) calculator, a scientific calculator typically includes the following:
    - 5.1.1. fraction keys (for fraction arithmetic)
    - 5.1.2. a percentage key
    - 5.1.3. a  $\pi$  key
    - 5.1.4. memory access keys
    - 5.1.5. an EXP key and a sign change (+/-) key
    - 5.1.6. square ( $x^2$ ) and square root ( $\sqrt{\quad}$ ) keys
    - 5.1.7. logarithm and exponential keys (base 10 and base e)
    - 5.1.8. a power key ( $ax$ ,  $xy$  or similar)
    - 5.1.9. trigonometrical function keys with an INVERSE key for the inverse functions
    - 5.1.10. a capacity to work in both degree and radian mode
    - 5.1.11. a reciprocal key ( $1/x$ )
    - 5.1.12. permutation and/or combination keys (  $nPr$  ,  $nCr$  )
    - 5.1.13. cube and/or cube root keys
    - 5.1.14. parentheses keys
    - 5.1.15. statistical operations such as mean and standard deviation
    - 5.1.16. metric or currency conversion
6. Features of calculators that are **NOT** permitted include:
  - 6.1. programmable (any calculator that can have a sequence of operations stored and then executed automatically is considered programmable and hence not allowed)
  - 6.2. capable of storing text or alphanumeric data input by a user (this does not exclude calculators with memories that are used to store intermediate numerical results obtained during calculations and required later)
  - 6.3. capable of storing, manipulating or graphing functions entered in symbolic form (this includes calculators with a graphic display capacity)

- 6.4. capable of performing ‘hard-wired’ numerical routines for operations such as differentiation and definite integration, and the solution of equations
- 6.5. capable of performing ‘hard-wired’ symbolic manipulations such as addition of algebraic expressions, binomial expansion and symbolic differentiation
- 6.6. capable of performing ‘hard-wired’ numerical routines for operations such as differentiation and definite integration, and the solution of equations
- 6.7. capable of external communication or web connectivity.
7. Examples of approved calculators:

CASI		SHARP	OTHER BRANDS	
fx-82 AU	fx-100 AU	EL-506H	ABACUS	SX-II MATRIX
fx-82 AU PLUS	fx-100 AU PLUS	EL-509L	CANON	F717SGA
fx-82 AU PLUS II	fx-100 D	EL-509R		F720
fx-82 D	fx-100 S	EL-509VM		F720i
fx-82 ES	fx-115 S	EL-509W	CITIZEN	SR-135
fx-82 ES PLUS	fx-115 WA	EL-509WS		SR-260
fx-82 ES PLUS A	fx-122 S	EL-509X		SR-270
fx-82 L	fx-220	EL-510R	HEWLETT PACKARD	HP 8S
fx-82 LB	fx-220 PLUS	EL-520VA		HP 9S
fx-82 MS	fx-270 MS	EL-520WG		HP 10S
fx-82 NASER	fx-270 W PLUS	EL-531GH		HP 10S+
fx-82 PLUS	fx-300 ES	EL-531LH		HP 300S
fx-82 SX	fx-300 MS	EL-531RH	INSYSTEM	IN-82SC
fx-82 SUPER	fx-300 W	EL-531V	JASTEK	JasCS1
fx-83 ES	fx-350 ES	EL-531VH	KENKO	KK 82-TL
fx-83 ES PLUS	fx-350 ES PLUS	EL-531W		KK 87-MS
fx-83 GT PLUS	fx-350 HB	EL-531WH		KK 350-TL
fx-83 MS	fx-350 MS	EL-531XH	RADIOSHACK	EC-4032
fx-83 WA	fx-350 TL	EL-533X	RSB	FB 82 ES PLUS
fx-85 ES	fx-550	EL-546VA		FB-350MS
fx-85 ES PLUS	fx-550 S	EL-W531	SCHOLAR	KD-350MS
fx-85 GT PLUS	fx-570 AD	EL-W531G	TANDY	EC-4032
fx-85 MS	fx-570 S	EL-W531H	TEXAS INSTRUMENTS	TI 30ECO RS
fx-85 SA	fx-580	EL-W531HAB		TI 30SLR
fx-85 WA	fx-820 MS	EL-W531XH		TI 30XA
fx-95 ES PLUS	fx-901	EL-W532XH		TI 30X IIB
fx-95 MS	fx-911 W			TI 30X IIS
fx-96 SG PLUS	fx-911 WA			TI-34 MultiView
	fx-911 Z			TI 36X Solar
	fx-992 S			TI 40 College II
	HL4			Albert2 (TX-842)
				TEXET
				Albert5 (TX-895)
			XINNUO	FN 350TL