1) | **Software Engineering Introduction - Questions**

(a) Software has become a limiting factor in the evolution of computer-based systems.
(b) Software is composed of Programs and Data.
(c) Latest Hardware is sufficient for producing good quality Software.
(d) A Software project which has slipped its time schedule, can be expedited by merely introducing more programmers.
(e) Quality assurance mechanisms can be applied to a project from the inception without waiting until the programs are coded.

2)

Each statement from Column A has to be matched with the most appropriate one from column B.

	Column A		Column B
(i)	Software that heavily interacts with Hardware	(A)	Artificial Intelligence Software
(ii)	Software that monitors, collects, formats and analyses information from an external environment and produces required information within strict time constraints	(B)	Engineering and Scientific Software
(iii)	Software that resides in read-only memory and is used to control products and systems	(C)	System Software
(iv)	Software characterized by number-crunching algorithms and used in space shuttle orbital dynamics, astronomy etc.	(D)	Real Time Software
(v)	Software that accesses large Databases and restructures existing data facilitating Management decision making or Business operations	(E)	Embedded Software
(vi)	Software used in Pattern recognition, Expert Systems and Game playing	(F)	Business Software

(b) (i) & (F), (ii) & (D), (iii) & (A), (iv) & (B), (v) & (C), (vi) & (E)
(c) (i) & (C), (ii) & (D), (iii) & (E), (iv) & (B), (v) & (F), (vi) & (A)
(d) (i) & (D), (ii) & (A), (iii) & (B), (iv) & (C), (v) & (E), (vi) & (F)
(e) (i) & (A), (ii) & (B), (iii) & (C), (iv) & (E), (v) & (F), (vi) & (D)

3) Which of the following statement(s) is/are true?

(a) Hardware advances continue to outpace the ability to build Software to tap the potential of Hardware.
(b) Productivity of software people is sufficient to meet the demand for computer based solutions.
(c) Enormous economic damage and potential human suffering can occur when Software fails.

(d) Existing programs can be easily supported and enhanced using automated tools even if we have used poor design methods.
(e) Building highly reliable and quality Software is not a problem as standards and procedures for building Software are available.

4) The evolution of software has gone through the following eras:

(i) The early years
(ii) Second era
(iii) Third era
(iv) Fourth era

It is required to associate the following phrases labelled A-D with the correct era:

(A) CASE tools
(B) Assembly language
(C) Machine code
(D) COBOL

Which of the following represents the correct association?

(a) (A) – (i), (B) – (ii), (C) – (iii), (D) – (iv)
(b) (A) – (iii), (B) – (iv), (C) – (ii), (D) – (i)
(c) (A) – (ii), (B) – (iii), (C) – (iv), (D) – (i)
(d) (A) – (iv), (B) – (ii), (C) – (i), (D) – (iii)
(e) (A) – (ii), (B) – (i), (C) –(iii), (D) – (iv)

5) Identify the specific characteristics of software development projects when compared with other manufacturing projects.

(a) In large and complex systems, it is impossible for end-users to anticipate how they will use the new Software before the system is put into use.
(b) Software development projects mainly involve team work.
(c) Quality assurance is very important in software projects.
(d) Software requirements change regularly.
(e) Software is primarily intangible; much of the process of creating software is also intangible, involving experience, thought and imagination.

6) Identify, from among the following, the factor(s) which contribute to the software crisis.

(a) Non- availability of suitable hardware
(b) Software is costly
(c) Software cannot be reused.
(d) Time schedules and cost estimates of software projects are grossly inaccurate.
(e) Difficulty of maintenance of software

7) Which of the following software quality attribute(s) belong(s) to potential usefulness?

(a) Reliability (b) Portability (c) Efficiency
(d) Reusability (e) Usability