9628-01 Level 4 Diploma in Software Development Methodologies (for the Level 4 Software Developer Apprenticeship)

9628-401 Software Development Methodologies

Sample question paper answer sheet

Pass mark 23/34 (70%)

Question	Answer Key	Test specification reference
1	A	1.1a Describe the analysis stage
2	B	1.1b Describe the software design and prototyping stage
3	B	1.1b Describe the software design and prototyping stage
4	C	1c Describe how to select appropriate development languages and tools
5	D	1.1d Describe software testing methodologies
6	D	1.1d Describe software testing methodologies
7	C	1.1e Describe the deployment stage
8	D	1.1f Describe the maintenance stage
9	D	1.1f Describe the maintenance stage
10	C	1.2 Explain the importance of the following in a procedural (linear)/staged (iterative) software development lifecycle
11	D	1.2 Explain the importance of the following in a procedural (linear)/staged (iterative) software development lifecycle
12	A	2.1a Describe the agile software development methodology • Structure and stages • Principles and rationale
13	D	2.1b Describe the waterfall software development methodology • Structure and stages • Principles and rationale
14	A	2.1c Describe the advantages and disadvantages of agile as a software development methodology
15	B	2.1d Describe the advantages and disadvantages of waterfall as a software development methodology
16	B	2.1e Explain the suitability of software development methodologies for different types of project

17	C	2.1f Describe consequences of poor selection of development methodologies
18	B	3.1a Describe typical contractual constraints to software development (eg time, cost, quality, compliance, regulatory, innovation criteria)and how they are mitigated
19	A	3.1b Describe typical configuration management and change control constraints to software development and how they are mitigated
20	D	3.1c Describe typical business constraints that might lead to alternative practices for software development (e.g. Agile over waterfall, rapid prototyping, modularity over performance)
21	C	3.2a Describe how to identify potential risks and flag them within project management team
22	B	3.2b Describe how project managers identify the additional technical resource for a project
23	A	3.2c Describe how to support effective cost estimation within the project management team
24	A	3.2d Describe how to accurately forecast effort (time) required within the project management team
25	C	4.1a Describe the roles and responsibilities within the software development and implementation lifecycle • Business analysts
26	B	4.1a Describe the roles and responsibilities within the software development and implementation lifecycle • Business analysts
27	D	4.1b Describe the roles and responsibilities within the software development and implementation lifecycle • Designers • Design a software model that fulfil the specifications
28	A	4.1c Describe the roles and responsibilities within the software development and implementation lifecycle • Developers
29	A	4.1d Describe the roles and responsibilities within the software development and implementation lifecycle • Testers
30	C	4.1d Describe the roles and responsibilities within the software development and implementation lifecycle • Testers
31	B	4.1e Describe the roles and responsibilities within the software development and implementation lifecycle • Technical architects
32	C	4.2a Describe how key roles and responsibilities can be used to form teams • Project manager • Business analysts • Designers • Developers • Testers • Technical architects

33	A	4.2b Describe factors that influence effective team working and their importance including internal and external factors: • Communication • Composition • Interpersonal relationships • Maturity of the team • Skill set • Leadership style • Resources • Climate and environment of the organisation • Sponsor
34	C	4.2b Describe factors that influence effective team working and their importance including internal and external factors: • Communication • Composition • Interpersonal relationships • Maturity of the team • Skill set • Leadership style • Resources • Climate and environment of the organisation • Sponsor