**Mid-Term Exam (Đề 2)**

**Review of attempt 1**

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| --- | --- |
| **Started on** | Monday, 8 November 2010, 10:01 AM |
| **Completed on** | Monday, 8 November 2010, 11:30 AM |
| **Time taken** | 1 hour 29 mins |
| **Grade** | **85** out of a maximum of 100 (**85**%) |

Question**1**

Marks: 2

Which of the following is NOT a problem associated with measuring software productivity as "the rate of output per unit of input?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. How do we define "the rate of output"? Incorrect |  |
|  | b. How do we define "the unit of input"? Incorrect |  |
|  | c. There is no definition of the quality of the output Incorrect |  |
|  | d. There is no definition of the quality of the input Correct |  |

Incorrect

Marks for this submission: 0/2.

Question**2**

Marks: 15

What are some of the key characteristics of agile methodologies?

Answer:

|  |
| --- |
| Some of key characteristics of Agile methodologies: + Assume that requirements is emerge + Product Owner/ User works closely with development team on a daily basic + Schedule, budget, architect, design for project evolve as requirements emerge + Change is managed informally + Product built so you always have a working system and can release at any time + Rework (refactoring) is good |

Correct

Marks for this submission: 15/15.

Question**3**

Marks: 2

Which of the following is NOT a process that is usually found in any software development methodology?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Resource bonuses Correct |  |
|  | b. Product requirements Incorrect |  |
|  | c. Unit and integration testing Incorrect |  |
|  | d. System testing Incorrect |  |
|  | e. Implementation and delivery Incorrect |  |
|  | f. None of the above Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**4**

Marks: 2

Which of the following is NOT true about work breakdown structure? (Choose the best answer)

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. A WBS is a tool used to define and group a project's discrete work elements (or tasks) in a way that helps organize and define the total work scope of the project. Incorrect |  |
|  | b. A WBS is a dynamic tool and can be revised and updated as needed by the project manager. Incorrect |  |
|  | c. A WBS is a strategy map that is helpful to project management team. Incorrect |  |
|  | d. It is developed after dependencies are identified and activity durations are estimated. Incorrect |  |
|  | e. b, c, & d Incorrect |  |
|  | f. c & d Correct |  |
|  | g. None of the above Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**5**

Marks: 2

Which of the following is the best description for the term "information" in software measurement?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Information is the transformation of data that we collected, usually by using graphs or tables, into something that we can get meaning from. Correct |  |
|  | b. A message received and understood Incorrect |  |
|  | c. A collection of facts from which conclusions may be drawn; "statistical data" Incorrect |  |
|  | d. None of the above Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**6**

Marks: 2

What does a burn down chart show?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Feature estimates (user stories, backlog items, requirements, etc.) successfully delivered by iteration Incorrect |  |
|  | b. A trended view of task, ideal day or story point progress Correct |  |
|  | c. Actual resource hours per iteration Incorrect |  |
|  | d. Actual costs incurred per iteration Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**7**

Marks: 2

Which chart is best for displaying percentages?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Column Incorrect |  |
|  | b. Bar Incorrect |  |
|  | c. Line Incorrect |  |
|  | d. Radar Incorrect |  |
|  | e. Pie Correct |  |

Correct

Marks for this submission: 2/2.

Question**8**

Marks: 2

Which of the following is the most appropriate action you can take if your user or management keep adding new (unplanned) features to your product?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. You can use a burn-up/down chart to show the team's progress and the fact that the project's definition of done continues to change Correct |  |
|  | b. You can ask them to stop changing the product Incorrect |  |
|  | c. You can use earned value to track project progress Incorrect |  |
|  | d. The customer is always right, so you should do as they ask Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**9**

Marks: 2

Which of the following is NOT a strength of agile methodologies?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Guaranteed to meet customer needs Incorrect |  |
|  | b. Supports technically weak staff Correct |  |
|  | c. Minimal documentation. Incorrect |  |
|  | d. Development team is trusted Incorrect |  |
|  | e. Each sprint produces a potentially shippable product Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**10**

Marks: 2

Which chart is best for displaying trends over time?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Column Incorrect |  |
|  | b. Bar Incorrect |  |
|  | c. Line Correct |  |
|  | d. Radar Incorrect |  |
|  | e. Pie Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**11**

Marks: 2

Which of the following is NOT part of the SMART acronym?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Stable Correct |  |
|  | b. Measurable Incorrect |  |
|  | c. Attainable Incorrect |  |
|  | d. Realistic Incorrect |  |
|  | e. Timely Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**12**

Marks: 2

Which of the following is NOT a necessary measurement program step?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Build business value Correct |  |
|  | b. Identify the data to collect Incorrect |  |
|  | c. Identify data collection and storage procedures Incorrect |  |
|  | d. Acquire the tools needed Incorrect |  |
|  | e. Establish where the data will reside Incorrect |  |

Incorrect

Marks for this submission: 0/2.

Question**13**

Marks: 2

Which of the following is NOT a basic approach to software productivity improvement?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Reduce product costs by eliminating investments in product features that customers do not find valuable. Incorrect |  |
|  | b. Reduce indirect costs by streamlining processes and eliminating inefficiencies in development, delivery and support. Incorrect |  |
|  | c. Increase revenue by adding more value to a product so customers will pay more for it. Incorrect |  |
|  | d. Increase profits by measuring individual performance Correct |  |

Incorrect

Marks for this submission: 0/2.

Question**14**

Marks: 2

Which of the following most accurately describes the Budgeted Cost of Work Scheduled (BCWS)?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. The plan of record Correct |  |
|  | b. The cost of completed work Incorrect |  |
|  | c. How much “value” was “earned” by the work performed Incorrect |  |
|  | d. BCWS = BCWP – ACWP Incorrect |  |

Incorrect

Marks for this submission: 0/2.

Question**15**

Marks: 2

Which of the following is NOT correct about bar chart? (Choose the best answer)

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. A bar chart or bar graph is a chart with rectangular bars with lengths proportional to the values that they represent. Incorrect |  |
|  | b. Ideal for showing the variations in the value of an item over time, or for showing the values of several items at a single point in time Incorrect |  |
|  | c. Use vertical bars to display values of one or more items Incorrect |  |
|  | d. Use for plotting continuos data Incorrect |  |
|  | e. c & d Correct |  |
|  | f. None of the above Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**16**

Marks: 2

Which of the following does NOT describe ROI?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. ROI describes how much time is required (the payback period) to recover the original investment. Incorrect |  |
|  | b. ROI is calculated as the cost of the project/annual cash inflows Incorrect |  |
|  | c. According to ROI the best investment is the one with the shortest payback period. Incorrect |  |
|  | d. ROI describes how much money is required (the payback amount) to make the investment worthwhile Correct |  |

Incorrect

Marks for this submission: 0/2.

Question**17**

Marks: 2

Which of the following are agile methodologies typically NOT concerned with?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. The customer being collocated with developers Incorrect |  |
|  | b. Being able to build a production ready release of the product at the end of each sprint Incorrect |  |
|  | c. The customer accepting the product after each sprint Incorrect |  |
|  | d. Completeness of requirements Correct |  |

Correct

Marks for this submission: 2/2.

Question**18**

Marks: 2

Which of the following are NOT resource types?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Reusable (trucks, computers, etc.) Incorrect |  |
|  | b. Consumed (money, natural resources, etc.) Incorrect |  |
|  | c. People Incorrect |  |
|  | d. Illegal (bribes, jail, etc.) Correct |  |
|  | e. None of the above Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**19**

Marks: 2

Which of the following is NOT an objective when developing a schedule?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. How do we organize the work and resources over time to complete the work? Incorrect |  |
|  | b. What schedule alternatives do we have? Incorrect |  |
|  | c. Are we making effective use of resources? Incorrect |  |
|  | d. Can we easily communicate with all project stakeholders? Incorrect |  |
|  | e. How much will this project cost? Correct |  |
|  | f. None of the above Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**20**

Marks: 2

Which of the following are traditional methodologies typically NOT concerned with?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Completeness of requirements Incorrect |  |
|  | b. Testability of requirements Incorrect |  |
|  | c. Not doing unnecessary work (unnecessary work - waste) Correct |  |
|  | d. Reducing rework (rework = waste) Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**21**

Marks: 15

What are your objectives when developing a schedule?

Answer:

|  |
| --- |
| When developing a schedule, objectives are:  Primary Obj: How do we organize the work and resources over time to complete the work? + Within a least amount of elapsed time + With the least Cost + With the least Risk  Second Obj:  + What schedule alternatives do we have? + Are you making effective use of resources? + Can we easily communicate with all project stakeholders? |

Partially correct

Marks for this submission: 14/15.

Question**22**

Marks: 2

Which of the following does NOT accurately describe NPV?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Net Present Value (NPV) measures the profitability of a project by comparing the value of a dollar today to the value of that same dollar in the future, taking inflation and returns into account. Incorrect |  |
|  | b. Net Present Value (NPV) measures the profitability of a project by comparing the value of a dollar today to the value of that same dollar in the future, but does not take inflation and returns into account. Correct |  |
|  | c. NPV analysis is sensitive to the reliability of future cash inflows that an investment or project will yield. Incorrect |  |
|  | d. If the NPV of a prospective project is positive, it should be accepted. Incorrect |  |

Incorrect

Marks for this submission: 0/2.

Question**23**

Marks: 2

Which of the following most accurately describes the Budgeted Cost of Work Performed (BCWP)?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. The cost of completed work Incorrect |  |
|  | b. The plan of record Incorrect |  |
|  | c. BCWP = ACWP – BCWS Incorrect |  |
|  | d. How much “value” was “earned” by the work performed Correct |  |

Correct

Marks for this submission: 2/2.

Question**24**

Marks: 20

Why is using Earned Value Management a problem for projects using an agile methodology?

Answer:

|  |
| --- |
| Using Earned value Management a problem for projects using an Agile Method because: To implement EVM You need to have a: -WBS broken into work packages associated with specific deliverable -Baseline schedule and budget -An effort logging system to track work performed agaisnt tasks  In agile methodologies: + requirements always change + only have story points + schedule depend on customer's need + Budget depend on which story point is finished v.v. |

Comment: With EVM you create a plan of record decomposed via a work breakdown structure into discrete ‘work packages’ that cover the entire project. This is a problem for Agile methods because with Agile methods scope evolves as the project evolves.

Correct

Marks for this submission: 20/20.

Question**25**

Marks: 2

Which of the following is NOT a strength of traditional methodologies?

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Works well for projects with stable product definition Incorrect |  |
|  | b. Works well for projects with well-understood technologies Incorrect |  |
|  | c. Quality constraints stronger than cost & schedule Incorrect |  |
|  | d. Supports technically weak staff Incorrect |  |
|  | e. Unimportant requirements are not developed Correct |  |

Correct

Marks for this submission: 2/2.

Question**26**

Marks: 2

Which of the following is correct about the Schedule Performance Index (SPI)? (Choose the best answer)

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. SPI = BCWS / BCWP Incorrect |  |
|  | b. SPI = BCWP / BCWS Incorrect |  |
|  | c. SPI > 1 -> the project is overachieving Incorrect |  |
|  | d. SPI < 1 -> the project is underachieving Incorrect |  |
|  | e. SPI = 1 -> the project is on plan Incorrect |  |
|  | f. All of the above is correct except a Correct |  |
|  | g. All of the above is correct except b Incorrect |  |

Correct

Marks for this submission: 2/2.

Question**27**

Marks: 2

Which of the following is NOT correct about Duration & Effort? (Choose the best answer)

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. Resource Hours worked = Effort Incorrect |  |
|  | b. Elapsed Calendar time = Effort Incorrect |  |
|  | c. Resource Hours worked = Duration Incorrect |  |
|  | d. Elapsed Calendar time = Duration Incorrect |  |
|  | e. a & d Incorrect |  |
|  | f. b & c Correct |  |

Correct

Marks for this submission: 2/2.

Question**28**

Marks: 2

The Actual Cost of Work Performed (ACWP) is:

Choose one answer.

|  |  |  |
| --- | --- | --- |
|  | a. The cost of the work that has been planned Incorrect |  |
|  | b. The value of the work that remains Incorrect |  |
|  | c. The cost of the work that has been completed Correct |  |
|  | d. The value of the work that has been completed Incorrect |  |

Incorrect

Marks for this submission: 0/2.