Program: Master of Computer Applications

Curriculum Scheme: CBCGS

Examination: MCA <2020>

Course Code: MCA102 and Course Name: MCA

Time: 2 HRS Max. Marks: 80

Section I - MCQS (40 Marks) – 40 Minutes

Section II – Subjective (40 Marks) – 80 Minutes

==============================================================================

**8. The timings**

**If the Examination Time is 10:00 am to 12:00 noon**

**Section I – 10:00 am – 10:40 am**

**Section II – 10:40 am – 12:00noon**

**If the Examination Time is 2:00 pm to 4:00 pm**

**Section I – 2 :00 pm – 2:40 pm**

**Section II – 2 :40 pm to 4:00 pm**

=============================================================================

**Section I**

**Note to the students:- All the Questions are compulsory and carry equal marks .**

|  |  |
| --- | --- |
| Q1. | Choose the correct sequence to calculate function point based on following activities:   1. F = 14 \* scale 2. Calculate Function Point 3. Calculate Unadjusted Function Point (UFP) 4. CAF = 0.65 + ( 0.01 \* F ) |
| Option A: | 3 – 1-4-2 |
| Option B: | 1-2-3-4 |
| Option C: | 4-3-2-1 |
| Option D: | 3-1-2-4 |
|  |  |
| Q2. | “Each newly added requirement will instantly incorporated and the system is re-released” is the feature of \_\_\_\_\_\_\_\_\_\_ model. |
| Option A: | Spiral |
| Option B: | Extreme Programming |
| Option C: | Incremental |
| Option D: | A and C |
|  |  |
| Q3. | The best use of prototyping model is to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Choose the correct option. |
| Option A: | To generate quick software to save cost and time |
| Option B: | To generate quick design which will be evaluated by customer to refine requirements of software. |
| Option C: | To generate small components |
| Option D: | To present what developers can design |
|  |  |
| Q4. | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the measure of practicality of a technical solution and the availability of technical resources and expertise. |
| Option A: | Operational Feasibility |
| Option B: | Schedule Feasibility |
| Option C: | Technical Feasibility |
| Option D: | Feasibility Report |
|  |  |
| Q5. | Product features are described by |
| Option A: | Non-functional requirements |
| Option B: | Undreamt requirements |
| Option C: | Functional requirements |
| Option D: | Unknown requirements |
|  |  |
| Q6. | In data dictionary, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ represents The smallest unit of data which cannot be decomposed further. |
| Option A: | Data Structure |
| Option B: | Data Element |
| Option C: | Data flow |
| Option D: | Data Store |
|  |  |
| Q7. | Interview is the fact finding technique used to |
| Option A: | Find and verify facts |
| Option B: | Get the end-user involved |
| Option C: | Solicit ideas and opinions |
| Option D: | All of the above \*\* |
|  |  |
| Q8. | n below mentioned formula, EAF stands for \_\_\_\_\_\_ and its value lies in range of \_\_\_\_\_\_\_\_\_ |
| Option A: | Effort Adjustment Factor, 0.9 to 1.4 |
| Option B: | Effort Adjustment Factor, 1.0 to 2.0 |
| Option C: | Effort Adjustment Factor, -1 to 1 |
| Option D: | None of these |
|  |  |
| Q9. | What is the most common measure of quality with respect to function points? |
| Option A: | Defects per KLOC |
| Option B: | Errors per KLOC |
| Option C: | $ per KLOC |
| Option D: | Pages of documentation per KLOC |
|  |  |
| Q10. | Which among these are not Degree of Rigor? |
| Option A: | Casual |
| Option B: | Structured |
| Option C: | Semi structured |
| Option D: | Strict |
|  |  |
| Q11. | The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a document that describes how the procurement processes will be managed, from developing documentation for making outside purchases or till contract closure. |
| Option A: | SRS |
| Option B: | RFQ |
| Option C: | Make or buy decision |
| Option D: | procurement management plan |
|  |  |
| Q12. | Which one of the following is not the key component in function point analysis? |
| Option A: | External inputs |
| Option B: | External outputs |
| Option C: | External operations |
| Option D: | External inquiries |
|  |  |
| Q13. | A \_\_\_\_\_\_\_\_\_\_\_\_ is sequence of tasks such that a delay in any of the tasks will cause a delay to the entire project. |
| Option A: | critical path |
| Option B: | Work breakdown structure |
| Option C: | Activity Network diagram |
| Option D: | Gnatt Chart |
|  |  |
| Q14. | Choose the correct formula for:  **Latest finish time** (LF) of a task = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | ES + duration of the task |
| Option B: | MT - Maximum of all paths from this task to finish |
| Option C: | Maximum of all paths from start to this task |
| Option D: | difference between MT and the maximum of all paths from this task to the finish |
|  |  |
| Q15. | "The team flies into action in an attempt to correct the problem rapidly without any prior planning." This risk management strategy is called: |
| Option A: | rapid fire strategy |
| Option B: | Normal risk strategy |
| Option C: | Proactive risk strategy |
| Option D: | reactive risk strategy |
|  |  |
| Q16. | The model that assumes that effort and development time are functions of product size alone is |
| Option A: | Basic COCOMO model |
| Option B: | Intermediate COCOMO model |
| Option C: | Detailed COCOMO model |
| Option D: | All |
|  |  |
| Q17. | Which one of the following is the correct order in which a software project manager estimates various project parameters while using COCOMO? |
| Option A: | Cost, effort, duration, time |
| Option B: | Cost, effort, duration, size |
| Option C: | size, effort, duration, cost |
| Option D: | duration, effort, cost, time |
|  |  |
| Q18. | The \_\_\_\_\_\_\_\_\_\_\_\_ to find the root and cause of the problem |
| Option A: | Data Flow Diagram |
| Option B: | Control Charts |
| Option C: | Ishikawa diagram |
| Option D: | Histogram |
|  |  |
| Q19. | Defining total cost of ownership and defining total benefits of ownership are important steps of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Option A: | Developing business case |
| Option B: | Developing SRS |
| Option C: | Conducting feasibility study |
| Option D: | Developing UML models |
|  |  |
| Q20. | Maturity levels in CMM are:- |
| Option A: | 6 |
| Option B: | 4 |
| Option C: | 3 |
| Option D: | 5 |
|  |  |
|  |  |