

COEPD – Traditional Development – 100 Marks – Pass 95%

Instructions to follow:

- 1.Copy paste (either image, diagram or text) is not entertained. If done, the document will not be evaluated.
- 2.After submission of the answers of this prep exam, You should be prepared to attend viva and justify your answers in the prep exams. If in Viva, participant is NOT justifying the answers, Viva will be repeated until Candidates justify 95% correctness.
- 3.Mentor calls are scheduled only if the participant have submitted their task at least for one time. (should apply their knowledge in this task first)
- 4.For attempting prep exams participant should be thorough on the topics using their references.
- 5.Please format the document properly (Always have a question no., question and answer).
- 6.Have a consistent format (Font name: Arial/ Calibri -Font size 12, Font Color: Black).
- 7.Few Questions are related to the case study, if check Questions thoroughly before you answer.
- 8.Answers should be elaborated in detail(*not as per the allotted marks).
9. Please focus on learning and applying the knowledge as this knowledge will be helpful in contributing at your BA job.

Online Agriculture Products Store

Mr. Henry, after being successful as a businessman and has become one of the wealthiest persons in the city. Now, Mr. Henry wants to help others to fulfil their dreams. One day, Mr. Henry went to meet his childhood friends Peter, Kevin and Ben. They live in a remote village and do farming. Mr. Henry asked his friends if they are facing any difficulties in their day-to-day work.

Peter told Mr. Henry that he is facing difficulties in procuring fertilizers which are very important for farm. Kevin said that he is also facing the same problem in-case of buying seeds for farming certain crops. Ben raised his concern on lack of pesticides which could help in greatly reducing pests in crops.

After listening to all his friends' problems, Mr. Henry thought that this is a crucial problem faced not only by his friends but also by so many other farmers. So, Mr. Henry decided to make an online agriculture product store to facilitate remote area farmers to buy agriculture products. Through this Online Web / mobile Application, Farmers and Companies (Fertilizers, seeds and pesticides manufacturing Companies) can communicate directly with each other.

The main purpose to build this online store is to facilitate farmers to buy seeds, pesticides, and fertilizers from anywhere through internet connectivity. Since new users are involved, Application should be user friendly.

This new application should be able to accept the product (fertilizers, seeds, pesticides) details from the manufacturers and should be able to display them to the Farmers. Farmers will browse through these products and select the products what they need and request to buy them and deliver them to farmers location.

Mr. Henry has given this project through his Company SOONY. In SOONY Company, Mr Pandu is Financial Head and Mr Dooku is Project Coordinator. Mr. Henry , Mr Pandu , and Mr Dooku formed one Committee and gave this project to APT IT SOLUTIONS company for Budget 2 Crores INR and 18 months Duration under CSR initiative. Peter, Kevin and Ben are helping the Committee and can be considered as Stakeholders share requirements for the Project.

Mr Karthik is the Delivery Head in APT IT SOLUTIONS company and he reached out to Mr Henry through his connects and Bagged this project. APT IT SOLUTIONS company have Talent pool Available for this Project. Mr Vandanam is project Manager, Ms. Juhi is Senior Java Developer, Mr

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Teyson, Ms Lucie, Mr Tucker, Mr Bravo are Java Developers. Network Admin is Mr Mike and DB Admin is John. Mr Jason and Ms Alekya are the Tester. And you joined this team as a BA.

Question 1 – BPM - 2 Marks

Identify Business Process Model for Online Agriculture Store – (Goal, Inputs, Resources, Outputs, Activities, Value created to the end Customer)

Question 2 – SWOT - 2 Marks

Mr Karthik is doing SWOT analysis before he accepts this project. What Aspects he Should consider as Strengths, as Weaknesses, as Opportunity and as Threats.

Question 3 – Feasibility study - 1 Marks

Mr Karthik is trying to do feasibility study on doing this project in Technology (Java), Please help him with points (HW SW Trained Resources Budget Time frame) to consider in feasibility Study.

Question 4 – Gap Analysis - 1 Marks

Mr Karthik must submit Gap Analysis to Mr Henry to convince to initiate this project. What points (compare AS-IS existing process with TO-BE future Process) to showcase in the GAP Analysis

Question 5 – Risk Analysis - 3 Marks

List down different risk factors that may be involved (BA Risks And process/Project Risks)

Question 6 – Stakeholder Analysis (RACI Matrix) - 3 Marks

Perform stakeholder analysis (RACI Matrix) to find out the key stakeholders who can take Decisions and Who are the influencers

Question 7 – Business Case Document - 3 Marks

Help Mr Karthik to prepare a business case document

Question 8 – Four SDLC Methodologies - 3 Marks

The Committee of Mr. Henry , Mr Pandu , and Mr Dooku and Mr Karthik are having a discussion on Project Development Approach.

Mr Karthik explained to Mr. Henry about SDLC. And four methodologies like Sequential Iterative Evolutionary and Agile. Please share your thoughts and clarity on Methodologies

Question 9 – Waterfall RUP Spiral and Scrum Models - 3 Marks

They discussed models in SDLC like waterfall RUP Spiral and Scrum . You put forth your understanding on these models

When the APT IT SOLUTIONS company got the project to make this online agriculture product store, there is a difference of opinion between a couple of SMEs and the project team regarding which methodology would be more suitable for this project. SMEs are stressing on using the V model and the project team is leaning more onto the side of waterfall model. As a business analyst, which methodology do you think would be better for this project?

Question 10 – Waterfall Vs V-Model - 2 Marks

Write down the differences between waterfall model and V model.

Question 11 – Justify your choice - 1 Marks

As a BA, state your reason for choosing one model for this project

Question 12 – Gantt Chart - 2 Marks

The Committee of Mr. Henry, Mr Pandu, and Mr Dooku discussed with Mr Karthik and finalised on the V Model approach (RG, RA, Design, D1, T1, D2, T2, D3, T3, D4, T4 and UAT)

Mr Vandanam is mapped as a PM to this project. He studies this Project and Prepares a Gantt chart with V Model (RG, RA, Design, D1, T1, D2, T2, D3, T3, D4, T4 and UAT) as development process and the Resources are PM, BA, Java Developers, testers, DB Admin, NW Admin.

Question 13 – Fixed Bid Vs Billing - 2 Marks

The Committee of Mr. Henry, Mr Pandu, and Mr Dooku is now discussing about the funds and how to release the funds for development. They were studying Fixed Bid model and Billing Model.

Share your knowledge on Fixed Bid model and Billing Model.

The Committee freeze the Billing Model and agreed to release funds against the timesheets submitted for every 2 weeks. Every Alternate Friday EOB, Mr Karthik will forward the Development Team Timesheets and in 3 working days, The Committee will verify and release funds. The Committee proposed to have a Quarterly Audit on the Project progress.

Question 14,15,16,17,18,19,20 – Timesheets - 7 Marks

Please share Sample Timesheets of a BA in various SDLC Stages RG, RA, Design, D1, T1, D2,T2, D3, T3, D4, T4 and UAT, Deployment n Implementation

- RG Timesheet of a BA
- RA Timesheet of a BA
- Design Timesheet of a BA
- Development Timesheet of a BA
- Testing Timesheet of a BA
- UAT Timesheet of a BA
- Deployment n Implementation Timesheet of a BA

Question 21 – Audits - 3 Marks

5 Quarterly Audits are planned Q1 , Q2, Q3, Q4, Q5 for this Project

What is your knowledge on how these Audits will happen for a BA ?

Question 22 – BA Approach Strategy - 5 Marks

Before the Project is going to Kick Start, The Committee asked Mr Karthik to submit BA Approach Strategy

Write BA Approach strategy (As a business analyst, what are the steps that you would need to follow to complete a project – What Elicitation Techniques to apply, how to do Stakeholder Analysis RACI/ILS, What Documents to Write, What process to follow to Sign off on the Documents, How to take Approvals from the Client, What Communication Channels to establish n implement, How to Handle Change Requests, How to update the progress of the project to the Stakeholders, How to take signoff on the UAT- Client Project Acceptance Form)

Your Team

Project Manager - Mr Vandanam
Senior Java Developer - Ms. Juhi
Java Developers - Mr Teyson, Ms Lucie, Mr Tucker, Mr Bravo
Network Admin - Mr Mike
DB Admin - Mr John.
Testers - Mr Jason and Ms Alekya
BA - You

Technical Team have assembled to discuss on the Project approach and have finalised to follow 3-tier architecture for this project.

Question 23 – 3-Tier Architecture - 1 Marks

Explain and illustrate 3-tier architecture?

Question 24 – BA Approach Strategy for Framing Questions - 3 Marks

Business Analyst should keep What points in his/her mind before he frames a Question to ask to the Stakeholder

(5W 1H – SMART – RACI – 3 Tier Architecture – Use Cases, Use case Specs, Activity Diagrams, Models, Page designs)

Question 25 – Elicitation Techniques - 3 Marks

As a Business Analyst, What Elicitation Techniques you are aware of? (BDRFOWJIPQU)

Question 26 – This project Elicitation Techniques - 1 Marks

Which Elicitation Techniques can be used in this Project and Justify your selection of Elicitation Techniques?

Prototyping
Use case Specs
Document Analysis
Brainstorming

Fertilizers, seeds, pesticides details from the manufacturers and should be able to display them to the Farmers.

To gather the business requirements from the client, you went to SOONY and met Mr. Henry. When Mr. Henry was asked about the project and what are they expecting from the project, Mr. Henry stated that he is expecting to have a login for all its users (fertilizers, seeds, pesticides manufacturers and Farmers) , a product catalog of fertilizers, seeds, pesticides, a search option to search for products, payment process, and delivery tracking.

After doing the stakeholder analysis, you have found out that Peter, Kevin, Ben are the key stakeholders and you have scheduled an appointment to meet them. After meeting with them and trying to gather the stakeholder requirements, Kevin said that, a Farmer should be able to browse through the products catalog once they visit the website and need to have a search option so that they can search for any product they need. Peter said that, if a farmer wants to buy any product or add them to buy-later list, they need to login first using their email id and password. If it is a new user, then they can create a new account by submitting their email ID and creating a secure password. Ben added saying that, Farmers needs to have an easy-to-use payment gateway which should include cash-on-delivery (COD), Credit/Debit card and UPI options so that the user's experience should be better. Kevin mentioned that, a user gets an email confirmation regarding their order status. A delivery tracker to track the whereabouts of their order.

Identify Business Requirements (which includes Stakeholder Requirements)

BR001 – Farmers should be able to search for available products in fertilizers, seeds, pesticides

BR002 – Manufacturers should be able to upload and display their products in the application

Question 27 – 10 Business Requirements- 5 Marks

Make suitable Assumptions and identify at least 10 Business Requirements.

Question 28 –Assumptions- 2 Marks

List your assumptions

Question 29 – This project Requirements Priority - 1 Marks

Give Priority 1 to 10 numbers (1 being low priority – 10 being high priority) to these Requirements after discussions with the stakeholders

Req ID	Req Name	Req Description	Priority
BR001	Farmer Search for Products	Farmers should be able to search for available products in fertilizers, seeds, pesticides	8
BR002	Manufacturers upload their Products	Manufacturers should be able to upload and display their products in the application	8

Once the requirements are finalized, as a business analyst, one of the major roles is to act as a liaison between the client and the project team. To gather the requirements correctly from the client side and then to deliver those requirements to the project team in a way they understand.

To make the project team understand the requirements, you need to convert those requirements into UML diagrams and screen mock-ups.

Question 30 – Use Case Diagram - 3 Marks

Draw use case diagram

Question 31 – (minimum 5) Use Case Specs - 3 Marks

Prepare use case specs for all use cases

Question 32 – (minimum 5) Activity Diagrams - 3 Marks

Activity diagrams

Question 33 – Functional Requirements - 7 Marks

Identify minimum 20 functional requirements

Example :

Functional requirement: When an order is fulfilled, the local printer shall print a packing slip.

Non-Functional Requirement: Packing slips shall be printed on both sides of 4"x 6" white paper, the standard size for packing slips used by local printers.

Req ID	Req Name	Req Description	Priority
FR0001	Farmer Registration	Farmers should be able to register with the application	8
FR0002	Farmer Search for Products	Farmers should be able to search for available products in fertilizers, seeds, pesticides	8
		An ISO 9001:2015 Certified	
NFR0101	Page Loading Time	Each Page should load within 2 seconds time	9
NFR0102	WCAG 2.1.	The system must meet Web Content Accessibility Guidelines WCAG 2.1.	8

Question 34–Minimum 5 page designs - 3 Marks

Make wireframe and prototypes

Question 35 – Tools (Visio, Balsamiq) - 3 Marks

Make a note of the Tools, which you are using for above concepts.

Question 36 – RTM - 2 Marks

A business analyst's key responsibilities are to keep track of the requirements and make sure that no requirement is missed.

Mr. Henry and peter have approached you regarding the current status of the project. How will you tackle this situation?

Prepare RTM

Req ID	Req Name	Req Description	Design	D1	T1	T4	UAT
FR0001	Farmer Registration	Farmers should be able to register with the application						
FR0002	Farmer Search for Products	Farmers should be able to search for available products in fertilizers, seeds, pesticides						
NFR0101	Page Loading Time	Each Page should load within 2 seconds time						
NFR0102	WCAG 2.1.	The system must meet Web Content Accessibility Guidelines WCAG 2.1.						

Question 37 – 10 Test Case Documents - 3 Marks

Prepare 10 Test Case Documents

Question 38 – DB Design - 2 Marks

After the requirements are thoroughly explained to the entire project team by business analyst, the Database architects have decided to do the database design and also to represent the in-flow and out-flow of data.

Draw database schema and ER diagram

Question 39 – Data Flow Diagram - 1 Marks

What is a data flow diagram? Draw a data flow diagram to represent the in-flow and out-flow of data when a Farmer is placing an order for the product

Question 40 – Change Request - 5 Marks

Due to change in the Government Taxation structure . we should change the Tax structure

How do you handle change requests in a project?

Question 41 – Change Request Vs an Enhancement - 1 Marks

As the project is in process, Ben and Kevin have contacted you. The reason is to inform you that they want the Farmers to sell their crop yields through this application i.e. Farmers should be able to add their crop yields or products and display to general public and should be able to sell them. They also want to introduce Auction system for their Crop yields. As a BA, what will be your response?

Is this a change request or an enhancement???

Question 42 – Estimations - 1 Marks

Come up with estimations – How many Manhours required

Question 43 – UAT – 2 Marks

Project has finally completed all the stages i.e., design, development, testing etc. Now, it is the role of a business analyst to contact the client for testing of the final product and have to successfully complete it. How are you going to handle this situation? And once it is done, what will be the process to close the project?

Explain UAT Acceptance process

Question 44 – Project Closure Document - 2 Marks

Explain Project closure document