Farmers Heaven Project Viva Questions & Answers (Total: 100)

PART 1: Project Basics & Functionalities

1. **What is the title of your project?**
   Farmers Heaven.
2. **What is the main purpose of Farmers Heaven?**
   To provide a unified digital platform for farmers, buyers, laborers, and agricultural advisors.
3. **Which programming languages did you use?**
   PHP, HTML, CSS, JavaScript.
4. **Which database is used in this project?**
   MySQL.
5. **What are the core modules of the project?**
   User Management, Product Listing, Order Management, Labour Hiring, Advisory Support.
6. **What are the different user roles in your system?**
   Admin, Farmer, Buyer, Labourer.
7. **How does a farmer register on the portal?**
   Through a registration form with details like name, phone, address, and type.
8. **How can a buyer place an order?**
   By adding products to cart and completing a checkout form.
9. **How is an order number generated?**
   *Using PHP function **mt_rand(100000000, 999999999)**.*
10. **Can users track their order history?**
    Yes, through the 'My Orders' page.
11. **Is login required for all features?**
    Yes, critical features are protected behind login sessions.
12. **What is the function of includes/config.php?**
    To connect to the MySQL database and manage session settings.
13. **How are laborers hired through the portal?**
    By filling out a hiring form with labor type, date, duration, and location.
14. **How are items added to cart?**
    Through a product listing where users can select and add items.
15. **What are the payment methods supported?**
    Cash on Delivery, Credit Card, Debit Card, E-Wallet.
16. **Where are product images stored?**
    *In the **admin/productimages/** folder.*
17. **Can a user update their profile?**
    Yes, from the profile section.

18. **Does the system send any notifications?**
    Only alert messages are shown using JavaScript popups.

19. **What validation is used for forms?**
    Basic HTML5 input validation.

20. **Is there any session timeout feature?**
    No explicit timeout, but session checks exist.

PART 2: Technical Components

21. **Explain the structure of the database.**
    *Includes tables like **tblproducts**, **orders**, **tblorderaddresses**, **users**, **labourrequests**.*

22. **How are products managed?**
    Admins can add/update/delete products via admin panel.

23. **How does the admin manage labor requests?**
    From the admin dashboard with approval/reject actions.

24. **How is order placement handled in the code?**
    *Using a multi-query to update **orders** and insert into **tblorderaddresses**.*

25. **How are images handled in the system?**
    Uploaded via forms and saved in a specific directory with reference stored in DB.

26. **Which CSS framework is used?**
    Custom CSS without any modern framework.

27. **Which JavaScript libraries are used?**
    jQuery, megamenu.js, easydropdown.js.

28. **What is megamenu.js used for?**
    Dropdown navigation menus.

29. **Is the design responsive?**
    Partially, but not fully mobile-friendly.

30. **Is there any use of AJAX?**
    No AJAX is implemented.

31. **How is data secured?**
    Session control and server-side validation, but no encryption.

32. **How does logout work?**
    Session is destroyed on logout.php.

33. **What kind of reports can admin view?**
    Total products, total users, order reports.

34. **How is search implemented?**
    Basic search box for product listing.

35. **How is form data processed?**
    Via POST method in PHP scripts.

36. **Can orders be updated after placement?**
    No, once placed, orders are marked with IsOrderPlaced = 1.

37. **What is the use of IsOrderPlaced column?**
    To identify unplaced vs. placed orders.

38. **What is the cart mechanism?**
    Order items are stored in ***orders*** *table with null* ***IsOrderPlaced*** *until placed.*

39. **How are totals calculated?**
    By summing price and shipping for each cart item.

40. **Is there any use of object-oriented PHP?**
    No, the code is procedural.

PART 3: Advanced & Scenario-based Questions

41. **How would you improve the UI of the system?**
    Use Bootstrap or Tailwind for responsive and modern design.

42. **What are the potential bugs you found?**
    No CSRF protection, unvalidated file uploads.

43. **How can you improve security?**
    Add input sanitization, prepared statements, and SSL.

44. **How will you host this project?**
    Using XAMPP locally or upload to a LAMP server.

45. **How can you extend this project?**
    Add mobile app, chat system, crop advisory AI.

46. **What is mysqli_multi_query?**
    A function to execute multiple SQL queries in one call.

47. **What happens if order placement fails midway?**
    Partial updates may happen, risk of inconsistency.

48. **What would you do to fix such risks?**
    Use database transactions to ensure atomicity.

49. **What will you do if two users get same order number?**
    Order numbers should be made unique using auto-increment IDs or UUIDs.

50. **Is OTP or verification implemented?**
    No, but can be added for email/phone verification.

PART 4: Additional 50 Viva Questions

51. **What are the main categories of users supported?**
    Admin, Farmer, Buyer, Labourer.
52. **How is a buyer different from a farmer in your project?**
    Farmers can list products; buyers can only purchase.
53. **Where is session management used?**
    To protect user pages and track user identity.
54. **Is there a dashboard for users?**
    Yes, showing orders and account info.
55. **Can farmers hire labor?**
    Yes, through the 'Labour Hiring' form.
56. **What does the 'Labour Hiring' module include?**
    Labour type, duration, date, and address details.
57. **Which table stores the labor requests?**
    *tblhirelabour**.*
58. **How does the admin respond to labour hiring?**
    Admin approves or rejects requests.
59. **What happens when a labourer is hired?**
    Status is updated in the database.
60. **Is there any map integration for address?**
    No, only text-based address.
61. **What happens if ZIP code is wrong?**
    There's no ZIP validation beyond maxlength.
62. **Can you export reports in this system?**
    Not directly, would require enhancement.
63. **Is there pagination in product listing?**
    No pagination is implemented.
64. **How do you prevent SQL Injection?**
    Current code lacks prevention; use prepared statements.
65. **How can performance be improved?**
    Optimize SQL queries and use AJAX for partial reloads.
66. **Can a user cancel an order?**
    No, this feature is not present.
67. **Which page shows product details?**
    *Individual product detail page under **product-details.php**.*
68. **Is there admin login validation?**
    *Yes, in **admin/login.php**.*
69. **What is logout.php used for?**
    To end sessions and redirect to login.

70. **Can users post reviews?**
    No review/rating system is present.

71. **How are queries written in PHP?**
    *Using **mysqli_query** and **mysqli_multi_query**.*

72. **What is the table name for orders?**
    *orders**.*

73. **What kind of join is used in cart query?**
    *INNER JOIN between **orders** and **tblproducts**.*

74. **What is the naming convention for tables?**
    *Mostly lowercase with **tbl** prefix.*

75. **Where is the CSS located?**
    *In **css/style.css**, **css/megamenu.css**.*

76. **What does order.php do?**
    Displays cart and processes order placement.

77. **Can a user delete an item from the cart?**
    Not directly; no delete button shown.

78. **Is there a limit on number of products listed?**
    No, all products are shown.

79. **Where is the user ID stored?**
    *In **$_SESSION['nmsuid']**.*

80. **Is CAPTCHA implemented?**
    No.

81. **How many tables are used in this project?**
    At least 8-10 including users, orders, products, labour, etc.

82. **What are includes/ files for?**
    Reusable components like header, footer, DB config.

83. **Where is data sanitization done?**
    Not done thoroughly; needs improvement.

84. **Are SQL errors displayed?**
    No, error reporting is turned off.

85. **Is this project scalable?**
    Yes, with code and DB optimization.

86. **Does it support multiple languages?**
    No localization/internationalization present.

87. **Is there any notification feature?**
    No email or SMS notifications implemented.

88. **Can admin delete users?**
    Yes, from the admin panel.

89. **What file contains the footer?**
    includes/footer.php**.

90. **What file is used for login?**
    login.php**.

91. **What is admin/index.php for?**
    Admin dashboard homepage.

92. **Can a user upload profile picture?**
    No such feature is provided.

93. **How can CSRF be prevented?**
    Using tokens in forms.

94. **What is the primary key of orders?**
    _id_* (auto-increment).*

95. **What is the use of OrderNumber field?**
    To track specific orders.

96. **How are form values submitted?**
    Using HTML forms with POST method.

97. **Can same email be registered again?**
    Depends on database constraints; not clearly validated.

98. **How is city stored in order address?**
    In **tblorderaddresses.city**.

99. **What are foreign keys used in project?**
    UserId, ProductId, etc., linked across tables.

100. **What do you plan to add in future versions?**
    Chat support, real-time tracking, farmer community features.

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