

C-3774

Sub. Code

82743

B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Fourth Semester
MOBILE APPLICATION DEVELOPMENT
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is meant by abstraction?
2. Explain the usage of Java packages.
3. Define Typecasting.
4. What are jump statements in Java?
5. What is the use of Android SDK?
6. What are the tools are placed in an android SDK?
7. Define selection Widgets.
8. Describe the Activities.
9. List the difference between Service and Thread.
10. How would you implement swipe animation in Android?

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) How to implement Multiple Inheritance in Java?

Or

- (b) How objects oriented programming is different from procedure oriented programming?

12. (a) List and briefly explain java tokens.

Or

- (b) Explain about arithmetic and relational operators with suitable examples.

13. (a) Explain the basic building blocks of Android with neat sketch.

Or

- (b) Explain about mobile software's and briefly discuss about its development in platform.

14. (a) Short notes on Web kit browser.

Or

- (b) Explain about SQLite database.

15. (a) Write a note on recourse directories.

Or

- (b) What is a widget? How are they created and used?

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) What do you mean by Constructor? Explain with suitable program segment.

Or

- (b) How are arrays declared? Write a java program to multiply two 3×3 matrices.

17. (a) Define Android SDK. Explain about how to build an android application in eclipse.

Or

- (b) Discuss in detail about event listener and handler with example.

18. (a) Explain the following :

(i) Alarms

(ii) Toast

(iii) Thread.

Or

- (b) Discuss briefly about Activity Lifecycle with neat sketch.
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82714

B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
First Semester
PROGRAMMING AND SCRIPTING
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is the difference between a Local and a Global Variable?
2. Define Recursion.
3. What are reference variable?
4. What are manipulators?
5. What is static data member?
6. What is static member function?
7. Differentiate seekp () and seekg ().

8. How do you change the color of background or text in HTML?
9. What is iterator in C++?
10. What is a CSS pseudo class?

Part B

(5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) Explain goto statement with an example.

Or

- (b) Differentiate const vs #define with example.

12. (a) Explain structures with example.

Or

- (b) Explain call by reference with an example.

13. (a) With an example, explain encapsulation.

Or

- (b) Explain function overloading with an example.

14. (a) Explain HTML5 Graphics.

Or

- (b) What is the difference between SVG and Canvas elements?

15. (a) How would you implement the basic layout components of the box model in CSS? Give an example?

Or

- (b) What are the migrated tags from HTML4 to HTML5?

Part C

(3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) Explain copy constructor with example.

Or

- (b) Explain relational and logical operators with example.

17. (a) How to create a link that will connect to another web browser page when clicked in HTML5?

Or

- (b) Explain Geolocation API in HTML5.

18. (a) What are CSS media queries and what are they used for?

Or

- (b) Give an example of how you would use counter-increment and counter-reset in CSS to create automatic numbering within a webpage.

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82723

B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Second Semester
UI DEVELOPMENT – I
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define scripting.
2. What do you mean by binary?
3. What is document object model?
4. State the needs of form validation.
5. What do you mean by XML parsing?
6. List out the need of dynamic effects.
7. What is CSS frame works?
8. State the different type of functions.
9. Mention the uses of less frame work.
10. Define – nesting.

Part B

(5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) Explain the client side scripting.

Or

- (b) Discuss about exceptional handling.

12. (a) Give a short note on event driven programming.

Or

- (b) Explain the two dimensional array.

13. (a) Describe about JavaScript frame works.

Or

- (b) Discuss about five handling import.

14. (a) Explain about media queries.

Or

- (b) Describe the CSS preprocessors.

15. (a) Give a short note on Namespaces.

Or

- (b) Describe about mixins.

Part C

(3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) Elaborate the different types of scripting.

Or

- (b) Explain about the object oriented programming.

17. (a) Give a detailed note on one dimensional array.

Or

(b) Describe the stages of developing client side Quiz application.

18. (a) Explain about Keyboard and mouse event.

Or

(b) Describe about CSS guards.

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82724

B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Second Semester
UX DESIGN-I
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List any three golden rules of user experience design.
2. What is affordance?
3. Mention how a research question should be.
4. Discuss the importance of survey in user research.
5. Give a short note of Social Anthropology.
6. How observation helps to enhance research quality?
7. Identify different market segments for mobile application.

8. What is research methodology?
9. What is the importance of designing user persona?
10. What are the different target devices common nowadays?

Part B

(5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) What is a balanced design. How does it help interfaces to perform well?

Or

- (b) Discuss the various economy of elements.

12. (a) Discuss the importance of Empathy in UX Design.

Or

- (b) What is Empathy Map? Discuss in detail about its usage?

13. (a) How does knowledge production helps designers to come out with effective results?

Or

- (b) List and define shortly various categories of anthropology.

14. (a) How to conduct stakeholder interviews for project discovery?

Or

- (b) What are the benefits of performing Competitor's Analysis?

15. (a) What are the various content organization methods?

Or

(b) How do you personalize content with respect to different users?

Part C (3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) Write in detail about User Psychology.

Or

(b) Discuss about various research techniques and research analysis methods.

17. (a) Discuss in detail research methodology with examples.

Or

(b) Explain the complete project discovery process involved in designing a product.

18. (a) What are the good practices need to be followed on targeting multiple devices?

Or

(b) List and define the elements of User Experience Designers.

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82732

B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Third Semester
VISUAL DESIGN
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define the usefulness of 3D Buttons.
2. Define Form elements.
3. List out Magazine Design principles.
4. Define Grid Layout design.
5. Define UI Illustrations.
6. Define UI Animations in Raster.
7. Explain the importance of screen sizes.

8. What is hybrid applications.
9. Explain the importance of mock ups.
10. Give on example for one page design.

Part B

(5 × 5 = 25)

Answer **all** questions either (a) or (b).

11. (a) Explain the importance of lights and shadows in visual design.

Or

- (b) Write briefly about components of web page.

12. (a) Explain briefly about layout design.

Or

- (b) What is perspective Views and mention its importance in visual design.

13. (a) Explain briefly about Android UI design.

Or

- (b) List out the difference between UI Animation in raster and UI Animation in vector.

14. (a) Explain Web design standards briefly.

Or

- (b) Write briefly about design guidelines of android.

15. (a) Explain the importance of Mock up.

Or

(b) Explain the advantages of single page design.

Part C (3 × 10 = 30)

Answer **all** questions, either (a) or (b).

16. (a) What is navigation and explain its types and importance?

Or

(b) Explain in detail about form elements.

17. (a) Difference between logo design principles and Icon design principles.

Or

(b) Explain grid layout design and responsive grids for web.

18. (a) Explain in detail about design guideline for Android.

Or

(b) Explain in detail about design guideline for iOS.

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B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Third Semester
UI DEVELOPMENT - II
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Differentiate implicit and explicit grid with examples.
2. What are the different media types allowed by CSS?
3. Name the contextual classes that are used with the progressive bar in bootstrap.
4. Define the key components of Bootstrap.
5. What is the use of jumbotron in Bootstrap?
6. Explain what is modal plugin used for in Bootstrap.
7. List down the major benefits of using Node.js.
8. Differentiate between Javascript and Node.js.

9. Mention what are the advantages of using Angular JS.
10. Define templates in Angular JS?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) How do you use CSS break points to create responsive designs?

Or

- (b) Give short notes about Responsive design

12. (a) Explain how you handle the image in bootstrap.

Or

- (b) Discuss in detail about Tables in bootstrap.

13. (a) Define pagination. Write a program to pagination and explain it.

Or

- (b) Explain about Navbar in bootstrap with example.

14. (a) Give brief introduction about Environment setting for nodeJS.

Or

- (b) How do you create HTTP web server in nodeJS?

15. (a) Differentiate between one-way binding and two-way data binding.

Or

- (b) Briefly explain about Form validation.

Part C

(3 × 10 = 30)

Answer **all** questions, choosing either (a) or (b).

16. (a) Enumerate various methods defined by media queries with an example.

Or

- (b) Describe about Layout and Bootstrap elements with suitable example.

17. (a) Define plugin. What are the various plugins of bootstrap? Explain.

Or

- (b) How do you handle the database in nodeJS. Explain with example.

18. (a) Explain the following:

- (i) Filters
- (ii) Templates
- (iii) Views.

Or

- (b) (i) What is data binding in Angular JS? How does it relate to the MVC architecture?
- (ii) What are directives? Explain the functions of the following directives?
- (1) ng-app
 - (2) ng-model
 - (3) ng-bind
 - (4) ng-controller.

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B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Third Semester
UX DESIGN – II
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Trust Building.
2. What is conflict management?
3. Define Information Architecture.
4. What is web board?
5. Explain high fidelity wire frame.
6. What is visual heat?
7. Explain anatomy of the perfect test report.
8. When to create funnel diagram?
9. What is rethinking hyper link?
10. What is desktop prototyping?

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Explain the importance of speaking in user's language.

Or

- (b) Explain proximity with example.

12. (a) Explain exploratory card sorting.

Or

- (b) How to create task models in power point?

13. (a) Difference between low fidelity and high fidelity wire frame.

Or

- (b) Design a low fidelity wire frame of about six screens of any application of your choice.

14. (a) Usage of Usability test reports.

Or

- (b) Draw a funnel diagram for UX design.

15. (a) What is layout adaptation?

Or

- (b) How to understand the device prototype in mobile?

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain the entire process of Visual design.

Or

- (b) Explain the importance of paper prototyping.

17. (a) Explain the ways where card sorting helps in information architecture.

Or

(b) Explain function familiarity test.

18. (a) Which is more important low fidelity wire frame or high fidelity wire frame? Argue.

Or

(b) Explain when to use the color feel.

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B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
Fourth Semester
WEB APPLICATION DEVELOPMENT
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is PHP?
2. Write the syntax to define PHP.
3. Define state management in PHP.
4. List out the PHP functions.
5. Define DBMS.
6. Draw the database architecture diagram.
7. What is meant by DDL and DML queries?
8. How to import the database into PHP?
9. List out the types of web services.
10. State Json.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write short notes on server side development.

Or

- (b) Illustrate the PHP global variables.

12. (a) Explain the concept of inheritance and polymorphism in PHP.

Or

- (b) Write short notes on file handling with suitable example.

13. (a) Explain briefly about the relational database with example.

Or

- (b) Illustrate different database operations performed in PHP.

14. (a) How to manage multiple queries in PHP?

Or

- (b) Explain about importing and exporting functions in database.

15. (a) Write short notes on AJAX.

Or

- (b) List out advantages of using advanced scripting languages.

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Write a PHP code for login page and perform database connectivity.

Or

- (b) Write a PHP code for ticket booking web page with responsive.

17. (a) Briefly explain the concept of data modeling.

Or

- (b) Illustrate normalization methods with any suitable example.

18. (a) Design a panel using AJAX and explain it briefly.

Or

- (b) Explain in detail about AJAX script manager.

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B.Sc. DEGREE EXAMINATION
UI DESIGN AND DEVELOPMENT
APRIL 2021 EXAMINATION
&
APRIL 2020 ARREAR EXAMINATION
First Semester
COMMUNICATION AND MEDIA DESIGN
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List the different types of communication?
2. What is interpersonal communication?
3. What is Projective profiling?
4. What would be impact of a poor user experience?
5. Define Copyrights?
6. List few software standards organizations?
7. What is mind map?
8. What is a wireframe?

9. What is user centered design?
10. What is a Version control system? Give examples.

Part B

(5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) Write a brief note on history of computers.

Or

- (b) Discuss the different types of psychology.

12. (a) What is user interface design and discuss the various practices to design a good UI ?

Or

- (b) Explain in detail about user learning methods?

13. (a) Write a short note on ESRB.

Or

- (b) What is intellectual property? Explain in detail.

14. (a) What is pilot study? Discuss the process and benefits of doing a pilot study.

Or

- (b) Discuss the user interface development process.

15. (a) What is prototype? Discuss the benefits of it.

Or

- (b) What is project management? Explain the various steps involved in it.

Part C

(3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) What are the various channels of communication?
Explain in detail.

Or

- (b) Discuss any two software development models

17. (a) Discuss how six thinking hats helps for idea generation process.

Or

- (b) Explain in detail about the five elements of user experience design.

18. (a) Differentiate customer and user. What is customer experience and discuss about various customer digital touch points.

Or

- (b) Give a detailed note in various emerging trends.
