C–7429	Sub. Code
	83413

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

First Semester

Game Design and Development

PROFESSIONAL CONTEXT TECHNOLOGY AND COMMUNICATION METHODS

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. List out the different types of games.

2. What is circumspect behavior?

3. What does social function of games?

4. Define the loop of interaction.

5. Write short notes about transmedia world.

6. Define the level design.

7. Write short notes about nature of game characters.

8. Define game balancing.

9. Outline the taxonomy of players.

10. Summarize the demographics in gaming.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the human computer interaction in games.

Or

(b) Define the MDA framework and how can it help us in understanding game design.

12. (a) Outline the linear and braided plot in gaming.

Or

(b) Write in detail about the channels of information game play.

13. (a) Organize the common elements of successful world.

Or

(b) Describe the values of aesthetics in gaming.

14. (a) Write in detail about modeling techniques used in gaming.

Or

(b) Write about balancing game economics.

15. (a) Describe the how you know your players.

Or

(b) Demonstrate the player communities in video games.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Elaborate on three practical approaches on gaming.

Or

(b) Briefly explain adding and subtracting mechanics in gaming.

17. (a) Discuss in detail about the integrating emergence and progression.

Or

(b) Explain in detail about the balancing art and technology.

18. (a) Examine the empathising and imagination in gaming.

Or

(b) Elaborate on detail about the code and other laws in computer game design.

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C–7430	Sub. Code
	83414

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

First Semester

Game Design and Development

VISUALIZATION FOR GAMES

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

1. List out the types of perspectives views.

2. Write short notes on two point perspective.

3. Summarize the basic steps in basic drawing.

4. Outline the methods to overlap objects when drawing.

5. Summarize the composition in a visual presentation.

6. Write short notes on strongest color psychologically.

7. List out the four types of texture.

8. What is the relationship between proportion and scale?

9. Organize the importance of script writing in gaming.

10. Write short notes on difference between concept art and illustration.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the methods to find the station point in one-point perspective.

Or

(b) Summarize the vanishing point with examples.

12. (a) Discuss in detail about the four characteristics of gesture drawing.

Or

(b) Describe the importance of foreshortening Renaissance art.

13. (a) Describe about the reducing realism color model.

Or

(b) Organize the additive and subtractive color model.

14. (a) Discuss about the useful tips on creating a good texture.

Or

(b) Organize the types of different gaming environment.

15. (a) Outline the best city-building games on PC 2022.

Or

(b) Write in detail about the scene construction in gaming.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about the linear perspective construction methods.

Or

(b) Elaborate on three point perspective and its importance.

17. (a) Briefly explain relative proportion of various part of the body.

Or

(b) Describe the cognitive learning model.

18. (a) Elaborate on foreground and background colours in textures.

Or

(b) Explain in detail about the eight elements of script formatting.

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C–2142	Sub. Code
	83423

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Second Semester

Game Design and Development

PROGRAMMING FOR INTERACTIVE MEDIA

(2019 – onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Abbreviate ENIAC
2. What do you mean by Processor?
3. What is computer program?
4. What do you understand by the term variable
5. What is a char in C?
6. What is meant by Enum in computer programming?
7. What is meant by early binding?
8. What is an exception handling?
9. What is the use of deque?
10. What are Iterators in Python?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write a note on programming language.

Or

(b) Write a short note on output devices.

12. (a) What are the parts of function in C program?

Or

(b) Write a note on arithmetic operations with example.

13. (a) What are the benefits and drawbacks of pointers?

Or

(b) Write a note on User defined data types.

14. (a) Write a short note on the various components of object.

Or

(b) Differentiate between static and dynamic polymorphism.

15. (a) Write a short note on Bellman Ford's algorithm.

Or

(b) What are the three well-structured components of standard Template Library?

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about the various types of operators in computer program.

Or

(b) Explain in detail about the characteristics of Operating Systems.

17. (a) Write a C program to access array elements using a pointer.

Or

(b) Discuss in detail the ways to create object of a class.

18. (a) Explain in detail about the various types of data structures.

Or

(b) Discuss about the various types of shortest path Algorithms.

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C–7431	Sub. Code
	83424

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Second Semester

Game Design and Development

2D GAME ART

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. List out the importance of graphics.

2. Write short about filtering in game art.

3. Outline the functions of menu bar in game art.

4. Write short notes on dodge and burn tool.

5. Summarize the function of blending modes.

6. Outline the importance of blur filter.

7. Write short notes on adobe illustrator.

8. Summarize the importance of digital illustration.

9. Define digital painting.

10. List out the importance of pixel art animation.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the vector graphics in game art.

Or

(b) Discuss in detail about the edge and transparency.

12. (a) Compare the move tool and hand tool in game art.

Or

(b) Summarize the importance of crop and eraser tool in game art.

13. (a) Compare the difference between layer and clip masking.

Or

(b) Summarize the function of texture brushes.

14. (a) Discuss about influence the qualities of a good logo.

Or

(b) Explain about the uses of attributes panel.

15. (a) Write in detail about function of matte painting.

Or

(b) Outline the importance of pixel art in 2D game art.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Elaborate on silhouetting and colour manipulation in game art.

Or

(b) Discuss in detail about zoom, crop, and eyedropper tools.

17. (a) Explain in detail about the channel mixer and colour look up in game art.

Or

(b) Elaborate on use the gradient map in adobe Illustrator.

18. (a) Describe the various principles of logo designing.

Or

(b) Explain in detail about the GUI for games.

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C–7432	Sub. Code 83432

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Third Semester

Game Design and Development

GAME ENGINE – I

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Outline the concept of 2D game.

2. List out the different screen dimensions in 3D game.

3. Write short notes on terrain design.

4. Define mesh filter in game deign.

5. Write short notes on raycasting.

6. How do you explain 3D physics?

7. List out any four camera properties.

8. Define memory optimization.

9. Write short notes on basic UI layout.

10. What are clean up code.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about understanding the 3D game.

Or

(b) Organize the working in 3D scene.

12. (a) Outline the designing level maps.

Or

(b) Write in detail about the function of mouse, key board, and touch.

13. (a) Describe the coroutines and exceptions in gaming.

Or

(b) Organize the various types of joints in games.

14. (a) Write in detail about the rendering to texture in cinematics.

Or

(b) Which technique is used to optimise the performance of memory?

15. (a) Describe the importance of sound and music in games.

Or

(b) Write in detail about different platforms in video games.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about the concept of 2D vs 3D games.

Or

(b) Briefly explain polygonal meshes in gaming.

17. (a) Discuss in detail about the basic 3D methods.

Or

(b) Explain in detail about the global illumination in games.

18. (a) Examine the implementing render passes.

Or

(b) Elaborate on network concept in computer game engine.

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C–7433	Sub. Code
	83433

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Third Semester

Game Design and Development

DIGITAL MODELING – I

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

1. Define 3D modeling.

2. How to rebuild curve maya?

3. List out the application of revolve tools.

4. Define surface fillet in 3D digital modeling.

5. Write short notes on UV unwrapping.

6. What is Retopology in 3ds Max?

7. List out the basic prop modelling in weapon design.

8. How to add point to curve in maya?

9. What is the environmental game design?

10. Write short notes on custom shape in visor polygonal.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the maya workspace in 3D digital modeling.

Or

(b) Organize the importance of attach and detach tools used in digital modeling.

12. (a) Outline the methods used to extrude a bevel in Blender.

Or

(b) Write in detail about the uses of booleans in modeling.

13. (a) Describe the importance of UV lighting in game modeling.

Or

(b) Write in detail about the simulation in anatomy.

14. (a) Develop a digital modeling for sword weapon.

Or

(b) Discuss the methods to use the maya EP curve tool.

15. (a) Describe the importance of set design for games.

Or

(b) Write in detail about the sculpt polygon tools.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about the project tangent and rebuild curve in digital modeling.

Or

(b) Briefly explain project curve on surface in digital modeling.

17. (a) Discuss in detail about the rebuild surface and reserve direction in modeling.

Or

(b) Explain in detail about the UV wrapping and brake texture.

18. (a) Examine the various methods used to modeling the weapons.

Or

(b) Elaborate on requirements for the set design in digital modeling.

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C–7434	Sub. Code 83434

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Third Semester

Game Design and Development

WEB GAME DEVELOPMENT

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

1. What's the difference between HTML and HTML5?

2. Define audio tag.

3. What is a two-dimensional array?

4. How pass data form in Java script?

5. What are the frameworks available for web development?

6. Define JSON parsing.

7. How do you make a 2D game on canvas?

8. What is implement jump in 2D games?

9. List out the keyboard events in JavaScript.

10. Outline the importance of the implementing timer.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the semantic and syntactic tags in HTML.

Or

(b) Describe the different application of canvas in HTML.

12. (a) Describe the steps involved in making a 1D array in Java.

Or

(b) List out the parameters are commonly used for password validation in java script.

13. (a) Write in detail about the four types of inheritance in Java.

Or

(b) Write in detail about the XML parsing work?

14. (a) Outline the steps involved in animate a sprite in Java.

Or

(b) Organize the program collision detection in game development processing?

15. (a) Describe the mouse events objects handled in Java.

Or

(b) Compare the request and response in web game development.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about the different types of attributes of a video tag.

Or

(b) Elaborate on methods used for handling forms in java script.

17. (a) Discuss in detail about the object oriented programme in java script.

Or

(b) Explain in detail about the API web framework in web game development.

18. (a) Examine the various steps can take to become a good game developer in game designing.

Or

(b) Elaborate on asynchronous web page updates in game development.

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C–5119	Sub. Code
	83442

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Fourth Semester

Game Design and Development

DIGITAL MODELING -II

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Tell about roughness in textures.
2. Write a short note on Lossy compression.
3. Summarize on creating basic texture maps.
4. Write a note on texture nodes.
5. Write a short note on base paint material.
6. Give a keynote on baking maps.
7. Tell about the concept "topology".
8. Write a keynote on the term "unwrapping".
9. Infer on the term "low poly" in game design.
10. Write about the face mesh in game designing.

Part B (5 × 5 = 25)

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

(Brief answers)

11. (a) Discuss on the process of painting textures.

Or

(b) Detail about the modular design.

12. (a) Discuss about the UV Texture editor.

Or

(b) Outline the various prospects in character skin study.

13. (a) Give a short note on direct light sources.

Or

(b) Write in detail about layer instancing.

14. (a) Summarize on the rigid rigging.

Or

(b) Discuss about the animated meshes.

15. (a) Briefly discuss about the "creating hands and feet".

Or

(b) Write short notes on character creation for games.

Part C (3 × 10 = 30)

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

(Essay type)

16. (a) Discuss about the character modeling basics.

Or

(b) Briefly explain the vehicle modeling basics.

17. (a) Explain in detail about various key points on textures.

Or

(b) Outline about creating basic texture maps.

18. (a) Describe with necessary illustrations on lighting and color theory.

Or

(b) Write in detail about the process of compositing in photoshop.

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C–5120	Sub. Code
	83443/82643

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fourth Semester

MOBILE GAME DEVELOPMENT

(Common for B.Sc. (GD and D)/B.Sc. (GP))

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Polymorphism.
2. Infer about the types of arrays.
3. Summarize on the types of inheritance.
4. Write a note on runnable interface.
5. Define emulator.
6. Tell about the build system.
7. Pen down about Game life cycle.
8. Tell about the Gesture listener.
9. Write about the screen transition.
10. Write a note on particle effects.

Part B (5 × 5 = 25)

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

(Brief answers)

11. (a) Explain the types of casting.

Or

(b) Discuss on the data abstraction and encapsulation.

12. (a) Discuss about the multithreading using thread class.

Or

(b) Outline the various prospects in synchronization.

13. (a) Give a keynote on parsing of external files.

Or

(b) Write in details about the build tools.

14. (a) Summarize on the Game development framework.

Or

(b) Discuss about the graphic libraries.

15. (a) Briefly write about the parallax scrolling.

Or

(b) Write short notes on programming gameplay.

Part C (3 × 10 = 30)

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

(Essay type)

16. (a) Elaborate in detail about the OOPS concept.

Or

(b) Briefly write on types of multithreading using thread class and runnable interface.

17. (a) Explain in detail about the elements of a mobile OS.

Or

(b) Briefly illustrate the camera and their setting, screen interface.

18. (a) Discuss in detail about the processes of developing a complete game.

Or

(b) Detail on graphics libraries and game development framework.

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C–7435	Sub. Code 83451

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Fifth Semester

Game Design and Development

GAME ENGINE – II

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

1. What is the importance of game engine?

2. How do you edit a dramatic landscape?

3. Write short notes about create a terrain layer.

4. What does it mean to master an audio track?

5. Define blueprint in Unreal engine.

6. How do you add a controller input in game engine?

7. Why checkpoints are important in games?

8. Define death animation.

9. What is Blackout level design?

10. List out the importance of best lighting for gaming.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the types of Transform tools.

Or

(b) Discuss in detail about the difference between a static mesh and a skeletal mesh.

12. (a) Describe the procedure to create an emission map.

Or

(b) List out the post processing procedures in volume introduction.

13. (a) Write in detail about the blue print class.

Or

(b) Discuss in detail about the loading screens in game engine.

14. (a) Outline the procedures followed in teleport players in Roblox.

Or

(b) Organize the coin pick up and counter in game engine.

15. (a) Describe the methods to make a movable platform in unity.

Or

(b) Outline the importance of flash light used in game engine.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about the content and BSP browser.

Or

(b) Elaborate on decals and opacity masks in game engine.

17. (a) Discuss in detail about the creating water with swimming features.

Or

(b) Explain in detail about the creation of AI and enemy basics.

18. (a) Examine the working mechanism of fuel system in game engine.

Or

(b) Briefly explain about ability pop up messages and animated pop up messages.

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C–7436	Sub. Code 83454

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Fifth Semester

Game Design and Development

ARTIFICIAL INTELLIGENCE

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. List out the 4 types of AI.

2. How do you describe a problem space?

3. Define roaming AI.

4. Infer behavioural data and behavioural analytics.

5. Summarize the flocking in game development.

6. What is meant by logic or rule-based approach in AI?

7. How does AI inference work?

8. Outline the conditions used in strips in AI.

9. Organize the expert system in AI explain.

10. What is meta-knowledge in artificial intelligence?

Part B $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) Write in detail about the major types of AI techniques.

Or

(b) Describe the Classifications of production Systems in AI.

12. (a) Outline the pattern recognition in machine learning.

Or

(b) Write in detail about how does AI changed the gaming world.

13. (a) Construct the rule-based reasoning in artificial intelligence.

Or

(b) Describe the uses of fuzzy logic in artificial intelligence.

14. (a) Compare the rule based approach and learning based approach in AI.

Or

(b) Organize the importance of Dempster-Shafer theory in AI.

15. (a) Describe the types of expert system in artificial intelligence.

Or

(b) Outline the heuristic function and where is it used in AI?

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about what are the top 10 potential artificial Intelligence problems that need to be addressed.

Or

(b) Briefly explain methods to create a strategically AI in games.

17. (a) Elaborate on finite state machine in programming and its applications.

Or

(b) Explain in detail about the forward and backward chaining in AI.

18. (a) Describe the Bayesian network in machine learning.

Or

(b) Elaborate on methods to develop an artificial intelligence strategy.

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C–7437	Sub. Code 83455A

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Fifth Semester

Game Design and Development

EMERGING TRENDS

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write short notes on VR in a game?

2. What is meant by geometric Modelling?

3. List out the purpose of quaternions in game designing?

4. Outline the purpose of a canonical model?

5. What are the lens aberrations?

6. Write short notes on texture filtering quality gaming.

7. Define AR in a game?

8. List out the importance of image sensing and acquisition?

9. What network protocol do games use?

10. How video games affect the brain negatively?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the requirements of geometric modeling.

Or

(b) Describe the causes for yaw pitch and roll.

12. (a) Outline the ZYZ Euler angle representation.

Or

(b) Write in detail about the importance of viewing transformation needed.

13. (a) Organize the six types of optical aberration.

Or

(b) Describe the methods used to fix yaw drift.

14. (a) Write in detail about explain image sensing and acquisition.

Or

(b) Organize the importance of SIFT techniques.

15. (a) Describe the working principle of sensor network.

Or

(b) Write in detail about smart grid in loT.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about the bird's eye view sensation and perception hardware.

Or

(b) Briefly explain homogeneous transformation matrices in video gaming.

17. (a) Discuss in detail about the motion perception process in gaming.

Or

(b) Explain in detail about the different sensors are used in augmented reality (AR).

18. (a) Examine the different types of communication protocols.

Or

(b) Elaborate on tilt drift correction in video game lighting.

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C–7438	Sub. Code 83455 B

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Fifth Semester

Game Design and Development

LEVEL DESIGN

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write short notes on level design in games.

2. What does level designer do?

3. Define terrain painting.

4. Outline the paint textured games.

5. What is the standard difficulty curve?

6. Write short notes on important to level a balance?

7. What does baking mean in game design?

8. Summarize the reflection probes unity?

9. List out any four RPG games.

10. Outline the design document for a game?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about methods used to create a good level game design.

Or

(b) Describe the methods to create a smart object mock-up.

12. (a) Outline the adding behaviour in level design.

Or

(b) Write in detail about the modifying wind flow in game level design.

13. (a) Organize the different levels of difficulty in game level design.

Or

(b) Describe the methods to improve the difficulty curve.

14. (a) Classify the two types of ambient lighting in game programming.

Or

(b) Organize the importance of occulusion shaders.

15. (a) Write in detail about the purpose of multiplayer map.

Or

(b) Summarize making a map for open world game.

Part C

$(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Explain in detail about the level based games and their uniqueness.

Or

(b) Elaborate on height map and normal map in level design in gaming.

17. (a) Discuss in detail about the placing trees and placing grass in level designing.

Or

(b) Explain in detail about the difficulty curve in game level design.

18. (a) Examine the importance of lighting in game level design.

Or

(b) Elaborate on level design document (LDD) in level design.

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C–7439	Sub. Code 83455C

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Fifth Semester

Game Design and Development

GAME PSYCHOLOGY

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write short notes on game psychology.

2. What are the benefits of human relations?

3. Why memory is important in psychology?

4. Write short notes on concept of intelligence.

5. Outline the classical conditioning in psychology.

6. Summarize the four types of motivation.

7. What is the concept of game theory?

8. Organize the implications of gender in behavior and personality.

9. List out the examples of educational games.

10. Summarize the future in gaming.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write in detail about the behaviourism in game psychology.

Or

(b) Describe the importance of psychology in community in development.

12. (a) Discuss in detail about the methods to improve the memory.

Or

(b) Write in detail about the different ways of measuring intelligence.

13. (a) Organize the types of operant conditioning in game psychology.

Or

(b) Describe the reward and punishment in psychology.

14. (a) Write in detail about methods used to players engaged in video games.

Or

(b) Outline the different perspectives on morality.

15. (a) Describe the potential benefits of game psychology.

Or

(b) Summarize the important reasons for aggression?

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about the psychology in family and education.

Or

(b) Briefly explain the steps of information retrieval process.

17. (a) Discuss in detail about the different theories of intelligence.

Or

(b) Explain in detail about the optimizing learning in game psychology.

18. (a) Elaborate on game learning curve in psychology and learning curve effect.

Or

(b) Conclude the gamification theories and benefits.

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C–7013	Sub. Code
	16/17/23/25/ 26/27/29

COMMON FOR ALL U.G DEGREE COURSES
EXAMINATION, NOVEMBER 2022

First/Second Semester

ENVIRONMENTAL STUDIES

(2019/2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Nonrenewable resources
2. Ecosystem
3. Food Chain of forest ecosystem.
4. Pandemic Emergencies.
5. Red Data Book
6. Hot spots
7. Climate Change
8. Deforestation
9. Biodiversity
10. Acid Rain

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Differentiate renewable and nonrenewable energy resources.

Or

(b) Write notes on structure and functions of grassland ecosystem.

12. (a) Write notes on Food Webs of Forest Ecosystem with suitable examples.

Or

(b) Write notes on Genetic, Species and Ecosystem Diversity.

13. (a) Write short notes on Food resources and its problems associated with them.

Or

(b) Write notes on land resources and problem associated with them.

14. (a) Write notes on thermal pollution.

Or

(b) Write notes on energy pyramids with suitable examples.

15. (a) Explore the threats to biodiversity.

Or

(b) Write note on man-made disaster with special reference to strike.

Part C (3 × 10 = 30)

Answer **all** the questions.

16. (a) Write an essay on multidisciplinary nature of environmental studies and about the need for public awareness on environment.

Or

(b) Write an essay on Water Resources and problem associated with over-utilization of various water resources.

17. (a) Write an essay on Biogeographical classification of India.

Or

(b) Write an essay on values of biodiversity.

18. (a) Write an essay on causes, effects and control measures of water pollution.

Or

(b) Enumerate various strategies in managing disasters caused due to natural calamities.

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C–5664	Sub. Code
	16/17/23/25/ 26/27/29

Common for All U.G. B.Sc./B.B.A. DEGREE EXAMINATION, APRIL 2022

First/Second Semester

ENVIRONMENTAL STUDIES

(2019/2020 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** the questions.

1. ZSI.

2. WII.

3. What is renewable energy?

4. Food web.

5. Pyramid of numbers in aquatic ecosystem.

6. Red data book.

7. List out any five Endemic species of India.

8. List out marine pollutants.

9. *Ex Situ* Conservation.

10. Enlist Option Values of Biodiversity.

Part B (5 × 5 = 25)

Answer **all** the questions.

11. (a) Write notes on definition, scope and importance of environmental studies.

Or

(b) Write notes on soil erosion and desertification.

12. (a) Write notes on energy flow in the ecosystem.

Or

(b) Write notes on threads to biodiversity.

13. (a) Write notes on Biodiversity at Global, National and Local levels.

Or

(b) Write notes on various strategies of conservation of Biodiversity.

14. (a) Write notes on ecological pyramids.

Or

(b) Write notes on air pollution.

15. (a) Write notes on noise pollution.

Or

(b) Write notes on effects and control measures of nuclear hazards.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on the multidisciplinary nature of Environmental Studies.

Or

(b) Write an essay on the following resources with special emphasis to how they are overexploited/utilized which in turn damage the environment, (i) Forest Resources and (ii) Food Resources.

17. (a) Write an essay on "India is a mega-diversity nation".

Or

(b) Write an essay on Biodiversity and their values.

18. (a) Write an essay on causes, effects and control measures of (i) Marine Pollution and (ii) Water Pollution.

Or

(b) Write an essay on concept, structure and function of ecosystem.

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