

Total No. of Questions : 4]

SEAT No. :

P-3132

[Total No. Of Pages : 2

[6057]-21
S.Y. B.Sc.
ANIMATION
AN 2204: Multimedia Communication
(2015 Pattern) (Semester-II) (82542)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates :

- 1) All questions are compulsory.*
- 2) Figures to the right indicate full marks.*

Q1) Attempt all the following :

[10 × 1 = 10]

- a) Define MIDI
- b) What is use of sound in Digital Communication?
- c) What is Synchronous Transmission?
- d) Write full form of WWW and URL?
- e) What is Video Editing?
- f) What is Digital Sound?
- g) List the type of Transmission media.
- h) Define Cool edit.
- i) What is Image Compression?
- j) Name the elements of multimedia communication.

P. T. O

Q2) Answer any Two of the following:

[2 × 5 = 10]

- a) Describe briefly about different types of transmission media.
- b) Define the following
 - i) Attenuation
 - ii) Delay distortion
 - iii) Noise
 - iv) Period
 - v) Frequency
- c) Explain briefly about parity method?
- d) Explain the concept of video editing.

Q3) Answer any Two of the following:

[2 × 5 = 10]

- a) Explain the concept of Music Sequencing & Notations.
- b) What is protocol? Explain HDLC protocol frame format?
- c) Explain the standard for entertainment applications.
- d) Write a note on 8 bit gray level image.

Q4) Answer any Two of the following:

[2 × 5 = 10]

- a) Write a short note on graphics and image data type and file format.
- b) Define multimedia communication and explain modes of communication.
- c) What is TCP/IP model? Explain OSI layer model.
- d) Write a short note on uses requirements.



Total No. of Questions : 4]

SEAT No. :

P-1339

[Total No. of Pages :2

[6057]-31
T.Y. B.Sc. (Animation)
AN - 3101 : SCRIPT WRITING
(2015 Pattern) (Semester - III) (92513)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions: (Any ten)

[10 × 1 = 10]

- a) What is one line description of a location and time of day of scene?
- b) Scene heading is also known as _____.
- c) _____ is the lines of speech for each character.
- d) _____ is the direction for the character that is either attitude or action.
- e) What is placed after the character's name in parenthesis?
- f) Action is also known as _____.
- g) Scene heading should always be in _____.
- h) _____ indicate that a large amount of time has passed.
- i) A character name is capped and always listed _____ his lives of dialogue.
- j) When a new scene heading is not necessary, but some distinction needs to be made in the action, you can use a _____.
- k) Which of the following is one about storyboard?
- l) Generally action written in the _____ tense.

P.T.O.

Q2) Answer any two :

[2 × 5 = 10]

- a) What are the 8 elements of script writing?
- b) What are the 7 types of scripts?
- c) What are the principles of script writing?
- d) How do you format a script?

Q3) Answer any two :

[2 × 5 = 10]

- a) What is action in script writing?
- b) What are the qualities of a good script writer?
- c) What is the importance of script with examples?
- d) How does a story work?

Q4) Answer any two :

[2 × 5 = 10]

- a) What are the 4 types of storytelling?
- b) What is story telling method?
- c) What are the 7 major story types?
- d) What can conflict do to the flow of the story?



Total No. of Questions : 4]

SEAT No. :

P-1340

[Total No. of Pages :2

[6057]-32
T.Y. B.Sc. (Animation)
AN - 3102 : WED TECHNOLOGY
(2015 Pattern) (Semester - III) (92523)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following :

[10 × 1 = 10]

- a) What is prompt box in javascript.
- b) What is web browser.
- c) Define HTML.
- d) Which attribute of <table> tag is used to merge table column and rows in HTML.
- e) In HTML for what <a> tag is used. Write it syntax?
- f) Write syntax of multiple line comments in javascript.
- g) Which tag and property attribute is used to create radio button in HTML.
- h) List any two properties of heading tag in CSS style.
- i) In DOM which method is used to access tag property.
- j) Write full form of the following :

DOM

CSS

P.T.O.

Q2) Answer any two

[2 × 5 = 10]

- a) Write a note on HTTP request and HTTP response.
- b) Write a javascript using 'for' loop for displaying sum of first 150 numbers.
- c) Explain the following tags of HTML

`_{.....}`

`^{.....}`

`<marquee> </marquee>`

`<u> </u>`

`
`

- d) How to insert table in HTML. Explain with an example.

Q3) Answer any two

[2 × 5 = 10]

- a) Write a note on features of PHP.
- b) Write javascript program to accept and display the string in alert box.
- c) Write a note on dream weaver.
- d) Write a HTML program to display unordered list of flowers names.

Q4) Answer any two

[2 × 5 = 10]

- a) Write a javascript program to accept student name using prompt box and display accepted name in alert box.
- b) Explain with an example to apply CSS using external method (link to apply stylesheet).
- c) Write a HTML code to design a form which accept student details such as (roll no, name), radio button for gender, check box for favourite games, one submit button and one reset button.
- d) Write note on dreamweaver interface.



Total No. of Questions: 4]

SEAT No. :

[Total No. of Pages :2

P1341

[6057]-33

T.Y. B.Sc. (Animation)

AN 3103 : GAME DESIGN-I

(2015 Pattern) (Semester-III) (92533)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Write proper questions number.*
- 3) *Draw Diagram if needed.*

Q1) Answer the following questions.

[10×1=10]

- a) What is low poly modeling?
- b) What is the role of 'Trickster'?
- c) Importance of 'Mentor' in Game.
- d) Who is the villain character in Game?
- e) What is Protagonist?
- f) What is Antagonist?
- g) Explain 'Ally' of the Game, in short.
- h) Which Studio developed NFS Game?
- i) Define Arcade Game.
- j) Define coin-op Game.

Q2) Answer any two of the followings.

[2×5=10]

- a) Explain Game production Cycle.
- b) Explain Alpha version of Gaming.
- c) Explain any 2 types of Game engine.
- d) Describe method of Game Sales and Marketing.

P.T.O.

Q3) Answer any two of the following questions.

[2×5=10]

- a) What is Prototype? Explain.
- b) Write a note on Growth of Game Industry.
- c) Describe Game as “modern Entertainment”.
- d) Design/Draw any 4 Game weapons.

Q4) Answer any two of the following questions.

[2×5=10]

- a) Explain Blender node editor panel.
- b) Write a note on Quality assurance testing.
- c) What are modeling tools in Blender.
- d) Write a note on UBISOFT Studio Journey in Gaming Industry.



Total No. of Questions : 4]

SEAT No. :

P1342

[6057] - 34

[Total No. of Pages : 2

T.Y.B.Sc. (Animation)

AN - 3104 : DIGITAL EDITING

(2015 Pattern) (Semester - III) (92543)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) *Figures to the right indicate full marks.*
- 2) *All questions are compulsory.*

Q1) Answer the following questions.

[10×1=10]

- a) Name any five video editing software.
- b) What is clapper board?
- c) What is title?
- d) What is still graphics?
- e) What is audio?
- f) What is camera?
- g) C+rl+N.....
- h) C+rl+O.....
- i) C+rl+/.
- j) F6.....

Q2) Answer the following questions (any two)

[2×5=10]

- a) Explain “Green Matte”?
- b) Explain storyboard in project panel
- c) Explain colour correction procedure
- d) Explain “cuts”,with example

P.T.O.

Q3) Answer the following question (any two)

[2×5=10]

- a) Explain the process of Titles
- b) Explain what is “Linear Editing”?
- c) What is “Rotoscoping Mask”, in compositing?
- d) Elaborate the “size & scale”. in pictorial composition?

Q4) Answer the following question (any two)

[2×5=10]

- a) Explain Digital and analog outputs.
- b) How to creating and editing equence?
- c) What is “Trimming Tool”, Explain work?
- d) Explain setup (Project)and sequence.



Total No. of Questions : 4]

SEAT No. :

P-1343

[Total No. Of Pages : 2

[6057]-35

T.Y. B.Sc. (Animation)

AN - 3105: VFX - 1

(92553) (Semester-III) (2015 Pattern)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions:

[10 × 1 = 10]

- a) Write Hot keys. For Blur and Roto paint
- b) Write Hot keys for color correction and Roto
- c) Write Hot key to view Home image in viewer
[I / H / V]
- d) What does RGBA Stands for?
- e) Which hotkey is used to set viewer to lumience
- f) Which arrow keys are used to see next and previous frame?
- g) What is full form of ROI?
- h) Write key to insert new control point in Nuke.
- i) What is Computer Vision?
- j) Name 2 primary categories of computer imaging.

P. T. O

Q2) Answer any Two of the following:

[2 × 5 = 10]

- a) What are the difference between Raster Image and Vector Image?
- b) Write note on Histogram.
- c) List timeline [Cursor on timeline] hot keys.
- d) List any 10 hot keys used as universal commands for windows in Nuke.

Q3) Answer any Two of the following:

[2 × 5 = 10]

- a) What is difference between CPU and GPU render?
- b) Explain a pipeline of VFX
- c) Explain steps to make Stereoscope in 3DsMax & Maya.
- d) What is Match Moving process explain in detail.

Q4) Answer any Two of the following:

[2 × 5 = 10]

- a) Explain Types of file format and write about any four formats in Brief.
- b) Image analysis and its process in detail.
- c) Write Edge Direction in detail
- d) List any 10 hot keys used in Node Graph in nuke.



Total No. of Questions : 4]

SEAT No. :

P-1344

[Total No. of Pages : 2

[6057]-36
T.Y. B.Sc.
ANIMATION
AN-3106: Creative Thinking
(2015 Pattern) (Semester - III) (92563)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates :

- 1) Answer all questions.*
- 2) Figures to the right indicate full marks.*

Q1) Answer the following questions :

[10 × 1 = 10]

- a) What is thinking?
- b) What is ideal?
- c) What is target audience?
- d) What is TG's?
- e) What is brain storming?
- f) What is mind mapping?
- g) What is platting?
- h) What is stories?
- i) What is story telling?
- j) What is communication?

P.T.O.

Q2) Answer the following questions (any two) : **[2 × 5 = 10]**

- a) What is character? Explain its development.
- b) What is stories and their element.
- c) How you read your audiences mind? Explain.
- d) What you understand TG's psychology.

Q3) Answer the following questions (any two) : **[2 × 5 = 10]**

- a) What is platting? Explain.
- b) What are different writing skills in waiter?
- c) What is different between stories and art of story telling.
- d) How to develop character development.

Q4) Answer the following questions (any two) : **[2 × 5 = 10]**

- a) Explain case studies?
- b) Explain case study pixer studio film.
- c) Explain case study on science-fiction film.
- d) What are steps process of animation film making.



Total No. of Questions: 4]

SEAT No. :

P1345

[6057]-41

[Total No. of Pages : 2

T.Y. B.Sc. (Animation)

AN3201 : IPR AND CYBER SECURITY

(2015 Pattern) (Semester-IV) (92514)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to right indicate full marks.*
- 3) *Symbols and abbreviations have their usual meanings.*

Q1) Attempt all of the following.

[10×1=10]

- a) What is digital signature?
- b) Define Patent.
- c) What are the two types of transmission media?
- d) Define the term computer Forensics.
- e) Define the term copyright.
- f) What is an operating system?
- g) What is trade and Investment?
- h) What is web security?
- i) Define worm and malware.
- j) What is steganography?

Q2) Attempt any two of the following.

[2×5=10]

- a) What is computer Network? Write a note on LAN.
- b) What are active and passive attacks? Explain types of passive attacks.
- c) What are the benefits and features of water marking?
- d) Define the term Intellectual Property. Explain its three types.

P.T.O.

Q3) Attempt any two of the following.

[2×5=10]

- a) Write difference between SSL and SET.
- b) Write a note on IT Act, 2000.
- c) What is E-commerce? Explain security Features of E-commerce.
- d) What is Intruders? Explain various types of Intruders.

Q4) Attempt any two of the following.

[2×5=10]

- a) Explain Hacking techniques in detail.
- b) Define cryptography. Explain symmetric key cryptography.
- c) Write a note on TCP/IP Protocol stack.
- d) What is cyber Law? Explain cyber security law and its types.



Total No. of Questions : 4]

SEAT No. :

P-1346

[Total No. of Pages : 2

[6057]-42

T.Y. B.Sc. (Animation)

AN 3202 : User Interface Design

(2017 Pattern) (Semester - IV) (92524)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions :

[10 × 1 = 10]

- a) Define steering law
- b) CSS stands for
- c) Which of these framework activities is not normally associated with the user interface design process.
- d) In CSS “Color : Red” can be called as.
- e) Which of the following testing types is not a part of system testing?
- f) What is alignment in UI?
- g) What is Symbian?
- h) What is evaluation?
- i) Define chunking.
- j) What is anticipation?

Q2) Answer any two :

[2 × 5 = 10]

- a) Explain any two types of low fidelity prototypes.
- b) Describe state machine translate events.
- c) What are design principles of UI?
- d) Explain color theory.

P.T.O.

Q3) Answer any two :

[2 × 5 = 10]

- a) What is system testing?
- b) What are input / output devices? Explain with example.
- c) What is task analysis? Explain in brief.
- d) Explain characteristics of Good user interface.

Q4) Answer any two :

[2 × 5 = 10]

- a) Explain design pattern.
- b) Explain MVC architecture.
- c) Explain any three tags of HTML.
- d) What is computer prototypes? Explain in brief.



Total No. of Questions : 4]

SEAT No. :

[Total No. of Pages : 2

P1347

[6057]-43

T.Y. B.Sc. (Animation)

AN-3203 : GAME PRODUCTION

(2015 Pattern) (Semester-IV) (92534)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions.

[10×1=10]

- a) Define AR & VR.
- b) What is level designing?
- c) List 2 types of console games.
- d) List 4 game production phases.
- e) Define “ARCADE GAMES’
- f) Define motion actuators.
- g) Define Beta version of Games.
- h) Name any 2 Game engines.
- i) What are assets?
- j) Name any 4 types of lights in game engine.

Q2) Answer any 2 of the following questions.

[2×5=10]

- a) Explain Alpha version of Gaming.
- b) What is AR explain in detail.
- c) Differentiate protagonist and antagonist.
- d) Explain Mentor’s Role in Game with examples.

P.T.O.

Q3) Answer any 2 of the following questions.

[2×5=10]

- a) Describe any one protagonist character from present games.
- b) Explain Background development in Game in your words.
- c) Describe anti hero character in games with examples.
- d) Explain Pre-Fabs in unity 3D.

Q4) Answer any 2 of the following questions.

[2×5=10]

- a) Explain SEGA studio's Journey.
- b) Explain importance of UVW mapping.
- c) Explain importance of poly count in Games.
- d) Explain game production cycle and draw diagram.



Total No. of Questions : 4]

SEAT No. :

P-1349

[Total No. of Pages :2

[6057]-45
T.Y. B.Sc. (Animation)
AN - 3205 : VFX - II
(2015 Pattern) (Semester - IV) (92554)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates :

- 1) All questions are compulsory.*
- 2) Figures to the right indicate full marks.*

Q1) Answer the following questions:

[10 × 1 = 10]

- a) Write down any four video formats.
- b) What is full form of ROI?
- c) What is full form of EXR?
- d) What is HSV tool?
- e) What is RGBA?
- f) Explain viewer.
- g) What is Render?
- h) What is checker board node?
- i) Explain Rough Geometry in short.
- j) What is Sterioscopic sequence?

P.T.O.

Q2) Answer any two of the following questions : **[2 × 5 = 10]**

- a) Explain chroma key in detail.
- b) Draw a node chart for chroma key process.
- c) Explain camera tracking with an example.
- d) Explain Roto with an example.

Q3) Answer any two of the following questions : **[2 × 5 = 10]**

- a) What is masking? Answer in detail.
- b) Explain matte painting.
- c) Explain Gamma correction.
- d) Explain pipeline of VF_x.

Q4) Answer any two of the following questions : **[2 × 5 = 10]**

- a) Explain stabilizing process.
- b) Explain Garbage matte with an example.
- c) Explain Morphing in composition.
- d) Explain Digital compositing in detail.



Total No. of Questions : 4]

SEAT No. :

[Total No. of Pages : 2

P-1350

[6057]-46

T.Y.B.Sc. (Animation)

AN - 3206 : NEW MEDIA

(2015 Pattern) (Semester - IV) (92564)

Time : 2 Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer any ten.

[10×1=10]

- a) The different types of online communication tools are_____.
- b) What is an advantage of online journalism?
- c) What is the proposed punishment for cyber Terrorism in IT Act?
- d) Who invented WWW?
- e) The first generation of the web 1.0, also known as_____.
- f) When IT Act 2000 came into effect?
- g) What does URL stand for?
- h) Which is not a way of communication using the Internet?
- i) Web 3.0 is also called as_____.
- j) Online journalism refers to content created and distributed over_____.
- k) GPS stands for_____.
- l) What is includes in digital audio files?

Q2) Answer any two.

[2×5=10]

- a) What is Internet?
- b) What are the characteristics of good interactive journalism?
- c) What is web browser?
- d) What is multi-mediality in online journalism?

P.T.O.

Q3) Answer any two.

[2×5=10]

- a) What is citizen journalist?
- b) What is New media?
- c) What is meant by cyberspace?
- d) Define URL.

Q4) Answer any two.

[2×5=10]

- a) What is the meaning of knowledge society?
- b) What are the types of Internet access?
- c) What is the online journalism?
- d) What are the 7 types of journalism?



Total No. of Questions : 4]

SEAT No. :

P-1351

[Total No. of Pages :2

[6057]-101

S.Y. B.Sc. (Animation)

ANM - 301 : ANIMATION TECHNIQUE

(2021 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer any Ten

[2 × 10 = 20]

- a) What is clay?
- b) What is ceto scopy?
- c) What is stop motion?
- d) What is frame?
- e) What is coma?
- f) What is masking?
- g) What is after effects?
- h) What is different axis you can relate?
- i) What is compositing?
- j) What is puppet?
- k) What is "NULL" frame?
- l) What is "NTSC" & "PAL"?

P.T.O.

Q2) Answer any four

[4 × 5 = 20]

- a) Write down short note on traditional animation
- b) Explain procedure & preparation for clay Animation.
- c) What is post - production explain in brief?
- d) Explain interface of after effects in detail?

Q3) Answer any Three

[3 × 5 = 15]

- a) What is transform in after effects? Explain in detail
- b) Write down short cut key
 - i) Text
 - ii) Solid layer
 - iii) Null object
 - iv) Camera
 - v) Light
- c) What is step motion animation & types.
- d) How to create shape & animate?

Q4) Answer any Three

[3 × 5 = 15]

- a) Explain time line?
- b) Explain any five animation principles
- c) Explain any three simulation effects
- d) Why VFX is necessary for modern film.



Total No. of Questions : 4]

SEAT No. :

P1352

[6057] - 102

[Total No. of Pages : 2

S.Y.B.Sc. (Animation)

ANM - 302 : 3D PRODUCTION - II (MAYA)

(2021 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Neat labelled diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*

Q1) Answer the following questions.

[10×2=20]

- a) Write shortcut to change pivot point.
- b) Which is Third Party Light preset can be used as an artificial light in Maya?
- c) Shortcut for maximise viewport in Maya.
- d) What is 'Parent' in Maya?
- e) Write shortcuts for Move, Rotate and scale?
- f) The short cut key no 4,5 and 6 used for which commands.
- g) What is use of skinning?
- h) What is weight cleaning in Maya.
- i) Write about Timeline.
- j) Write keyboard combination for moving the object.
- k) What is Bifrost in Maya?

Q2) Answer the following questions.

[4×5=20]

- a) Explain a simple wave cycle of animation in maya with drawing.
- b) How will you define an Animation?
- c) Explain Arnold lights in Maya.
- d) Define camera settings and types of camera's in Maya.

P.T.O.

Q3) Answer the following questions. (any 3)

[3×5=15]

- a) Write short note on Graph Editor.
- b) Describe Hypershade in Maya.
- c) Explain Hard Surface Modeling.
- d) Describe Rigging in Maya.

Q4) Answer the following questions. (any 3)

[3×5=15]

- a) Explain facial expressions with drawings.
- b) Describe common Render Setting in Maya.
- c) Explain soft selection tool and its uses in Maya.
- d) Explain Modeling Toolkit and its various commands.



Total No. of Questions : 4]

SEAT No. :

P-1353

[Total No. of Pages :2

[6057]-103

S.Y. B.Sc. (Animation)

**ANM - 303 : ANIMATION PRODUCTION PROCESS
(2021 Pattern) (Semester - III)**

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer any ten.

[10 × 2 = 20]

- a) Writing dialogues is a part of which stage?
- b) OTS stands for _____.
- c) CMYK stands for _____.
- d) The aspect ratio of widescreen is _____.
- e) The frame rate of NTSC video is _____.
- f) The term - "Line of action" in animation means.
- g) What is storyboard?
- h) In which year started breakdown or passing position.
- i) Which is the first movie that used 2D Animation?
- j) Which country started 3D Animation first?
- k) Who made the first animated film in 1906?
- l) A character designer is an artist that creates _____.

P.T.O.

Q2) Answer any four

[4 × 5 = 20]

- a) Difference between CLAY & CUT OUT Animation.
- b) Explain Scope of STOPMOTION Animation.
- c) What is mean by VFX?
- d) How performance in majored in CLAY Animation?
- e) Define film.

Q3) Answer any three

[3 × 5 = 15]

- a) Define Masking.
- b) Define BG plates.
- c) Define Stereoscopy.
- d) Explain origins of ROTO Techniques.

Q4) Answer any three

[3 × 5 = 15]

- a) Explain key framing techniques.
- b) Explain the basic shooting setup.
- c) Explain spline with an example.
- d) Explain the process of composition.



Total No. of Questions : 4]

SEAT No. :

P-1471

[Total No. of Pages : 2

[6057]-201

S.Y. B.Sc. (Animation)

ANM-401 : Animation for AR & VR Techniques

(2021 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following questions :

[10 × 2 = 20]

- a) Write components of AR/VR.
- b) What is flight simulation?
- c) Write primary features of VR.
- d) Explain VR world space.
- e) Name a popular AR device.
- f) Name a popular VR device.
- g) What is motion track in AR?
- h) What is motion track in VR?
- i) What is frame work in AR/VR?
- j) What is virtual space?
- k) What is Real space?
- l) What is Reulering in VR?

Q2) Answer the following questions (any three) :

[3 × 5 = 15]

- a) What is 3D clipping? Explain in breif.
- b) What is color theory? Explain.
- c) What is 3D modelling? Explain.
- d) What are different 3D s/w to create your modelling? Explain
- e) Explain interpolation techniques.

P.T.O.

Q3) Answer the following questions (any three) :

[3 × 5 = 15]

- a) Write the benefits of food illumination.
- b) What is characteristics of stereoscopic? Explain
- c) Which Technology VR used in TV & film production?
- d) Explain VR Toolkits
- e) What is VR sensor List? Explain

Q4) Answer the following questions (any four) :

[4 × 5 = 20]

- a) Write the taxonomy of AR explain it.
- b) What are some challenges faced in AR development? Explain
- c) What are some challenges faced in VR development? Explain
- d) How an AR and VR be integrated to create mixed reality experiences? Explain
- e) Name a popular AR and VR devices.



Total No. of Questions : 4]

SEAT No. :

P-1472

[Total No. of Pages : 2

[6057]-202

S.Y. B.Sc. (Animation)

ANM-402 : 3D Sculpting Tools & Techniques (Z Brush)

(2021 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following 10 :

[10 × 2 = 20]

- a) Define Digital sculpting.
- b) What are the strength keys in ZB?
- c) Which is the stencil in ZB and How to use it?
- d) Which short cut key used for strength of Brush?
- e) Which short cut key used for subdivision level up & down?
- f) What is an Anatomy?
- g) What is Resolution in sculpting softwares?
- h) How to use move, Rotate and scale tools?
- i) Which short cut key used to hide selected?
- j) Define fill object.

Q2) Answer any 3 :

[3 × 5 = 15]

- a) Explain Dynamesh and its use.
- b) Explain Importance of UVW unwrapping.
- c) Explain standard, move and smoth Brushes.
- d) Explain Z Brush Term and concept.

P.T.O.

Q3) Answer any 3 :

[3 × 5 = 15]

- a) List types of 'strokes' explain all.
- b) Describe focal shift, Draw size and intensity.
- c) Explain Extract mapping in Z Brush.
- d) Explain Clay Built up Brush.

Q4) Answer any 4 :

[4 × 5 = 20]

- a) Explain Z Brush interface.
- b) Explain any 4 Brushes.
- c) Describe Retopology.
- d) Explain Active symmetry.
- e) Describe importance of Lary mouse.
- f) Explain Light Box in detail.



Total No. of Questions : 4]

SEAT No. :

P-1473

[Total No. of Pages : 2

[6057]-203

S.Y. B.Sc. (Animation)

ANM-403 : GAME DESIGN (Blender)

(2021 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following :

[10 × 2 = 20]

- a) What is the purpose of the particle modifier in Blender?
- b) What are the basic settings for a particle system in Blender?
- c) What is the shortcut for entering Edit Mode in Blender?
- d) What is the shortcut key for adding object in the scene?
- e) Name any two game production houses.
- f) Define low poly modeling.
- g) Which company introduced GTA game?
- h) Write down the year in which the Arcade gaming was developed.
- i) How does the Soft Body modifier affect an object in Blender?
- j) What is a Prefab in game engine?

Q2) Answer the following (Any three) :

[3 × 5 = 15]

- a) What is AR? Explain in brief.
- b) Draw and design any five types of weapons.

P.T.O.

- c) Write a short note on 'UV Mapping'.
- d) Explain solidify modifier with examples.
- e) Explain Assets in game with 10 examples.

Q3) Answer the following (Any Three) :

[3 × 5 = 15]

- a) What is Joy Stick? Explain in brief.
- b) Write a short note on 'Nodes' in Blender.
- c) Write any 10 shortcuts with their use in Blender.
- d) Write a short note on texturing game models in Blender.
- e) Explain the process of creating 3D models in Blender for game design.

Q4) Answer the following (Any Four) :

[4 × 5 = 20]

- a) Explain the concept of level design in Blender.
- b) How can Blender be used to create realistic game environments?
- c) Write short note on low poly modeling.
- d) Write a short note on 'Blender software'.
- e) Explain any two types of game genres in brief. Give two examples of each.
- f) Explain the role of AI in game design with Blender.

