F.Y. B.Sc. (Animation) EXAMINATION, 2017

Paper I
ELEMENTS OF INFORMATION TECHNOLOGY
(2012 PATTERN)

Time : Three Hours
Maximum Marks : 80

N.B. :— (i) All questions are compulsory.
(ii) Figures to right indicate full marks.
(iii) Neat diagrams must be drawn wherever necessary.

1. Answer any ten of the following : [2×10=20]

(a) Explain Taskbar.

(b) What are differences between DIV and SPAN in HTML ?

(c) What are the most important new features of HTML5 ?

(d) Which strategies used for specifying font size ?

(e) Which are the three different values for positioning a division on the page ?

(f) Write down syntax for <video> tag and list attribute of it.

(g) What is algorithm ?

(h) What is file ?

(i) List four types of computer.

P.T.O.
(j) What is volatile memory? Give the example of volatile memory.

(k) What is programming language?

(l) List the types of programming language.

2. Attempt any three of the following: \[5 \times 3 = 15\]

(a) Write a note on Assembly language.

(b) What is ROM? Describe its various types.

(c) Write a short note on Plotter.

(d) Write an algorithm to find maximum of three number.

(e) Explain Batch Operating System.

3. Attempt any three of the following: \[5 \times 3 = 15\]

(a) Write a short note on CD.

(b) Explain time sharing operating system.

(c) How we change cell padding, spacing and alignment of the HTML table?

(d) Write a note on Pen drive

(e) What are characteristics of Algorithm?

4. Answer any three of the following: \[5 \times 3 = 15\]

(a) Draw a flowchart for calculation of compound interest

Where \( P = \) Principle, \( N = \) No. of time periods

\( R = \) Rate of interest

\( CI = \) Compound Interest and

\( CI = P \times (1 + R/100)^N - P \)
(b) Draw a flowchart to find factorial of number.
(c) Draw a flowchart for printing maximum of given any 100 number.
(d) Write an HTML code to display the following output:
   (1) Apple
   (2) Banana
   (3) Grapes
   (4) Orange
(e) Draw a flowchart to print 10 terms of Fibonacci number.

5. Answer any *three* of the following: [5×3=15]
   (a) What is indent? Explain *three* types of indentation.
   (b) Explain control Panel in MS-Windows.
   (c) Write a note on Scanner.
   (d) Explain the following terms:
      (1) Partial path
      (2) Relative path
      (3) Absolute path
   (e) Which are the different ways for selecting graphics format?
1. Answer any ten of the following: [2x10=20]

(a) What is program?
(b) What is variable? List any four examples.
(c) Explain the use of getch() function.
(d) What is the use of putchar() function?
(e) What is main difference between variable and constant?
(f) What is syntax error?
(g) Assume that we are executing the following code:

\[
\begin{align*}
a &= 20 \\
b &= 44.0
\end{align*}
\]

For each of the following expression, write the value of the expression and type of value:

(1) b/10
(2) a/11.0
(h) Explain ‘in’ operator used with list in python.

(i) What is interpreter? How does it work?

(j) Assume that we execute the following assignment statement:

E = 'X'

For each of the following expression, write the value of the expression and type of the value:

(1) E + 'E'
(2) E* 3

(k) Explain any two logical operators in C.

(l) What will be the output of the following program?

```c
main()
{
    int i = 3;
    printf("%d\n", --i);
    i ++;
    printf("%d", i);
}
```

2. Answer any three of the following: [5×3=15]

(a) Explain syntax and use of if else in C program.

(b) Explain continue and goto statement with example in C programming.

(c) Write a note on data types in C.
(d) Explain syntax and use of printf and scanf function in C programming.
(e) Explain bitwise operators with suitable example.

3. Answer any three of the following: \[5 \times 3 = 15\]

(a) Write a note on program error in python.
(b) Write a note on event driven programming in python.
(c) Explain arrays in C.
(d) What is Header file? Explain use of stdio.h and string.h.
(e) What is string? Explain strcpy() and strcat() function in C programming.

4. Answer any three of the following:\[5 \times 3 = 15\]

(a) Write a ‘C’ program to calculate factorial of integer.
(b) Write a ‘C’ function to calculate \(x^y\).
(c) Write a ‘C’ program to calculate sum of digit.
(d) Write a program [Python Script] to accept name of the student, marks obtain in four subjects, calculate percentage and print percentage and name [Max. marks in each subject is 100].
(e) Write a python script to calculate and print simple interest.
5. Answer any *three* of the following: [5×3=15]

(a) What is pointer? Explain pointer arithmetic.

(b) Write a note on multidimensional array.

(c) What are the different types of conversion function? Explain any *three*.

(d) Explain list operator with an example.

(e) Explain any *four* dictionary method.
F.Y. B.Sc. (Animation) EXAMINATION, 2017

BASICS OF ANIMATION

(2012 PATTERN)

Time : Three Hours

Maximum Marks : 80

N.B. — (i) Attempt All questions.

(ii) Neat diagrams must be drawn wherever necessary.

(iii) Figures to the right indicate full marks.

1. Answer the following (any ten) : [10×2=20]

(a) What is the full form of ................. ?

(i) CMYK

(ii) PDF

(b) What is Animation ?

(c) FPS stands for ................. ?

(d) Define keyframe.

(e) List types of animation.

(f) What are storyboards ?

(g) Define term Rigging.

P.T.O.
(h) Difference between 2D and 3D Animation.

(i) Name the two stop motion Animation.

(j) Define Scene.

(k) What is Animatics?

(l) What is stretch and squash?

2. Answer the following (any four): [4×5=20]

(a) List the 12 principles of animation and explain any two.

(b) What is model sheet? What are different views used for a 2-D model and 3D model?

(c) What are the types of Animation? Explain 3D Animation.

(d) Define terms:
   (i) Frame
   (ii) Arc
   (iii) Production
   (iv) Rendering
   (v) Animatics.

(e) Write a short note on production process of stop motion animation.

3. Answer the following (any four): [4×5=20]

(a) What is expression chart? Why is it necessary?

(b) What is character bible of working women?
(c) Explain the concept of cartoon anatomy.

(d) Write the characteristics of animator.

(e) Explain the terms:
   (i) Flip book
   (ii) Inbetween
   (iii) Cel
   (iv) Pixel
   (v) Balance

4. Answer the following (any four) : [4×5=20]

   (a) Write brief history of animation.
   (b) Draw thumbnail drawing on “Thirsty crow”.
   (c) Develop creative character for animation using basic shapes:

   ![Basic Shapes](image)

   (d) Explain concept of 2D sequential motion drawing.
   (e) What is the Hollywood Formula? Explain in detail.
Total No. of Questions—4] [Total No. of Printed Pages—2

[5118]-4

F.Y. B.Sc. (Animation) EXAMINATION, 2017

AN1104 : FOUNDATION ART

(2012 PATTERN)

Time : Three Hours Maximum Marks : 80

N.B. :— (i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

1. Answer the following questions (any 10) : [10×2=20]

(a) What is rhythm ?

(b) Name five levels of shading in grey scale.

(c) Name any two muscles of head.

(d) What is ground line ?

(e) What is stick drawing ?

(f) What is block construction ?

(g) What are tones ?

(h) Write any two muscles of upper arm.

(i) What are basic shapes used for drawing ? Name any four shapes.

(j) What is line of ‘Action’ ?

(k) Name any two types of bone of torso.

(l) What is arapery ?
2. Answer the following questions (any 4) : [4×5=20]
   (a) What are the skills required for animation artist?
   (b) Explain with example 3 point perspective with example.
   (c) Explain volume construction.
   (d) What is reflection light? Explain with example.
   (e) Explain with example gesture drawing.

3. Answer the following questions (any 4) : [4×5=20]
   (a) Explain the basic proportion of an average male body.
   (b) Explain child proportion with two different examples.
   (c) What is contour drawing? Explain.
   (d) Explain design principle ‘Balance’.
   (e) What is foreshortening? Explain with example.

4. Answer the following questions (any 4) : [4×5=20]
   (a) Explain the use of Mannequins.
   (b) Explain any five facial expression with example.
   (c) Why foundation art is important in animation?
   (d) Explain different eye level in perspective.
   (e) Explain with example Dynamic Pose.
1. Answer the following (any 10) : [10×2=20]

(a) What is Pixel ?

(b) Write a shortcut for transform tool.

(c) Write a shortcut for Align tool.

(d) Full form of SWF.

(e) Write shortcut of group object.

(f) Write path for insert layer.

(g) Write path for delete folder.

(h) What is gradient ?

(i) Define characteristic of line.

(j) What are tools use for drawing ?

(k) What is the use of ink-bootle tool ?

(l) What is FPS ?
2. Answer the following (any 4) :  
(a) Write the types of tween used in flash. Explain it briefly.  
(b) What is masking ?  
(c) What is vector graphic ?  
(d) What is use of tool panel in flash ?  
(e) What is the use of free transform tool ?

3. Answer the following (any 4) :  
(a) Define characteristics of Premitive Rectangle.  
(b) Explain various types of stroke style.  
(c) What are types of text ? Explain in brief.  
(d) Write short note on timeline effects.  
(e) Explain magic wand tool.

4. Answer the following (any 4) :  
(a) What is layer Guide ?  
(b) Write path for delete folder.  
(c) Explain different types of export file format.  
(d) Write down the parts of timeline.  
(e) Write concept of frame by frame animation.
1. Attempt any ten of the following:  
   [10×2=20]
   
   (a) What is back faces?
   
   (b) List types of Ethernet.
   
   (c) State and explain type of compression algorithm.
   
   (d) Explain Nyquist Sampling theorem.
   
   (e) Define differential encoding and transform encoding.
   
   (f) Define frame bursting and frame filtering.
   
   (g) List and explain 3 main properties of color source.
   
   (h) Draw token format and define the term SD, AC and EC used in that.
   
   (i) What is clipping? State its types.
(j) What are the two types of hidden surface algorithm?

(k) What is the full form of MPEG? State its types.

(l) Explain video packet.

2. Attempt any four of the following: [4×5=20]

(a) Write a note of Sutherland-Hodgman algorithm.

(b) Draw the frame format of ethernet and explain the term associated with each block.

(c) Briefly explain the QOS parameter associated with packet switched network.

(d) What is light? State and explain the basic characteristics of light.

(e) State and explain three types of CRT display techniques.

3. Attempt any four of the following: [4×5=20]

(a) Explain the interactive application of multimedia over internet.

(b) Write a note on geometric transformation.

(c) Write note on Z-buffer algorithm.

(d) Explain the basic mode of operation of GIF and also explain the size of color table used how each pixel value is sent, and how receiver knows the image parameter used by this source.

(e) Write down shearing matrix in 2D.
4. Attempt any four of the following: \[4\times 5=20\]

(a) Write a note on LPC.

(b) Draw and explain color models.

(c) Briefly explain all elements of multimedia and their basic form of representation.

(d) Write a note on digital camera and explain various methods for capturing color images.

(e) Explain the meaning of the following types of compressed frame with diagram:

(i) I-frame

(ii) P-frame.
F.Y. B.Sc. (Animation) EXAMINATION, 2017

INTRODUCTION TO 3D ANIMATION AND MODELLING—I
(2012 PATTERN)

Time : Three Hours  Maximum Marks : 80

N.B. :-  (i) All questions are compulsory.
(ii) Figures to the right indicate full marks.

1. Answer the following (any ten) :

   (1) Define viewport.
   (2) What is floating toolbar ?
   (3) What is keyboard shortcut for fetch ?
   (4) What is Pin stack ?
   (5) Write keyboard shortcut for clone.
   (6) What is title bar and menu ?
   (7) What is undo ? Write keyboard shortcut.
   (8) What is setting snap points of face ?
   (9) Write short key for hide and unhide.
   (10) What is the shortkey for rotation and move ?
   (11) What is the shortkey for material editor ?
   (12) What is Render ?

2. Answer the following (any four) :

   (1) Explain attaching and detaching objects.
(2) What is body objects?
(3) Explain mirror command.
(4) What is patches?
(5) What is shapes and splines?

3. Answer the following (any four):

(1) Define hair and fur.
(2) Explain soft selection.
(3) Explain copying and pasting modifiers.
(4) What is Shape primitive button?
(5) Explain fillet/chamfer modifier.

4. Answer the short notes on (any four):

(1) Time Slider
(2) Importing and Exporting
(3) Squashing objects
(4) Prompt line
(5) Aligning normal.
F.Y. B.Sc. (Animation) EXAMINATION, 2017
AN-1108 : INTRODUCTION TO MASS COMMUNICATION AND MEDIA LITERACY
(2012 PATTERN)

Time : Three Hours Maximum Marks : 80

N.B. :—  (i) All questions are compulsory.
         (ii) Figures to the right indicate full marks.

1. Answer the following questions (any ten) :  [10×2=20]
   (a) What is Business Communication ?
   (b) List any four newspaper published in Maharashtra.
   (c) List two news channels.
   (d) What is full form of PRO ?
   (e) What is the role of Television in our life ?
   (f) List two Radio Channels.
   (g) What are e-books ?
   (h) Will print media end ?
   (i) What are the issues of Media Ethics ?
   (j) Write down the difference between Short film and Documentary.
   (k) What are the various media used for mass communication ?
   (l) How does mass communication affect culture ?

2. Answer the following (any four) :  [4×5=20]
   (a) How does social media affect youth ?
(b) How does mass media act as a link between the government and the people?
(c) What is mass media law and how is it involved in mass communication?
(d) What is sociology of media and what are its basic roles?
(e) What is cultural globalization? How does mass communication promote it?

3. Attempt the following (any four): [4×5=20]
   (a) What is the concept of imperialism in media?
   (b) What does democracy refer to with respect to mass communication and how does it relate to consolidation of mass media?
   (c) Give a brief account on Shannon Weaver model.
   (d) What is Press Council and how does it help the current scenario of media?
   (e) What are the roles of an editor of a newspaper?

4. Attempt the following (any four): [4×5=20]
   (a) What is bullet theory?
   (b) How does mass communication affect culture?
   (c) What are the various elements of mass communication?
   (d) Define Communication, Mass Communication, Mass Media.
   (e) Define Virtual life.
S.Y. B.Sc. (Animation) (First Semester) EXAMINATION, 2017

TECHNICAL ENGLISH-I

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :— (i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

1. Answer the following : [10]

(1) What is technical writing ?

(2) Define ethics.

(3) Why is flowcharting useful for instructions ?

(4) What are the two types of motivation ?

(5) What is teamwork ?

(6) What do you mean by copyright ?

(7) Why should writing always focus on the reader ?

(8) What is meant by conciseness ?

(9) What is the importance of formatting ?

(10) What is “Stereotyping” ?
2. **Attempt any *two* of the following:** [10]
   1. Explain the process of rewriting.
   2. Explain the benefits and challenges of e-mails and letters.
   3. What is audience? Explain the variables.
   4. How can you resolve conflicts in a team?

3. **Answer any *two* of the following:** [10]
   1. What is mind map? Create a mind map for a birthday party.
   2. Explain the criteria of an e-mail with an example.
   3. What are the five patterns of organizing content while writing?
   4. What are the objectives of technical writing?

4. **Answer any *two* of the following:** [10]
   1. What is the importance of teamwork?
   2. How to involve the audience in your text?
   3. What are the different types of technical written documents?
   4. What is the meaning and purposes of a memo?
S.Y. B.Sc. (Animation) (First Semester) EXAMINATION, 2017
3D-ANIMATION-I
(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :- (i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

1. Attempt All of the following : [10]

(a) What is CGI ?

(b) How to use panning a view and write down shortcut key ?

(c) Define the term of NURBS.

(d) What is pivot point and how to use ?

(e) Write down full forms of the following :

(i) JPEG

(ii) 3DS

(iii) HSDS

(iv) FFO

(f) Write down any four software’s names using for 3D Animation.

P.T.O.
(g) Which primitive have a slide on option?
(h) Define perspective.
(i) What is element?
(j) What is soft selection and how to use?

2. Attempt any two of the following: [10]
   (a) Explain project file management workflow.
   (b) What is parametric object? Explain in brief.
   (c) Explain state material window with diagram.
   (d) What is light linking? Explain in brief.

3. Attempt any two of the following: [10]
   (a) Explain the production workflow of CGI.
   (b) Explain the editable spline and their sub-object level.
   (c) What is modifier? Explain in brief.
   (d) Write down different between 3D Animation and 2D Animation.

4. Attempt any two of the following: [10]
   (a) Explain track view editor.
   (b) Explain the sunlight system and give an example
   (c) Explain command line render.
   (d) Explain bevel plus modifier with example.
S.Y. B.Sc. (Animation) (First Semester) EXAMINATION, 2017

DIGITAL ART–I

(2012 PATTERN)

Time : Two Hours  
Maximum Marks : 40

N.B. :—

(i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

1. Answer the following questions : [10]

(a) Write shortcut of Gradient tool.

(b) Write shortcut of crop tool ?

(c) What is shortcut of patch tool ?

(d) What is shortcut of Burn tool ?

(e) Name any two types of Lasso tools.

(f) Name any two types of Eraser tools ?

(g) Name any two types of text tools.

(h) What is shortcut of colour balance ?

(i) What is shortcut of Dodge tool ?

(j) Name any two types of retouching tool.

P.T.O.
2. Answer the following questions (any two): [2\times 5=10]

(a) Explain ‘Pen’ tool.
(b) Explain LAB colour mode.
(c) Explain HRD.
(d) Explain history brush tool.

3. Answer the following questions (any two): [2\times 5=10]

(a) Explain smudge tool.
(b) Explain text paragraph panel.
(c) Explain layers.
(d) Explain multicolour mode.

4. Answer the following questions (any two): [2\times 5=10]

(a) What is colour balance in adjustment? Explain.
(b) Explain RGB and CMYK colour mode.
(c) Explain match colour in Adjustments.
(d) Explain clipping mask and quick mask.
S.Y. B.Sc. (Animation) (First Semester) EXAMINATION, 2017
AN-2104 MULTIMEDIA SYSTEM
(2012 PATTERN)

Time : Two Hours
Maximum Marks : 40

N.B. :—  
(i) All questions are compulsory.
(ii) Figures to the right indicate full marks.

1. Attempt each of the following :  
   [10×1=10]
   (a) Write the abbreviation of MIDI and QMF.
   (b) What is multimedia system ?
   (c) What is luminance and chrominance ?
   (d) List out the names of audio and video formats.
   (e) Define multimedia.
   (f) What is analog signal ?
   (g) Write the frequency range of music signal.
   (h) What is redundancy ?
   (i) Name MPEG standards.
   (j) What is RGB and CMYK ?

2. Attempt any two of the following :  
   [2×5=10]
   (a) Write short note on hyper-application.
   (b) Write short note on MIDI.
   (c) Write a note on Sensor's for TV Cameras.
   (d) Explain the technology trends in brief.
3. Attempt any two of the following : [2×5=10]
   (a) Draw and explain time domain sampled representation of a signal.
   (b) Write short note on DCT.
   (c) Write short note on MPEG compression standard.
   (d) Draw and explain digital representations of sound.

4. Attempt any two of the following : [2×5=10]
   (a) Explain composite color video format.
   (b) Explain in brief raster scanning principle.
   (c) Write short note on designer’s view on multimedia appliances.
   (d) Write short note on video monitoring equipment.
1. Answer of the following : \[10\times1=10\]
   (1) What are the two major mediums of animation apart from stop motion ?
   (2) What is Kinex short ?
   (3) What is “Phenakistoscope”? 
   (4) Animator use a device called .......................... to keep track of the movement.
   (5) Clay used for stop motion animation is .......................... clay.
   (6) SIR stands for ......................................
   (7) What is meant by shooting on twos ?
   (8) What is meant by Dallies ?
   (9) What is Exposure sheet ?
   (10) Give full form of MPEG and AVI.

2. Answer any two of the following : \[10\]
   (1) What is production pipeline of stop motion animation ?
(2) Give the difference between Computer Animation and Stop motion animation.
(3) What is cut out animation? Give example.
(4) What is storyboard? Explain the drawing.

3. Answer any two of the following: [10]
   (1) What is an Armature? Explain with types.
   (2) Explain the principle “Slow in, slow out”.
   (3) Give the process of latex build-up process.
   (4) Write a short note on interior and exterior sets.

4. Answer any two of the following: [10]
   (1) What is Rotoscopy and compositing in stop motion animation?
   (2) Explain in brief the form and latex method of building models.
   (3) What are the different types of camera movement?
   (4) Explain any two animation principles with suitable diagrams.
S.Y. B.Sc. (Animation) (First Semester) EXAMINATION, 2017
AN-2106 : PRODUCTION PROCESS—I
(2012 PATTERN)

Time : Two Hours  Maximum Marks : 40

N.B. —  (i) All questions are compulsory.
         (ii) Figures to the right indicate full marks.

1. Answer the following questions (any ten) :  [10×1=10]
   (a) What is Premise ?
   (b) What is ‘Story Beats’ ?
   (c) What is ‘Climax’ in a story ?
   (d) What is Perspective ?
   (e) Define script writing for a movie.
   (f) What is Screen Play ?
   (g) What is ‘Pilot Script’ ?
   (h) Define Story Board.
   (i) What is Layout ?
   (j) List the equipment required for a layout artist.
   (k) What is Silhouette ?
   (l) Define positive and negative space in design.

2. Answer the following (any two) :  [10]
   (a) Write a note on ‘Types of Animation Characters’.
(b) What is story dynamics? Explain.
(c) Give an overview of the production process with the help of a flowchart.
(d) What is Post Production? Explain.

3. Answer the following (any two): [10]
   (a) Write a short note on conceptual drawings.
   (b) What is ‘Turn around sheet’ in character designing?
   (c) Write a note on ‘The Rule of Thirds’?
   (d) How to write dialogues?

4. Answer the following (any two): [10]
   (a) What is ‘head room’? Explain with the help of an illustration.
   (b) Write a note on Background design.
   (c) What is Body Language? How is it important in character designing?
   (d) How to develop a cartoon character from basic shapes?
S.Y. B.Sc. (Animation) (Second Semester) EXAMINATION, 2017

TECHNICAL ENGLISH-II

(2011 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :—

(i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

1. Answer the following questions : [10]

(a) What is a verbal table ?

(b) What is a technical description ?

(c) What is the process for writing an effective technical description ?

(d) What is a Brouchure ?

(e) What is a pictograph ?

(f) What are the points to be considered when including hazard alert messages ?

(g) What is a disclaimer ?

(h) What is the best way to organize a technical description ?

(i) What is the difference between photographic and impressionistic words ?

(j) Define process analysis.
2. Attempt any *two* of the following: [10]
   
   (a) Explain the reverse chronological resume and functional resume in detail.
   
   (b) Explain the evaluation criteria for a technical description.

   (c) Explain the use of technical description.

   (d) What is a news-letter? Explain in detail.

3. Attempt any *two* of the following: [10]
   
   (a) What are the rules for good technical writing?

   (b) What are brochures and the process of writing them?

   (c) What are design elements? Name and explain them.

   (d) Name and explain electronic resume and its types.

4. Attempt any *two* of the following: [10]

   (a) Why is designing a document of crucial importance?

   (b) Why are graphics so important in instruction?

   (c) Explain in detail the format of writing instructions.

   (d) Describe different graphic elements to be used in an instruction.
1. Answer the following : [10]
   (a) Write down short key for "Select and Rotate".
   (b) Write down function name of the keyboard shortcut "Ctrl + Z".
   (c) Write the full form of NURBS.
   (d) How do you open the "Curve Editor" in 3ds Max ?
   (e) Write the names of two specify joints constraints.
   (f) What is the full form of IK ?
   (g) Write any two particle names are used in particle system.
   (h) What is GI system ?
   (i) What is RGB and CMYK ?
   (j) In which file name extension 3ds Max file saved ?

2. Answer the following (any two) : [10]
   (a) Explain the various types of particle system.
(b) What is UVW map modifier?
(c) How do you create atmospheric effect?
(d) Explain the function of relaxing vertices.

3. Answer the following (any two): [10]
   (a) Define the function of moving, sliding and scaling keys in Animation.
   (b) What is Block controller? Explain.
   (c) Explain the different types of layout in Track view.
   (d) Define PArray particle system.

4. Answer the following (any two): [10]
   (a) Explain mental ray sun and sky.
   (b) Explain Pcloud particle system.
   (c) Explain mental ray render.
   (d) Explain 3point light system.
S.Y. B.Sc. (Animation) (Sem. II) EXAMINATION, 2017
AN-2203 : Digital Art—II
(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :— (i) All questions are compulsory.
(ii) Figures to the right indicate full marks.
(iii) Neat diagrams must be drawn wherever necessary.

1. Attempt the following all questions : [10]
   (a) What is Printing ?
   (b) What is Digital Painting ?
   (c) Which shortcut key uses for ‘level’ ?
   (d) What is ‘duotones’ ?
   (e) Define ‘CMYK’ Color Mode.
   (f) Write down any 4 filters name in blur filters option.
   (g) What are switches and how to use ?
   (h) Define slice tool.
   (i) Which file format support for web animation ?
   (j) How to import video files in Photoshop ?

2. Attempt any two of the following : [10]
   (a) What is ‘Web Graphics’ ? Explain it.
(b) Explain the following render filters:
   (i) Different clouds
   (ii) Lens flares.
(c) Explain the importance of filter in brief.
(d) Explain any three tools of Photoshop.

3. Attempt any two of the following: [10]
   (a) What is smart object? Explain it.
   (b) What is web images and explain their file formats.
   (c) Explain the process of change canvas size.
   (d) Explain pixlate option in filter menu.

4. Attempt any two of the following: [10]
   (a) What is resolution? Explain in brief.
   (b) Explain the following points:
       (i) Lab Color
       (ii) Grayscale Color.
   (c) Explain ‘Timeline Animation’ with diagram in Photoshop.
   (d) Explain Gaussian blur filters.
S.Y. B.Sc. (Animation) (Second Semester) EXAMINATION, 2017

AN-2204 MULTIMEDIA COMMUNICATION

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :—

(i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

(iii) Figures to the right indicate full marks.

1. Answer the following questions : [10×1=10]

(a) List the names of layers used in TCP/IP reference model.

(b) Define multimedia communication.

(c) What is propagation delay ?

(d) Name the elements of multimedia.

(e) What is signal-to-noise ratio (SNR) ?

(f) What is multiplexing ?

(g) What is sound forge ?

P.T.O.
(h) Write any four image formats.

(i) Define 1-bit image.

(j) Write the abbreviation of:

(a) IP

(b) DNS.

2. Answer any two of the following: [2×5=10]

(a) Write a short note on movie-on-demand

(b) Define the following:

(i) Attenuation

(ii) Delay distortion

(iii) Noise

(iv) Period.

(c) Write a note on 8-bit gray level image.

(d) Write a note on asynchronous transmission.

3. Answer any two of the following: [2×5=10]

(a) Write a note on bimodality of human speech.

(b) What are the types of media interaction? Explain them.

(c) Draw a diagram of idle error control scheme.

(d) Explain two modes of transmission.
4. Answer any *two* of the following: \[2\times5=10\]

(a) Briefly describe GIF file format.

(b) Write a note on HDLC protocol.

(c) Write a note on music sequencing and notation.

(d) Explain any *one* standard relating to interactive application over internet.
S.Y. B.Sc. (Animation) (Second Semester) EXAMINATION, 2017
AN-2205 : ANIMATION TECHNIQUES—II
(2012 PATTERN)

Time : Two Hours                      Maximum Marks : 40

N.B. :—  (i) All questions are compulsory.
         (ii) Neat diagrams must be drawn wherever necessary.

1. Attempt all the following questions :  [10]
   (a) What is the extension for adobe after effect project ?
   (b) What is Compositing ?
   (c) How to import footage in after effect ?
   (d) What is ‘Ease out’ in after effect ?
   (e) What is Roto ?
   (f) How to apply transitions an image ?
   (g) How to add 3D camera layer ?
   (h) Define Single-point motion tracking.
   (i) What is ‘CTI’ ?
   (j) What is Motion blur and how to enable ?

2. Attempt any two of the following :  [10]
   (a) What is function of scale ? What are the control keys in the tool bar ?
   (b) What is graph editor ? Explain in brief.
   (c) What is path animation ? Explain it.
   (d) What is the function of blending mode ? Explain it.
3. Attempt any two of the following: [10]
   (a) What is motion sketch? Explain in brief.
   (b) What is Wire Removal? Explain in brief.
   (c) Explain multipoint tracking.
   (d) What is null object and how to use? Explain in brief.

4. Attempt any two of the following: [10]
   (a) Explain Motion stabilization.
   (b) What is the function of key frames in After Effect?
   (c) What is keying? Explain in brief.
   (d) Explain Rendering in After Effect.
S.Y. B.Sc. (Animation) (Second Semester) EXAMINATION, 2017
AN-2206 PRODUCTION PROCESS—II
(2012 PATTERN)

Time : Two Hours Maximum Marks : 40

N.B. :—
(i) All questions are compulsory.
(ii) Neat diagrams must be drawn wherever necessary.

1. Attempt all questions of the following : [10×1=10]
   
   (a) What is the Parallel rule ?
   (b) What is Scale in Layout ?
   (c) What are repeat pans ?
   (d) What are zip pans ?
   (e) What are ‘Rest Areas’ ?
   (f) Name some principles in staging that must be kept in mind.
   (g) What are ‘Cut off guides’ ?
   (h) What is ‘Level Sketch’ ?
   (i) What are ‘Story Boards’ ?
   (j) What is Master Shot ?

2. Attempt any two of the following : [10]
   
   (a) Write a short note on ‘One point perspective’.
   (b) What is ‘Aspect Ratio’ ? Explain in brief.
   (c) Write a short note on ‘The Rule of Thirds’.
   (d) What is ‘Script Writing’ ? Explain in brief.
3. Attempt any two of the following: [10]
   (a) What is ‘Forced Perspective’? Explain it.
   (b) Write a short note on conceptual drawings.
   (c) Write a short note on ‘Blue Sketch’.
   (d) What is outline? Explain in brief.

4. Attempt any two of the following: [10]
   (a) Write a short note on story beats.
   (b) Write a short note on storyboards for movies.
   (c) Write a short note on shooting boards.
   (d) What is layout design? Explain in brief.
1. Answer the following questions : [1x10=10]

   (i) Name the first Indian Animation made by Dadasaheb Phalke.

   (ii) What is a storyboard ?

   (iii) What is a photomatic ?

   (iv) Who created the poetic screenplay genre and when ?

   (v) What is Walla ?

   (vi) What is POV ?

   (vii) What is a parenthetical ?

   (viii) What is a beat ?

   (ix) In terms of script writing what is the meaning of a back story.

   (x) In which year did ‘The Flintstones’ the first half-hour animated sitcom debuted ?
2. Attempt any two: 

(a) What is market testing?
(b) Explain the role of a theme in a story.
(c) Explain the preparation required for meeting a story editor.
(d) Give a detailed account of format consideration while creating a story board.

3. Answer any two: 

(a) What are the devices of comedy in animation? Explain.
(b) How is an animator a visual director?
(c) What is a scene and what are its important aspects?
(d) Prepare a list of important points to be checked before submitting a premise.

4. Answer any two: 

(a) Explain in detail the process of creating a story with the III Act structure.
(b) Describe what buyers are looking for in a story in detail.
(c) Describe in detail the development of a character.
(d) Explain the use of a storyboard in the field of business.
T.Y. B.Sc. (Animation) (Third Semester) EXAMINATION, 2017

INTRODUCTION TO ACTION SCRIPT

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

1. Answer the following questions [10×1=10]

(a) Give any two examples of complex data type.

(b) Explain normal blend mode.

(c) What is action script ?

(d) Write any three methods of inserting elements to an array.

(e) Explain the term “Associative array”.

(f) If SWF is given to you, are you able to edit the sources ?

(g) Explain the term “Event object”.

(h) Explain data type String and Boolean.

(i) What is FPS in flash ?

(j) What is alpha property ?

P.T.O.
2. Attempt any **two** of the following : \[2 \times 5 = 10\]

(a) Write a note on “package”.

(b) Write a function to change the color, font and size of the text within the text field "txt Fld"

(c) Explain the following terms :

   - Associative array
   - Indexed array
   - Multidimensional array
   - Index
   - Key

(d) Explain the access-control modifiers available for instance variables definitions.

3. Answer any **two** of the following : \[2 \times 5 = 10\]

(a) Write a note on “Display Object Container”.

(b) Write the use of the following terms :

   - Math.max()
   - Math.min()
   - Math.PI
   - abs()
   - ceil()

(c) Write a function that will return a random number between 4 and 11 (Hint : use Math.random ())

(d) Write a function to load an external image.

4. Answer any **two** of the following : \[2 \times 5 = 10\]

(a) Write a function to navigate to a URL-WWW.Corel.Com after clicking on a button.

(b) Stay any 5 data types used in AS3.

(c) Explain the terms : Variable and Constant.

(d) Write a switch statement that will print the day of the week, based on the day number returned by the getday() method.
T.Y. B.Sc. (Animation) (Third Semester) EXAMINATION, 2017

GAMING TECHNOLOGY

(2012 PATTERN)

Time : Two Hours
Maximum Marks : 40

N.B. — (i) All questions are compulsory.
(ii) Figures to the right indicate full marks.
(iii) Neat diagrams must be drawn.

1. Attempt all of the following : [10]
   (1) Name 3 game consoles from 7th generation of gaming consoles.
   (2) Draw 1 weapon concept for 2d game.
   (3) What should be color scheme for an action oriented game?
   (4) Name 4 web-based games.
   (5) Write 3 game sequences of any game company.
   (6) Write down a name of 1st board game.
   (7) Draw logo of any game company.
   (8) Write down 2 game engine names.
   (9) Draw a flowchart for any 2d game.
   (10) Define quality assurance testing.

P.T.O.
2. Answer the following (any two): [10]

(1) Create a game character for 2d or 3d action game with props.

(2) Create a character for a casual game of a 35 year old farmer.

(3) Give 10 names of the famous 3d console games.

(4) Explain classification of gaming.

3. Answer the following (any two): [10]

(1) Draw concept sketch for endless runner game.

(2) Create concept of a 3d game and design at least 2 levels.

(3) Write down game-production pipeline.

(4) Explain post-production process for any game. Give example.

4. Answer the following (any two): [10]

(1) Explain ‘Gaming as a modern entertainment’.

(2) Create a background for a city based side-scroller game.

(3) Define origin and growth of gaming industry.

(4) Write down tracking progress and plan testing of a game.
T.Y. B.Sc. (Animation) (Third Semester) EXAMINATION, 2017

AN-3104 : DIGITAL EDITING AND MOTION GRAPHICS

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

1. Answer the following questions :

(i) What are network packages ?

(ii) Name any five video editing softwares ?

(iii) What are bumpers ?

(iv) What is persistence of vision ?

(v) What are commercials ?

(vi) State two temporal considerations.

(vii) What are credits ?

(viii) ......................... are 30-60 seconds mini program that appear between movies or other events.

(ix) Define lower thirds.

(x) Full form of PSA.

P.T.O.
2. Answer the following (any two) : [2×5=10]
   (i) What is the 180-degree rule ?
   (ii) Explain the significance of immersive environment.
   (iii) What is digital signage ? Explain.
   (iv) Explain the motion graphics importance in Exhibit design.

3. Answer the following (any two) : [2×5=10]
   (i) Explain persistence of vision, with example.
   (ii) What is thaumatrope ? Explain with diagram.
   (iii) Use of motion graphics in day to day life. Give 10 uses.
   (iv) Explain spatial consideration in detail.

4. Answer the following (any two) : [2×5=10]
   (i) Explain network branding in detail.
   (ii) Give explanation for motion graphics in multimedia.
   (iii) Explain new technology in motion graphics.
   (iv) Draw premiere pro interface.
T.Y. B.Sc. (Animation) (Third Semester) EXAMINATION, 2017

AN-3105: COLOR THEORY AND VISUAL DESIGN

(2012 PATTERN)

Time: Two Hours

Maximum Marks: 40

N.B.:—

(i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

1. Answer the following questions:

   (a) What is weak colors?

   (b) What is pigment colors?

   (c) What is cast shadow?

   (d) What are symbolic colors?

   (e) Name any three colour schemes?

   (f) What is Intensity of colour?

   (g) What is Double Image?

   (h) What is contrast in colour?

   (i) What is Colour Balance?

   (j) What is Digital colour?

P.T.O.
2. Answer the following questions (any 2) : [2×5=10]
   (a) Explain in brief why colours are important in Animation Movies ?
   (b) Explain Hyperchromatic colours.
   (c) Explain ‘HUE’ colours in brief.
   (d) What do we experience when we keep eyes open in a totally dark place ? Explain in brief.

3. Answer the following questions (any 2) : [2×5=10]
   (a) Why is ‘Principles of Design’ important ? Explain in brief.
   (b) Explain the definite nature of colours.
   (c) Explain ‘Tint’ colours.
   (d) Explain Grey shades.

4. Answer the following questions (any 2) : [2×5=10]
   (a) Explain psychological effects of colours on Human Mind.
   (b) Explain the refraction of colour in object.
   (c) What is colour Harmony ? Explain.
   (d) Explain Tones in colours.
T.Y. B.Sc. (Animation) EXAMINATION, 2017

AN-3106 : ADVANCE 3D ANIMATION—I

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 40

N.B. :—  (i)  All questions are compulsory.

(ii)  Draw figures if required to get full marks.

1. Answer the following questions : [10]

(1) What does called a modeling started with a cube ?

(2) What is the full form of NURBS ?

(3) Which command makes a model through a line which expands in 360° from the Center Pivot ?

(4) Which command used to connect two different polygons which makes a path between two objects ?

(5) Which command used to connect two vertex or edges ?

(6) How to make a model transparent while modeling in Maya Software ?

(7) Which command duplicates an object in Maya ?

P.T.O.
(8) Which layout is used to create texture map?

(9) Which deformer used to create facial expressions in Maya software?

(10) Which command used to merge two edges while unwrapping UVs?

2. Answer the following questions (any two): [10]

(1) What is the importance of rage slider? Draw figure.

(2) Explain Tumble, Pan and Zoom camera movement.

(3) Explain squash and stretch in Bouncing Ball Animation, with reference of principles of Animation.

(4) List all principles of Animation and explain any three.

3. Answer the following questions (any two): [10]

(1) Differentiate Quads and N-Gons.

(2) Explain any two:
   (i) Soft Modification
   (ii) UVW Mapping
   (iii) Normals.

(3) Explain Hypershade in Maya (8 to 10 lines).

(4) Process to create Blend shapes (facial).
4. Answer the following questions (any two): [10]

(1) Write a short note on “How the Renderes works in Maya”.

(2) Differentiate between polymodeling and NURBS modeling.

(3) Explain “Create PSD Network” process between Maya and Photoshop.

(4) Explain Deformers:
   
   (i) Wrapp

   (ii) Bend

   (iii) Loft.
T.Y. B.Sc. (Fourth Semester) EXAMINATION, 2017

ANIMATION
(AN-3201 : Web Technology)
(2012 PATTERN)

Time : Two Hours
Maximum Marks : 40

N.B. :— (i) All questions are compulsory.
(ii) Figures to the right indicate full marks.

1. Answer the following questions : [10×1=10]
   (a) List any four common browsers.
   (b) Write the name of any two HTTP methods.
   (c) Define head section.
   (d) Write a difference between class selector and ID selector.
   (e) Which file formats are commonly used for graphics presented on websites?
   (f) What is a marquee?
   (g) Define relative positioning.
   (h) How do you create an email link?
   (i) Write full form of CSS.
   (j) Name any two attributes of input tag.
2. Answer any two: [2×5=10]

(a) Write difference between static website and dynamic website.
(b) Explain the different list types are available in HTML.
(c) Explain class selector with example.
(d) Explain radio button with example.

3. Answer any two: [2×5=10]

(a) Explain cell padding with example.
(b) Explain HTML img tag with its attributes.
(c) What are the advantages of using CSS?
(d) Explain how to add an image to web page in dreamweaver?

4. Answer any two: [2×5=10]

(a) Write a program to display a username and password field along with submit button.
(b) Define CSS. List down the ways of including style information in a document.
(c) Explain how table can be inserted into a HTML document with an example.
(d) Write a program to create an unordered list.
T.Y. B.Sc. (Animation) (Fourth Semester) EXAMINATION, 2017
AN-3202 : INTELLECTUAL PROPERTY RIGHTS AND
CYBER SECURITY
(2012 PATTERN)

Time : Two Hours
Maximum Marks : 40

N.B. :
(i) All questions are compulsory.
(ii) Figures to the right indicate full marks.
(iii) Symbols and abbreviations have their usual meanings.
(iv) Draw neat diagrams wherever necessary.

1. Attempt all of the following : [10]
   (a) Define Law.
   (b) Give full form of SSE-CMM.
   (c) What is full duplex mode of communication ?
   (d) Define Spam.
   (e) What is a virus ?
   (f) Explain information security.
   (g) Define an asset.
   (h) What is steganography ?
   (i) Define cipher text.
   (j) Define software copyright.

2. Attempt any two of the following : [10]
   (a) Define Computer Network. State and explain different types of Network.
(b) Define Policy. State and explain types of policies.
(c) Explain public key infrastructure.
(d) What is VPN? Explain its basic architecture.

3. Attempt any two of the following: [10]
   (a) What is transmission medium? Explain its different types.
   (b) Explain different types of attacks that hackers use to hack our information.
   (c) Write a note on IT Act, 2000.
   (d) What is a Patent? What are Patentability standards?

4. Attempt any two of the following: [10]
   (a) Explain TCP/IP reference model with appropriate diagram.
   (b) What is a firewall? Explain types of firewall.
   (c) Write a note on BCP in detail.
   (d) Define Caesar Cipher and modified Caesar Cipher. Convert the following plain text to Cipher text by Caesar Cipher and modified Caesar Cipher \((n = 5)\) plain text: “It is interesting to study Cryptography.”
T.Y. B.Sc. (Animation) (Fourth Semester) EXAMINATION, 2017
AN-3203 : GAMING PRODUCTION
(2012 PATTERN)

Time : Two Hours
Maximum Marks : 40

N.B. :— (i) All questions are compulsory.
       (ii) Figures to the right indicate full marks.
       (iii) Draw neat diagram wherever necessary.

1. Attempt all of the following : [10]
   (a) What is E3 usually held in Los Angeles in May ?
   (b) Which command is used to model a bottle with curve line in Maya ?
   (c) Which is an important character representing Hero’s opposite ?
   (d) Which character blocks the progress of the Hero by whatever means necessary ?
   (e) Which character must be away drive the story ?
   (f) Which type of Antagonist is an Anti Hero ?
   (g) Which type of Antagonist helps the Hero to progress in journey ?
   (h) Which types of Antagonist characters are larger than life ?
   (i) The supporting characters are also known as ......... characters.
   (j) Which specific story pattern that legends and myths of all world cultures share ?

P.T.O.
2. Attempt any two of the following: \[2\times5=10\]
   (a) Which are the gamers abilities in Game Production?
   (b) Describe importance of Hardware in Game Development.
   (c) Define capability table of last generation console platforms.
   (d) Differentiate Last Gen and Next Gen Console Platforms.

3. Attempt any two of the following: \[2\times5=10\]
   (a) Explain “The show” to express your game production.
   (b) Draw a game application layer.
   (c) Define “System Clock” of the application layer.
   (d) Explain Network communications of application layer.

4. Attempt any two of the following: \[2\times5=10\]
   (a) Draw and explain game logic layer.
   (b) Explain physics and collision in Game Logic Layer.
   (c) Define “Events” in Game Logic Layer.
   (d) Define Command Interpreter in Game Logic Layer.
T.Y. B.Sc. (Semester IV) EXAMINATION, 2017

ANIMATION

Paper AN 3204 : Digital Editing and Motion Graphics–II
(2012 PATTERN)

Time : Two Hours  Maximum Marks : 40

N.B. :— (i) All questions are compulsory.

(ii) Neat diagrams must be drawn wherever necessary.

1. Answer the following questions : [10×1=10]

   (i) What is ‘Old School’ Animation ?

   (ii) Explain the term direct on film.

   (iii) What is interpolation ?

   (iv) Path animation is also referring for which concept ?

   (v) What is parenting ?

   (vi) Bollywood Film “Yuva” is the example of discontinuity editing. Is this correct ?

   (vii) What is nesting ?

   (viii) What is compositing ?

   (ix) Explain the concept Blend oprations.

   (x) What is Keying ?

P.T.O.
2. Attempt any two of the following: [2×5=10]

(i) What is visual interpolation?

(ii) Explain interpolating form and surface.

(iii) What is parenting and nesting in coordinating movement?

(iv) Elaborate mobile framing.

3. Attempt any two of the following: [2×5=10]

(i) What is the difference between Chrama and Luma keys?

(ii) What is Keying?

(iii) Write down any five keying tips.

(iv) Explain the concept “Mattes”.

4. Attempt any two of the following: [2×5=10]

(i) What is Rotoscoping Masks?

(ii) Explain color correction.

(iii) What is color manipulation?

(iv) Explain the concept editing in your own words.
1. Answer the following : [10×1=10]
   
   (a) Which hot key is used to set viewer to luminance ?
   
   (b) Write down the definition of Digital Image.
   
   (c) Shortcut to extract node is shift + ...... + ...... .
   
   (d) What is Image Processing ?
   
   (e) What is Computer Vision ?
   
   (f) Who developed the alpha channel ?
   
   (g) Who was the introducer of alpha channel ?
   
   (h) Write down the full form of P.Sd. file.
   
   (i) What is Noise ?
   
   (j) What is Histogram of Image ?

2. Attempt any two of the following : [2×5=10]

   (a) Write a note on Histogram.
   
   (b) Explain image analysis and its process.
   
   (c) What are the differences between raster image and vector image ?
   
   (d) Write about specifying colors and RGB.
3. Attempt any two of the following: \(2 \times 5 = 10\)
   
   (a) Explain the concept “Image Input Devices”.
   
   (b) Explain the difference between Human Generated Elements Vs. Computer Generated Elements.
   
   (c) What are the basic principles of Digital Compositing?
   
   (d) Write a brief note about Node base compositing software with example.

4. Attempt any two of the following: \(2 \times 5 = 10\)
   
   (a) Write a note on Histogram.
   
   (b) Write down about image compression.
   
   (c) What is Green Screen Matting?
   
   (d) Write a brief note about Chroma Shoot with drawing.
T.Y. B.Sc. (Animation) (Fourth Semester) EXAMINATION, 2017
AN-3206 ADVANCED 3D ANIMATION—II
(2012 PATTERN)

Time : Two Hours
Maximum Marks : 40

N.B. :—
(i) All questions are compulsory.
(ii) Neat diagrams must be drawn wherever necessary.

1. Attempt all of the following : [10]
   (a) What is Skinning ? How to use ?
   (b) Define joint weighting systems.
   (c) What is breakdown key ?
   (d) Define spot light.
   (e) What is the name of Maya’s Material editor ?
   (f) Write down NURBS full form.
   (g) Define outliner window.
   (h) What is Constraint ?
   (i) Which tool create looping segments ?
   (j) What is Soft Selection ?

2. Attempt any two of the following : [10]
   (a) Explain any two types of camera angle.
   (b) Explain attribut editor panel and draw a figure.
   (c) Explain orient constraint with example.
   (d) Explain Ambient Light System and draw a figure.
3. Attempt any two of the following: [10]
   (a) What is different between 3Ds Max and Maya Software?
   (b) Explain paint skin weight window and draw a figure.
   (c) What is render layer? Explain in brief.
   (d) What is Deformer? Explain in brief.

4. Attempt any two of the following: [10]
   (a) Explain the following points:
       (i) Reroot Skeleton
       (ii) Orient Joint.
   (b) What is Pop-thru? Explain it.
   (c) Explain and draw any three polygon primitives.
   (d) Which light create fog effect? Explain in briefly.