

Total No. of printed pages = 7

AMT-403/3DM&T/4th Sem/2018/M

3D MODELLING AND TEXTURING

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks for the questions.

Illustrate your answers with suitable sketches and examples wherever necessary.

Answer question Nos.1 and 2 and any *three* from the rest.

1. Choose the correct option : $1 \times 15 = 15$

- (a) To get Auto Contrast option in Photoshop, select
- (i) Filter Menu
 - (ii) Image > Adjustment
 - (iii) The V key on the keyboard
 - (iv) The X key on the keyboard.

[Turn over

(b) A Maya file saves as a _____ file.

- (i) Max
- (ii) ASCII
- (iii) STUDIO
- (iv) ADS

(c) Automatic mapping is a _____.

- (i) Projection
- (ii) Project
- (iii) Image
- (iv) File

(d) In Maya there are four view ports, what are they?

- (i) Top, Perspective, Side, Front
- (ii) Top, Side, Front, Back
- (iii) Top, Left, Right, Back
- (iv) Perspective, Camera 1, Camera 2, Camera 3

(e) Which menu we will get Extrude option in Maya?

- (i) Mesh
- (ii) Edit Mesh
- (iii) Select
- (iv) None of the above

(f) What is the shortcut key for duplicate in Maya?

- (i) Ctrl+D
- (ii) Alt+D
- (iii) Ctrl+A
- (iv) Ctrl+F

(g) Maya is used by _____.

- (i) Casual game
- (ii) Video game developer
- (iii) Game Programmer
- (iv) Game Programming

(h) Texture mode in Maya _____.

- (i) 5
- (ii) 4
- (iii) 6
- (iv) 9

(i) There are three different geometry types in Maya and they are:

- (i) NURBS, Subdiv., Polygons
- (ii) Polygons, NURBS, Deformers
- (iii) Polygons, Bevels, NURBS
- (iv) Subdiv., Deformers, Polygon

(j) Which menu we will get Insert edge loop tool option ?

- (i) Mesh
- (ii) Edit Mesh
- (iii) Normals
- (iv) Display

(k) What is the shortcut key for Rotated Tool in Maya ?

- (i) W
- (ii) E
- (iii) R
- (iv) Q

(l) Three main elements of polygon matters ?

- (i) Points, faces and control vertices
- (ii) Faces, edges and Edit points
- (iii) Vertices, edges and faces
- (iv) Hull, Isoparm and points

(m) Which menu we will get 'Outliner' option in Maya ?

- (i) Display
- (ii) Windows
- (iii) Select
- (iv) None of the above

(n) Edge is a part of NURBS.

- (i) False
- (ii) True

(o) NURBS full form —

- (i) Non-uniform rational B-Spline
- (ii) Non-uniform rational B-spline
- (iii) Non-uniform rationality B-spline
- (iv) Non-uniform rational B-splin

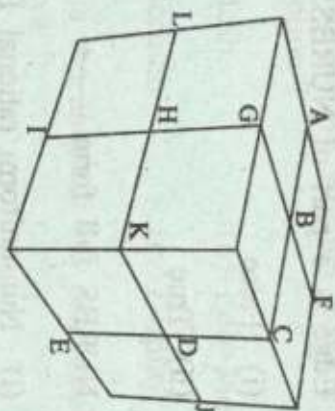
2. Write short notes on any two : $2 \times 5 = 10$

- (a) Hyper shade
- (b) Extrude
- (c) NURBS
- (d) Polygon

3. Answer any three questions :

- (a) (i) What do you mean by 3D model in Maya ?

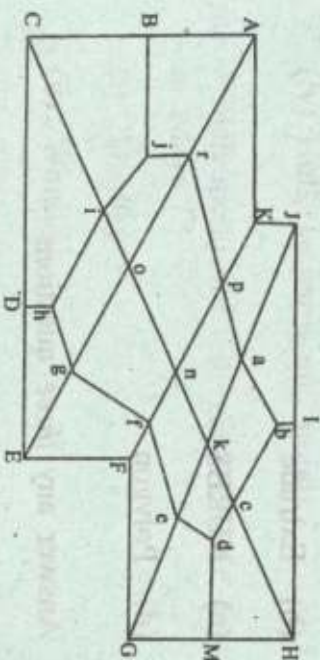
(ii)



The diagram is a cube which has edges (AB, BC, CD, DE, FE, BG, GH, HI, LH, HK, KD, DJ) drawn by insert edge loop tool.

What are the other two options through which you can make the same edges? Discuss it step by step. $3+12=15$

(b) (i)



Observe the diagram and indicate how many faces, vertex, and edges are there in the diagram.

(ii) How many types of Boolean are there? Name them. Describe any two types of Boolean with figure. $3+12=15$

(c) What are the various steps for setting up Image Planes in Maya to create an organic or inorganic model? Describe the process. 15

(d) Discuss the process of working in Photoshop in your own language. Write a note on Bump Map, Displacement map. $5+5+5=15$