

Total No. of printed pages = 4

**AMT-501/DAR/5th Sem/2017/N**

**DIGITAL ANIMATION AND RIGGING**

Full Marks – 70

Pass Marks – 28

Time – Three hours

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

**PART – A**

1. Multiple choice questions : 1×5=5

(a) \_\_\_\_\_ is the study of movement and motion structures that have joints.

(i) Cel-animation      (ii) Kinematics

(iii) Morphing      (iv) Tweaking

(b) What does GUI stand for ?

(i) Gaming User interface

(ii) Geometric User Interface

(iii) Graphical User Interface

(iv) Guidance User Interface

[Turn over

(c) What was the name of the Thomas Edison animation viewing machine called ?

(i) Kenetoscope (ii) Kinetoscope

(iii) Kalaedricope (iv) Zoetrope

(d) What was the first full CG 3D animation called ?

(i) Story toy (ii) Long story

(iii) Book toy (iv) Toy story

(e) Objects such as clay models and paper cut-outs are used in which type of animation

(i) Cel animation

(ii) Stop motion animation

(iii) Computer animation

(iv) Traditional animation

2. Answer the following questions in short :

10×2=20

(a) What is staging ?

(b) List the twelve principles of animation.

(c) What are the primary functions of a pose ?

(d) What are deformers ?

(e) Define the term joint, bone and joint chain.

(f) Define Silhouette.

(g) What is kinematics ?

(h) What is component editor ?

(i) Define the term gesture.

(j) What is anticipation ?

### PART – B

3. Answer any *three* of the following questions :

(a) Give a comparison between traditional method of animation and computer generated animation. 10

(b) Explain the principle of squash and stretch with proper example and diagram. 10

(c) Explain the importance of timing in animation with appropriate example and diagram. 10

(d) What do you mean by inverse kinematics and forward kinematics ? Explain about the IK-FK switch. 6+4=10

(e) What are the different methods of skinning ? Explain in brief. 10

4. Answer any *one* of the following questions :

(a) Draw the appropriate poses with proper line of action for the following :  $3 \times 5 = 15$

(i) Devastated

(ii) Strength

(iii) Balance

(b) Draw and explain the key poses of a walk cycle.  $10 + 5 = 15$