

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086
(For candidates admitted from the academic year 2024 – 2025 & thereafter)

M.A. / M.Com. / M.Sc. DEGREE EXAMINATION – APRIL 2026
SECOND SEMESTER

COURSE : ELECTIVE

PAPER : EMERGING TRENDS IN COMPUTER SCIENCE

SUBJECT CODE : 24DS/PE/ET23

TIME : 3 HOURS

MAX. MARKS: 100

Q. No.	SECTION A Answer all the questions (10 x 2=20)	CO	KL
1.	Define Augmented Reality.	CO1	K1
2.	What is Virtual Reality?	CO1	K1
3.	Define Artificial Intelligence.	CO1	K1
4.	What is meant by knowledge representation?	CO1	K1
5.	What are 3D printing materials?	CO1	K1
6.	Explain how 3D printing is used in medical applications.	CO2	K2
7.	Explain the basic concept of cloud computing.	CO2	K2
8.	Explain how does cloud computing support scalable services.	CO2	K2
9.	Explain the role of cloud computing in social networking.	CO2	K2
10.	Explain how are media services delivered using cloud computing.	CO2	K2
Q. No.	SECTION B Answer all the questions (6 x 5=30)	CO	KL
11.	a) Recall and relate the history of AI. (OR) b) Describe Virtual Reality (VR) and explain its uses in education and healthcare.	CO1	K1
12.	a) Explain the concept of Artificial Intelligence and describe the role of agents in AI systems. (OR) b) Explain the importance of knowledge representation in Artificial Intelligence with suitable examples.	CO2	K2
13.	a) Apply the concept of 3D printing to explain how Fused Filament Fabrication (FFF) is used to create objects. (OR) b) Illustrate how 3D printing technology can be applied in medical and industrial applications.	CO3	K3

14.	a) Apply the concept of cloud computing to explain how cloud environments are built for modern computing systems. (OR) b) Illustrate how different types of cloud deployment models are applied in real-world applications.	CO3	K3
15.	a) Analyze the role of computer-generated worlds in the development of Augmented Reality and Virtual Reality technologies. (OR) b) Analyze the advantages and limitations of using Augmented Reality and Virtual Reality in modern industries.	CO4	K4
16.	a) Analyze the role of cloud computing in supporting social networking. (OR) b) Analyze the different application areas of Artificial Intelligence in fields such as healthcare, business, and robotics.	CO4	K4
Q. No.	SECTION C Answer all the questions (5 x 10=50)	CO	KL
17.	a) Recall and explain the importance of AR technology in architecture, engineering, and construction. (OR) b) Recall and relate the applications of VR in aerospace, defense, and telepresence systems.	CO1	K1
18.	a) Explain the concept of agents situated in environments with suitable examples. (OR) b) Explain the dimensions of complexity in Artificial Intelligence systems.	CO2	K2
19.	a) Apply 3D printing technology to explain its use in medical applications such as prosthetics and implants. (OR) b) Illustrate how 3D printing can be applied in industrial manufacturing and product prototyping.	CO3	K3
20.	a) Apply cloud computing technologies to explain how businesses manage storage and computing resources efficiently. (OR) b) Make use of cloud reference model to explain how cloud services are organized and delivered.	CO3	K3
21.	a) Analyze how cloud computing enables media streaming and content delivery services. (OR) b) Analyze the role of cloud computing in supporting multiplayer online gaming systems.	CO4	K4
