KUMARAGURU
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Register Number:……..

B.E/ B.TECH DEGREE EXAMINATIONS: NOV / DEC 2014

(Regulation 2009)

Sixth Semester

CSE118: MULTIMEDIA SYSTEMS

(Common to CSE/IT)

Time: Three Hours **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. FPS stands for_____
   a) Focal Point Scale b) Frames Per Second
   c) Film Perfect Standard d) Film Projection Standard
2. Which one is the hypermedia object server that serves multimedia documents for editing and retrieval?
   a) Real time scheduler b) Hypermedia engine
   c) Media device control d) Conferencing services
3. When saving a photograph for use on a website, which format would you choose?
   a) BMP b) GIF
   c) JPEG d) TIFF
4. _____ is a multimedia application toolkit which provides a continuous media player with scheduling controls for the application
   a) Quick time b) Tactus
   c) Athena Muse d) ICM
5. Which one is an ISO standard for representing hypermedia documents using SGML?
   a) MMV b) HyTime
   c) The Amsterdam hypermedia model d) Dexter model
6. The Lancaster CMSS use _____ scheduling
   a) Circular b) Round robin
   c) Premptive d) FCFS

7. CCITT stands for _____

a) Common committee for International Telephony and Telegraphy
b) Consultative committee for International Telephony and Telegraphy
c) Coordinative committee for International Telephony and Telegraphy
d) Consultative council for International Telephony and Telegraphy

8. Which one is a connectionless cell-based variable rate data service operating between 1.5 and 45 Mb/s.

a) Cell relay service
b) Continuous bit rate
c) Switched Multimegabit data service
d) Private line access service

9. _____ system has been developed as a proof-of-concept prototype as part of the Intelligent Multimedia Interfaces Project

a) CUBRICON
b) CAVECAT
c) CRUISER
d) OMFI

10. _____ refers to delivery of entertainment television to consumers at a quality level substantially improved over conventional television

a) ATV
b) EDTV
c) HDTV
d) CDTV

PART B (10 x 2 = 20 Marks)

11. What are the challenges of Multimedia systems?
12. What are the drawbacks of MIDI?
13. Explain the implementation of ADPCM.
14. List the 3 models in hypermedia document.
15. Explain the prototype MMV.
16. List the issues facing the design of Multimedia Information Systems.
17. Compare the shared and embedded multimedia architectures.
18. Draw the protocol reference model for multimedia services.
19. What are the different modes in TWS?
20. Define an Intelligent multimedia system.

PART C (5 x 14 = 70 Marks)

21. a) (i) Explain the QoS architecture for Multimedia systems with a neat diagram. (7)

(ii) Explain in detail about the Multimedia distributed processing model and Multimedia Information model. (7)

(OR)

b) (i) Explain about the Digital audio signal processing. (10)

(ii) Compare subtractive- based representations and parametric representations. (4)

22. a) Explain in detail about the video compression techniques.

(OR)

b) (i) Explain why a bidirectional B-frame improves video compression rates. What drawbacks are there with using B-frames? (8)

(ii) If the display order of a group of pictures is IBBPBBPPBBI, what is the order of transmission and coding of this group? (6)

23. a) Explain the following:

a) Performance Guarantees for Continuous Media Access

b) Continuous Media File System

c) CMSS

d) GSS

(OR)

b) (i) Explain the current state of Multimedia Presentation and Authoring industry. (7)

(ii) Explain the barriers to widespread use of authoring and presentation systems. (7)

24. a) (i) Explain the BISDN reference model with a neat diagram. (7)

(ii) Explain the QMF format and OMFI. (7)

(OR)

b) (i) Define real –time interchange and explain the file format techniques for supporting real –time interchange. (7)

(ii) Explain in detail about the multimedia conferencing architectures. (7)

25. a) You have been asked to advice on a Multimedia production that is to send an audio production of network. The transmission is to occupy as low a bandwidth

as possible but yet maintain as high as possible audio fidelity. The audio production will involve voices, for narration and dialog, music both electronic and acoustic instruments and sound effects.

Comment on the most appropriate methods in which to deliver such a presentation and also address relative merits and drawbacks of the methods you suggest in your solution.

(OR)

b) Explain the anatomy of Intelligent Multimedia systems.

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