

**M.TECH IT (COURSEWARE ENGINEERING) FIRST YEAR SECOND SEMESTER - 2018****Subject : Educational Management And Quality Assurance**

Time : Three hours

Full Marks : 100

Answer any five questions.

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|---|--|-------------|
| 1 | (a) What is meant by Quality Assurance framework?<br>(b) Why Quality guidelines are necessary?<br>(c) How does the Instructional Technology support learning?  | 5+5+10      |
| 2 | (a) What is a copyright?<br>(b) What may be copyrighted?<br>(c) How a copyright may be obtained?<br>(d) What constitutes an infringement of a copyright?<br>(e) Who owns the copyright to a particular work?<br>(f) How long does a copyright last?  | 3+3+4+5+3+2 |
| 3 | (a) What is bandwidth? Discuss any three communication medium for wireless communication.<br>(b) The bandwidth of a speech signal is from 25Hz to 10KHz and that of a music signal is from 20Hz to 20KHz. (i) Derive the bit rate that is generated by the digitization procedure for music and speech signal respectively, assuming the Nyquist sampling rate is used with 10 bits per sample for the speech signal and 12 bits per sample for the music signal. (ii) Calculate the memory required to store a 10 minute passage of stereophonic music. | 8+12        |
| 4 | (a) Give an account of the considerations for developing a multimedia content for Digital Distance education.<br>(b) Discuss main principles of User Centered Design(UCD).   | 12+8        |
| 5 | (a) Suggest and describe a framework for determining quality of a classroom lecture.<br>(b) Name and discuss some of the challenges faced by the academic staff of distance education.   | 10+10       |
| 6 | (a) Describe the following as part of Distance Education (DE) infrastructure.<br>(i). T1, T3 lines.<br>(ii). ADSL modem<br>(iii). Satellite delivery.<br>(b) In which area/(s) is the DE infrastructure utilized.?   | 12+8        |
| 7 | (a) Justify the statement by example: "A major concern for distance learning is connectivity and transmission speed".<br>(b) Write a brief account of the major technologies used in building digital distance education infrastructure.   | 10+10       |

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Write short notes on (any four) :

5X4=20

- (i). Advantages and disadvantages of Standards.
- (ii). Learning Management System.
- (iii). SCORM.
- (iv). Main Dimensions for Courseware quality.
- (v). Dominant modes of Digital Distance education.
- (vi). Multimodal Digital Distance education.