

**B.Sc. 6<sup>th</sup> Semester (Honours) Practical Examination, 2020**

**PHYSICS**

**(Communication Electronics Lab)**

**Paper : 604/DSE-4/P-8**

**Course ID: 62427**

**Time: 1 Hour**

**Full marks: 10**

*The figures in the right hand side margin indicate full marks.  
Candidates are required to give their answers in their own words  
as far as practicable.*

**1. Answer any five of the following questions**

**2 x 5 = 10**

- a) What is the necessity of modulating an electronic signal?
- b) What are the different types of analog and digital modulations?
- c) What is the difference between high level and low level modulation?
- d) What is the advantage of PPM over PWM and PAM?
- e) What is a slope detector?
- f) What is multiplexing?
- g) What do you mean by sampling of signal?
- h) Why the quality of sound heard on an FM radio is better than that on an AM radio?
- i) What is the difference between AM signal and PAM signal?
- j) Mention a few limitations of amplitude modulation. Why collector modulation is used while modulating a signal by transistor modulator circuit?
- k) What is limiter and why it is employed in an FM receiver?
- l) Give at least two advantages and disadvantages of digital transmission over analog transmission.
- m) How does Pulse Position Modulation (PPM) work? Explain very briefly.
- n) How does an AM receiver work? What is the most common problem with radio reception?
- o) What are transmitter and receiver? Which frequency is the best for FM transmission?

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