

NATIONAL CERTIFICATE COMMUNICATIONS ELECTRONICS N5

(8080235)

15 November 2019 (X-Paper) 09:00–12:00

This question paper consists of 6 pages and a formula sheet of 3 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
COMMUNIVATION ELECTRONICS N5
TIME: 3 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

- 1. Answer ALL the questions.
- 2. Read ALL the questions carefully.
- Number the answers according to the numbering system used in this question paper.
- 4. Start each section on a NEW page.
- 5. Use only BLUE or BLACK ink.
- 6. Write neatly and legibly.

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QUESTION 1:

Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–N) next to the question number (1.1–1.10) in the ANSWER BOOK.

COLUMN A			COLUMN B	
1.1	The only component available to oppose current flow in a direct current circuit	Α	folded dipole	
		В	L-type	
1.2	A component that sets up a back emf when AC flows through it, which is opposite to the applied emf	С	Shannon Hartley	
	applica citii	D	resistance	
1.3	A two-port network which has similar input and output ports that may be interchanged	Ε	symmetrical	
1.4	The network pads used for matching purposes only and are designed to give minimum attenuation	F	coil	
		G	AM	
1.5	A network that is designed to pass a certain band of frequencies without loss, while attenuating all other frequencies	Н	oscillator	
		I	radiation resistance	
1.6	A stage in an AM transmitter which generates the constant amplitude which will be modulated and transmitted	J	half-wave dipole	
		K	filter	
1.7	The modulation process that produces two set of side bands and is a narrow-band system	L	T-type	
		М	reactance	
1.8	The theorem that specifies the limit of the rate of speed or channel capacity, that data may be transmitted for a given bandwidth within a certain signal-to-noise ratio	N	FM	
1.9	The ratio of power radiated by the antenna to the square of the current at the feed point			
1.10	The antenna that offers high resistance to the circuit or transmission line		(10 × 1)	

(10 × 1) [10]

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