Roll No

Max. Mks. : 30

Time

: 70 Minutes

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute)

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

B.Tech

FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)

(Objective Type)

Subject Code: ACSBS0202

Subject: Principles of Electronics

General Instructions:

All questions are compulsory.

Question No-1 to 5 are objective type question carrying 2 marks each.

Question No- 6 to 15 are also objective type/Glossary based question carrying 2 marks each.

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Туре	Difficulty	Correct	Option1	Option2	Option3	Option4
1	A semiconductor has temperature coefficient of resistance.		Attempt All Questions	5 x 2 = 10	2		Single Choice	Brilliant	Negative	Positive	Negative	Both may be possible	None of the above
2	Maximum efficiency of Half Wave Rectifier is		Attempt All Questions	5 x 2 = 10	2		Single Choice	Brilliant	0.41	0.25	0.41	0.65	0.85
3	If the emitter-base junction is forward biased and the collector-base junction is reverse biased, what will be the region of operation for a transistor?		Attempt All Questions	5 x 2 = 10	2		Single Choice	Brilliant	active region	cut off region	saturated region	inverted region	active region
4	A MOSFET can be operated with …………		Attempt All Questions	5 x 2 = 10	2		Single Choice	Brilliant	positive as well as negative gate voltage	negative gate voltage only	positive gate voltage only	positive as well as negative gate voltage	none of the above
5	What is Barkhausen criterion for oscillation?		Attempt All Questions	5 x 2 = 10	2		Single Choice	Smart	Aß = 1	Aß > 1	Aß < 1	Aß = 1	Aß ≠ 1
6	Gain of inverting amplifier		Glossary I	Glossary I	2		Single Choice	Brilliant	Avf= -Rf/R1	Avf= 1+ Rf/R1	Avf= -Rf/R1		
7	Gain of non inverting amplifier		Glossary I	Glossary I	2		Single Choice	Brilliant	Avf= 1+ Rf/R1	Avf = 1 + Rf/R1	Avf= -Rf/R1		
8	The input gate current of a FET is		Glossary II	Glossary II	2		Single Choice	Brilliant	zero	zero	infinite		
9	The input resistance of FET in the low frequency small signal operation is		Glossary II	Glossary II	2		Single Choice	Brilliant	infinite	zero	infinite		
10	Current gain of transistor amplifier is lowest in		Glossary III	Glossary III	2		Single Choice	Brilliant	CB configuration	Saturation region	CB configuration		
11	The collector current is proportional to base current only in		Glossary III	Glossary III	2		Single Choice	Brilliant	Saturation region	Saturation region	CB configuration		
12	Intrinsic semiconductors are doped with Impurity for making n-type semiconductor .		Glossary IV	Glossary IV	2		Single Choice	Brilliant	pentavalent	trivalent	pentavalent		
13	Intrinsic semiconductors are doped with Impurity for making p-type semiconductor .		Glossary IV	Glossary IV	2		Single Choice	Brilliant	trivalent	trivalent	pentavalent		

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Туре	Difficulty	Correct	Option1	Option2	Option3	Option4
14	Holes moves inband.		Glossary V	Glossary V	2		Single Choice	Brilliant	 	 	conduction		
15	Free electrons moves inband .		Glossary V	Glossary V	2		Single Choice	Brilliant	conduction	valence	conduction		