

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Second Semester)

Branch - ELECTRONICS

ELECTRONICS CIRCUITS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Choose the Ripple factor for half wave rectifier a) 1.11 b) 1.21 c) 1.52 d) 1.61	K1	CO1
	2	Which of the following are true about capacitor filter? a) It is also called as capacitor output filter b) It is electrolytic c) It is connected in parallel to load d) It helps in storing the magnetic energy	K2	CO1
2	3	Transistor biasing represents _____ conditions a) a.c. b). d.c. c) both a.c. and d.c. d) spiked ac	K1	CO2
	4	Transformer coupling is used for ____ amplification. a) Power b) Voltage c) Current d) Frequency	K2	CO2
3	5	What is the disadvantage of a class B push-pull amplifier? a) The efficiency reduces b) The figure of merit increases c) The cross-over distortion occurs d) The Q-power dissipation is very large	K1	CO3
	6	The change of output wave shape from the input wave shape of an amplifier is known as a). distortion b). gain c). amplitude d). wave shape	K2	CO3
4	7	What is the noise level in negative feedback amplifier? a).not equal b) decreases c) equal d) increases	K1	CO4
	8	Positive feedback is employed in a) amplifiers b) oscillator c) biasing circuit d) divider circuit	K2	CO4
5	9	In phase shift oscillator generally _____ RC sections are used a) four b) two c) one d) three	K1	CO5
	10	Which circuit converts irregularly shaped waveform to regular shaped waveforms? a) Comparator b) Voltage limiter c) Schmitt trigger d) multivibrator	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Prepare a note on Average value and Ripple Factor.	K3	CO1
	(OR)			
	11.b.	How to regulate the voltage using Regulator IC78XX ?		
2	12.a.	Describe the emitter follower with neat diagram.	K3	CO2
	(OR)			
	12.b.	What is FET? How its work as a source Amplifier ?		
3	13.a.	Summaries the applications, advantages and disadvantages of a class C Amplifiers.	K3	CO3
	(OR)			
	13.b.	Explain complementary pair operation in push -pull amplifier.		
4	14.a.	Distinguish between positive and negative Feedback Amplifiers.	K3	CO4
	(OR)			
	14.b.	Draw and explain voltage shunt feedback amplifier.		
5	15.a.	With neat circuit diagram write about Hartley oscillator.	K4	CO5
	(OR)			
	15.b.	Write the working principle of monostable multivibrators.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Draw and explain Bridge wave rectifier and find the RMS value.	K4	CO1
2	17	Explain CE amplifier with diagram and calculate gain of the amplifier.	K4	CO2
3	18	Describe in detail about Class A amplifier with neat circuit diagram.	K4	CO3
4	19	Discuss in detail about the current shunt feedback amplifier, and listed with advantages.	K4	CO4
5	20	Explain Astable multivibrator with neat diagram and calculate it's frequency.	K4	CO5

Z-Z-Z

END