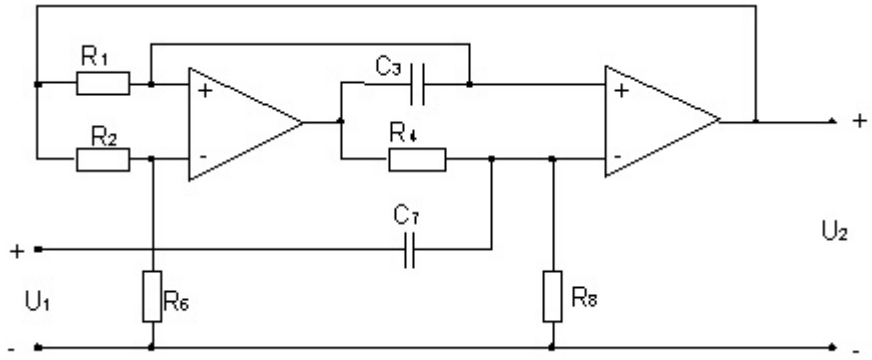
Question 1 (10 points)

Koliko iznosi wp ako je zadano: R1=R2=R4=R6=C3=C7=2 ?

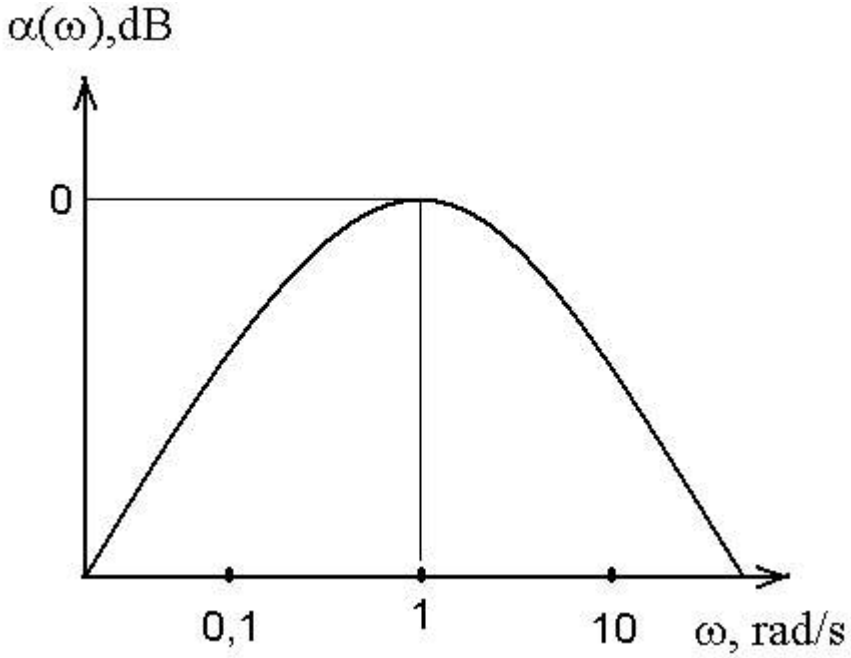


Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.125
100.0%			b.	0.25
-50.0%			c.	0.5
-50.0%			d.	0.75

0 / 10 (*Question not answered.*)

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?



Percent	Correct	Student	Answer Choices

Value	Response	Response		
-50.0%			a.	nisko propusn
-50.0%			b.	pojasnoj bran
-50.0%			c.	visoko propus
100.0%			d.	pojasno propu

Score:

Question 3 (10 points)

Red filtra je ukupan broj kapaciteta i induktiviteta u mreži. Kako se određuje broj kapaciteta?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	prebroje se svi kapaciteti
100.0%			b.	kapacitet napravljen kombinacijom 2 ili više kapacite
-50.0%			c.	broje se samo kapaciteti serijski spojeni sa induktivite
-50.0%			d.	broje se samo kapaciteti paralelno spojeni sa induktiv

Score:

Question 4 (10 points)

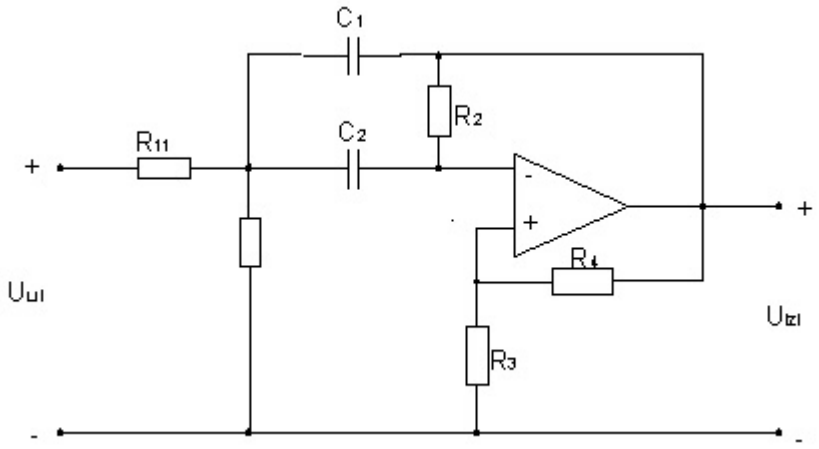
Kako se odreduju konstante gusenja a(w) i faze b(w)?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Odreduju se prema formulama koje su dane za n
100.0%			b.	Odreduju se prema formulama koje su dane za s
-50.0%			c.	Odreduju se pomocu formule filtracije za male f
-50.0%			d.	Ne mogu se odrediti.

Score:

Question 5 (10 points)

Koja ja vrsta filtera zadana na slici?



Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	niskopropusni
-50.0%			b.	visokopropusni
100.0%			c.	pojasno propusni
-50.0%			d.	pojasna brana

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

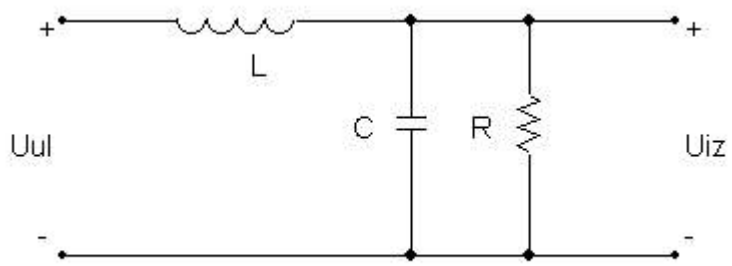
$$H(s) = \frac{s}{s^2 + s + 1}$$

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	pojasna brana
100.0%			b.	pojasno propusni filtar
-50.0%			c.	sve propusni filtar
-50.0%			d.	nisko propusni filtar

Score:

Question 2 (10 points)

Za filtar prikazan na slici odrediti prijenosnu funkciju ako je R=1, L=2, C=3.



Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	H(s)=1/(s^2+s+1)
-50.0%			b.	H(s)=2s/(6s^2+2s+1)
100.0%			c.	H(s)=1/(6s^2+2s+1)
-50.0%			d.	H(s)=s/(6s^2+2s+1)

Score:

Question 3 (10 points)

Koji filtar se koristi kako bi se unio fazni pomak između signala?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	PP
100.0%			b.	SP
-50.0%			c.	NP
-50.0%			d.	VP

Score:

Question 4 (10 points)

Iz koje vrste sklopova K-filtra se moze izvesti M-filter?

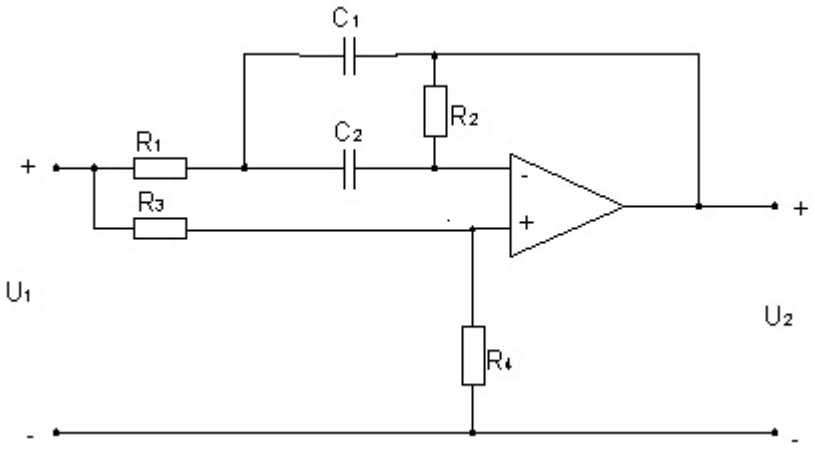
Percent Value	Correct Response	Student Response	Answer Choices	
50.0%			a.	Iz K-filtra u T spoju.

-50.0%			b.	Iz K-filtrau W spoju.
50.0%			c.	Iz K-filtra u PI spoju.
-50.0%			d.	Ne moze se uzvesti M-filter iz K-filtra.

Score:

Question 5 (10 points)

Da li je ispunjen uvjet za pojasnu branu ako je G1=G2=G3=G4=1. C1=C2=0.5 ?



Percent Value	Correct Response	Student Response	Answer Choices	
100.0%			a.	Da
-50.0%			b.	Ne

Score:

Question 1 (10 points)

Kako glase prijenosne jednadžbe linije kao četveropola?

Percent Value	Correct Response	Student Response	Answer Choices	
25.0%			a.	A = ch (γ*l)
25.0%			b.	B = Z0 * sh (γ*l)
25.0%			c.	C = (1/Z0) * sh (γ
25.0%			d.	D = ch (γ*l)

-50.0%			f.	C = Z0 * sh (γ*l)

Score:

Question 2 (10 points)

O čemu ovisi produkt LG u slučaju savršenih vodiča?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	O unutarnjem mediju.
100.0%			b.	O vanjskom mediju.
-50.0%			c.	Neovisan je.
-50.0%			d.	Nijedan od ponuđenih.

Score:

Question 3 (10 points)

U nekoj čvrstoj točki x=x1 (x kao parametar) na vodu se vrijednosti up,ip,ur,ir mijenjaju u ovisnosti o t:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	linearno, s frekvencijom omega jednako onoj harmoničke pobude
-50.0%			b.	eksponencijalno, s frekvencijom omega jednako onoj harmoničke p
100.0%			c.	po cos-funkciji, s frekvencijom omega jednako onoj harmoničke po
-50.0%			d.	po sin-funkciji, s frekvencijom omega jednako onoj harmoničke po

Score:

Question 4 (10 points)

Koji od navedenih izraza predstavlja koeficijent refleksije na ulazu linije?

$\Gamma_2 = \frac{Z_2 - Z_0}{Z_2 + Z_0}$ a) $\Gamma_2 = \frac{Z_2 + Z_0}{Z_2 - Z_0}$ b) $\Gamma_1 = \frac{Z_1 + Z_0}{Z_1 - Z_0}$ c) $\Gamma_1 = \frac{Z_1 - Z_0}{Z_1 + Z_0}$ d)

Student response:

Score:

Question 5 (10 points)

Kolika je ulazna impedancija Zul homogene linije bez gubitaka, duljine lambda/2, koja je na kraju zaključen

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Zul = Z0^2 / Z2
-50.0%			b. Zul = Z0/Z2
-50.0%			c. Zul = Zo(Z2+jZ0)
100.0%	▶		d. Zul = Z2
-50.0%			e. niti jedna od navedenih

Score:

Question 1 (10 points)

Kako glase prijenosne jednadžbe linije kao četveropola?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
25.0%	▶		a. A = ch (γ*l)
25.0%	▶		b. B = Z0 * sh (γ*l)
25.0%	▶		c. C = (1/Z0) * sh (γ*l)
25.0%	▶		d. D = ch (γ*l)
-50.0%			e. A = sh (γ*l)
-50.0%			f. C = Z0 * sh (γ*l)

Score: 0 / 10 (*Question not answered.*)

Question 2 (10 points)

Koja od formula predstavlja vodljivost izolacije?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. G = (C * σ) / ε
-50.0%			b. G = (C * ε) / σ
-50.0%			c. G = (σ * ε) / C
-50.0%			d. G = σ * ε * C

Score: 0 / 10 (*Question not answered.*)

Question 3 (10 points)

Kod vodova s dobrom izolacijom i razmjerno malim induktivitetom ,za koje vrijedi da je u području njihove namjene omegaL<

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. točno
-50.0%			b. netočno

Score: 0 / 10 (*Question not answered.*)

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 3 ohm/km L= 8 nH/km G= 9 S/km C=24 nF/km. Odredi faktor prijenosa homogene linije.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. (3^0,5) * (3 + 8s*10^-9)
-50.0%			b. (3^0,5) * (2 + 4s*10^-8)
-50.0%			c. 3^0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: 0 / 10 (*Question not answered.*)

Question 5 (10 points)

Koja od navedenih tvrdnji je istinita?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶		a. polazni val se smanjuje od ulaza prema izlazu
-50.0%			b. polazni val raste od ulaza prema izlazu
-50.0%			c. reflektirani val se smanjuje od ulaza prema izlazu
50.0%	▶		d. reflektirani val se smanjuje od izlaza prema ulazu

Score: 0 / 10 (*Question not answered.*)

Question 1 (10 points)

Zavisne varijable u i i ovise o:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶		a. duljini x
50.0%	▶		b. vremenu t
-50.0%			c. otporu R
-50.0%			d. kapacitetu C

Score: 0 / 10 (*Question not answered.*)

Question 2 (10 points)

Koliko je faktor refleksije ukoliko je vod na kraju kratko spojen?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices

-50.0%			b.	Γ2 = 1
-50.0%			c.	Γ2 je beskonačan.
-50.0%			d.	Nijedan od ponuđenih, ovisi i o drugim parametrima.

Score: 0 / 10 (*Question not answered.*)

Question 3 (10 points)

Pomak u fazi između reflektiranog i upadnog(polaznog) vala je:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. fi za napon,a fi +pi za struje
-50.0%			b. fi+pi za napon,a fi za struje
-50.0%			c. fi za napon i struje
-50.0%			d. fi +pi za napon i struje

Score: 0 / 10 (*Question not answered.*)

Question 4 (10 points)

Izraz za faktor prijenosa homogene linije glasi:

a) $\gamma = \sqrt{(R+sL)(G+sC)}$

b) $\gamma = \sqrt{(G+sL)(R+sC)}$

c) $\gamma = \sqrt{\frac{R+sL}{G+sC}}$

d) $\gamma = \sqrt{\frac{G+sC}{R+sL}}$

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. a
-50.0%			b. b

-50.0%			d.	d
-50.0%			e.	ništa od navedenog

Score: 10 / 10

Question 5 (10 points)

Kolika je ulazna impedancija Zul homogene linije bez gubitaka, duljine lambda/2, koja je na kraju zaključena dvopolom impedancije Z2?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Zul = Z0^2 / Z2
-50.0%			b. Zul = Z0/Z2
-50.0%			c. Zul = Zo(Z2+jZ0)
100.0%	▶		d. Zul = Z2
-50.0%		▶	e. niti jedna od navedenih

Score: -5 / 10

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

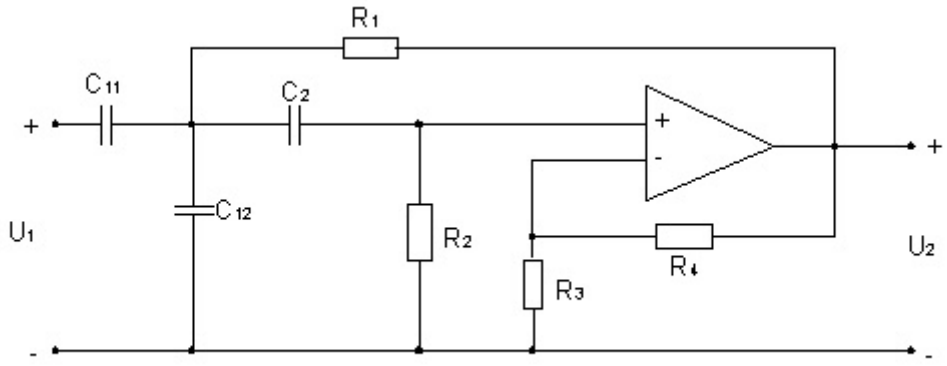
$$H(s) = \frac{s}{s^2 + s + 1}$$

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasna brana
100.0%	▶	▶	b. pojasno propusni filtar
-50.0%			c. sve propusni filtar
-50.0%			d. nisko propusni filtar

10 / 10

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni
100.0%	▶		b. visoko propusni
-50.0%			c. pojasno propusni
-50.0%		▶	d. pojasna brana

-5 / 10

Question 3 (10 points)

Kako glasi kratica za visokopropusni filtar?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. VF
100.0%	▶	▶	b. VP
-50.0%			c. PF
-50.0%			d. VS

10 / 10

Question 4 (10 points)

Koja je razlika izmedu K-filtera i M-filtera.

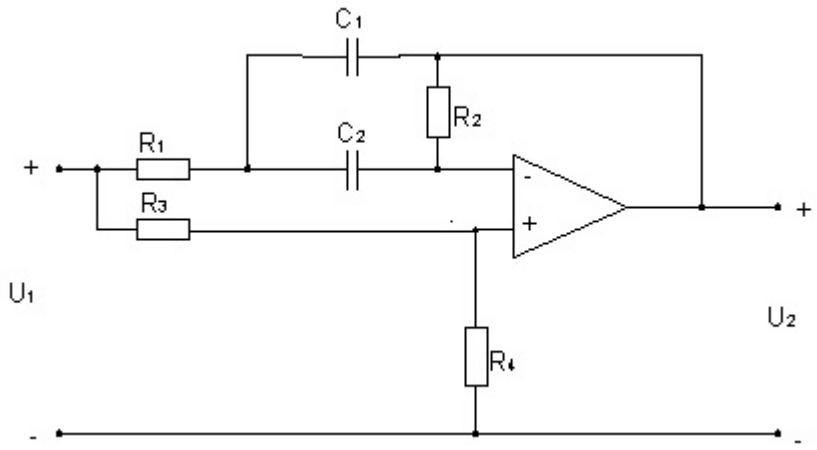
Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nema razlike.

-50.0%			b.	Neka druga razlika.
100.0%			c.	M-filtri imaju pojaseve frekvencija kod kojih su Xa(w) i Xb(w) istog predznaka.
-50.0%			d.	K-filtri imaju svojstvo da ima je ulazna impedancija uvijek reciprocna izlaznoj.

-5 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?

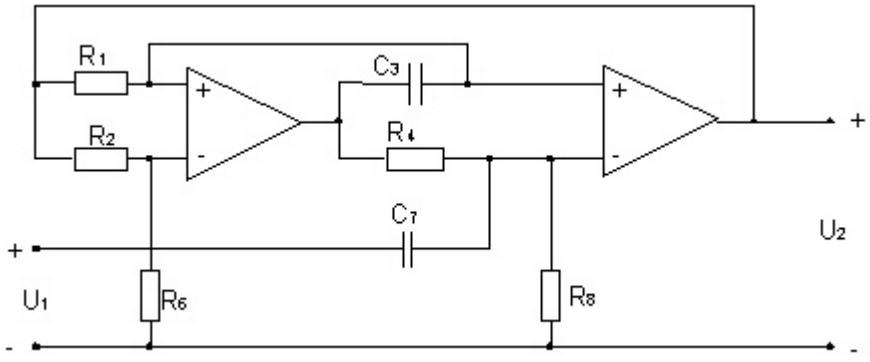


Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%			d. pojasna brana

-5 / 10

Question 1 (10 points)

Koja je vrsta filtra zadana na slici?

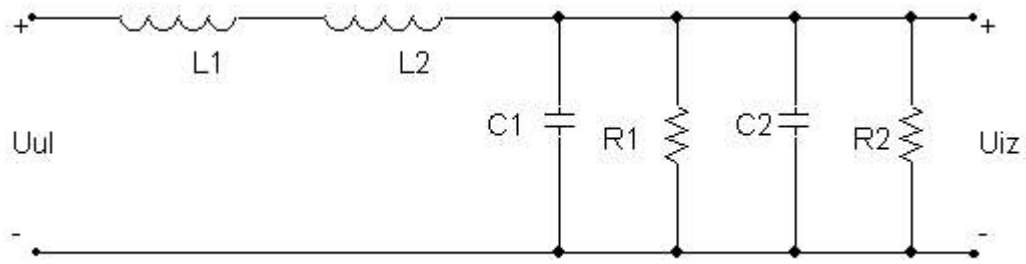


Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska pojačala

10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 6
-50.0%			b. 3
100.0%	▶	▶	c. 2
-50.0%			d. Ako nisu poznate vrijednosti elemenata, ne može se odrediti

10 / 10

Question 3 (10 points)

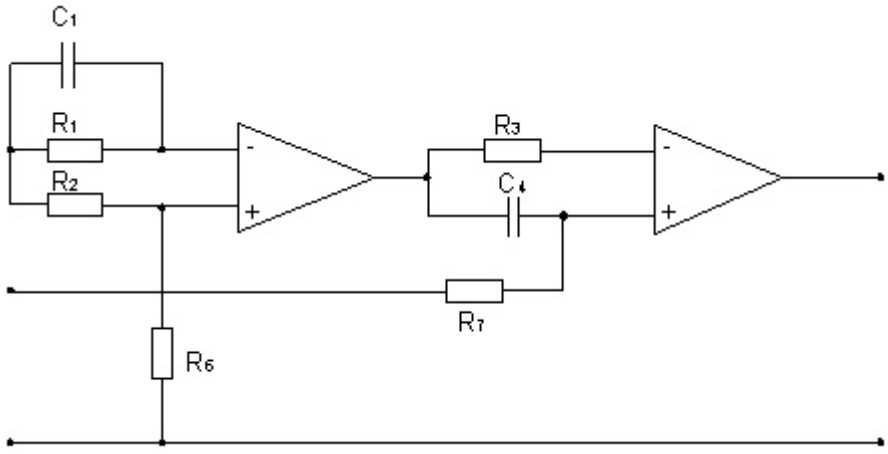
Kako se može aproksimirati amplitudno-frekvencijska karakteristika? (zaokruži netočan odgovor)

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. kao Butterworthova karakteristika
-50.0%		▶	b. minimaks ili Čebiševom aproksimacijom
-50.0%			c. eliptičkom ili Cauerovom aproksimacijom
100.0%	▶		d. Laplaceovom aproksimacijom

-5 / 10

Question 4 (10 points)

Koliko iznosi wp ako znamo da je R1=R2=R3=R6=R7=1, C1=C4=2 ?

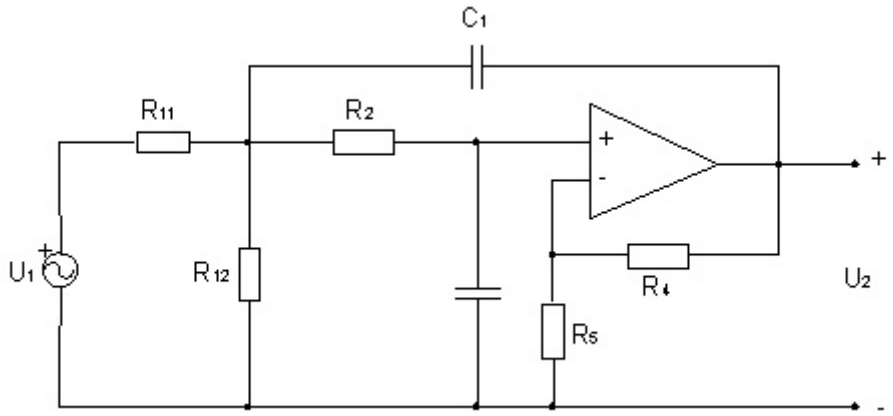


Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%		▶	a.	0.25
100.0%	▶		b.	0.5
-50.0%			c.	0.125
-50.0%			d.	0.625

-5 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?

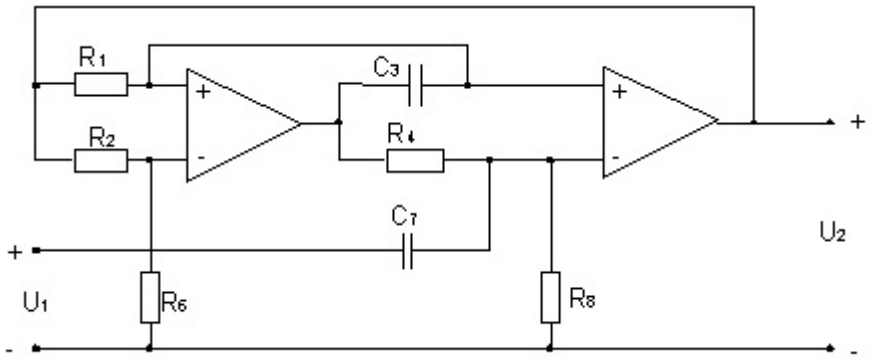


Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. niskopropusni
-50.0%			b. visokopropusni
-50.0%		▶	c. pojasno propusni
-50.0%			d. pojasna brana

-5 / 10

Question 1 (10 points)

Koja je vrsta filtra zadana na slici?



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala

-50.0%			c.	PP s 2 operacijska pojačala
-50.0%			d.	PB s 2 operacijska pojačala

10 / 10

Question 2 (10 points)

Zadana je prijenosna funkcija. Odrediti tip filtra kojem ona pripada.

$$H(s) = \frac{3s^2 + 1}{3s^2 + 2s + 1}$$

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasno propusni filtar
100.0%	▶	▶	b. pojasna brana
-50.0%			c. sve propusni filtar
-50.0%			d. ne smije biti isti red potencije u brojniku i nazivniku

10 / 10

Question 3 (10 points)

Što je u pojasnom propustu (wg - wd)?

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. širina pojasa propuštanja
-50.0%		▶	b. centralna frekvencija
-50.0%			c. trajanje propusta
-50.0%			d. faktor kvalitete

-5 / 10

Question 4 (10 points)

Nesimetrični reaktantni četveropoli se upotrebljavaju i kao četveropoli za prilagođivanje otpora u prijenosnim sustavima:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. točno
-50.0%			b. netočno

10 / 10

Question 5 (10 points)

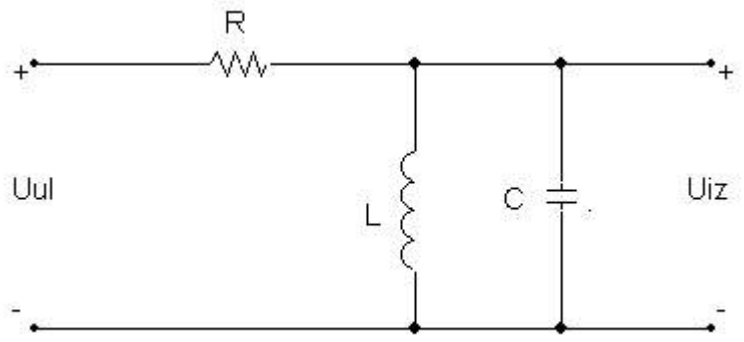
Cemu je jednaka impedancija Zc(w) izvedenog M-filtra?

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. Jednaka je zrcalnoj impedanciji odgovarajuceg K-filtra.
-50.0%			b. Jednaka je O (nuli).
-50.0%			c. Jednaka je zrcalnoj admitanciji odgovarajuceg K-filtra.
-50.0%		▶	d. Jednaka je ulaznoj impedanciji odgovarajuceg K-filtra.

-5 / 10

Question 1 (10 points)

Za filtar sa slike odrediti tip filtra.



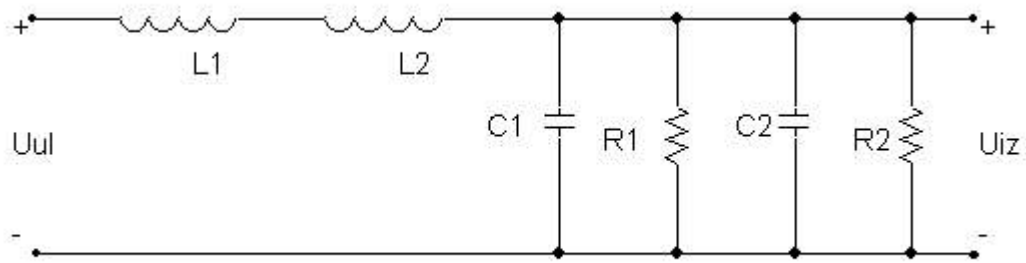
Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar

-50.0%			b.	visoko propusni filtar
-50.0%			c.	pojasna brana
100.0%	▶	▶	d.	pojasno propusni filtar

10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 6
-50.0%			b. 3
100.0%	▶	▶	c. 2
-50.0%			d. Ako nisu poznate vrijednosti elemenata, ne može se odrediti

10 / 10

Question 3 (10 points)

Ako smo realizirali univerzalni filtar drugog stupnja sa tri operacijska pojačala, tada:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. prvo operacijsko pojačalo sumira napone
50.0%	▶		b. drugo i treće operacijsko pojačalo su integratori
-50.0%			c. sva operacijska pojačala su integratori
-50.0%			d. spoj možemo gledati samo u cjelosti

5 / 10

Question 4 (10 points)

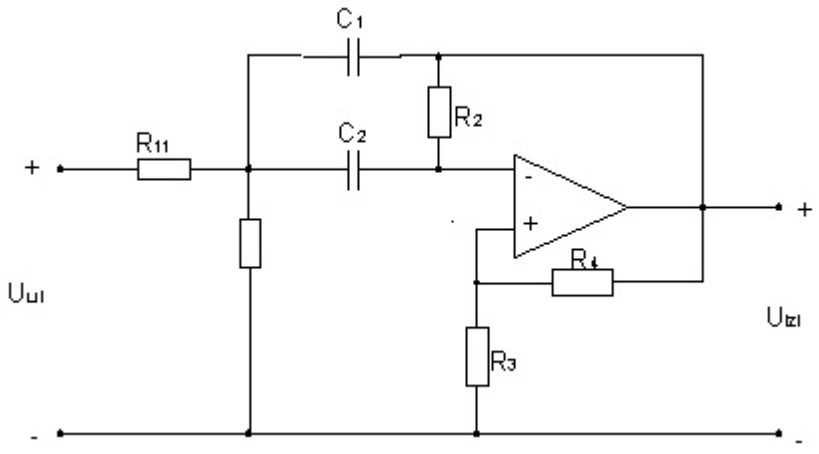
Kako se odreduju konstante gusenja a(w) i faze b(w)?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Odreduju se prema formulama koje su dane za nesimetricne filtere.
100.0%	▶		b. Odreduju se prema formulama koje su dane za simetricne filtere.
-50.0%		▶	c. Odreduju se pomocu formule filtracije za male filtere.
-50.0%			d. Ne mogu se odrediti.

-5 / 10

Question 5 (10 points)

Koja ja vrsta filtera zadana na slici?



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
100.0%	▶		c. pojasno propusni
-50.0%		▶	d. pojasna brana

-5 / 10

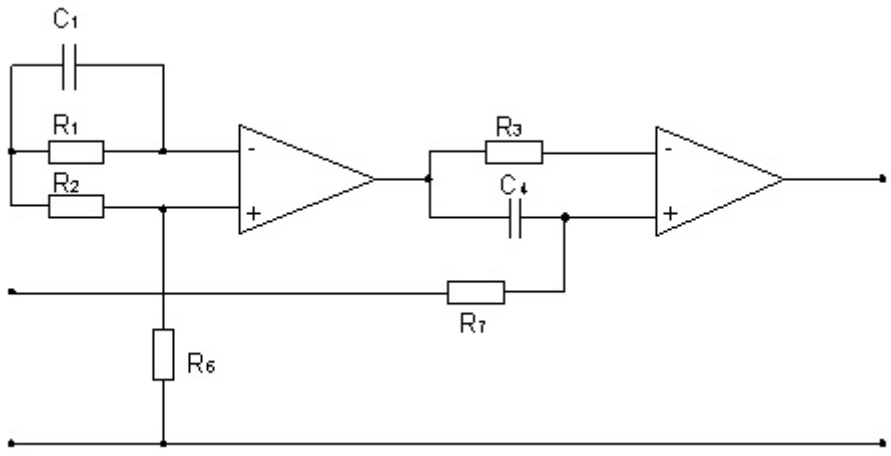
Za filtar sa slike odrediti tip filtra.

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%			d. pojasno propusni filtar

10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: R1=R2=R3=2, C1=C4=3, wp=1 ?



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 2
-50.0%			b. 3
-50.0%			c. 4
-50.0%			d. 5
100.0%			e. 6

10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

10 / 10

Question 4 (10 points)

Kod reaktantnog četveropola zaključenog zrcalnim impedancijama prenosi se u području propuštanja napon proporcionalno,a struja obrnuto proporcionalno omjeru transformacije četveropola,uz zakret faze za b:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. točno
-50.0%			b. netočno

10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 1
100.0%	▶	▶	c. 2
-50.0%			d. 4

10 / 10

Za filtar sa slike odrediti tip filtra.

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

10 / 10

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni
100.0%	▶	▶	b. visoko propusni
-50.0%			c. pojasno propusni
-50.0%			d. pojasna brana

10 / 10

Question 3 (10 points)

Ovo je niskopropusni filtar drugog reda. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. k je faktor pojačanja, Q faktor kvalitete, wo frekvencija pola
-50.0%			b. Q je faktor pojačanja, k faktor kvalitete, wo frekvencija pola

-50.0%			c.	wo je faktor pojačanja, k faktor kvalitete, Q frekvencija pola
-50.0%			d.	wo je faktor pojačanja, Q faktor kvalitete, k frekvencija pola

10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 ima vrijednost 0 ili -beskonacno 2.Kod omega=beskonacno ima vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nula reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funkcije reaktancije (susceptancije) skače od +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-osovini

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. netočno
100.0%	▶	▶	b. točno
-50.0%			c. nisu napisana sva svojstva

10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

10 / 10

Za neki filtar je zadana centralna frekvencija 1kHz. Gornja granična frekvencija iznosi 1,1kHz , a donja granična frekvencija 0,9kHz. Koliko iznosi Q faktor?

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	Q=5
-50.0%			b.	Q=0,2
-50.0%			c.	Q=0,5
-50.0%			d.	Q=2

10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	nisko propusnom filtru
-50.0%			b.	pojasnoj brani
-50.0%			c.	visoko propusnom filtru
100.0%	▶	▶	d.	pojasno propusnom filtru

10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Q=fc*(fh+fl)
-50.0%			b.	Q=(fc)^2*fh
-50.0%			c.	Q=(fc+fh)/fc
100.0%	▶	▶	d.	Q=fc/(fh+fl)

10 / 10

Question 4 (10 points)

Sto dobivamo povoljnim odabirom velicine m kod K-filtera?

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Da frekvencija lezi sto blize granicnoj.
-50.0%			b. Da frekvenicja lezi sto dalje od granicne.
-50.0%			c. Da izbjegnemo frekvencijsku karakteristiku.
-50.0%			d. Nista od navedenog.

10 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%	▶	▶	d. pojasna brana

10 / 10

Koja je vrsta filtra zadana na slici?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska pojačala

10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 6
-50.0%			b. 3
100.0%	▶	▶	c. 2
-50.0%			d. Ako nisu poznate vrijednosti elemenata, ne može se odrediti

10 / 10

Question 3 (10 points)

Koji filtar se koristi kako bi se unio fazni pomak između signala?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	PP
100.0%	▶	▶	b.	SP
-50.0%			c.	NP
-50.0%			d.	VP

10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%	▶	▶	b. Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c. Thg=Th(a+jb)=Zk/Zp
-50.0%			d. Thg=Th(a-jb)=Zk/Zp

10 / 10

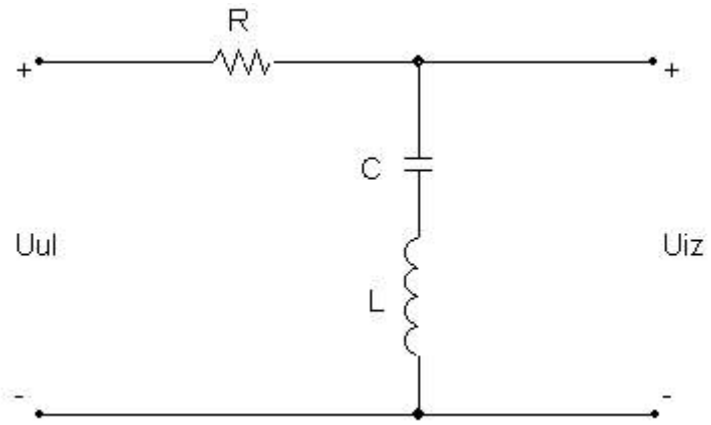
Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

10 / 10

Koji tip filtra je prikazan slikom?



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Pojasno propusni filtar
100.0%	▶	▶	b. Pojasna brana (ili Notch)
-50.0%			c. Sve propusni filtar
-50.0%			d. Nisko propusni filtar

10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana funkcija?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
100.0%	▶	▶	b. visoko propusnom filtru
-50.0%			c. pojasnoj brani
-50.0%			d. ništa od navedenog

10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

10 / 10

Question 4 (10 points)

Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

10 / 10

Question 5 (10 points)

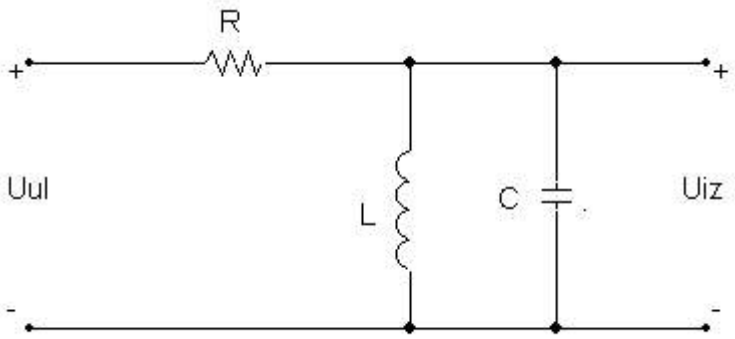
Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	1
100.0%	▶	▶	c.	2
-50.0%			d.	4

10 / 10

Question 1 (10 points)

Koji je red filtra prikazanog slikom?

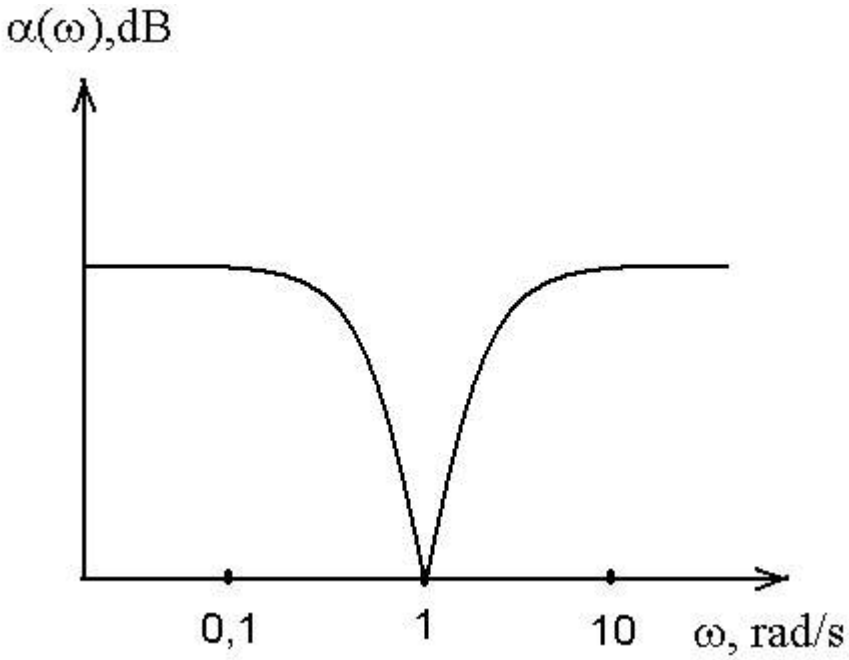


Percent Value	Correct Response	Student Response	Answer Choices
-50.0%		▶	a. 2
100.0%	▶		b. 3
-50.0%			c. Da bi odredili red filtra moraju biti zadane vrijednosti elemenata
-50.0%			d. Da bi odredili red filtra mora biti zadana prijenosna funkcija

-5 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?



Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. visoko propusnom filtru
100.0%	▶	▶	c. pojasnoj brani
-50.0%			d. pojasno propusnom filtru

10 / 10

Question 3 (10 points)

Pojasno propusni filtar propušta signale

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. jače od wg
-50.0%			b. slabije od wg
100.0%	▶	▶	c. između wg i wd
-50.0%			d. slabije od wd

10 / 10

Question 4 (10 points)

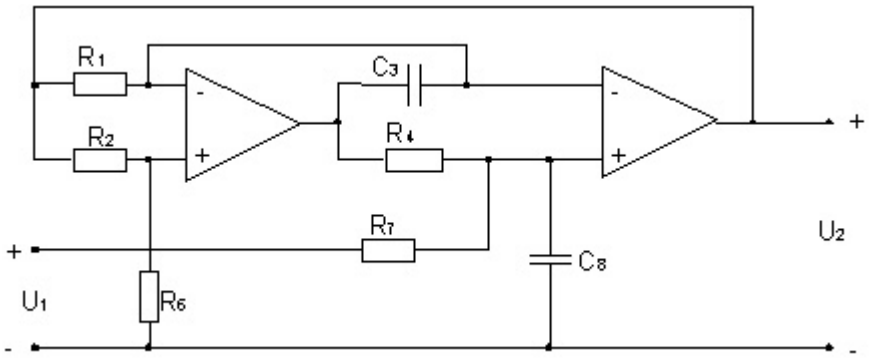
Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?

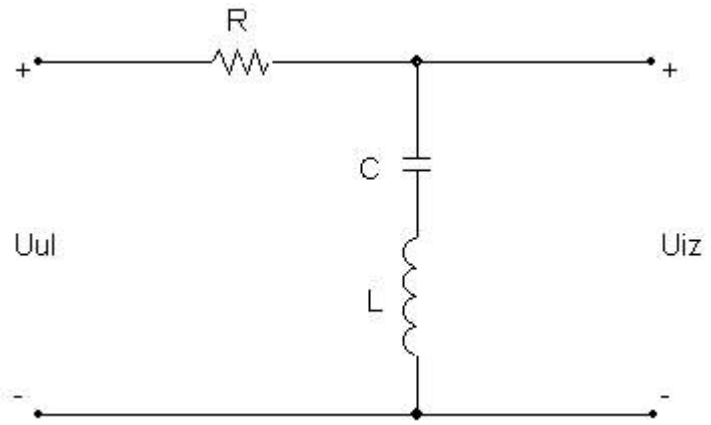


Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
100.0%	▶		c. PP sa 2 operacijska pojacala
-50.0%		▶	d. PB sa 2 operacijska pojacala

-5 / 10

Question 1 (10 points)

Koji tip filtra je prikazan slikom?

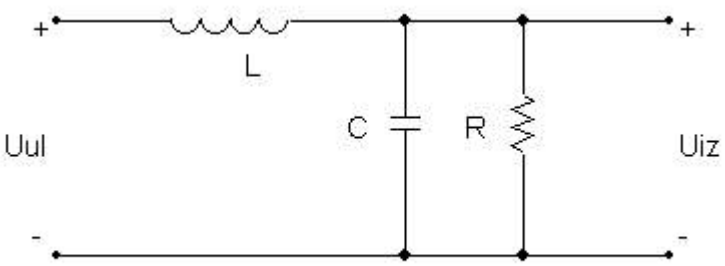


Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Pojasno propusni filtar
100.0%			b.	Pojasna brana (ili Notch)
-50.0%			c.	Sve propusni filtar
-50.0%			d.	Nisko propusni filtar

10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti prijenosnu funkciju. R=1, L=1, C=1.



Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	H(s)=s/(s^2+s+1)
100.0%			b.	H(s)=1/(s^2+s+1)
-50.0%			c.	H(s)=s^2/(s^2+s+1)
-50.0%			d.	H(s)=(s^2+s+1)/s

10 / 10

Question 3 (10 points)

Ovo je niskopropusni filtar drugog reda. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. k je faktor pojačanja, Q faktor kvalitete, wo frekvencija pola
-50.0%			b. Q je faktor pojačanja, k faktor kvalitete, wo frekvencija pola
-50.0%			c. wo je faktor pojačanja, k faktor kvalitete, Q frekvencija pola
-50.0%			d. wo je faktor pojačanja, Q faktor kvalitete, k frekvencija pola

10 / 10

Question 4 (10 points)

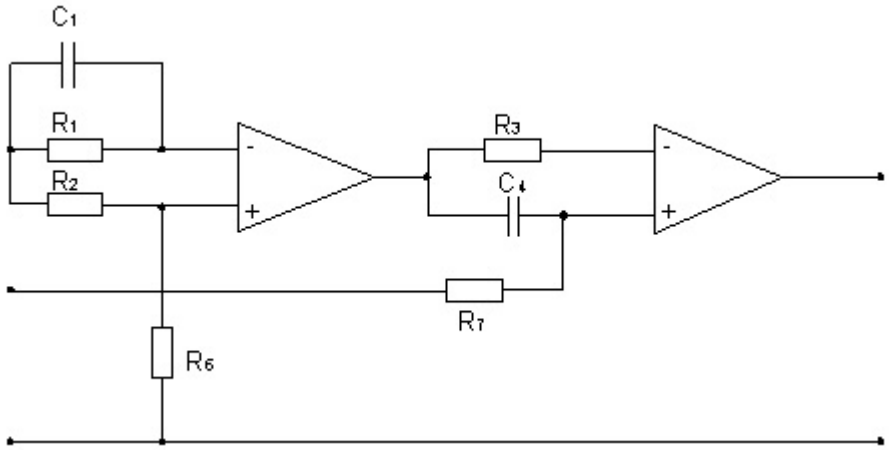
Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%	▶	▶	b. Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c. Thg=Th(a+jb)=Zk/Zp
-50.0%			d. Thg=Th(a-jb)=Zk/Zp

10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?



Percent Value	Correct Response	Student Response	Answer Choices	
100.0%			a.	NP sa 2 operacijska pojacala
-50.0%			b.	VP sa 2 operacijska pojacala
-50.0%			c.	PP sa 2 operacijska pojacala
-50.0%			d.	PB sa 2 operacijska pojacala

10 / 10

Question 1 (10 points)

Za neki filtar je zadana centralna frekvencija 1kHz. Gornja granična frekvencija iznosi 1,1kHz , a donja grani

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%			a.	Q=5
-50.0%			b.	Q=0,2
-50.0%			c.	Q=0,5
-50.0%			d.	Q=2

10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Percent Value	Correct Response	Student Response	Answer Choices

-50.0%			a.	nisko propusnom filtru
-50.0%			b.	pojasnoj brani
-50.0%			c.	visoko propusnom filtru
100.0%			d.	pojasno propusnom filtru

10 / 10

Question 3 (10 points)

Red filtra je ukupan broj kapaciteta i induktiviteta u mreži. Kako se određuje broj kapaciteta?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. prebroje se svi kapaciteti
100.0%			b. kapacitet napravljen kombinacijom 2 ili više kapaciteta se broji kao
-50.0%			c. broje se samo kapaciteti serijski spojeni sa induktivitetom
-50.0%			d. broje se samo kapaciteti paralelno spojeni sa induktivitetom

10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%			b.	Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c.	Thg=Th(a+jb)=Zk/Zp
-50.0%			d.	Thg=Th(a-jb)=Zk/Zp

10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

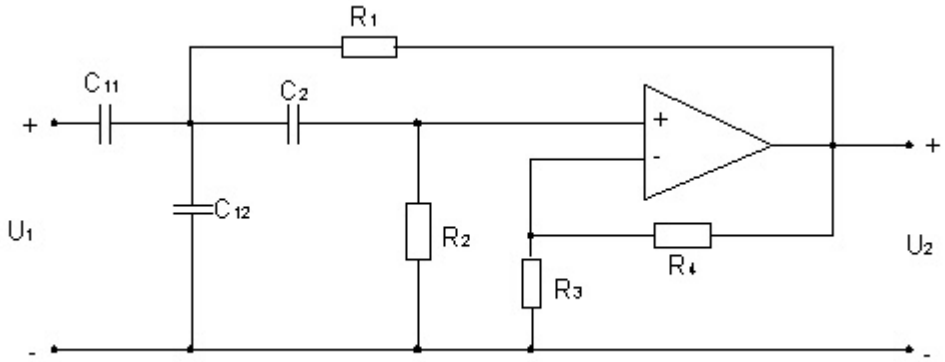
Percent	Correct	Student	Answer Choices

Value	Response	Response		
100.0%			a.	NP sa 2 operacijska pojacala
-50.0%			b.	VP sa 2 operacijska pojacala
-50.0%			c.	PP sa 2 operacijska pojacala
-50.0%			d.	PB sa 2 operacijska pojacala

10 / 10

Question 1 (10 points)

Koliko iznosi Qp ako je zadano: C1=C2=G1=G2=G3=G4=2 ?



Percent Value	Correct Response	Student Response
-50.0%		
-50.0%		
-50.0%		
100.0%		

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response
-50.0%	

-50.0%	
-50.0%	
100.0%	

Score: 10 / 10

Question 3 (10 points)

Niskopropusni filtar se sastoji od otpora i kapaciteta. Ako w pada onda:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Xc raste, pa je signal na izlazu veći od signala na
100.0%			b. Xc raste, pa je signal na izlazu jednak signalu na
-50.0%			c. Xc pada, pa je signal na izlazu jednak signalu na
-50.0%			d. Xc pada, pa je signal na izlazu veći od signala na

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nula reaktanc +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraj

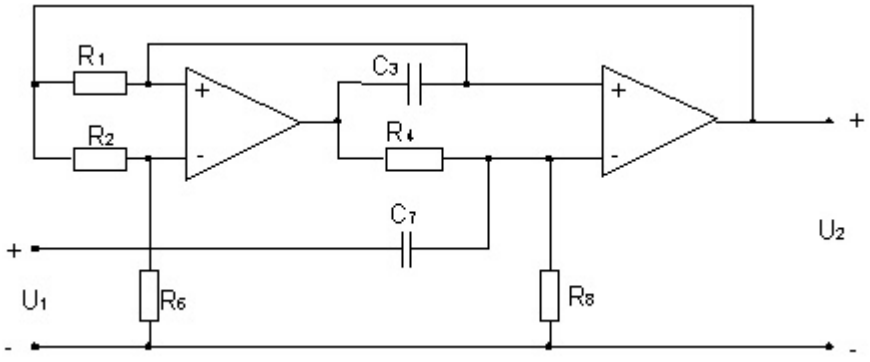
Student response:

Percent Value	Correct Response
-50.0%	
100.0%	
-50.0%	

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: wp=0.25, R1=R2=R4=R6=R8=1, C7=2 ?

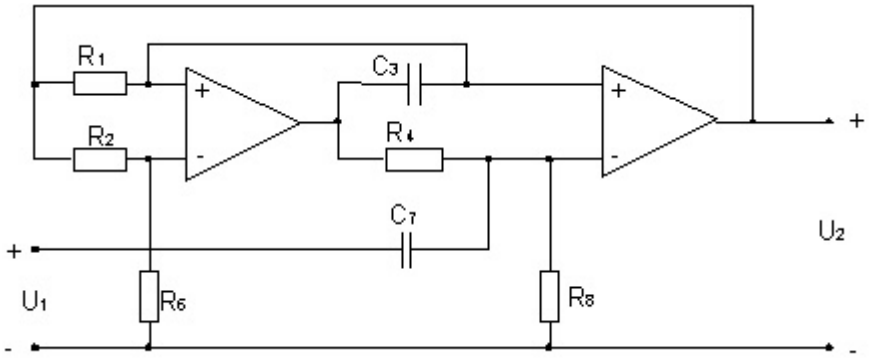


Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	4
-50.0%			b.	2
100.0%			c.	0.5
-50.0%			d.	0.25

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Koliko iznosi wp ako je zadano: R1=R2=R4=R6=C3=C7=2 ?



Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.1
100.0%			b.	0.2
-50.0%			c.	0.5
-50.0%			d.	0.7

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

$$H(s) = \frac{s^2 - s + 1}{s^2 + s + 1}$$

Student response:

Percent Value	Correct Response
-50.0%	
-50.0%	
100.0%	
-50.0%	

Score: 10 / 10

Question 3 (10 points)

Kako glasi kratica za visokopropusni filtar?

Student response:

Percent Value	Correct Respons
-50.0%	
100.0%	
-50.0%	
-50.0%	

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod on
koji leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nu
skače od +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule k

Student response:

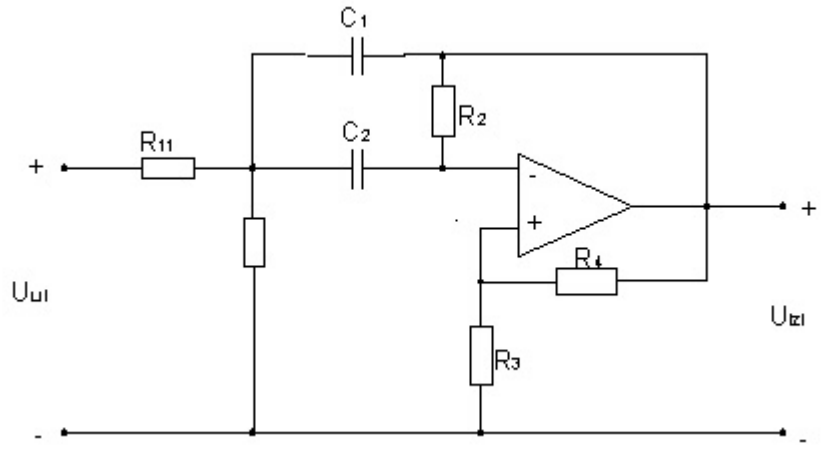
Percent Value	Correct Response
-50.0%	

100.0%	
-50.0%	

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: G1=G2=G3=G4=1, C1=2, C2=0.5 ?



Percent Value	Correct Response	Student Response
-50.0%		
100.0%		
-50.0%		
-50.0%		

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 1 (10 points)

Za pojasno propusni filtar je zadana donja granična frekvencija (40MHz) i gornja granična frekvencija (60MH
iznosi centralna frekvencija filtra?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%			a. 48.99 MHz

-50.0%			b.	50 MHz
-50.0%			c.	50,99 MHz
-50.0%			d.	Nije moguće odrediti

Score: 10 / 10

Question 2 (10 points)

Za filtar prikazan na slici odrediti prijenosnu funkciju ako je R=1, L=2, C=3.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=1/(s^2+s+1)
-50.0%			b. H(s)=2s/(6s^2+2s+1)
100.0%	▶	▶	c. H(s)=1/(6s^2+2s+1)
-50.0%			d. H(s)=s/(6s^2+2s+1)

Score: 10 / 10

Question 3 (10 points)

Red filtra je ukupan broj kapaciteta i induktiviteta u mreži. Kako se određuje broj kapaciteta?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. prebroje se svi kapaciteti
100.0%	▶	▶	b. kapacitet napravljen kombinacijom 2 ili više kapaciteta se broji kao jedan
-50.0%			c. broje se samo kapaciteti serijski spojeni sa induktivitetom
-50.0%			d. broje se samo kapaciteti paralelno spojeni sa induktivitetom

Score: 10 / 10

Question 4 (10 points)

Koja je razlika izmedu K-filtera i M-filtera.

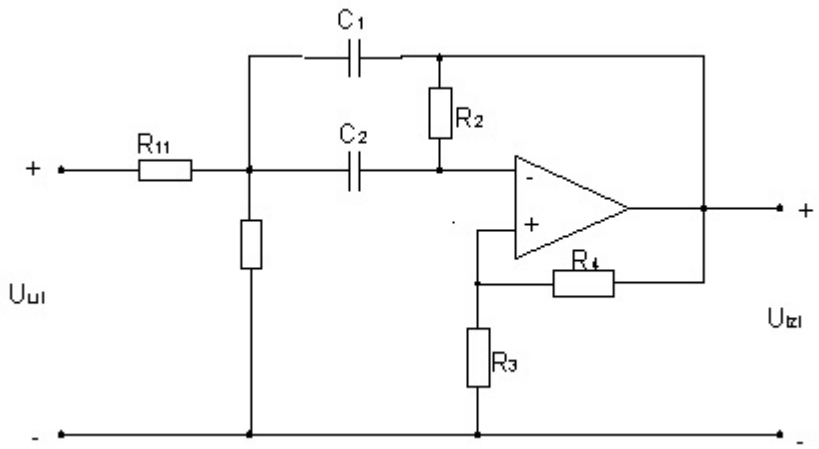
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nema razlike.
-50.0%			b. Neka druga razlika.
100.0%	▶	▶	c. M-filtri imaju pojaseve frekvencija kod kojih su Xa(w) i Xb(w) istog predznaka.
-50.0%			d. K-filtri imaju svojstvo da ima je ulazna impedancija uvijek reciprocna izlaznoj.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?



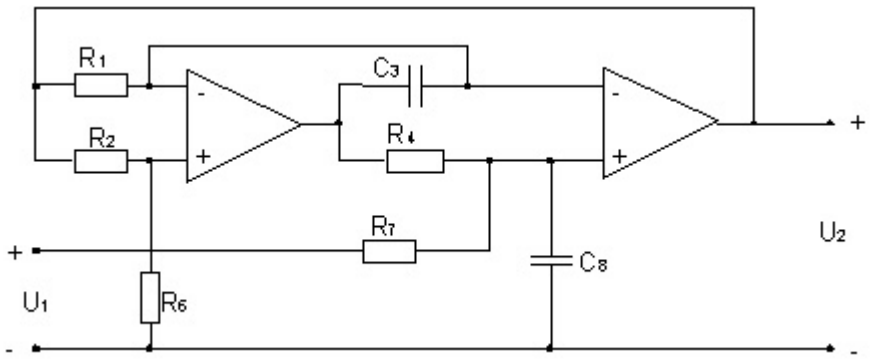
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 1
100.0%	▶	▶	c. 2
-50.0%			d. 4

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: wp=2, R1=R2=R4=R6=R7=2, C3=C8=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	2
-50.0%			c.	6
100.0%	▶	▶	d.	8

Score: 10 / 10

Question 3 (10 points)

Kako glasi kratica za pojasnopropusni filtar?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	PP
-50.0%			b.	PF
-50.0%			c.	PPF
-50.0%			d.	PB

Score: 10 / 10

Question 4 (10 points)

U području frekvencije u kojem su Xk(omega) i Xp(omega) istog predznaka zrcalna impedancija(Zc1 i Zc2)

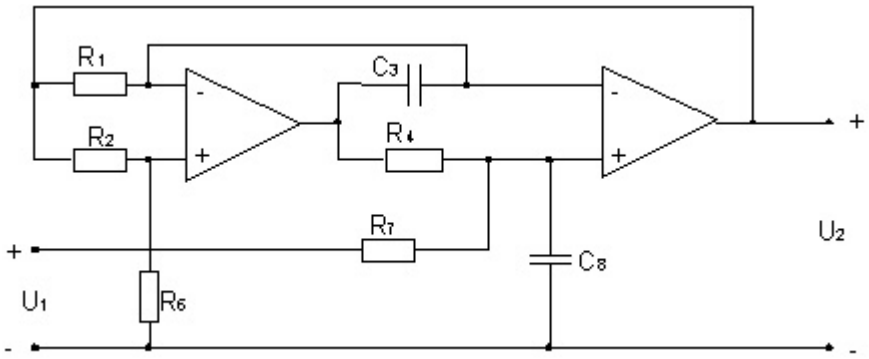
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	realna
100.0%	▶	▶	b.	imaginarna
-50.0%			c.	nula

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



Student response:

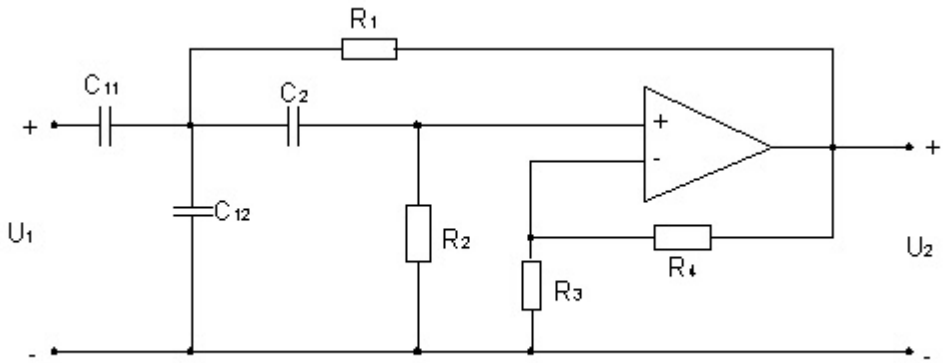
Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
100.0%	▶	▶	c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 1 (10 points)

Koliko iznosi Qp ako je zadano: C1=C2=G1=G2=G3=G4=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	8
-50.0%			b.	4
-50.0%			c.	2
100.0%			d.	1

Poveži filtar sa oblikom prijenosne funkcije: niskopropusni filtar.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)
-50.0%			b. H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)
-50.0%			c. H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo^2)
100.0%			d. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Score: -5 / 10

Score: 10 / 10

Koliko iznosi wp za zadanu sliku ako je poznato da je G1=G2=1 i C1=C2=2?

Student response:

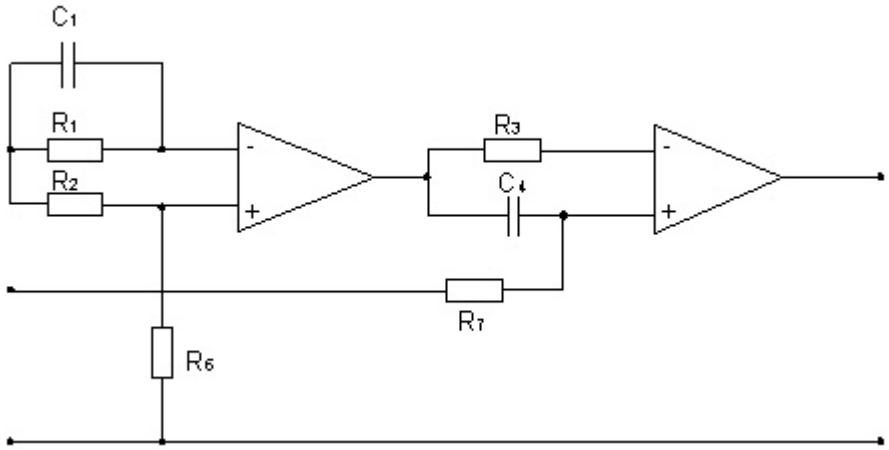
Percent Value	Correct Response	Student Response	Answer Choices	
100.0%			a.	0.5
-50.0%			b.	2
-50.0%			c.	0.25

-50.0%			d.	4

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: R1=R2=R3=2, C1=C4=3, wp=1 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	2
-50.0%			b.	3
-50.0%			c.	4
-50.0%			d.	5
100.0%	▶	▶	e.	6

Score: 10 / 10

Question 3 (10 points)

Pojasno propusni filtar propušta signale

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	jače od wg
-50.0%			b.	slabije od wg
100.0%	▶	▶	c.	između wg i wd
-50.0%			d.	slabije od wd

Score: 10 / 10

Question 4 (10 points)

Ako su Xk(omega) i Xp(omega) u nekom području frekvencije suprotnog predznaka,tj. kad je Th(a+jb) imag
tom području vrijednost zrcalne konstante gušenja je jednaka nuli,a fazna konstanta kao funkcija od omega n
vrijednost prema b=arctg (+ ili -q).Ovo područje zovemo :

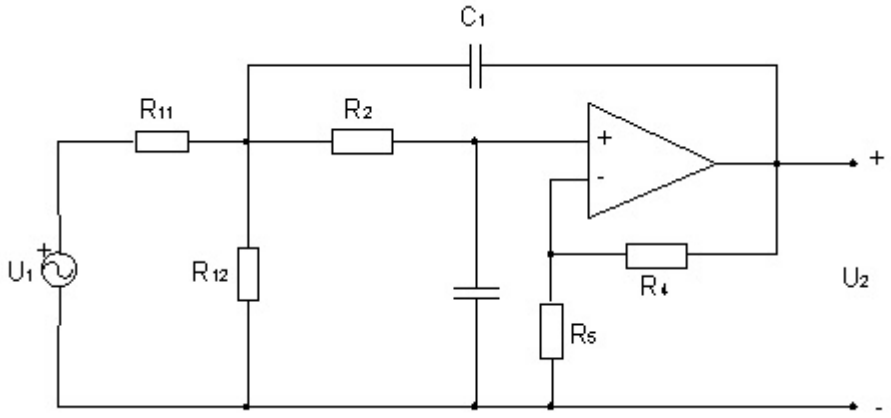
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. područje propuštanja
-50.0%			b. područje gušenja
-50.0%			c. granično područje
-50.0%			d. središnje područje

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



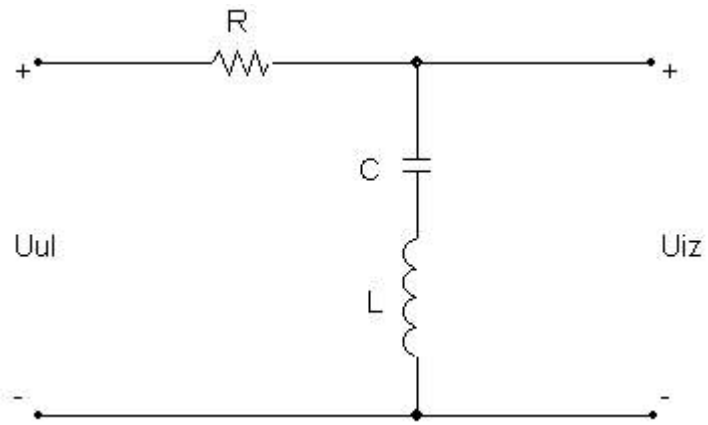
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%		▶	b. VP sa 2 operacijska pojacala
100.0%	▶		c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: -5 / 10

Question 1 (10 points)

Za filtar prikazan slikom odrediti prijenosnu funkciju. R=2, L=1, C=2.



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=s/(4s^2+s+2)
-50.0%			b. H(s)=s/(2+s)
100.0%	▶	▶	c. H(s)=(2s^2+1)/(2s^2+2s+1)
-50.0%			d. H(s)=2(s^2+1)/(s^2+2s+1)

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. pojasnoj brani
-50.0%			c. visoko propusnom filtru
100.0%	▶	▶	d. pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Ako smo realizirali univerzalni filtar drugog stupnja sa tri operacijska pojačala, tada:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. prvo operacijsko pojačalo sumira napone
50.0%	▶	▶	b. drugo i treće operacijsko pojačalo su integratori
-50.0%			c. sva operacijska pojačala su integratori
-50.0%			d. spoj možemo gledati samo u cjelosti

Score: 10 / 10

Question 4 (10 points)

Na koji nacin dobivamo impedancije M-filtra?

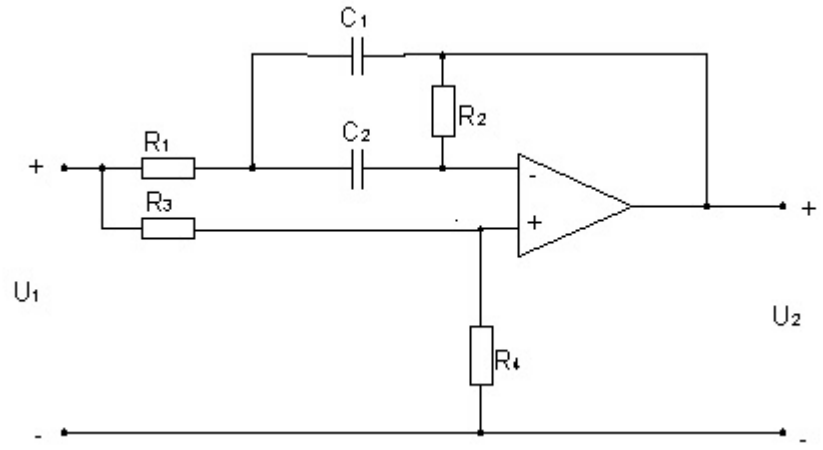
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Od impedancija odgovarajuceg K-filtra.
-50.0%			b. Od Ulazne impedancije K-filtra.
-50.0%			c. Od izlazne impedancije K-filtra.
-50.0%			d. Ne postoji K-filter koji bi mogao biti odgovarajuci M-filtru.

Score: 10 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%			d. pojasna brana

Score: 10 / 10

Question 3 (10 points)

Poveži filtar sa oblikom prijenosne funkcije: pojasna brana.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)
-50.0%			b. H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)
100.0%			c. H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo^2)
-50.0%			d. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Score: 10 / 10

Question 4 (10 points)

Kod reaktantnog četveropola zaključenog zrcalnim impedancijama prenosi se u području propuštanja napon proporcionalno,a struja obrnuto proporcionalno omjeru transformacije četveropola,uz zakret faze za b:

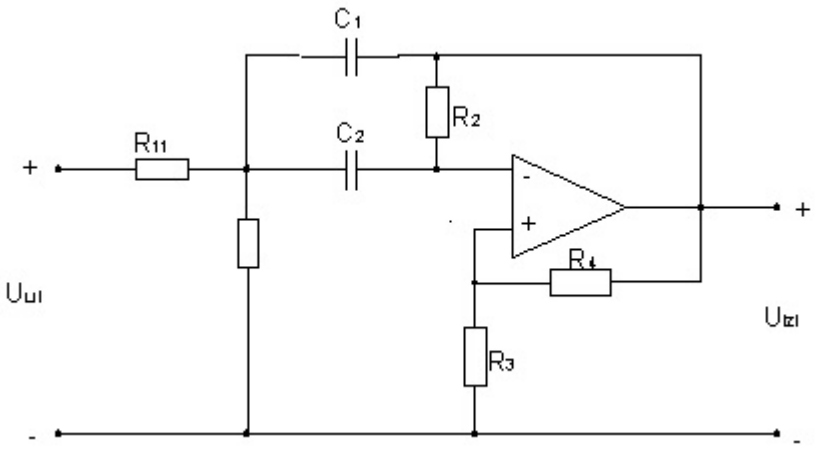
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	točno
-50.0%			b.	netočno

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: G1=G2=G3=G4=1, C1=2, C2=0.5 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.25
100.0%	▶	▶	b.	0.5
-50.0%			c.	2
-50.0%			d.	4

Score: 10 / 10

Total score:	**50 / 50 = 100.0%**
Total score:	**50 / 50 = 100.0%**
Total score:	**35 / 50 = 70.0%**
Total score:	**50 / 50 = 100.0%**

Koliko iznosi Qp ako je zadano: C1=C2=G1=G2=G3=G4=2 ?

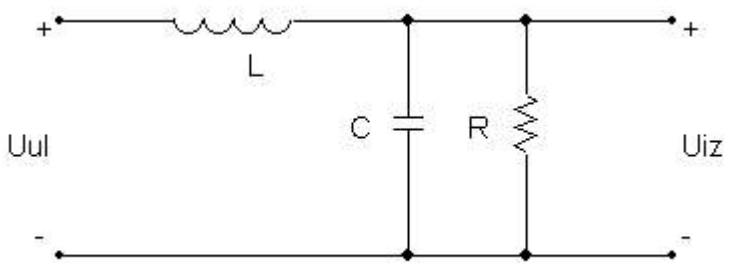
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	8
-50.0%			b.	4
-50.0%			c.	2
100.0%	▶	▶	d.	1

Score: 10 / 10

Question 2 (10 points)

Koji tip filtra je prikazan slikom?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasna brana (Notch)
-50.0%			b. pojasno propusni filtar
-50.0%			c. visoko propusni filtar
100.0%	▶	▶	d. ništa od navedenog

Score: 10 / 10

Question 3 (10 points)

Što je istina za fi(jw)?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. to je amplitudno frekvencijska karakteristika
50.0%	▶	▶	b. to je fazno frekvencijska

				karakteristika
50.0%	▶	▶	c.	arg(H(jw))=arg((Uiz(jw))/(Uul(jw)))
-50.0%			d.	arg(H(jw))=arg((Iiz(jw))/(Iul(jw)))

Score: 10 / 10

Question 4 (10 points)

Iz koje vrste sklopova K-filtra se moze izvesti M-filter?

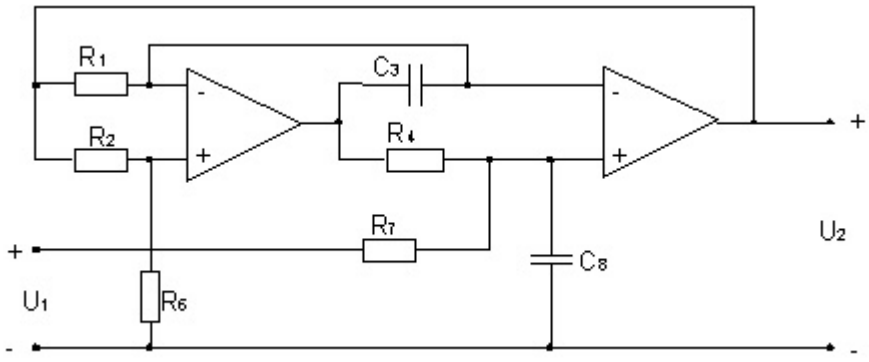
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. Iz K-filtra u T spoju.
-50.0%			b. Iz K-filtrau W spoju.
50.0%	▶	▶	c. Iz K-filtra u PI spoju.
-50.0%			d. Ne moze se uzvesti M-filter iz K-filtra.

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
100.0%	▶	▶	c. PP sa 2 operacijska pojacala

-50.0%			d.	PB sa 2 operacijska pojacala

Score: 10 / 10

Za filtar sa slike odrediti tip filtra.

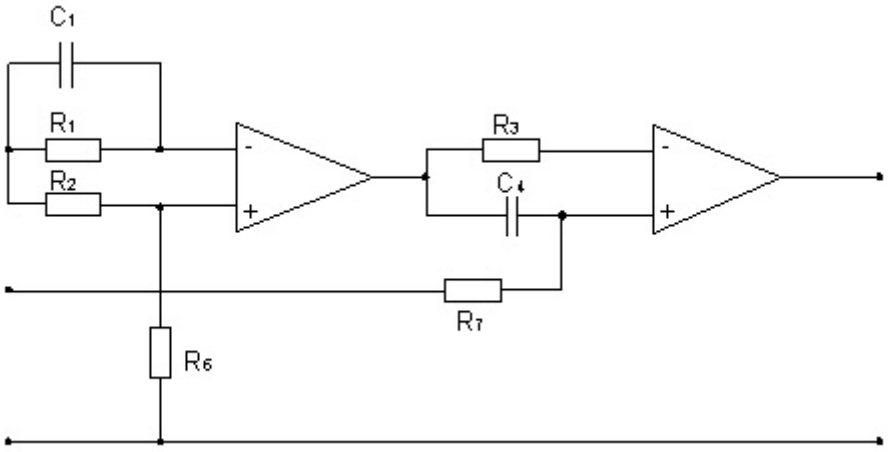
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: R1=R2=R3=2, C1=C4=3, wp=1 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	2
-50.0%			b.	3
-50.0%			c.	4
-50.0%			d.	5
100.0%	▶	▶	e.	6

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Kod reaktantnog četveropola zaključenog zrcalnim impedancijama prenosi se u području propuštanja napon proporcionalno,a struja obrnuto proporcionalno omjeru transformacije četveropola,uz zakret faze za b:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. točno
-50.0%			b. netočno

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 1
100.0%	▶	▶	c. 2
-50.0%			d. 4

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za filtar sa slike odrediti tip filtra.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni
100.0%	▶	▶	b. visoko propusni
-50.0%			c. pojasno propusni
-50.0%			d. pojasna brana

Score: 10 / 10

Question 3 (10 points)

Ovo je niskopropusni filtar drugog reda. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. k je faktor pojačanja, Q faktor kvalitete, wo frekvencija pola
-50.0%			b. Q je faktor pojačanja, k faktor kvalitete, wo frekvencija pola
-50.0%			c. wo je faktor pojačanja, k faktor kvalitete, Q frekvencija pola
-50.0%			d. wo je faktor pojačanja, Q faktor kvalitete, k frekvencija pola

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 ima vrijednost 0 ili -beskonacno 2.Kod omega=beskonacno ima vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nula reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funkcije reaktancije (susceptancije) skače od +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-osovini

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. netočno
100.0%	▶	▶	b. točno
-50.0%			c. nisu napisana sva svojstva

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za neki filtar je zadana centralna frekvencija 1kHz. Gornja granična frekvencija iznosi 1,1kHz , a donja granična frekvencija 0,9kHz. Koliko iznosi Q faktor?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Q=5
-50.0%			b. Q=0,2
-50.0%			c. Q=0,5
-50.0%			d. Q=2

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. pojasnoj brani

-50.0%			c. visoko propusnom filtru
100.0%	▶	▶	d. pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Sto dobivamo povoljnim odabirom velicine m kod K-filtera?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Da frekvencija lezi sto blize granicnoj.
-50.0%			b. Da frekvenicja lezi sto dalje od granicne.
-50.0%			c. Da izbjegnemo frekvencijsku karakteristiku.
-50.0%			d. Nista od navedenog.

Score: 10 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%	▶	▶	d. pojasna brana

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Ž

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska pojačala

Score: 10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices

-50.0%			a.	6
-50.0%			b.	3
100.0%	▶	▶	c.	2
-50.0%			d.	Ako nisu poznate vrijednosti elemenata, ne može se odrediti

Score: 10 / 10

Question 3 (10 points)

Koji filtar se koristi kako bi se unio fazni pomak između signala?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	PP
100.0%	▶	▶	b.	SP
-50.0%			c.	NP
-50.0%			d.	VP

Score: 10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%	▶	▶	b.	Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c.	Thg=Th(a+jb)=Zk/Zp
-50.0%			d.	Thg=Th(a-jb)=Zk/Zp

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Koji tip filtra je prikazan slikom?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Pojasno propusni filtar
100.0%	▶	▶	b. Pojasna brana (ili Notch)
-50.0%			c. Sve propusni filtar
-50.0%			d. Nisko propusni filtar

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
100.0%	▶	▶	b. visoko propusnom filtru
-50.0%			c. pojasnoj brani

-50.0%			d.	ništa od navedenog

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Student response:

Percent	Correct	Student	Answer Choices

Value	Response	Response		
-50.0%			a.	0.5
-50.0%			b.	1
100.0%	▶	▶	c.	2
-50.0%			d.	4

Score: 10 / 10

View Results

Električni filtri.

User ID: jmatulic **Attempt:** 1 / 1 **Out of:** 50

Started: June 7, 2004 18:29 **Finished:** June 7, 2004 18:30 **Time spent:** 0 min. 28 sec.

Student finished 9 min. 32 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

$$H(s) = \frac{s}{s^2 + s + 1}$$

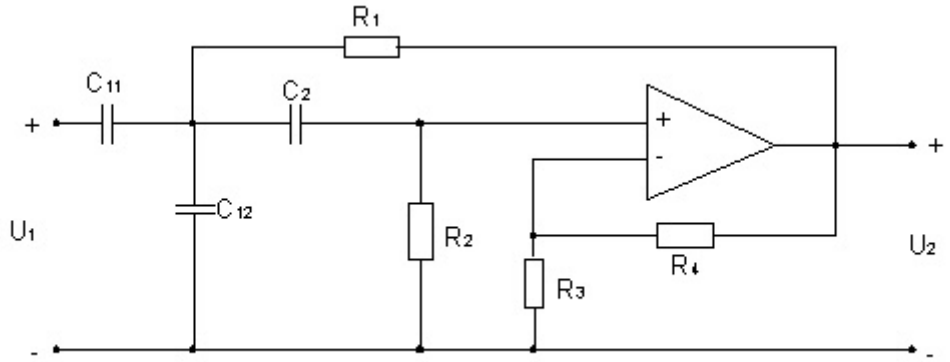
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasna brana
100.0%	▶	▶	b. pojasno propusni filtar
-50.0%			c. sve propusni filtar
-50.0%			d. nisko propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni
100.0%	▶		b. visoko propusni
-50.0%			c. pojasno propusni
-50.0%		▶	d. pojasna brana

Score: -5 / 10

Question 3 (10 points)

Kako glasi kratica za visokopropusni filtar?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. VF
100.0%	▶	▶	b. VP
-50.0%			c. PF
-50.0%			d. VS

Score: 10 / 10

Question 4 (10 points)

Koja je razlika izmedu K-filtera i M-filtera.

Student response:

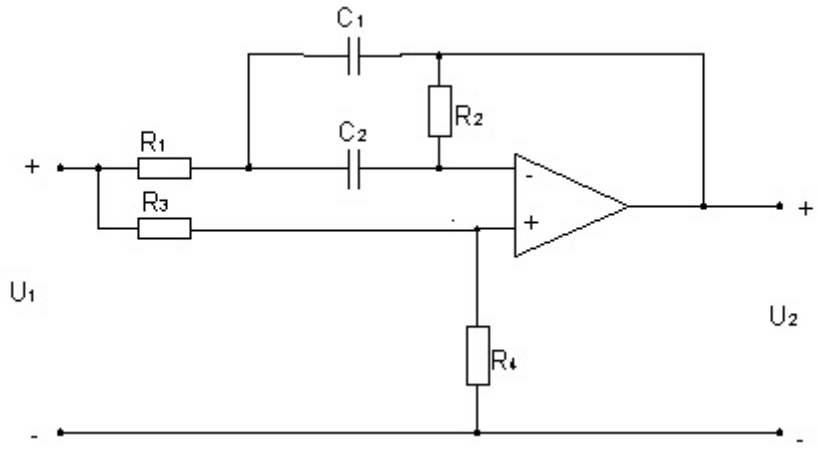
Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nema razlike.
-50.0%		▶	b. Neka druga razlika.

100.0%			c.	M-filtri imaju pojaseve frekvencija kod kojih su Xa(w) i Xb(w) istog predznaka.
-50.0%			d.	K-filtri imaju svojstvo da ima je ulazna impedancija uvijek reciprocna izlaznoj.

Score: -5 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%			d. pojasna brana

Score: -5 / 10

Total score: **5 / 50 = 10.0%**

View Results

Električni filtri.

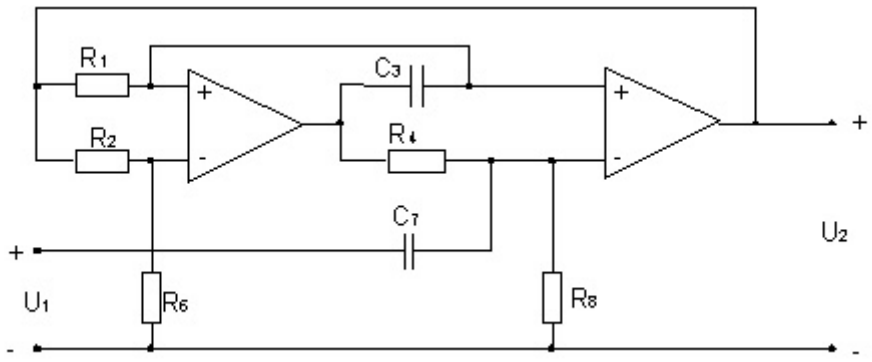
User ID: mpiskac **Attempt:** 1 / 1 **Out of:** 50

Started: June 7, 2004 18:36 **Finished:** June 7, 2004 18:37 **Time spent:** 0 min. 44 sec.

Student finished 9 min. 16 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Koja je vrsta filtra zadana na slici?



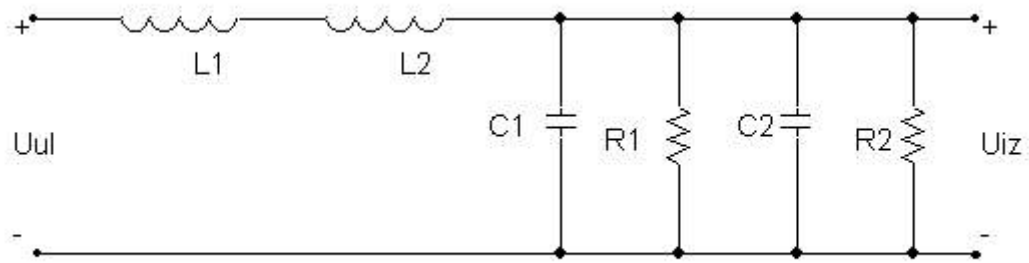
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska pojačala

Score: 10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 6
-50.0%			b. 3
100.0%	▶	▶	c. 2
-50.0%			d. Ako nisu poznate vrijednosti elemenata, ne može se odrediti

Score: 10 / 10

Question 3 (10 points)

Kako se može aproksimirati amplitudno-frekvencijska karakteristika? (zaokruži netočan odgovor)

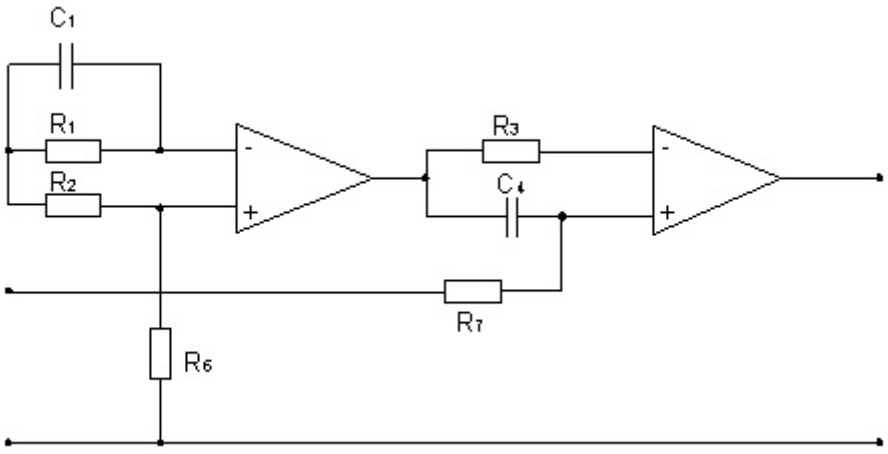
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. kao Butterworthova karakteristika
-50.0%		▶	b. minimaks ili Čebiševom aproksimacijom
-50.0%			c. eliptičkom ili Cauerovom aproksimacijom
100.0%	▶		d. Laplaceovom aproksimacijom

Score: -5 / 10

Question 4 (10 points)

Koliko iznosi wp ako znamo da je R1=R2=R3=R6=R7=1, C1=C4=2 ?



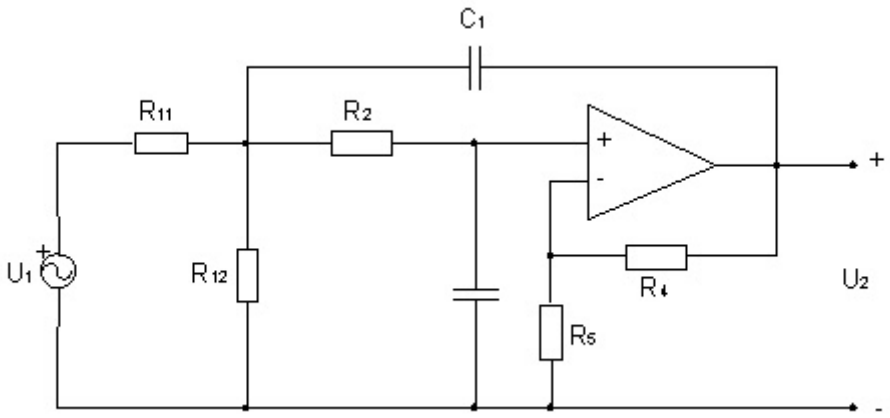
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.25
100.0%			b.	0.5
-50.0%			c.	0.125
-50.0%			d.	0.625

Score: -5 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%			a.	niskopropusni
-50.0%			b.	visokopropusni

-50.0%		▶	c.	pojasno propusni
-50.0%			d.	pojasna brana

Score: -5 / 10

Total score: **5 / 50 = 10.0%**

View Results

Električni filtri.

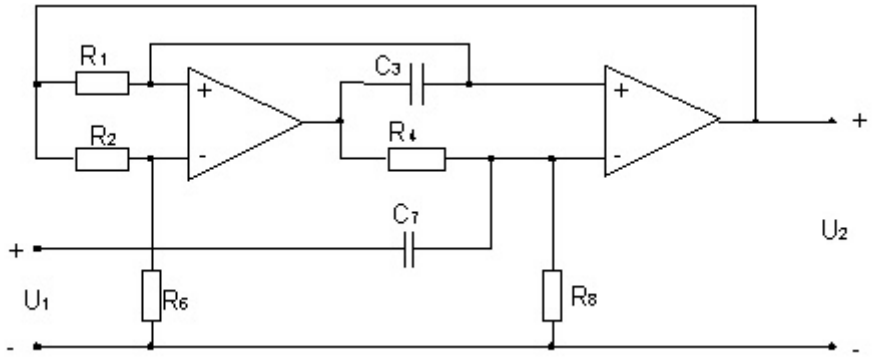
User ID: ilikevic **Attempt:** 1 / 1 **Out of:** 50

Started: June 7, 2004 18:40 **Finished:** June 7, 2004 18:40 **Time spent:** 0 min. 17 sec.

Student finished 9 min. 43 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Koja je vrsta filtra zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska

				pojačala

Score: 10 / 10

Question 2 (10 points)

Zadana je prijenosna funkcija. Odrediti tip filtra kojem ona pripada.

$$H(s) = \frac{3s^2 + 1}{3s^2 + 2s + 1}$$

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasno propusni filtar
100.0%	▶	▶	b. pojasna brana
-50.0%			c. sve propusni filtar
-50.0%			d. ne smije biti isti red potencije u brojniku i nazivniku

Score: 10 / 10

Question 3 (10 points)

Što je u pojasnom propustu (wg - wd)?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. širina pojasa propuštanja
-50.0%		▶	b. centralna frekvencija
-50.0%			c. trajanje propusta
-50.0%			d. faktor kvalitete

Score: -5 / 10

Question 4 (10 points)

Nesimetrični reaktantni četveropoli se upotrebljavaju i kao četveropoli za prilagođivanje

otpora u prijenosnim sustavima:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. točno
-50.0%			b. netočno

Score: 10 / 10

Question 5 (10 points)

Cemu je jednaka impedancija Zc(w) izvedenog M-filtra?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. Jednaka je zrcalnoj impedanciji odgovarajuceg K-filtra.
-50.0%			b. Jednaka je O (nuli).
-50.0%			c. Jednaka je zrcalnoj admitanciji odgovarajuceg K-filtra.
-50.0%		▶	d. Jednaka je ulaznoj impedanciji odgovarajuceg K-filtra.

Score: -5 / 10

Total score: **20 / 50 = 40.0%**

View Results

Električni filtri.

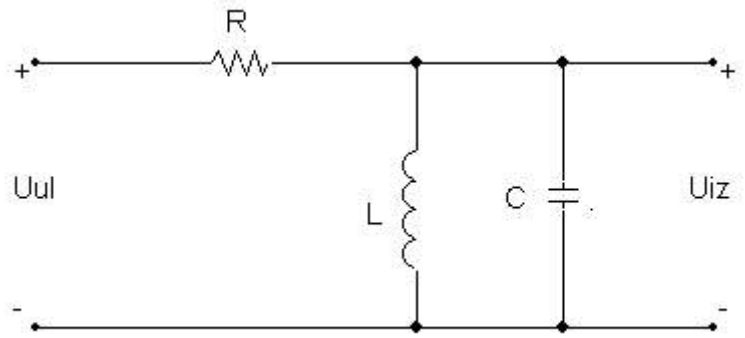
User ID: istojkovic **Attempt:** 1 / 1 **Out of:** 50

Started: June 7, 2004 18:49 **Finished:** June 7, 2004 18:49 **Time spent:** 0 min. 29 sec.

Student finished 9 min. 31 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Za filtar sa slike odrediti tip filtra.



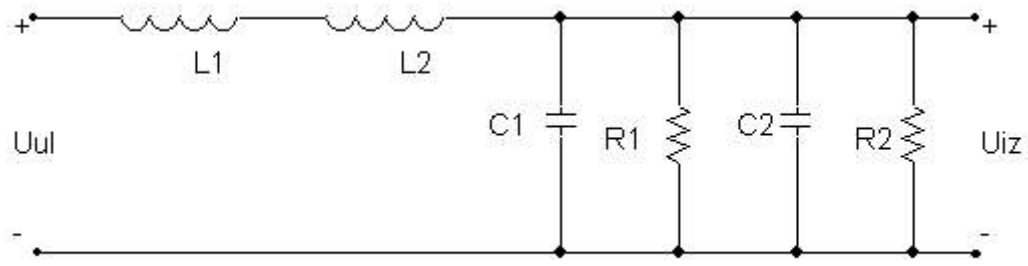
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 6
-50.0%			b. 3
100.0%	▶	▶	c. 2
-50.0%			d. Ako nisu poznate vrijednosti elemenata, ne

				može se odrediti

Score: 10 / 10

Question 3 (10 points)

Ako smo realizirali univerzalni filtar drugog stupnja sa tri operacijska pojačala, tada:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. prvo operacijsko pojačalo sumira napone
50.0%	▶		b. drugo i treće operacijsko pojačalo su integratori
-50.0%			c. sva operacijska pojačala su integratori
-50.0%			d. spoj možemo gledati samo u cjelosti

Score: 5 / 10

Question 4 (10 points)

Kako se odreduju konstante gusenja a(w) i faze b(w)?

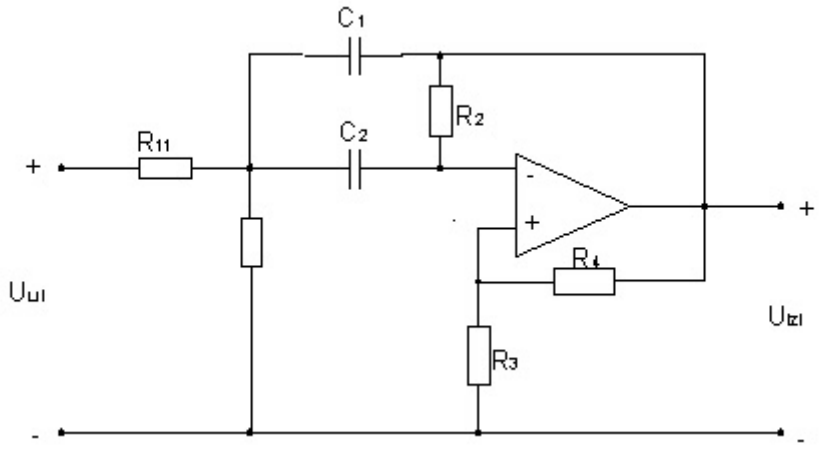
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Odreduju se prema formulama koje su dane za nesimetricne filtere.
100.0%	▶		b. Odreduju se prema formulama koje su dane za simetricne filtere.
-50.0%		▶	c. Odreduju se pomocu formule filtracije za male filtere.
-50.0%			d. Ne mogu se odrediti.

Score: -5 / 10

Question 5 (10 points)

Koja ja vrsta filtera zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
100.0%	▶		c. pojasno propusni
-50.0%		▶	d. pojasna brana

Score: -5 / 10

Total score: **15 / 50 = 30.0%**

Za filtar sa slike odrediti tip filtra.

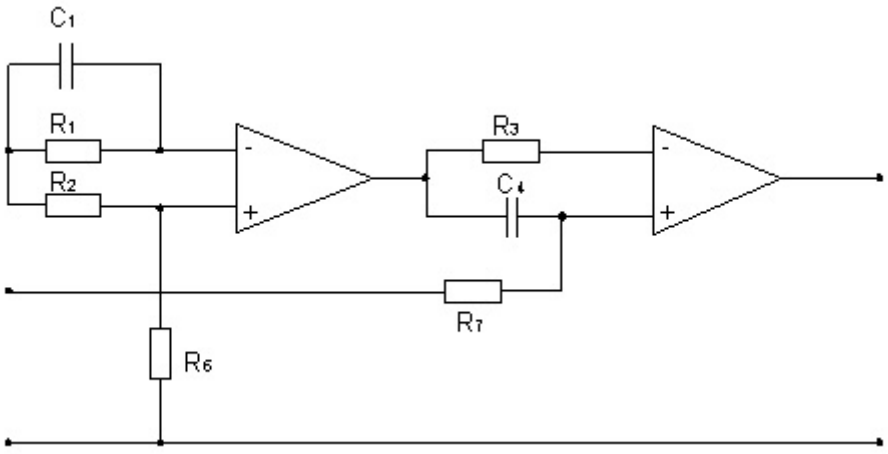
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: R1=R2=R3=2, C1=C4=3, wp=1 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	2
-50.0%			b.	3
-50.0%			c.	4
-50.0%			d.	5
100.0%	▶	▶	e.	6

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Q=fc*(fh+fl)
-50.0%			b.	Q=(fc)^2*fh
-50.0%			c.	Q=(fc+fh)/fc
100.0%	▶	▶	d.	Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Kod reaktantnog četveropola zaključenog zrcalnim impedancijama prenosi se u području propuštanja napon proporcionalno,a struja obrnuto proporcionalno omjeru transformacije četveropola,uz zakret faze za b:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. točno
-50.0%			b. netočno

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 1
100.0%	▶	▶	c. 2
-50.0%			d. 4

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za filtar sa slike odrediti tip filtra.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana

100.0%	▶	▶	d.	pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni
100.0%	▶	▶	b. visoko propusni
-50.0%			c. pojasno propusni
-50.0%			d. pojasna brana

Score: 10 / 10

Question 3 (10 points)

Ovo je niskopropusni filtar drugog reda. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. k je faktor pojačanja, Q faktor kvalitete, wo frekvencija pola
-50.0%			b. Q je faktor pojačanja, k faktor kvalitete, wo frekvencija pola
-50.0%			c. wo je faktor pojačanja, k faktor kvalitete, Q frekvencija pola
-50.0%			d. wo je faktor pojačanja, Q faktor kvalitete, k frekvencija pola

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 ima vrijednost 0 ili -beskonacno 2.Kod omega=beskonacno ima vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nula reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funkcije reaktancije (susceptancije) skače od +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-osovini

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. netočno
100.0%	▶	▶	b. točno
-50.0%			c. nisu napisana sva svojstva

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za neki filtar je zadana centralna frekvencija 1kHz. Gornja granična frekvencija iznosi 1,1kHz , a donja granična frekvencija 0,9kHz. Koliko iznosi Q faktor?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Q=5
-50.0%			b. Q=0,2
-50.0%			c. Q=0,5
-50.0%			d. Q=2

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. pojasnoj brani
-50.0%			c. visoko propusnom filtru
100.0%	▶	▶	d. pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Sto dobivamo povoljnim odabirom velicine m kod K-filtera?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Da frekvencija lezi sto blize granicnoj.
-50.0%			b. Da frekvenicja lezi sto dalje od granicne.
-50.0%			c. Da izbjegnemo frekvencijsku karakteristiku.
-50.0%			d. Nista od navedenog.

Score: 10 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%	▶	▶	d. pojasna brana

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Ž

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶	▶	b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska pojačala

Score: 10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 6
-50.0%			b. 3
100.0%	▶	▶	c. 2
-50.0%			d. Ako nisu poznate vrijednosti elemenata, ne može se odrediti

Score: 10 / 10

Question 3 (10 points)

Koji filtar se koristi kako bi se unio fazni pomak između signala?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. PP
100.0%	▶	▶	b. SP
-50.0%			c. NP

-50.0%			d.	VP

Score: 10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%	▶	▶	b. Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c. Thg=Th(a+jb)=Zk/Zp
-50.0%			d. Thg=Th(a-jb)=Zk/Zp

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Koji tip filtra je prikazan slikom?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Pojasno propusni filtar
100.0%	▶	▶	b. Pojasna brana (ili Notch)
-50.0%			c. Sve propusni filtar
-50.0%			d. Nisko propusni filtar

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
100.0%	▶	▶	b. visoko propusnom filtru
-50.0%			c. pojasnoj brani
-50.0%			d. ništa od navedenog

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Student response:

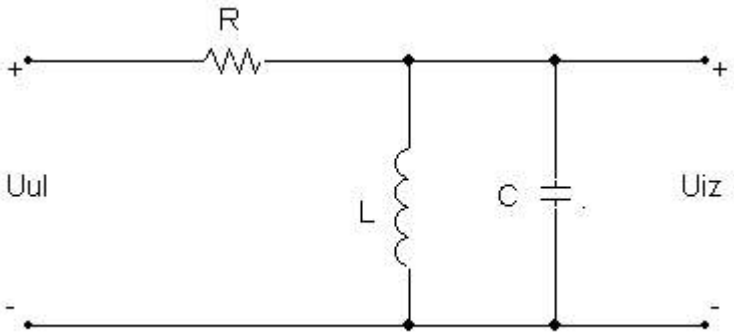
Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	1
100.0%	▶	▶	c.	2
-50.0%			d.	4

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 1 (10 points)

Koji je red filtra prikazanog slikom?



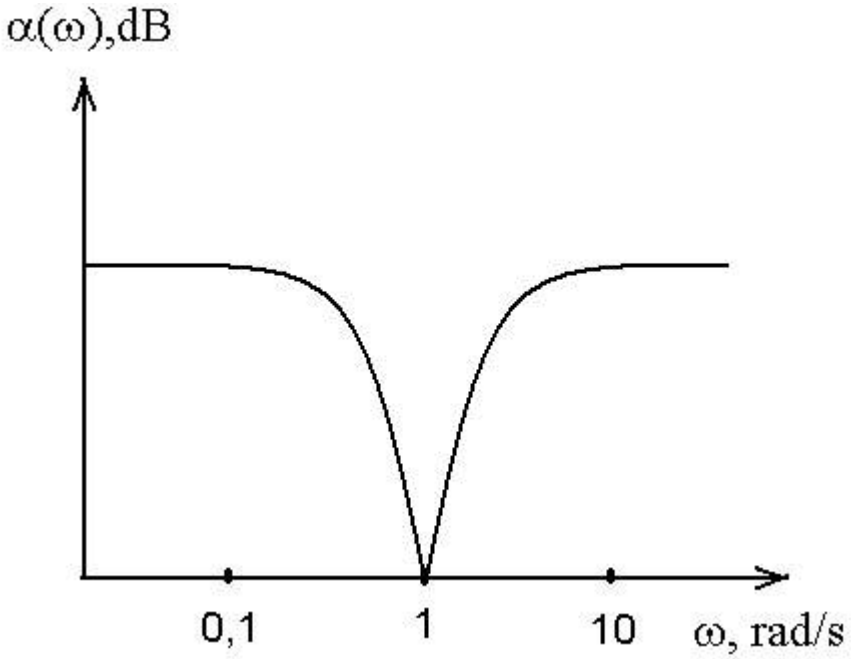
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%		▶	a. 2
100.0%	▶		b. 3
-50.0%			c. Da bi odredili red filtra moraju biti zadane vrijednosti elemenata
-50.0%			d. Da bi odredili red filtra mora biti zadana prijenosna funkcija

Score: -5 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. visoko propusnom filtru
100.0%	▶	▶	c. pojasnoj brani
-50.0%			d. pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Pojasno propusni filtar propušta signale

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. jače od wg
-50.0%			b. slabije od wg
100.0%	▶	▶	c. između wg i wd
-50.0%			d. slabije od wd

Score: 10 / 10

Question 4 (10 points)

Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

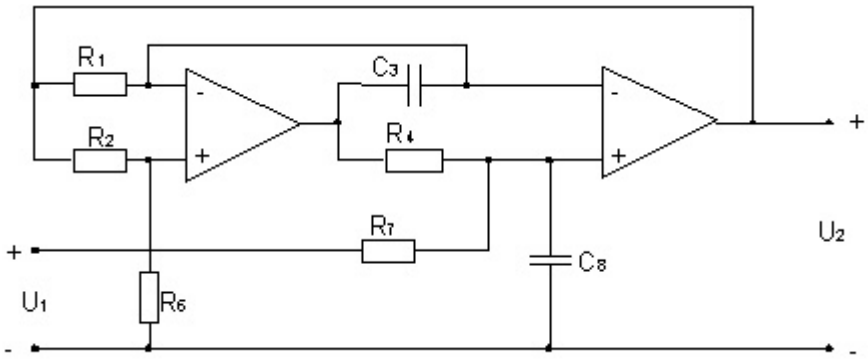
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



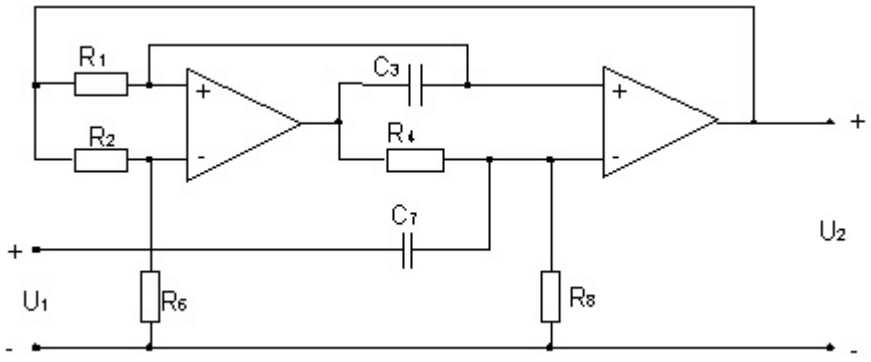
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
100.0%	▶		c. PP sa 2 operacijska pojacala
-50.0%		▶	d. PB sa 2 operacijska pojacala

Score: -5 / 10

Total score: **20 / 50 = 40.0%**

Koja je vrsta filtra zadana na slici?

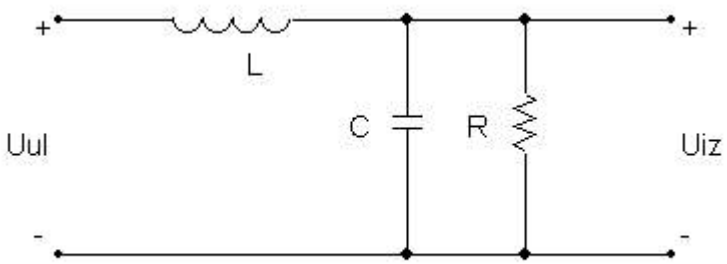


Student response:

Score:

Question 2 (10 points)

Koji tip filtra je prikazan slikom?



Student response:

Score:

Question 3 (10 points)

Kako glasi kratica za niskopropusni filtar?

Student response:

Score:

Question 4 (10 points)

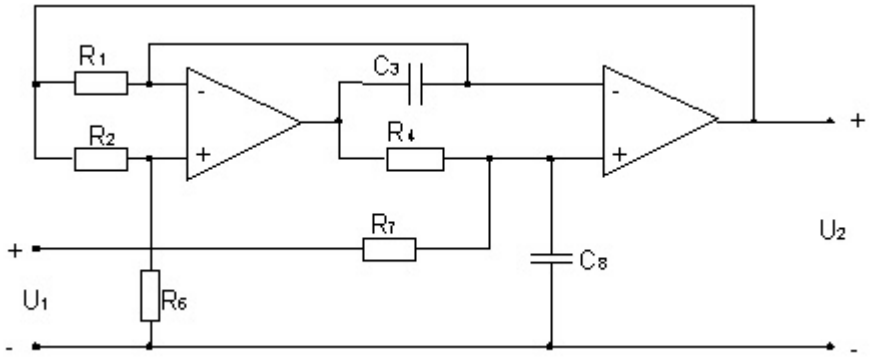
Koja je razlika izmedu K-filtera i M-filtera.

Student response:

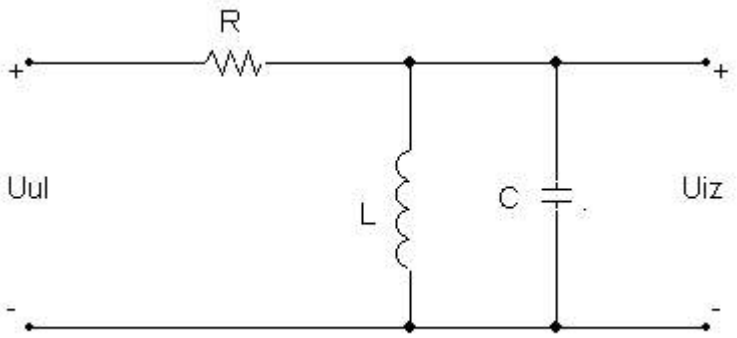
Score:

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



Student response:

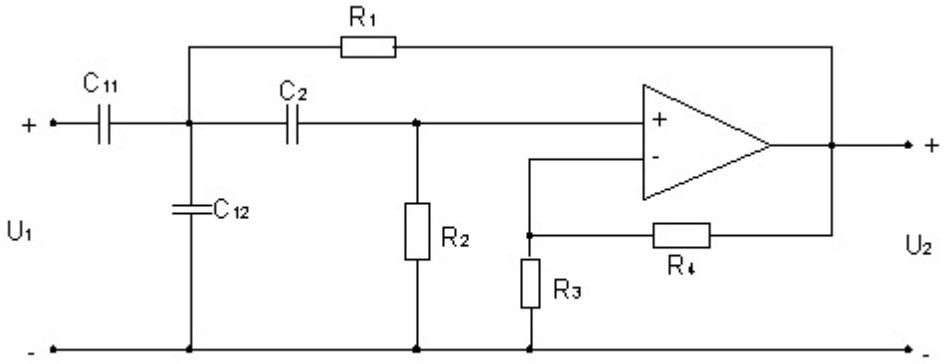


Student response:

Score:

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?



Student response:

Score:

Question 3 (10 points)

Kako glasi kratica za visokopropusni filtar?

Student response:

Score:

Question 4 (10 points)

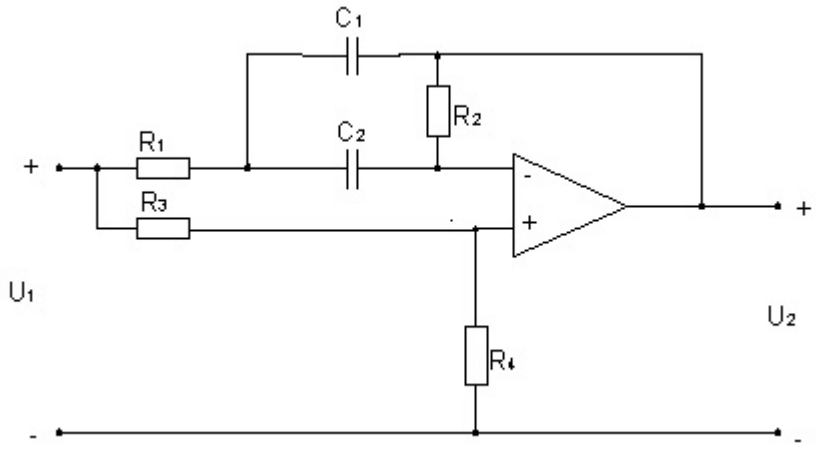
Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

Score:

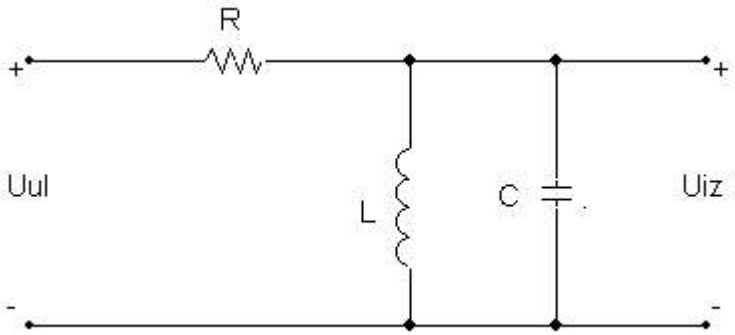
Question 5 (10 points)

Da li je ispunjen uvjet za pojasnu branu ako je G1=G2=G3=G4=1. C1=C2=0.5 ?



Student response:

Score:

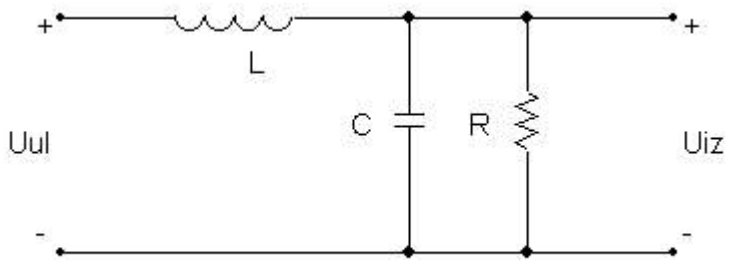


Student response:

Score:

Question 2 (10 points)

Za filtar prikazan na slici odrediti prijenosnu funkciju ako je R=1, L=2, C=3.



Student response:

Score:

Question 3 (10 points)

Kako glasi kratica za pojasnopropusni filtar?

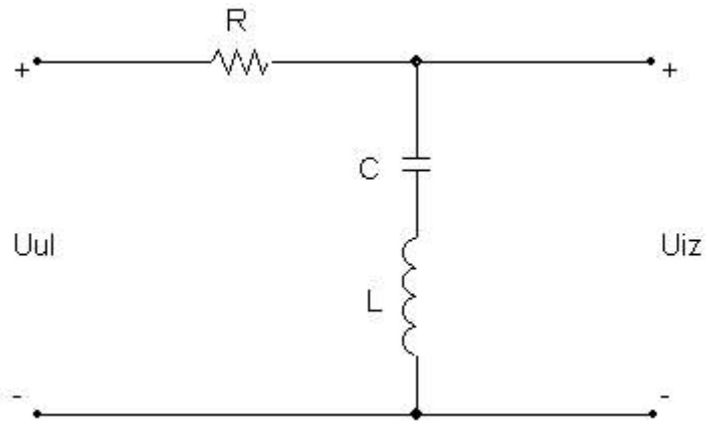
Student response:

Score:

Score:

Question 1 (10 points)

Koji tip filtra je prikazan slikom?



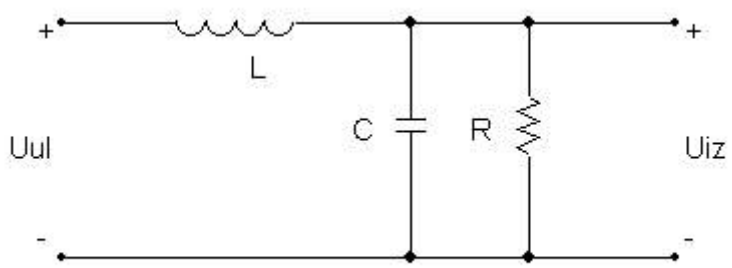
Student response:

Percent Value	Correct Response	S R
-50.0%		
100.0%		
-50.0%		
-50.0%		

Score: 10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti prijenosnu funkciju. R=1, L=1, C=1.



Student response:

Percent Value	Correct Response
-50.0%	
100.0%	
-50.0%	
-50.0%	

Score: 10 / 10

Question 3 (10 points)

Ovo je niskopropusni filtar drugog reda. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Student response:

Percent Value	Correct Response	Student Response	An
100.0%			a.
-50.0%			b.
-50.0%			c.
-50.0%			d.

Score: 10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

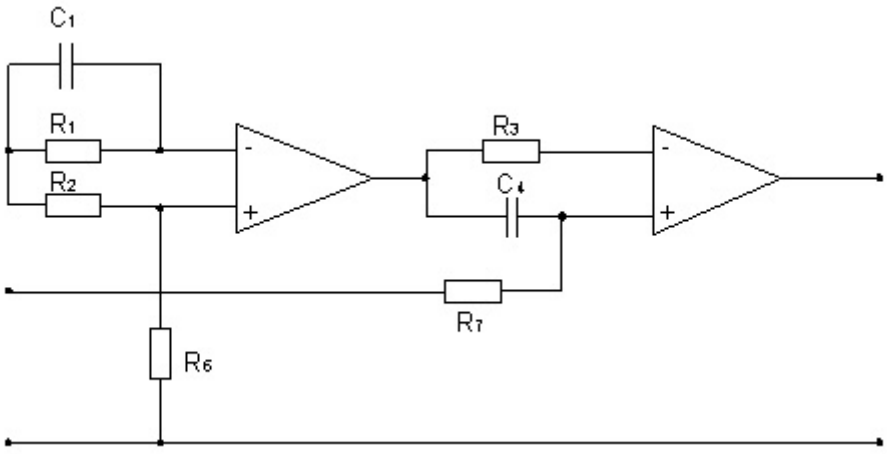
Percent Value	Correct Response	Stude Respo
-50.0%		
100.0%		
-50.0%		

-50.0%		

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?



Student response:

Percent Value	Correct Response	Stud Resp
100.0%		
-50.0%		
-50.0%		
-50.0%		

Score: 10 / 10

Question 1 (10 points)

Za neki filtar je zadana centralna frekvencija 1kHz. Gornja granična frekvencija iznosi 1,1kHz , a

Student response:

Percent Value	Correct Response	Student Response	An
100.0%			a.
-50.0%			b.
-50.0%			c.
-50.0%			d.

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choic
-50.0%			a. nisko prop
-50.0%			b. pojasnoj b
-50.0%			c. visoko pro
100.0%	▶	▶	d. pojasno p

Score: 10 / 10

Question 3 (10 points)

Red filtra je ukupan broj kapaciteta i induktiviteta u mreži. Kako se određuje broj kapaciteta?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. prebroje se svi kapaciteti
100.0%	▶	▶	b. kapacitet napravljen kombinacijom 2
-50.0%			c. broje se samo kapaciteti serijski spoje
-50.0%			d. broje se samo kapaciteti paralelno spo

Score: 10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Thg=Th(a-jb)=
100.0%	▶	▶	b. Thg=Th(a+jb)=
-50.0%			c. Thg=Th(a+jb)=

-50.0%			d.	Thg=Th(a-jb)=

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

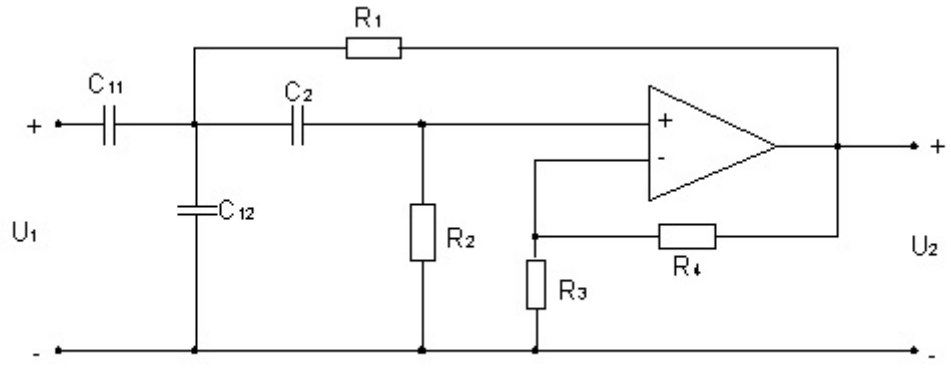
Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 opera
-50.0%			b. VP sa 2 opera
-50.0%			c. PP sa 2 opera
-50.0%			d. PB sa 2 opera

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 1 (10 points)

Koliko iznosi Qp ako je zadano: C1=C2=G1=G2=G3=G4=2 ?



Student response:

Percent Value	Correct Response	Student Response
-50.0%		
-50.0%		
-50.0%		

100.0%		

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answ
-50.0%			a. n
-50.0%			b. p
-50.0%			c. v
100.0%			d. p

Score: 10 / 10

Question 3 (10 points)

Niskopropusni filtar se sastoji od otpora i kapaciteta. Ako w pada onda:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Xc raste, pa je signa
100.0%			b. Xc raste, pa je signa
-50.0%			c. Xc pada, pa je signa
-50.0%			d. Xc pada, pa je signa

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno može iznos reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funkcije reak 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-osovini

Student response:

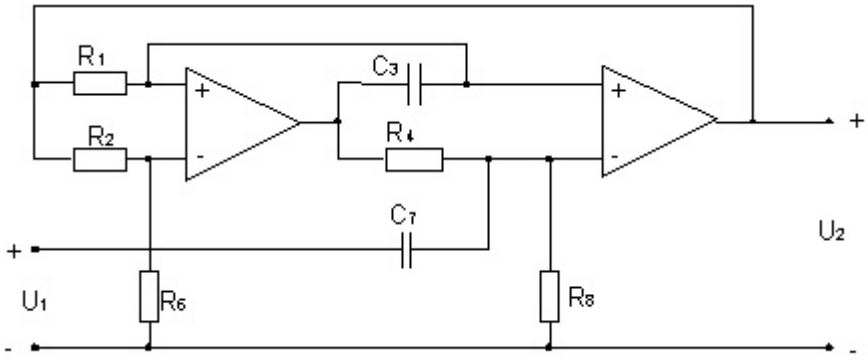
Percent Value	Correct Response	Student Response	Answe

-50.0%		a.	ne
100.0%	▶	b.	to
-50.0%		c.	ni

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: wp=0.25, R1=R2=R4=R6=R8=1, C7=2 ?



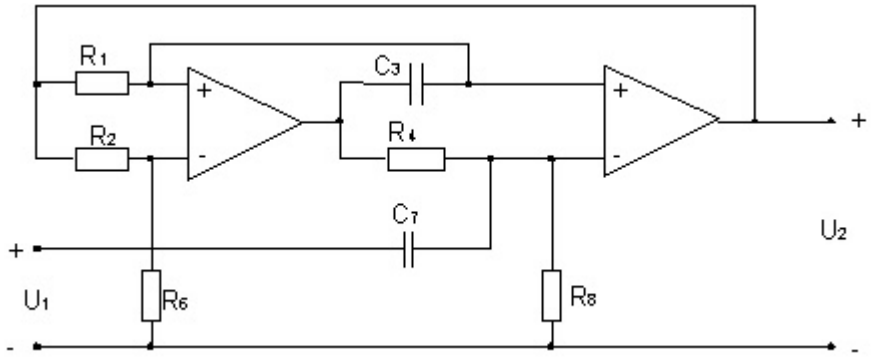
Student response:

Percent Value	Correct Response	Student Response
-50.0%		
-50.0%		
100.0%	▶	▶
-50.0%		

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Koliko iznosi wp ako je zadano: R1=R2=R4=R6=C3=C7=2 ?



Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.125
100.0%	▶	▶	b.	0.25
-50.0%			c.	0.5
-50.0%			d.	0.75

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

$$H(s) = \frac{s^2 - s + 1}{s^2 + s + 1}$$

Student response:

Percent Value	Correct Response	Student Response	Answ
-50.0%			a.
-50.0%			b.
100.0%	▶	▶	c.
-50.0%			d.

Score: 10 / 10

Question 3 (10 points)

Kako glasi kratica za visokopropusni filtar?

Student response:

Percent Value	Correct Response	Student Response
-50.0%		
100.0%		
-50.0%		
-50.0%		

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod ome
ima vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno m
nula reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funk
beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-o

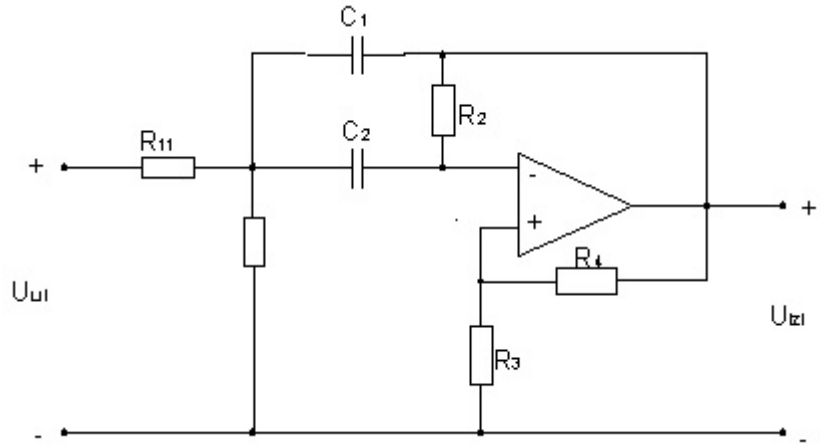
Student response:

Percent Value	Correct Response	Student Response	Answe
-50.0%			a. ne
100.0%			b. to
-50.0%			c. nis

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: G1=G2=G3=G4=1, C1=2, C2=0.5 ?



Percent Value	Correct Response	Student Response	Answer Choices

-50.0%			a.	0.25
100.0%	▶	▶	b.	0.5
-50.0%			c.	2
-50.0%			d.	4

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 1 (10 points)

Za pojasno propusni filtar je zadana donja granična frekvencija (40MHz) i gornja granična frekvencija (60MH
frekvencija filtra?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	48.99 MHz
-50.0%			b.	50 MHz
-50.0%			c.	50,99 MHz
-50.0%			d.	Nije moguće odrediti

Score: 10 / 10

Question 2 (10 points)

Za filtar prikazan na slici odrediti prijenosnu funkciju ako je R=1, L=2, C=3.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	H(s)=1/(s^2+s+1)
-50.0%			b.	H(s)=2s/(6s^2+2s+1)
100.0%	▶	▶	c.	H(s)=1/(6s^2+2s+1)
-50.0%			d.	H(s)=s/(6s^2+2s+1)

Score: 10 / 10

Question 3 (10 points)

Red filtra je ukupan broj kapaciteta i induktiviteta u mreži. Kako se određuje broj kapaciteta?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. prebroje se svi kapaciteti
100.0%	▶	▶	b. kapacitet napravljen kombinacijom 2 ili više kapacitet broji kao jedan
-50.0%			c. broje se samo kapaciteti serijski spojeni sa induktivitet
-50.0%			d. broje se samo kapaciteti paralelno spojeni sa induktivi

Score: 10 / 10

Question 4 (10 points)

Koja je razlika izmedu K-filtera i M-filtera.

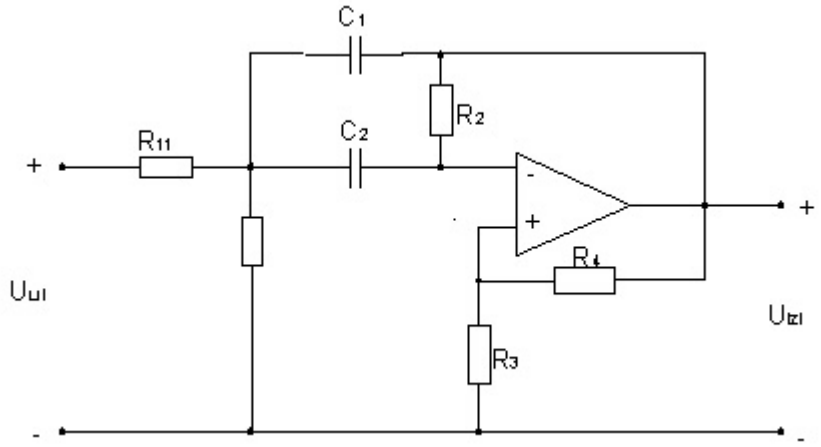
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nema razlike.
-50.0%			b. Neka druga razlika.
100.0%	▶	▶	c. M-filtri imaju pojaseve frekvencija kod kojih su Xa(w Xb(w) istog predznaka.
-50.0%			d. K-filtri imaju svojstvo da ima je ulazna impedancija u reciprocna izlaznoj.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?



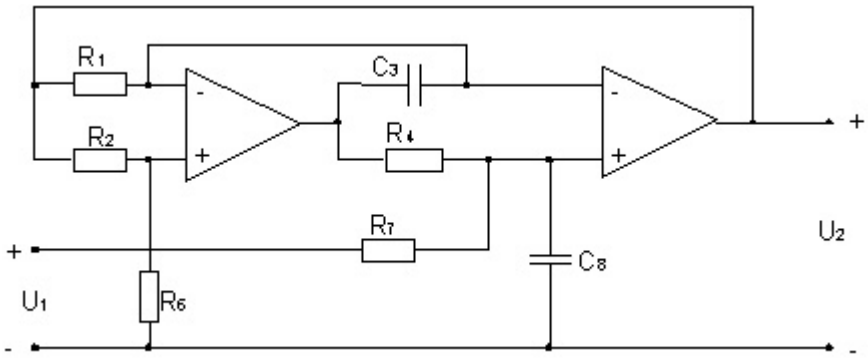
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	1
100.0%			c.	2
-50.0%			d.	4

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: wp=2, R1=R2=R4=R6=R7=2, C3=C8=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	2
-50.0%			c.	6
100.0%			d.	8

Score: 10 / 10

Question 3 (10 points)

Kako glasi kratica za pojasnopropusni filtar?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	PP
-50.0%			b.	PF
-50.0%			c.	PPF
-50.0%			d.	PB

Score: 10 / 10

Question 4 (10 points)

U području frekvencije u kojem su Xk(omega) i Xp(omega) istog predznaka zrcalna impedancija(Zc1 i Zc2)

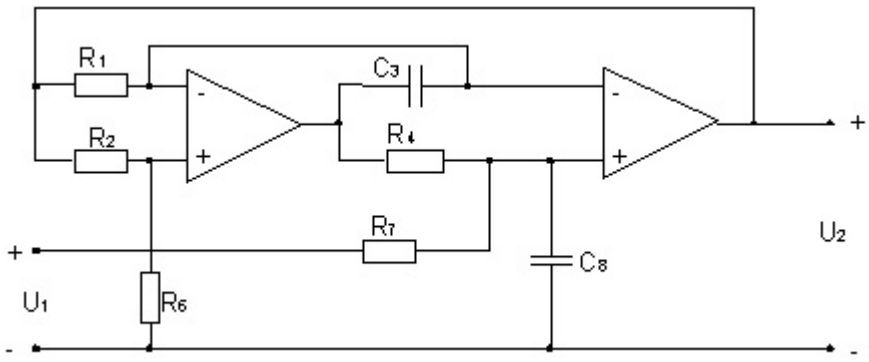
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	realna
100.0%	▶	▶	b.	imaginarna
-50.0%			c.	nula

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



Student response:

Percent	Correct	Student	Answer Choices

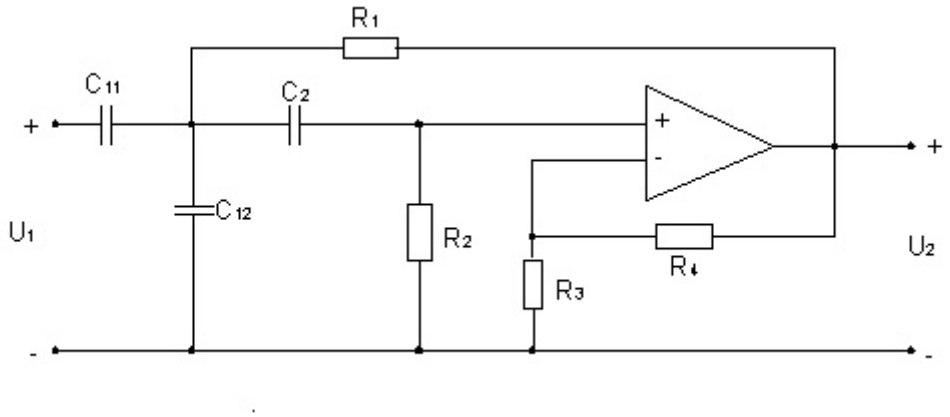
Value	Response	Response		
-50.0%			a.	NP sa 2 operacijska pojacala
-50.0%			b.	VP sa 2 operacijska pojacala
100.0%			c.	PP sa 2 operacijska pojacala
-50.0%			d.	PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 1 (10 points)

Koliko iznosi Qp ako je zadano: C1=C2=G1=G2=G3=G4=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	8
-50.0%			b.	4
-50.0%			c.	2
100.0%			d.	1

Poveži filtar sa oblikom prijenosne funkcije: niskopropusni filtar.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)
-50.0%			b. H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)

-50.0%			c.	H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo
100.0%	▶		d.	H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Score: -5 / 10

Score: 10 / 10

Koliko iznosi wp za zadanu sliku ako je poznato da je G1=G2=1 i C1=C2=2?

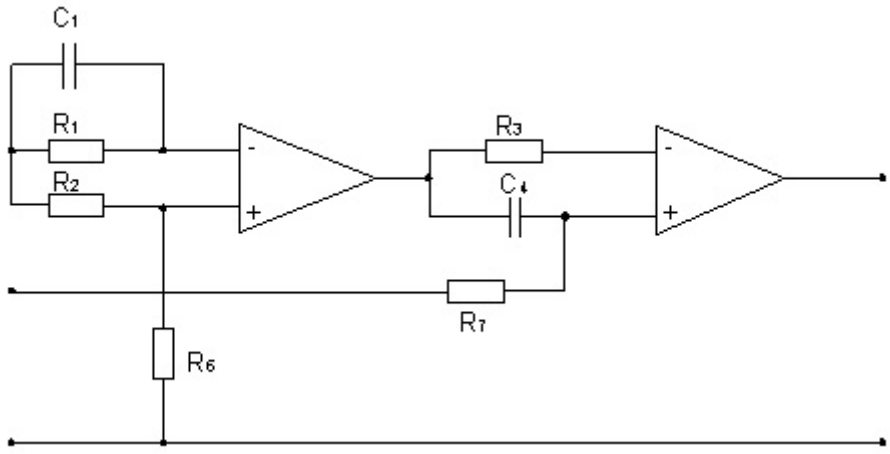
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	0.5
-50.0%			b.	2
-50.0%			c.	0.25
-50.0%			d.	4

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: R1=R2=R3=2, C1=C4=3, wp=1 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	2
-50.0%			b.	3
-50.0%			c.	4

-50.0%			d.	5
100.0%	▶	▶	e.	6

Score: 10 / 10

Question 3 (10 points)

Pojasno propusni filtar propušta signale

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	jače od wg
-50.0%			b.	slabije od wg
100.0%	▶	▶	c.	između wg i wd
-50.0%			d.	slabije od wd

Score: 10 / 10

Question 4 (10 points)

Ako su Xk(omega) i Xp(omega) u nekom području frekvencije suprotnog predznaka,tj. kad je Th(a+jb) imag
vrijednost zrcalne konstante gušenja je jednaka nuli,a fazna konstanta kao funkcija od omega mijenja vrijedn
područje zovemo :

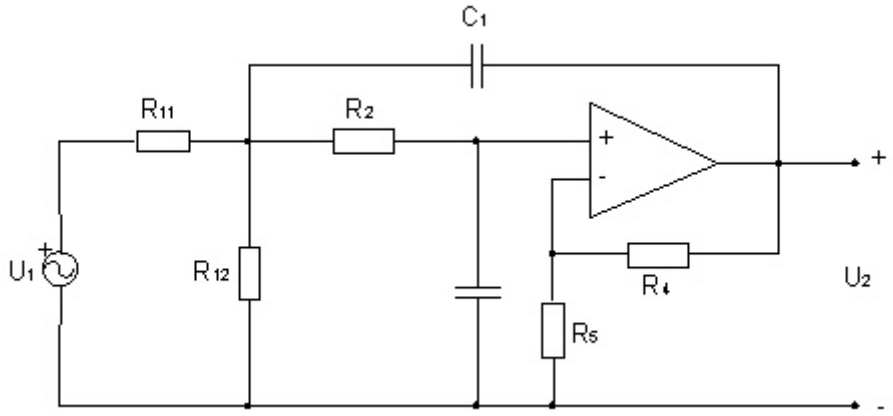
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	područje propuštanja
-50.0%			b.	područje gušenja
-50.0%			c.	granično područje
-50.0%			d.	središnje područje

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



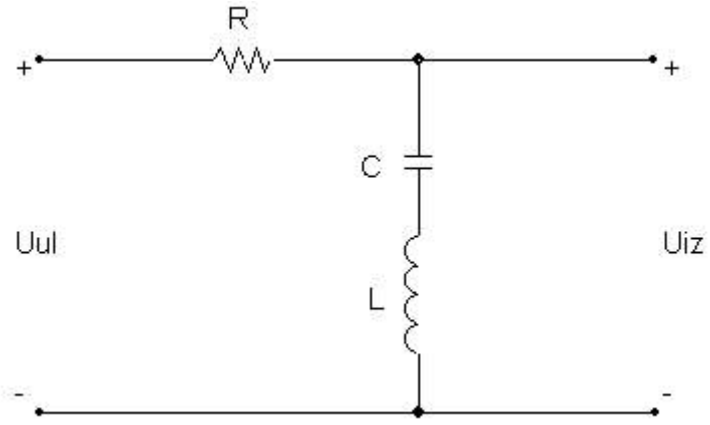
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
100.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: -5 / 10

Question 1 (10 points)

Za filtar prikazan slikom odrediti prijenosnu funkciju. R=2, L=1, C=2.



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=s/(4s^2+s+2)

-50.0%			b.	H(s)=s/(2+s)
100.0%	▶	▶	c.	H(s)=(2s^2+1)/(2s^2+2s+1)
-50.0%			d.	H(s)=2(s^2+1)/(s^2+2s+1)

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	nisko propusnom filtru
-50.0%			b.	pojasnoj brani
-50.0%			c.	visoko propusnom filtru
100.0%	▶	▶	d.	pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Ako smo realizirali univerzalni filtar drugog stupnja sa tri operacijska pojačala, tada:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
50.0%	▶	▶	a.	prvo operacijsko pojačalo sumira napone
50.0%	▶	▶	b.	drugo i treće operacijsko pojačalo su integratori
-50.0%			c.	sva operacijska pojačala su integratori
-50.0%			d.	spoj možemo gledati samo u cjelosti

Score: 10 / 10

Question 4 (10 points)

Na koji nacin dobivamo impedancije M-filtra?

Student response:

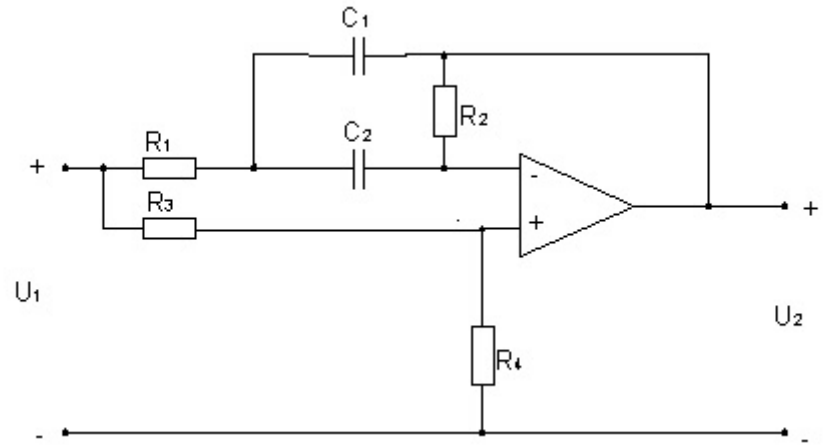
Percent Value	Correct Response	Student Response	Answer Choices

100.0%		a. Od impedancija odgovarajuceg K-filtra.
-50.0%		b. Od Ulazne impedancije K-filtra.
-50.0%		c. Od izlazne impedancije K-filtra.
-50.0%		d. Ne postoji K-filter koji bi mogao biti odgovarajuci M-

Score: 10 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%			d. pojasna brana

Score: 10 / 10

Question 3 (10 points)

Poveži filtar sa oblikom prijenosne funkcije: pojasna brana.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)

-50.0%			b.	H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)
100.0%	▶	▶	c.	H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo
-50.0%			d.	H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Score: 10 / 10

Question 4 (10 points)

Kod reaktantnog četveropola zaključenog zrcalnim impedancijama prenosi se u području propuštanja napon obrnuto proporcionalno omjeru transformacije četveropola,uz zakret faze za b:

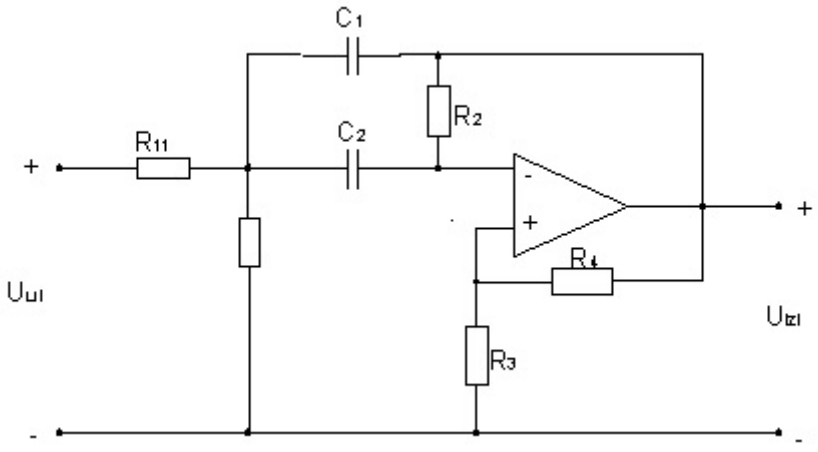
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	točno
-50.0%			b.	netočno

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: G1=G2=G3=G4=1, C1=2, C2=0.5 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.25
100.0%	▶	▶	b.	0.5
-50.0%			c.	2
-50.0%			d.	4

Score: 10 / 10

Total score:	**50 / 50 = 100.0%**
Total score:	**50 / 50 = 100.0%**
Total score:	**35 / 50 = 70.0%**
Total score:	**50 / 50 = 100.0%**

Koliko iznosi Qp ako je zadano: C1=C2=G1=G2=G3=G4=2 ?

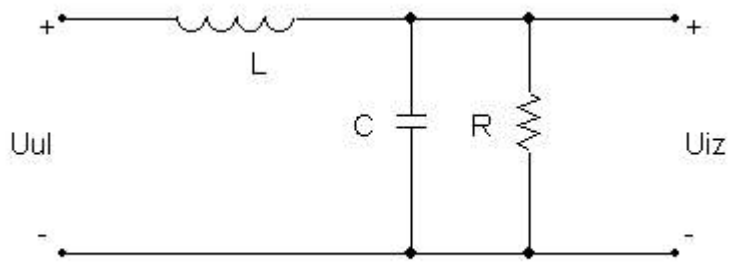
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	8
-50.0%			b.	4
-50.0%			c.	2
100.0%			d.	1

Score: 10 / 10

Question 2 (10 points)

Koji tip filtra je prikazan slikom?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasna brana (Notch)
-50.0%			b. pojasno propusni filtar

-50.0%			c. visoko propusni filtar
100.0%	▶	▶	d. ništa od navedenog

Score: 10 / 10

Question 3 (10 points)

Što je istina za fi(jw)?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. to je amplitudno frekvencijska karakteristika
50.0%	▶	▶	b. to je fazno frekvencijska karakteristika
50.0%	▶	▶	c. arg(H(jw))=arg((Uiz(jw))/(Uul(jw)))
-50.0%			d. arg(H(jw))=arg((Iiz(jw))/(Iul(jw)))

Score: 10 / 10

Question 4 (10 points)

Iz koje vrste sklopova K-filtra se moze izvesti M-filter?

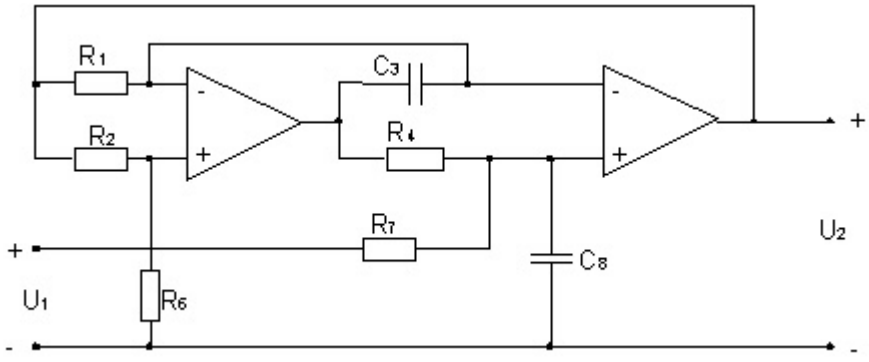
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. Iz K-filtra u T spoju.
-50.0%			b. Iz K-filtrau W spoju.
50.0%	▶	▶	c. Iz K-filtra u PI spoju.
-50.0%			d. Ne moze se uzvesti M-filter iz K-filtra.

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtera zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
100.0%	▶	▶	c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za filtar sa slike odrediti tip filtra.

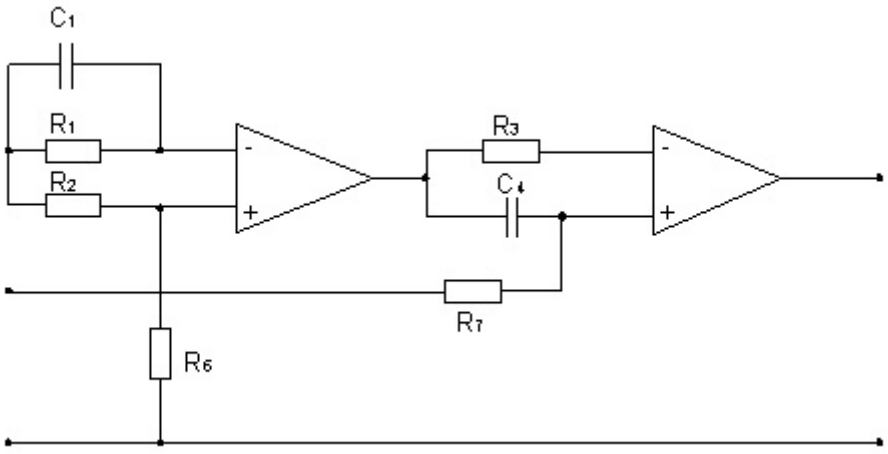
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: R1=R2=R3=2, C1=C4=3, wp=1 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	2
-50.0%			b.	3
-50.0%			c.	4
-50.0%			d.	5
100.0%	▶	▶	e.	6

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	Q=fc*(fh+fl)
-50.0%			b.	Q=(fc)^2*fh
-50.0%			c.	Q=(fc+fh)/fc
100.0%	▶	▶	d.	Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Kod reaktantnog četveropola zaključenog zrcalnim impedancijama prenosi se u području propuštanja napon proporcionalno,a struja obrnuto proporcionalno omjeru transformacije

četveropola,uz zakret faze za b:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. točno
-50.0%			b. netočno

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 1
100.0%	▶	▶	c. 2
-50.0%			d. 4

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za filtar sa slike odrediti tip filtra.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni
100.0%	▶	▶	b. visoko propusni
-50.0%			c. pojasno propusni
-50.0%			d. pojasna brana

Score: 10 / 10

Question 3 (10 points)

Ovo je niskopropusni filtar drugog reda. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. k je faktor pojačanja, Q faktor kvalitete, wo frekvencija pola
-50.0%			b. Q je faktor pojačanja, k faktor kvalitete, wo frekvencija pola
-50.0%			c. wo je faktor pojačanja, k faktor kvalitete, Q frekvencija pola
-50.0%			d. wo je faktor pojačanja, Q faktor kvalitete, k frekvencija pola

Score: 10 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 ima vrijednost 0 ili -beskonacno 2.Kod omega=beskonacno ima vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nula reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funkcije reaktancije (susceptancije) skače od +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-osovini

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. netočno
100.0%	▶	▶	b. točno
-50.0%			c. nisu napisana sva svojstva

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Za neki filtar je zadana centralna frekvencija 1kHz. Gornja granična frekvencija iznosi 1,1kHz , a donja granična frekvencija 0,9kHz. Koliko iznosi Q faktor?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Q=5
-50.0%			b. Q=0,2
-50.0%			c. Q=0,5
-50.0%			d. Q=2

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. pojasnoj brani
-50.0%			c. visoko propusnom filtru
100.0%	▶	▶	d. pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Sto dobivamo povoljnim odabirom velicine m kod K-filtera?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Da frekvencija lezi sto blize granicnoj.
-50.0%			b. Da frekvenicja lezi sto dalje od granicne.
-50.0%			c. Da izbjegnemo frekvencijsku karakteristiku.
-50.0%			d. Nista od navedenog.

Score: 10 / 10

Question 5 (10 points)

O kojoj vrsti filtra se radi na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. niskopropusni
-50.0%			b. visokopropusni
-50.0%			c. pojasno propusni
100.0%	▶	▶	d. pojasna brana

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Ž

Koja je vrsta filtra zadana na slici?

Student response:

Percent	Correct	Student	Answer Choices

Value	Response	Response		
-50.0%			a.	NP s 2 operacijska pojačala
100.0%	▶	▶	b.	VP s 2 operacijska pojačala
-50.0%			c.	PP s 2 operacijska pojačala
-50.0%			d.	PB s 2 operacijska pojačala

Score: 10 / 10

Question 2 (10 points)

Za filtar sa slike odrediti red filtra.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	6
-50.0%			b.	3
100.0%	▶	▶	c.	2
-50.0%			d.	Ako nisu poznate vrijednosti elemenata, ne može se odrediti

Score: 10 / 10

Question 3 (10 points)

Koji filtar se koristi kako bi se unio fazni pomak između signala?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	PP
100.0%	▶	▶	b.	SP
-50.0%			c.	NP
-50.0%			d.	VP

Score: 10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%	▶	▶	b. Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c. Thg=Th(a+jb)=Zk/Zp
-50.0%			d. Thg=Th(a-jb)=Zk/Zp

Score: 10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Koji tip filtra je prikazan slikom?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Pojasno propusni filtar
100.0%	▶	▶	b. Pojasna brana (ili Notch)
-50.0%			c. Sve propusni filtar
-50.0%			d. Nisko propusni filtar

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana funkcija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
100.0%	▶	▶	b. visoko propusnom filtru
-50.0%			c. pojasnoj brani
-50.0%			d. ništa od navedenog

Score: 10 / 10

Question 3 (10 points)

Koja formula je istinita za faktor dobrote?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Q=fc*(fh+fl)
-50.0%			b. Q=(fc)^2*fh
-50.0%			c. Q=(fc+fh)/fc
100.0%	▶	▶	d. Q=fc/(fh+fl)

Score: 10 / 10

Question 4 (10 points)

Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	1
100.0%	▶	▶	c.	2
-50.0%			d.	4

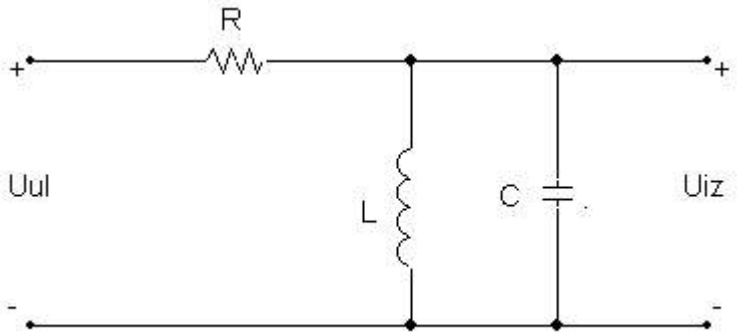
Score: 10 / 10

Total score: **50 / 50 = 100.0%**

View Results

Question 1 (10 points)

Odrediti prijenosnu funkciju filtra ako je R=1, L=1, C=1.



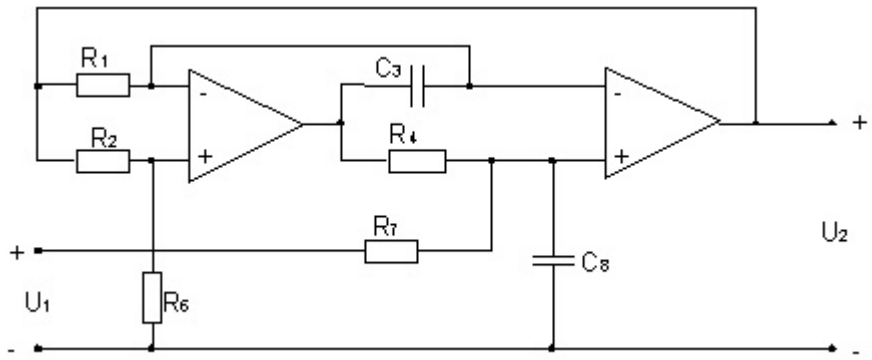
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(s^2+s+1)/s
100.0%	▶	▶	b. H(s)=s/(s^2+s+1)
-50.0%			c. H(s)=s/(s^2-s+1)
-50.0%			d. H(s)=(s^2+s+1)/s

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: wp=2, R1=R2=R4=R6=R7=2, C3=C8=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 2
-50.0%			c. 6
100.0%	▶	▶	d. 8

Score: 10 / 10

Question 3 (10 points)

Što je red filtra?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. najviša potencija od s u prijenosnoj funkciji
-50.0%			b. zroj potencija od s
-50.0%			c. najniža potencija od s u prijenosnoj funkciji
50.0%	▶		d. ukupni zbroj kapaciteta i induktiviteta u mreži

Score: 5 / 10

Question 4 (10 points)

Prema Fosterovom teoremu krivulja reaktancije odnosno susceptancije ima sljedeća svojstva: 1.Kod omega=0 ima vrijednost 0 ili -beskonacno 2.Kod omega=beskonacno ima vrijednost 0 ili +beskonacno 3.Kod određenih vrijednosti omega, koji leže između 0 i beskonacno može iznos reaktancije (susceptancije) poprimiti i vrijednost nula (nula reaktancije/susceptancije) ili beskonačnost (pol reaktancije/susceptancije) 4.U polu vrijednost funkcije reaktancije (susceptancije) skače od +beskonacno na -beskonacno 5.Gradijent krivulje je pozitivan na sve omega 6:Polovi i nule krivulje alterniraju na omega-osovini

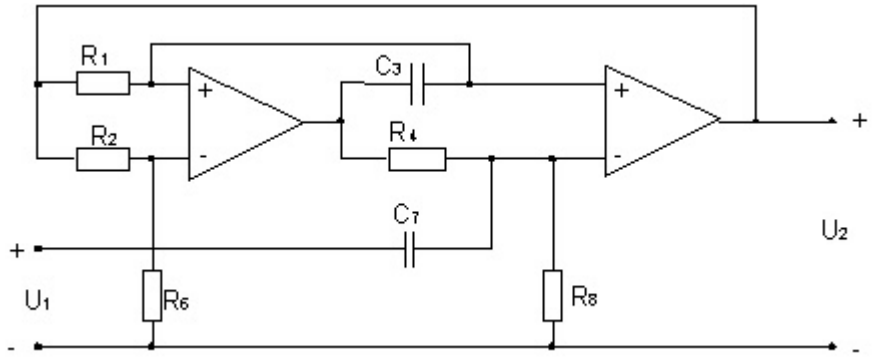
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. netočno
100.0%	▶	▶	b. točno
-50.0%			c. nisu napisana sva svojstva

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: wp=0.25, R1=R2=R4=R6=R8=1, C7=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 4
-50.0%			b. 2
100.0%	▶	▶	c. 0.5
-50.0%			d. 0.25

Score: 10 / 10

Total score: **45 / 50 = 90.0%**

Question 1 (10 points)

Zavisne varijable u i i ovise o:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. duljini x
50.0%	▶	▶	b. vremenu t
-50.0%		▶	c. otporu R
-50.0%		▶	d. kapacitetu C

Score: 0 / 10

Question 2 (10 points)

Kakav je odziv linearnog sistema na eksponencijalni poticaj?

Student response:

Percent	Correct	Student	Answer Choices

Value	Response	Response	
100.0%			a. Odziv je takoder ekponencijalni.
-50.0%			b. Odziv je linearan.
-50.0%			c. Odziv je nelinearan.
-50.0%			d. Odziv je O (nula).

Score: 10 / 10

Question 3 (10 points)

Vod bez gubitaka je vod kod kojeg parametri R i G iznose:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. R=1 i G=1
-50.0%			b. R=1 i G=0
-50.0%			c. R=0 i G=1
100.0%			d. R=0 i G=0

Score: 10 / 10

Question 4 (10 points)

Izraz za otpor vodiča glasi:

$R = \rho \frac{l}{S}$ a) $R = \rho \frac{S}{l}$ b) $R = \chi \frac{l}{S}$ c) $R = \frac{l}{\rho S}$ d)

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%			a. a
-50.0%			b. b
-50.0%			c. c
-50.0%			d. d
-50.0%			e. ništa od navedenog

Score: 10 / 10

Question 5 (10 points)

Za liniju zadanu sa l=1000 km, R=5 ohm/km, L=20 nH/km, G=1 S/km, C=4 nF/km, u0(t)=10(S(t)-S(t-T)) i T=2*10exp(-6) s na ulazu, odrediti napon na izlazu ako je linija zaključena svojom karakterističnom impedancijom Z0.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. u1(s) = (1/s - 1/s exp(-sT)) exp(-sqrt(5)*10e3)
50.0%	▶		b. U1(s) = 10(1/s - 1/s exp(-sT)) exp(-sqrt(5)*10e3)
50.0%	▶		c. u1(t) = 10exp(-sqrt(5)*10e3) (S(t-T1)-S(t-T1-T))
-50.0%		▶	d. u1(t) = 10 exp(-s4 sqrt(5)*10e(-6)) (S(t-T1)-S(t-T1-T))

Score: -5 / 10

Total score: **25 / 50 = 50.0%**

Question 1 (10 points)

Ako imamo liniju zakočenu na oba kraja, impedancija na početku je Z1, tada je Γ1:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. koeficijent refleksije na ulazu linije
-50.0%			b. prijenosna jednadžba linije
-50.0%			c. (Z1-Z0)(Z1+Z0)
50.0%	▶		d. (Z1-Z0)/(Z1+Z0)

Score: 5 / 10

Question 2 (10 points)

Ukoliko je neki vod sastavljen od više homogenih odsječaka (međusobno različitih), kakav je novonastali vod?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Novonastali vod je isto homogen.
100.0%	▶	▶	b. Novonastali vod nije homogen.
-50.0%			c. Novonastali vod je semi-homogen.
-50.0%			d. Novonastali vod je perfektan.

Score: 10 / 10

Question 3 (10 points)

Ako u području primjene voda vrijedi da je omegaL>>R i omegaC>>G kaže se da vod u tom području ima:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. velike gubitke
100.0%	▶	▶	b. male gubitke
-50.0%			c. nema gubitaka

Score: 10 / 10

Question 4 (10 points)

Izraz za karakterističnu (valnu) impedanciju voda glasi:

a) $Z_0 = \sqrt{(R+sL)(G+sC)}$

b) $Z_0 = \sqrt{(G+sL)(R+sC)}$

c) $Z_0 = \sqrt{\frac{R+sL}{G+sC}}$

d) $Z_0 = \sqrt{\frac{G+sC}{R+sL}}$

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. a
-50.0%			b. b

100.0%	▶	▶	c. c
-50.0%			d. d
-50.0%			e. ništa od navedenog

Score: 10 / 10

Question 5 (10 points)

Pri određivanju liniji ekvivalentnog T-četveropola nadomjesni otpori iznose

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%		▶	a. ZA = z11 = Z0 th(gama l / 2)
100.0%	▶		b. ZB = z12 = Z0 1 / sh(gama l)
-50.0%			c. YA = y11 - y12 = Z0 th(gama / 2)
-50.0%			d. YB = y11 = 1 / Z0sh(gama l / 2)

Score: -5 / 10

Total score: **30 / 50 = 60.0%**

Question 1 (10 points)

Što je to homogeni vod?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Onaj koji je u cijeloj svojoj dužini jednakog sastava i jednakih dimenzija.
-50.0%			b. Onaj koji je u cijeloj svojoj dužini jednakog sastava.
-50.0%			c. Onaj kojemu je otpor jednak nuli.

Score: 10 / 10

Question 2 (10 points)

Koliko je faktor refleksije ukoliko je vod na kraju kratko spojen?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. Γ2 = -1
-50.0%			b. Γ2 = 1
-50.0%		▶	c. Γ2 je beskonačan.
-50.0%			d. Nijedan od ponuđenih, ovisi i o drugim parametrima.

Score: -5 / 10

Question 3 (10 points)

Kod vodova s dobrom izolacijom i razmjerno malim induktivitetom ,za koje vrijedi da je u području njihove namjene omegaL<

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. točno
-50.0%		▶	b. netočno

Score: -5 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 2 ohm/km L=10 nH/km G= 1 S/km C= 5 nF/km. Odredi faktor prijenosa homogene linije.

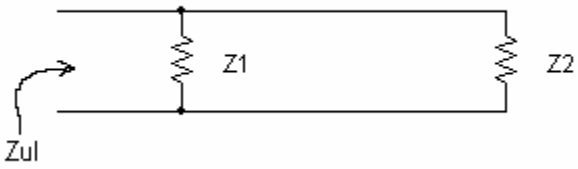
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. (2^0,5) * (1 + 5s*10^-9)
-50.0%		▶	b. (2^0,5) * (1 + 4s*10^-8)
-50.0%			c. 2^0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: -5 / 10

Question 5 (10 points)

Za sliku vrijedi (linija bez gubitaka):



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Zul = sq(Z0)
-50.0%			b. Zul = sq(Z0)/Z2
100.0%	▶	▶	c. Zul = Z0
-50.0%			d. nista od navedenog

Score: 10 / 10

Total score: **5 / 50 = 10.0%**

Question 1 (10 points)

Što je to homogeni vod?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. Onaj koji je u cijeloj svojoj dužini jednakog sastava i jednakih dimenzija.
-50.0%		▶	b. Onaj koji je u cijeloj svojoj dužini jednakog sastava.
-50.0%			c. Onaj kojemu je otpor jednak nuli.

Score: -5 / 10

Question 2 (10 points)

Koja od formula predstavlja vodljivost izolacije?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. G = (C * σ) / ε
-50.0%			b. G = (C * ε) / σ
-50.0%			c. G = (σ * ε) / C
-50.0%		▶	d. G = σ * ε * C

Score: -5 / 10

Question 3 (10 points)

RC-vodovi se karakteriziraju sa 2 parametra:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. R i C,uz pretpostavku da je G=L=0
-50.0%			b. R i C,uz pretpostavku da je G=L
-50.0%			c. L i G,uz pretpostavku da je R=C=0
-50.0%			d. L i G,uz pretpostavku da je R=C

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 2 ohm/km L=10 nH/km G= 1 S/km C= 5 nF/km. Odredi faktor prijenosa homogene linije.

Student response:

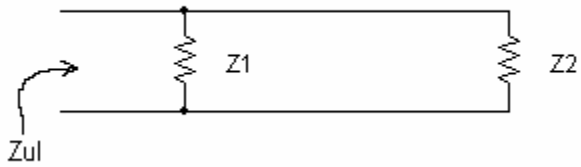
Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. (2^0,5) * (1 + 5s*10^-

			9)
-50.0%			b. (2^0,5) * (1 + 4s*10^-8)
-50.0%			c. 2^0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: 10 / 10

Question 5 (10 points)

Za sliku vrijedi (linija bez gubitaka):



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Zul = sq(Z0)
-50.0%			b. Zul = sq(Z0)/Z2
100.0%			c. Zul = Z0
-50.0%			d. nista od navedenog

Score: 10 / 10

Total score: **20 / 50 = 40.0%**

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

$$H(s) = \frac{2s}{2s^2 + 2s + 1}$$

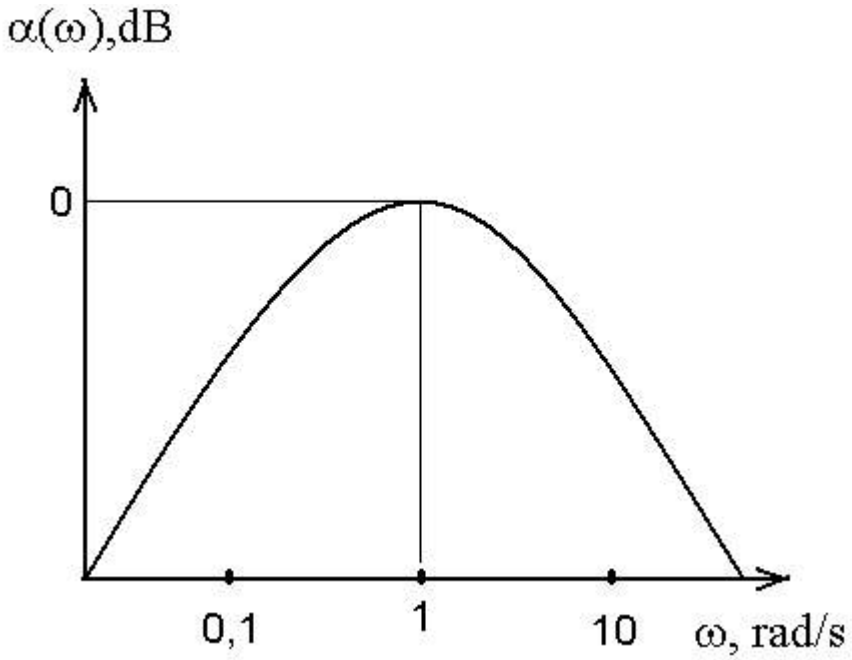
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nisko propusni filtar
-50.0%			b. Visoko propusni filtar
-50.0%		▶	c. Pojasna brana (ili Nocth)
100.0%	▶		d. Ništa od navedenog

Score: -5 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%		▶	b. pojasnoj brani
-50.0%			c. visoko propusnom filtru
100.0%	▶		d. pojasno propusnom

			filtru

Score: -5 / 10

Question 3 (10 points)

Što je red filtra?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶		a. najviša potencija od s u prijenosnoj funkciji
-50.0%			b. zroj potencija od s
-50.0%		▶	c. najniža potencija od s u prijenosnoj funkciji
50.0%	▶	▶	d. ukupni zbroj kapaciteta i induktiviteta u mreži (ako nemamo nikakvu serijsku ili paralelnu kombinaciju kapaciteta ili induktiviteta)

Score: 0 / 10

Question 4 (10 points)

Koja je razlika izmedu K-filtera i M-filtera.

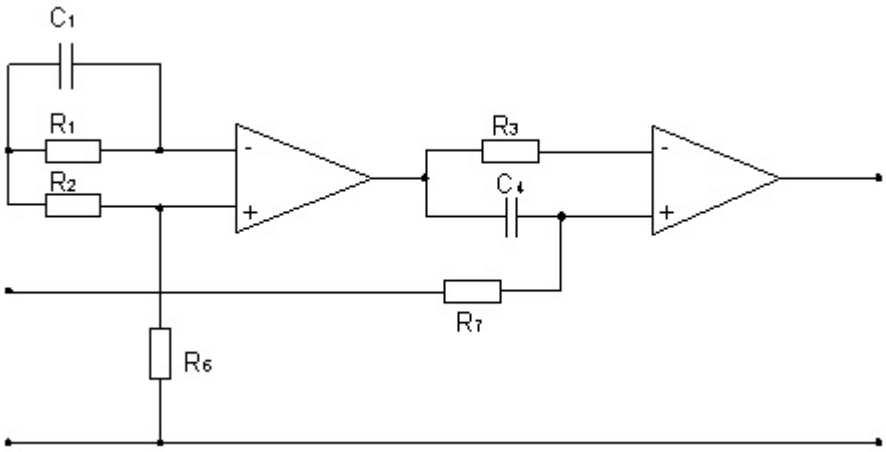
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nema razlike.
-50.0%		▶	b. Neka druga razlika.
100.0%	▶		c. M-filtri imaju pojaseve frekvencija kod kojih su Xa(w) i Xb(w) istog predznaka.
-50.0%		▶	d. K-filtri imaju svojstvo da ima je ulazna impedancija uvijek reciprocna izlaznoj.

Score: -10 / 10

Question 5 (10 points)

Koja je vrsta filtra zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. NP sa 2 operacijska pojacala
-50.0%			b. VP sa 2 operacijska pojacala
-50.0%			c. PP sa 2 operacijska pojacala
-50.0%			d. PB sa 2 operacijska pojacala

Score: 10 / 10

Total score: **-10 / 50 = -20.0%**

Question 3 (10 points)

Poveži filtar sa oblikom prijenosne funkcije: pojasnopropusni filtar.

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)
100.0%	▶		b. H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)
-50.0%			c. H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo^2)

-50.0%			d.	H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Question 4 (10 points)

Sto kod filtra oznacavamo s Z'k i Z'p?

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nepostojece oznake.
-50.0%			b. Ulazne impedancije.
-50.0%			c. Izlazne impedancije.
100.0%	▶		d. Zrcalne impedancije.

Question 3 (10 points)

Što je istina za |H(jw)|?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. |H(jw)|= |(Uiz(jw))/(Uul(jw))|
50.0%	▶	▶	b. to je amplitudno frekvencijska karakteristika
-50.0%			c. |H(jw)|=|(Iiz(jw))/(Iul(jw))|
-50.0%			d. to je fazno frekvencijska karakteristika

Score: 10 / 10

Question 4 (10 points)

Granična frekvencija je:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶		a. frekvencija na granici dvaju pojasa-pojasa propuštanja i pojasa gušenja
50.0%	▶		b. tamo gdje jedna od reaktancija mijenja predznak, bilo da prolazi kroz nulu ili pol
-50.0%			c. tamo gdje su reaktancije istog predznaka, bilo da prolazi kroz nulu ili pol

-50.0%			d.	ništa od navedenog nije točno

Question 3 (10 points)

Amplituda od up i ip (polazni val) je radi faktora exp(-alfax) funkcija od x i eksponencijalno pada s rastućim x,dok ona od ur i ir (reflektirani val) eksponencijalno raste radi faktora exp(alfax) s rastućim x,odnosno pada računajući od kraja voda prema početku. :

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶		a. točno
-50.0%			b. netočno

Question 5 (10 points)

Za koji od sljedećih slučajeva možemo računati kao za liniju bez gubitaka?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. R=0
-50.0%			b. G=0
50.0%	▶	▶	c. R=0 i G=0
50.0%	▶		d. Z0=sqrt(L/C)

Question 3 (10 points)

Kako glasi kratica za svepropusni filtar?

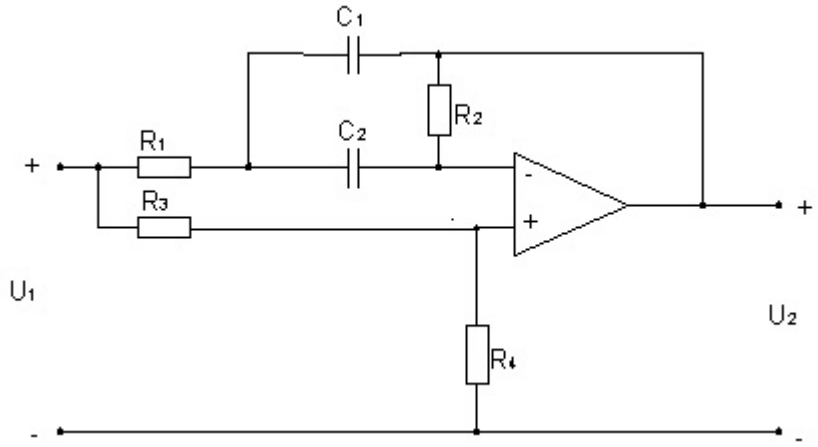
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. SPF
-50.0%			b. SF
100.0%	▶	▶	c. SP
-50.0%			d. APF

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: G1=G2=0.25, C1=C2=1 ?



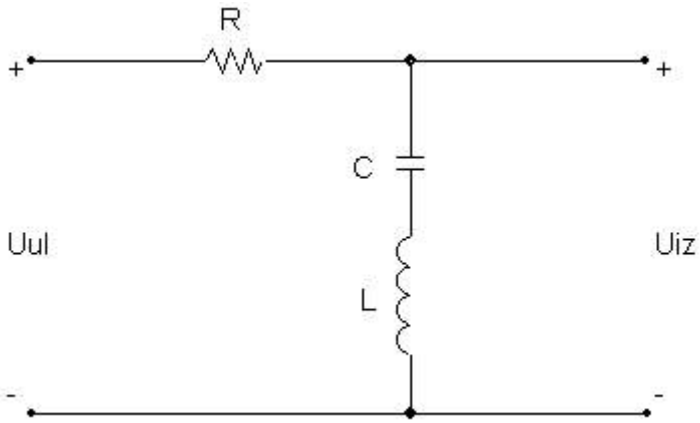
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	1/16
100.0%	▶	▶	b.	1/4
-50.0%			c.	4
-50.0%			d.	16

Score: 10 / 10

Question 1 (10 points)

Za filtar prikazan slikom odrediti prijenosnu funkciju. R=2, L=1, C=2.



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=s/(4s^2+s+2)
-50.0%			b. H(s)=s/(2+s)
100.0%	▶	▶	c. H(s)=(2s^2+1)/(2s^2+2s+1)

-50.0%			d. H(s)=2(s^2+1)/(s^2+2s+1)

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana funkcija?

$$H(s) = \frac{s^2}{s^2 + s + 1}$$

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
100.0%	▶		b. visoko propusnom filtru
-50.0%		▶	c. pojasnoj brani
-50.0%			d. ništa od navedenog

Score: -5 / 10

Question 3 (10 points)

Ako smo realizirali univerzalni filtar drugog stupnja sa tri operacijska pojačala, tada:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶		a. prvo operacijsko pojačalo sumira napone
50.0%	▶		b. drugo i treće operacijsko pojačalo su integratori
-50.0%			c. sva operacijska pojačala su integratori
-50.0%			d. spoj možemo gledati samo u cjelosti

Score: 0 / 10 (*Question not answered.*)

Question 4 (10 points)

Ako su Xk(omega) i Xp(omega) u nekom području frekvencije istog predznaka,tj. kad je Th(a+jb) realno,u tom području vrijednost zrcalne konstante gušenja je veća od nule,a fazna konstanta ima za sve omega iz tog područja konstantnu vrijednost.Ovo područje zovemo :

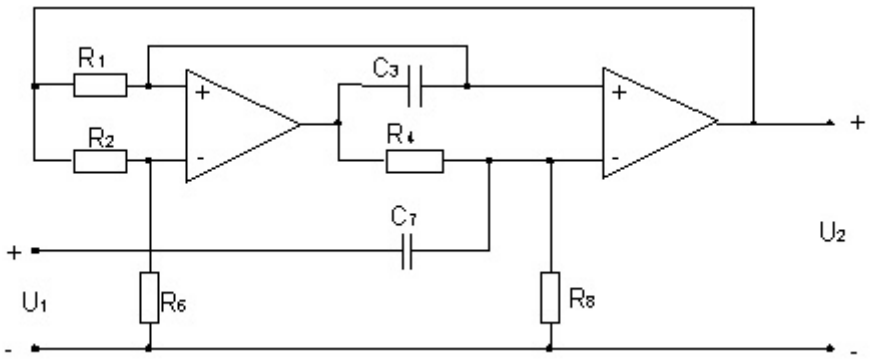
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. područje propuštanja
100.0%	▶	▶	b. područje gušenja
-50.0%			c. granično područje
-50.0%			d. središnje područje

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi Qp ako je zadano: wp=0.25, R1=R2=R4=R6=R8=1, C7=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 4
-50.0%			b. 2
100.0%	▶		c. 0.5
-50.0%			d. 0.25

Score: 0 / 10 (*Question not answered.*)

Total score: **15 / 50 = 30.0%**

Question 1 (10 points)

Da bi dobili rješenja simultanih diferencijskih jednadžbi potrebno je poznavati početne i rubne uvjete. Kako oni glase?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
33.0%	▶		a. i(x,t), u(x,t) za t=0
33.0%	▶	▶	b. i(0,t), u(0,t)
33.0%	▶	▶	c. i(l,t), u(l,t)
-50.0%			d. i(1,t), u(1,t)

Score: 6.6 / 10

Question 2 (10 points)

U koju klasu sistema spada homogeni vod s konstantnim parametrima?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. U klasu linearnih sistema.
-50.0%			b. U klasu neliearnih sistema.
-50.0%			c. U klasu sinusoidalnih sistema.
-50.0%			d. U nijednu od navedenih klasa.

Score: 10 / 10

Question 3 (10 points)

Pod različitim vodovima smatraju se oni vodovi koji imaju međusobno različite:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices

-50.0%			a. valne impedancije
-50.0%			b. faktore prijenosa
-50.0%			c. nijedno od navedenog
100.0%	▶	▶	d. oboje

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 3 ohm/km L= 8 nH/km G= 9 S/km C=24 nF/km. Odredi faktor prijenosa homogene linije.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. (3^0,5) * (3 + 8s*10^-9)
-50.0%			b. (3^0,5) * (2 + 4s*10^-8)
-50.0%			c. 3^0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: 10 / 10

Question 5 (10 points)

Ako je ulazna impedancija Zul neke linije bez gubitaka, duljine lambda/4 i na kraju kratko spojene, tada je

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
0.0%			a. Zk(lambda/4) = 0, za liniju kratko spojenu na kraju
50.0%	▶		b. Zk(lambda/4) = beskonačno, za liniju kratko spojenu na kraju
50.0%	▶		c. Zp(lambda/4) = 0, za liniju otvorenu na kraju
0.0%			d. Zp(lambda/4) = beskonačno, za liniju otvorenu na kraju

Score: 0 / 10 (*Question not answered.*)

Total score: **36.6 / 50 = 73.2%**

View Results

Električni filtri.

User ID: idelac **Attempt:** 1 / 1 **Out of:** 50

Started: June 10, 2004 19:43 **Finished:** June 10, 2004 19:48 **Time spent:** 4 min. 39 sec.

Student finished 5 min. 21 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

$$H(s) = \frac{2s}{2s^2 + 2s + 1}$$

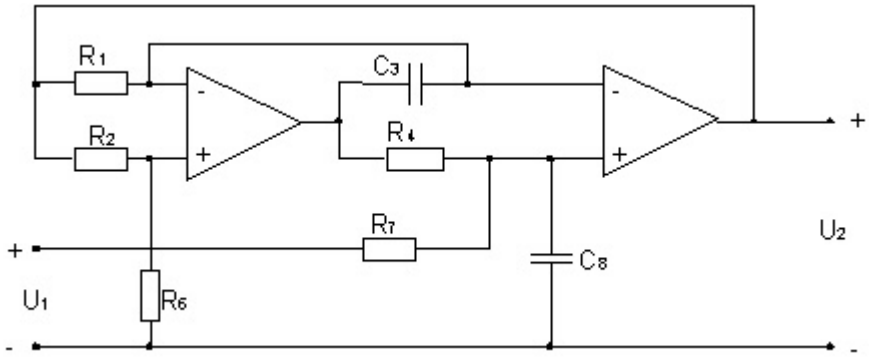
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nisko propusni filtar
-50.0%			b. Visoko propusni filtar
-50.0%			c. Pojasna brana (ili Nocth)
100.0%	▶	▶	d. Ništa od navedenog

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: wp=2, R1=R2=R4=R6=R7=2, C3=C8=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	2
-50.0%			c.	6
100.0%	▶		d.	8

Score: 0 / 10 (*Question not answered.*)

Question 3 (10 points)

Što je istina za |H(jw)|?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. |H(jw)|= |(Uiz(jw))/(Uul(jw))|
50.0%	▶	▶	b. to je amplitudno frekvencijska karakteristika
-50.0%			c. |H(jw)|=|(Iiz(jw))/(Iul(jw))|
-50.0%			d. to je fazno frekvencijska karakteristika

Score: 10 / 10

Question 4 (10 points)

Prilikom izabira parametra m kod M-filtra u kojem rsponu se on krece?

Student response:

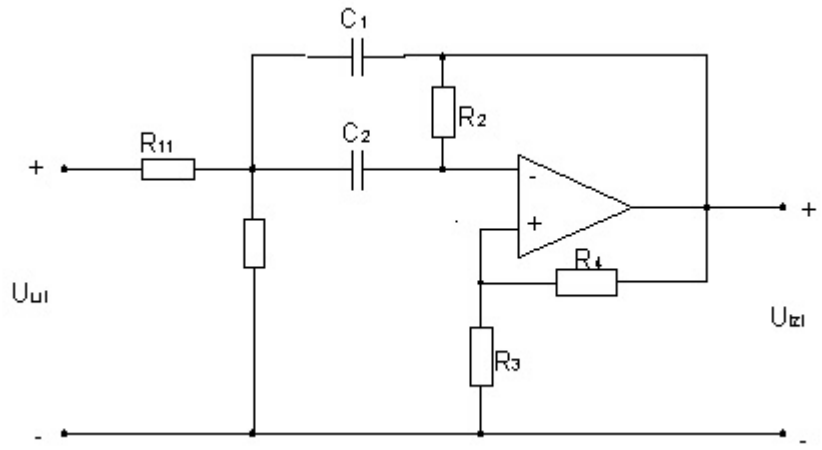
Percent Value	Correct Response	Student Response	Answer Choices

-50.0%			a. Od minus beskonacno do plus beskonacno.
-50.0%			b. Od O (nula) do plus beskonacno.
100.0%	▶	▶	c. Od O (nula) do 1 (jedan).
-50.0%			d. Od 1 (jedan) do beskonacno.

Score: 10 / 10

Question 5 (10 points)

Koja ja vrsta filtera zadana na slici?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%		▶	a. niskopropusni
-50.0%			b. visokopropusni
100.0%	▶		c. pojasno propusni
-50.0%			d. pojasna brana

Score: -5 / 10

Total score: **25 / 50 = 50.0%**

View Results

Linije.

User ID: idelac **Attempt:** 1 / 1 **Out of:** 50

Started: June 10, 2004 19:50 **Finished:** June 10, 2004 19:59 **Time spent:** 9 min. 23 sec.

Student finished 0 min. 37 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Kako glase prijenosne jednadžbe linije kao četveropola?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
25.0%	▶	▶	a. A = ch (γ*l)
25.0%	▶	▶	b. B = Z0 * sh (γ*l)
25.0%	▶	▶	c. C = (1/Z0) * sh (γ*l)
25.0%	▶	▶	d. D = ch (γ*l)
-50.0%			e. A = sh (γ*l)
-50.0%			f. C = Z0 * sh (γ*l)

Score: 10 / 10

Question 2 (10 points)

Koji princip vrijedi kod vodova koji tvore klasu linearnih homogenih vremenski invarijantnih vodova?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Princip superpozicije.
-50.0%			b. Princip interpolacije.
-50.0%			c. Princip degeneracije.
-50.0%			d. Princip opozicije.

Score: 10 / 10

Question 3 (10 points)

Lambda=P/beta ,ovaj razmak nazivamo:

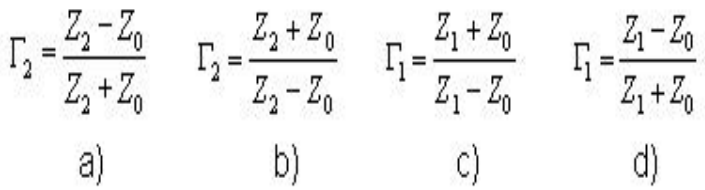
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. širina vala
100.0%	▶	▶	b. dužina vala
-50.0%			c. visina vala

Score: 10 / 10

Question 4 (10 points)

Koji od navedenih izraza predstavlja koeficijent refleksije na izlazu iz linije?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. a
-50.0%			b. b
-50.0%			c. c
-50.0%			d. d
-50.0%			e. ništa od navedenog

Score: 10 / 10

Question 5 (10 points)

Koliki je valni koeficijent gušenja za liniju bez gubitaka?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. alfa=0
-50.0%			b. 0 < alfa < 1
-50.0%			c. alfa>1
-50.0%			d. beta=0

-50.0%	e. 0 < beta < 1

Score: 10 / 10

Total score: **50 / 50 = 100.0%**

Question 4 (10 points)

Kakva je krivulja granicne frekvencije prilikom odabira povoljne velicine m kod K-filtera?

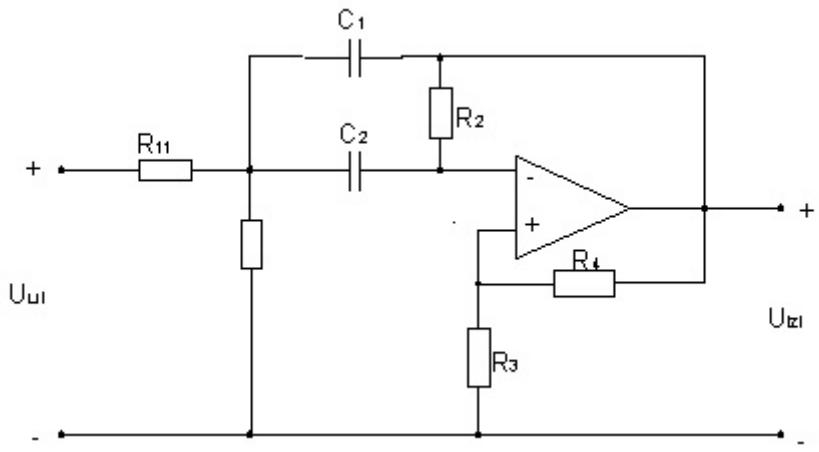
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Ne mijenja se.
100.0%	▶	▶	b. Strmina krivulje u blizini granicne frekvencije je velika.
-50.0%			c. Strmina krivulje u blizini granicne frekvencije je mala.
-50.0%			d. Funkcija je uvijek konstanta.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: R11=R12=1, G1=G2=1, C1=C2=0.5 ?



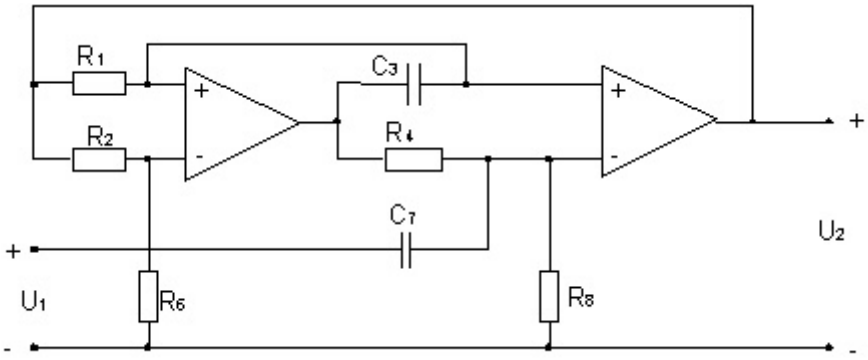
Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	0.5
-50.0%			b.	1
100.0%	▶		c.	2
-50.0%			d.	4

Score: 0 / 10 (*Question not answered.*)

Total score: **5 / 50 = 10.0%**

Koja je vrsta filtra zadana na slici?



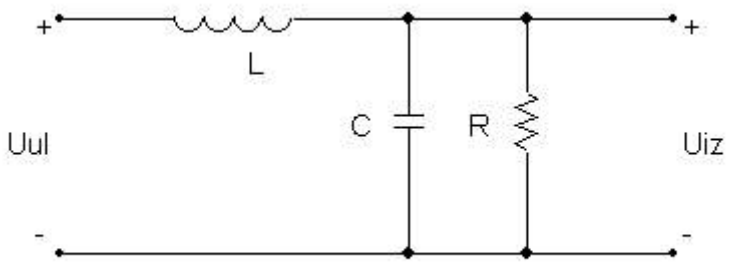
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. NP s 2 operacijska pojačala
100.0%	▶		b. VP s 2 operacijska pojačala
-50.0%			c. PP s 2 operacijska pojačala
-50.0%			d. PB s 2 operacijska pojačala

Score: 0 / 10 (*Question not answered.*)

Question 2 (10 points)

Koji tip filtra je prikazan slikom?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasna brana (Notch)
-50.0%		▶	b. pojasno propusni filtar
-50.0%			c. visoko propusni filtar
100.0%	▶		d. ništa od navedenog

Score: -5 / 10

View Results

Linije.

User ID: tpoljak **Attempt:** 1 / 1 **Out of:** 50

Started: June 10, 2004 20:11 **Finished:** June 10, 2004 20:16 **Time spent:** 5 min. 15 sec.

Student finished 4 min. 45 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Kako glasi faktor prijenosa homogene linije?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. gama = ((R+sL)/(G+sC))^(1/2)
-50.0%			b. gama = ((G+sC)/(R+sL))^(1/2)
100.0%	▶	▶	c. gama = ((R+sL)(G+sC))^(1/2)
-50.0%			d. gama = (R+sL)(G+sC)

Score: 10 / 10

Question 2 (10 points)

Koji su nam parametri potrebni da bi izračunali faktor prijenosa homogenog voda?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. R, L, C, G i s.
-50.0%			b. Ulazni i izlazni napon.
-50.0%			c. Ulazna struja, izlazna struja i impedancija.
-50.0%			d. L i C.

Score: 10 / 10

Question 3 (10 points)

Raspored napona i struje duž voda bez gubitaka je određen jednadžbama :

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. U(y)=U(l)cos(betay) + jI(l)Zosin(betay)
-50.0%			b. U(y)=U(l)cos(betay) - jI(l)Zosin(betay)
-50.0%			c. U(y)=U(l)sin(betay) + jI(l)Zocos(betay)
-50.0%			d. U(y)=U(l)sin(betay) - jI(l)Zocos(betay)

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 4 ohm/km L= 5 nH/km G= 8 S/km C=10 nF/km. Odredi faktor prijenosa homogene linije.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. (2^0,5) * (4 + 5s*10^-9)
-50.0%			b. (2^0,5) * (4 + 5s*10^-8)
-50.0%			c. 2^0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: 10 / 10

Question 5 (10 points)

Koja od navedenih tvrdnji je istinita?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. polazni val se smanjuje od ulaza prema izlazu
-50.0%			b. polazni val raste od ulaza prema izlazu
-50.0%			c. reflektirani val se smanjuje od ulaza prema izlazu
50.0%	▶		d. reflektirani val se smanjuje od izlaza prema ulazu

Score: 5 / 10

Total score: **45 / 50 = 90.0%**

View Results

Električni filtri.

User ID: bpegan **Attempt:** 1 / 1 **Out of:** 50

Started: June 10, 2004 20:19 **Finished:** June 10, 2004 20:23 **Time spent:** 4 min. 41 sec.

Student finished 5 min. 19 sec. ahead of the 10 min. time limit.

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

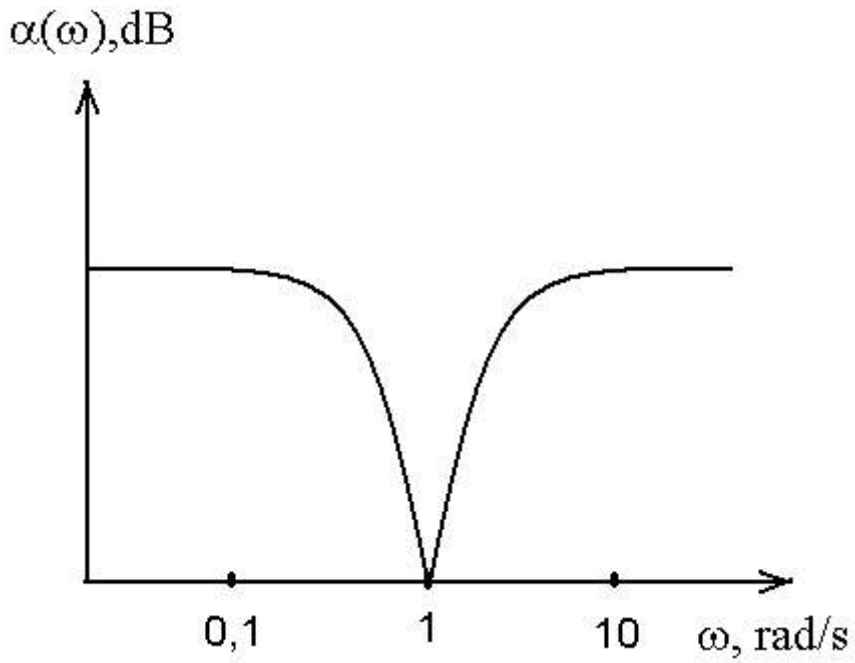
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nisko propusni filtar
-50.0%			b. Visoko propusni filtar
-50.0%			c. Pojasna brana (ili Nocth)
100.0%	▶	▶	d. Ništa od navedenog

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusnom filtru
-50.0%			b. visoko propusnom filtru
100.0%	▶	▶	c. pojasnoj brani
-50.0%			d. pojasno propusnom filtru

Score: 10 / 10

Question 3 (10 points)

Poveži filtar sa oblikom prijenosne funkcije: visokopropusni filtar.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)
-50.0%			b. H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)
-50.0%			c. H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo^2)
-50.0%			d. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Score: 10 / 10

Question 4 (10 points)

Kako se odreduju konstante gusenja a(w) i faze b(w)?

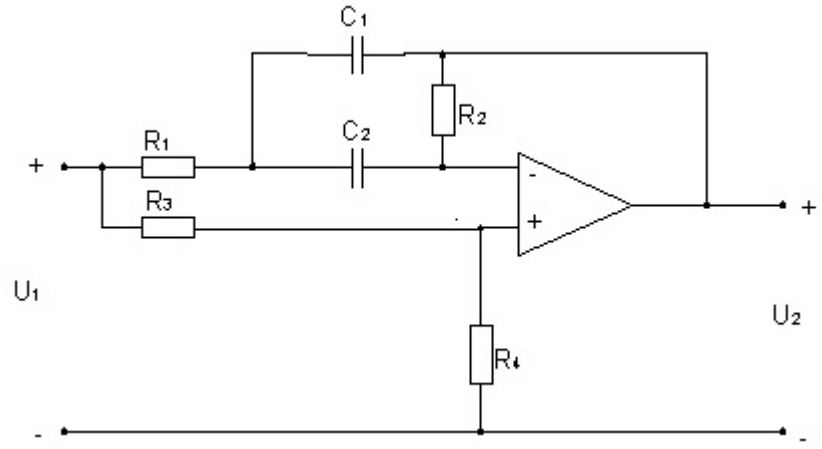
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Odreduju se prema formulama koje su dane za nesimetricne filtere.
100.0%	▶	▶	b. Odreduju se prema formulama koje su dane za simetricne filtere.
-50.0%			c. Odreduju se pomocu formule filtracije za male filtere.
-50.0%			d. Ne mogu se odrediti.

Score: 10 / 10

Question 5 (10 points)

Koliko iznosi wp ako je zadano: G1=G2=0.25, C1=C2=1 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	1/16
100.0%	▶		b.	1/4
-50.0%			c.	4
-50.0%			d.	16

Score: 0 / 10 (*Question not answered.*)

Total score: **40 / 50 = 80.0%**

Što je to homogeni vod?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Onaj koji je u cijeloj svojoj dužini jednakog sastava i jednakih dimenzija.
-50.0%		▶	b. Onaj koji je u cijeloj svojoj dužini jednakog sastava.
-50.0%		▶	c. Onaj kojemu je otpor jednak nuli.
-50.0%			d. Nijedan od navedenih.

Score: 0 / 10

Question 2 (10 points)

Koja od formula predstavlja vodljivost izolacije?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. G = (C * σ) / ε
-50.0%			b. G = (C * ε) / σ
-50.0%			c. G = (σ * ε) / C
-50.0%			d. G = σ * ε * C

Score: 10 / 10

Question 3 (10 points)

U nekoj čvrstoj točki x=x1 (x kao parametar) na vodu se vrijednosti up,ip,ur,ir mijenjaju u ovisnosti o t:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. linearno, s frekvencijom omega jednako onoj harmoničke pobude
-50.0%			b. eksponencijalno, s frekvencijom omega jednako onoj harmoničke pobude
100.0%	▶		c. po cos-funkciji, s frekvencijom omega jednako onoj harmoničke pobude
-50.0%		▶	d. po sin-funkciji, s frekvencijom omega jednako onoj harmoničke pobude

Score: 0 / 10

Question 4 (10 points)

Izraz za vodljivost vodiča glasi:

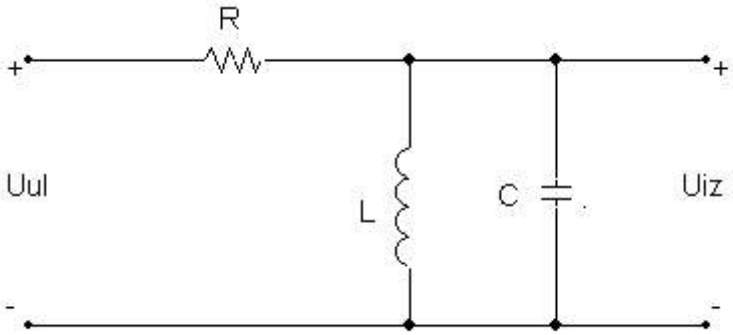
$G = \chi \frac{S}{l}$ a) $G = \chi \frac{l}{S}$ b) $G = \rho \frac{S}{l}$ c) $G = \rho \frac{l}{S}$ d)

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. a
-50.0%			b. b
-50.0%			c. c
-50.0%			d. d
-50.0%			e. ništa od navedenog

Score: 10 / 10

Za filtar sa slike odrediti tip filtra.



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. nisko propusni filtar
-50.0%			b. visoko propusni filtar
-50.0%			c. pojasna brana
100.0%	▶	▶	d. pojasno propusni filtar

Score: 10 / 10

Question 2 (10 points)

Kojem tipu filtra pripada zadana prijenosna funkcija?

$$H(s)=\frac{s^2-s+1}{s^2+s+1}$$

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Nisko propusnom filtru
-50.0%			b. Visoko propusnom filtru
100.0%	▶		c. Sve propusnom filtru
-50.0%		▶	d. Ništa od navedenog

Score: -5 / 10

Question 3 (10 points)

Što je istina za fi(jw)?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. to je amplitudno frekvencijska karakteristika
50.0%	▶	▶	b. to je fazno frekvencijska karakteristika
50.0%	▶	▶	c. arg(H(jw))=arg((Uiz(jw))/(Uul(jw)))
-50.0%			d. arg(H(jw))=arg((Iiz(jw))/(Iul(jw)))

Score: 10 / 10

Question 4 (10 points)

Zrcalna konstanta gušenja g = a+jb dana je izrazom:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Thg=Th(a-jb)=korijen(Zk/Zp)
100.0%	▶	▶	b. Thg=Th(a+jb)=korijen(Zk/Zp)
-50.0%			c. Thg=Th(a+jb)=Zk/Zp
-50.0%			d. Thg=Th(a-jb)=Zk/Zp

Score: 10 / 10

Question 1 (10 points)

Kako se naziva najmanji razmak između dviju točaka na vodu koje imaju isto stanje?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Naziva se kratkim valom.
100.0%	▶	▶	b. Nazva se dužinom vala.
-50.0%			c. Nijedan od navedenih.
-50.0%			d. Naziva se titraj.

Score: 10 / 10

Question 2 (10 points)

Koliko je faktor refleksije ukoliko je vod na kraju kratko spojen?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Γ2 = -1
-50.0%			b. Γ2 = 1
-50.0%			c. Γ2 je beskonačan.
-50.0%			d. Nijedan od ponuđenih, ovisi i o drugim parametrima.

Score: 10 / 10

Question 3 (10 points)

Kod voda bez gubitaka:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Zo je realan,a faktor gušenja alfa(omega)=0 za sve omega
-50.0%			b. Zo je realan,a faktor gušenja alfa(omega)=omega za sve omega
-50.0%			c. Zo je imaginaran,a faktor gušenja alfa(omega)=0 za sve omega
-50.0%			d. Zo je imaginaran,a faktor gušenja alfa(omega)=omega za sve omega

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 4 ohm/km L= 5 nH/km G= 8 S/km C=10 nF/km. Odredi iznos karakterističnе (valne) impedancije linije.

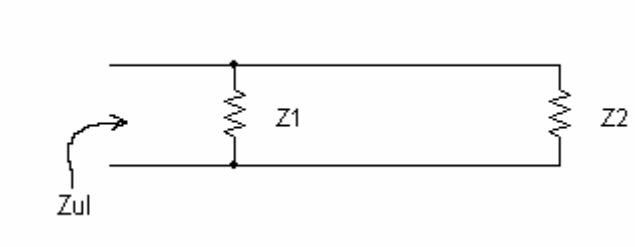
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. (2^0,5) * (4 + 5s*10^-9)
-50.0%			b. (2^0,5) * (4 + 5s*10^-8)
100.0%			c. 2^-0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: -5 / 10

Question 5 (10 points)

Za sliku vrijedi (linija bez gubitaka):



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Zul = sq(Z0)
-50.0%			b. Zul = sq(Z0)/Z2
100.0%			c. Zul = Z0
-50.0%			d. nista od navedenog

Score: -5 / 10

Total score: **20 / 50 = 40.0%**

Question 1 (10 points)

Zadana je prijenosna funkcija filtra. Odrediti tip filtra kojem ona pripada.

$$H(s) = \frac{s}{s^2 + s + 1}$$

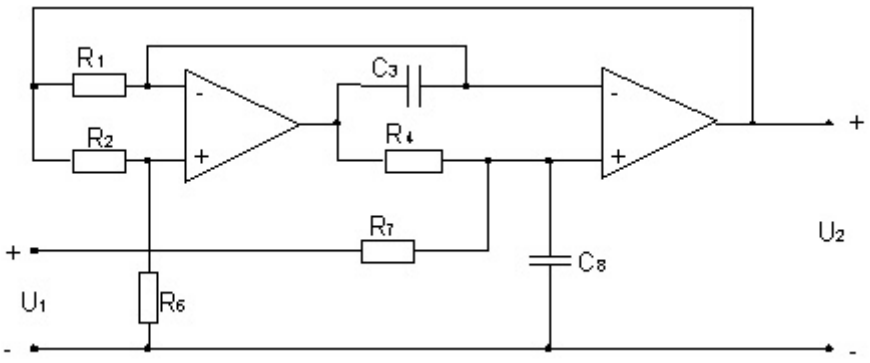
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. pojasna brana
100.0%	▶	▶	b. pojasno propusni filtar
-50.0%			c. sve propusni filtar
-50.0%			d. nisko propusni filtar

Score: 10 / 10

Question 2 (10 points)

Koliko iznosi Qp ako je zadano: wp=2, R1=R2=R4=R6=R7=2, C3=C8=2 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. 0.5
-50.0%			b. 2
-50.0%			c. 6
100.0%	▶	▶	d. 8

Score: 10 / 10

Question 3 (10 points)

Poveži filtar sa oblikom prijenosne funkcije: pojasna brana.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. H(s)=(K*s^2)/(s^2+(wo/Q)*s+wo^2)
-50.0%			b. H(s)=(K*wo/Q)/(s^2+(wo/Q)*s+wo^2)
100.0%	▶	▶	c. H(s)=(K*(s^2+wo^2))/(s^2+(wo/Q)*s+wo^2)
-50.0%			d. H(s)=(K*wo^2)/(s^2+(wo/Q)*s+wo^2)

Score: 10 / 10

Question 4 (10 points)

Iz koje vrste sklopova K-filtra se moze izvesti M-filter?

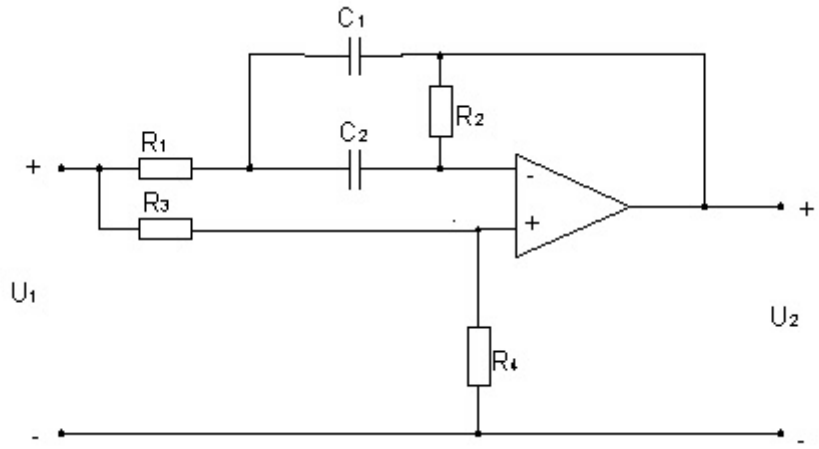
Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. Iz K-filtra u T spoju.
-50.0%			b. Iz K-filtrau W spoju.
50.0%	▶	▶	c. Iz K-filtra u PI spoju.
-50.0%			d. Ne moze se uzvesti M-filter iz K-filtra.

Score: 10 / 10

Question 5 (10 points)

Da li je ispunjen uvjet za pojasnu branu ako je G1=G2=G3=G4=1. C1=C2=0.5 ?



Student response:

Percent Value	Correct Response	Student Response	Answer Choices

100.0%	▶		a.	Da
-50.0%		▶	b.	Ne

Score: -5 / 10

Total score: **35 / 50 = 70.0%**

Kako glase prijenosne jednadžbe linije kao četveropola?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
25.0%	▶	▶	a. A = ch (γ*l)
25.0%	▶	▶	b. B = Z0 * sh (γ*l)
25.0%	▶	▶	c. C = (1/Z0) * sh (γ*l)
25.0%	▶	▶	d. D = ch (γ*l)
-50.0%			e. A = sh (γ*l)
-50.0%			f. C = Z0 * sh (γ*l)

Score: 10 / 10

Question 2 (10 points)

Kakav je odziv linearnog sistema na eksponencijalni poticaj?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. Odziv je takoder ekponencijalni.
-50.0%			b. Odziv je linearan.
-50.0%			c. Odziv je nelinearan.
-50.0%			d. Odziv je O (nula).

Score: 10 / 10

Question 3 (10 points)

Ako u području primjene voda vrijedi da je omegaL>>R i omegaC>>G kaže se da vod u tom području ima:

Student response:

Percent	Correct	Student	Answer Choices

Value	Response	Response		
-50.0%			a.	velike gubitke
100.0%			b.	male gubitke
-50.0%			c.	nema gubitaka

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 2 ohm/km L=10 nH/km G= 1 S/km C= 5 nF/km. Odredi iznos karakteristične (valne) impedancije linije.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	(2^0,5) * (1 + 5s*10^-9)
-50.0%			b.	(2^0,5) * (1 + 4s*10^-8)
100.0%			c.	2^0,5
-50.0%			d.	(5^0,5) * (1 + 5s*10^-9)

Score: 10 / 10

Question 5 (10 points)

Koliki je valni koeficijent gušenja za liniju bez gubitaka?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%			a.	alfa=0
-50.0%			b.	0 < alfa < 1
-50.0%			c.	alfa>1
-50.0%			d.	beta=0
-50.0%			e.	0 < beta < 1

Score: 10 / 10

Question 1 (10 points)

Koji su primarni parametri linija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. R, G po metru, C, L po sekundi
100.0%	▶	▶	b. R, G, C, L po metru
-50.0%			c. R, G, C, L po sekundi
-50.0%			d. R, G po sekundi, C, L po metru

Score: 10 / 10

Question 2 (10 points)

U koju klasu sistema spada homogeni vod s konstantnim parametrima?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. U klasu linearnih sistema.
-50.0%			b. U klasu neliearnih sistema.
-50.0%			c. U klasu sinusoidalnih sistema.
-50.0%			d. U nijednu od navedenih klasa.

Score: 10 / 10

Question 3 (10 points)

Vod bez distorzije karakteriziran je sljedećom relacijom među primarnim parametrima:

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. RL=GC
-50.0%			b. RG=CL
100.0%	▶	▶	c. RC=GL

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 4 ohm/km L= 5 nH/km G= 8 S/km C=10 nF/km. Odredi faktor prijenosa homogene linije.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
100.0%	▶	▶	a. (2^0,5) * (4 + 5s*10^-9)
-50.0%			b. (2^0,5) * (4 + 5s*10^-8)
-50.0%			c. 2^0,5
-50.0%			d. (5^0,5) * (1 + 5s*10^-9)

Score: 10 / 10

Question 5 (10 points)

Vrijedi

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶	▶	a. u(x,t) = up(x,t) + ur(x,t)
-50.0%			b. u(x,t) = up(x,t) - ur(x,t)
-50.0%			c. i(x,t) = ip(x,t) + ir(x,t)
50.0%	▶	▶	d. i(x,t) = ip(x,t) - ir(x,t)

Score: 10 / 10

Question 4 (10 points)

Zadana je linija sa slijedećim parametrima: R= 3 ohm/km L= 8 nH/km G= 9 S/km C=24 nF/km. Odredi iznos karakteristične (valne) impedancije linije.

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. (2^0,5) * (3 + 8s*10^-9)
-50.0%			b. (2^0,5) * (2 +

				4s*10^-8)
100.0%	▶	▶	c.	3^-0,5
-50.0%			d.	(5^0,5) * (1 + 5s*10^-9)

Score: 10 / 10

Question 3 (10 points)

Kako glasi kratica za pojasnu branu?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
-50.0%			a.	N
100.0%	▶	▶	b.	PB
-50.0%			c.	PP
-50.0%			d.	PF

Score: 10 / 10

Question 3 (10 points)

Što je istina za centralnu frekvenciju?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	fc=(fl*fh)^(1/2)
-50.0%			b.	fc=1/RC
-50.0%			c.	fc=fl*fh
-50.0%			d.	fc=RC

Score: 10 / 10

Question 1 (10 points)

Kako glasi karakteristična valna impedancija linije?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices	
100.0%	▶	▶	a.	Z0=((R+sL)/(G+sC))^(1/2)

-50.0%			b. Z0=((G+sC)/(R+sL))^(1/2)
-50.0%			c. z0=((R+sL)(G+sC))^(1/2)
-50.0%			d. z0=(R+sL)(G+sC)

Score: 10 / 10

Question 2 (10 points)

Čemu je jednak pad napona po jedinici dužine voda ?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Jednak je zbroju padova napona na seriskom otporu i paralelnom iduktivitetu po jedinici dužine voda.
100.0%	▶	▶	b. Jednak je zbroju padova napona na serijskom otporu i serijskom iduktivitetu po jedinici dužine.
-50.0%			c. Jednak je zbroju padova napona na serijskom otporu po jedinici dužine voda.
-50.0%			d. Nijedan od ponuđenih.

Score: 10 / 10

Question 4 (10 points)

Navedeni izrazi predstavljaju:

$$Z_0 = \sqrt{\frac{C}{L}} \qquad \gamma = s\sqrt{LC}$$

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. karakterističnu (valnu) impedanciju

				beskonačno duge linije faktor prijenosa beskonačno duge linije
-50.0%			b.	faktor prijenosa beskonačno duge linije karakterističnu (valnu) impedanciju beskonačno duge linije
100.0%			c.	ništa od navedenog
-50.0%			d.	karakterističnu(valnu) impedanciju linije bez gubitaka faktor prijenosa linije bez gubitaka
-50.0%			e.	faktor prijenosa linije bez gubitaka karakterističnu (valnu) impedanciju linije bez gubitaka

Score: 10 / 10

Question 2 (10 points)

Kako se nazivaju parametri Zo i γ homodenog voda?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. Primarni parametri.
100.0%			b. Sekundarni parametri.
-50.0%			c. Nemaju poseban naziv.
-50.0%			d. Neki drugi naziv.

Score: 10 / 10

Question 5 (10 points)

Koja jednakost ne vrijedi za beskonačno dugu liniju?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
-50.0%			a. U(0) = A1
-50.0%			b. I(0) = A1/Z0
-50.0%			c. U(x) = U(0) exp(-gama

				x)
100.0%	▶	▶	d.	I(x) = (A1/Z0)/Z0 exp(-gama x)
-50.0%		▶	e.	I(0) = A1/Zul

Score: 5 / 10

Question 1 (10 points)

Što predstavlja Zo kod linija?

Student response:

Percent Value	Correct Response	Student Response	Answer Choices
50.0%	▶		a. Valnu impedanciju voda.
-50.0%			b. Početnu impedanciju.
50.0%	▶	▶	c. Karakterističnu impedanciju.
-50.0%			d. Nijedan od ponuđenih.

Score: 5 / 10