Govt Degree College
Rayachoti

Dept of Urdu

Assignments

SL. Urdu. V Semester.
ML. Urdu.

V سمسٹر سال 2019-20 کے لیے درج ذیل طلبہ کو مختلف موضوعات پر تفویضات دی گئیں۔ تفویضات کے عنوانات اور طلبہ کی دستخطیں نیچے دی گئیں ہیں۔

S/NO	Names	Aissignment Topics.	Signature
1	PATHAN SUMAIAH	اردو کا آغاز و ارتقا	
2	SHAIK Abdulla	مثنوی کا آغاز و ارتقا۔	
3	S. ASIFF fULLA	فورٹ ولیم کالج۔	
4	S. FAYAZ	علامہ اقبال	S. fayaz
5	S. RAHAMATULLA	غالب۔	
6	S. SIRAJUDDEEN	سرسید احمد خاں	
7	S. Umar Farooqi	مرثیہ انیس	

VI Semester.

S/NO	NAMES	Aissignment Topics	Signature
1	PATHAN SUMAIAH	تنقید آغاز و ارتقا۔	
2	SHAIK Abdulla	نقاد کے فرائض	
3	S. ASIFF fULLA	حالی کی تنقید نگاری	
4	S. FAYAZ	امتحام حسین کی تنقید	
5	S. RAHAMATULLA	آل احمد سرور کی تنقید	
6	S. SIRAJUDDEEN	تنقید کے دبستان	
7	S. Umar Farooqi	تنقید کی موضوعیات	

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SL/ML Urdu. III semester.

III & IV سمسٹر کے طلبہ کو درج ذیل موضوعات پر
تفویضات دی گئیں۔ نیچے طلبہ کی دستخطیں بھی موجود ہیں۔

S/No	Names	Aissignment Topic.	Signature
1	G. ZiyAuddin BASHA	میر امن باغ و بہار کا خلاصہ۔	G. Ziyauddin Basha
2	Lalu Sabgasi Abbas	خطوط غالب۔	
3	SHAIK MOHAMMED SAJID	سید مجروح کے نام خطوط۔	S.M.D. Sajid
4	SHAIK RIYAZ ALI	مثنوی سحر البیان کا خلاصہ۔	
5	SHAIK Abdul SAMAD	مرثیہ میر انیس	S. Abdul Samad.
6	SHAIK TAJ BASHA	مرثیہ نگاری	—
7	SHAIK ZAHEDA BEGUM	رباعی کا فن۔	—
8	Syed BASHA	رباعی گوئی کا آغاز و ارتقا۔	S. Basha
9	Syed SAISTA BANO	امجد کی رباعی گوئی۔	—

IV SEMESTER.

S/No	Names	Aissignment Topics	Signature
1	G. ZiyAuddin BASHA	آرائش و زیبائش کی تعریف۔	G. Ziyauddin Basha
2	Lalu Sabgasi Abbas	سوانح عمری کی تعریف	
3	SHAIK MOHAMMED SAJID	ترسیل کی تعریف اقسام۔	S.M.D. Sajid
4	SHAIK RIYAZ ALI	کتاب کی تعریف۔	
5	SHAIK Abdul SAMAD	کتاب کے اقسام۔	S. Abdul Samad.
6	SHAIK TAJ BASHA	—	—
7	SHAIK ZAHEDA BEGUM	—	—
8	Syed BASHA	ترسیل میں رکاوٹیں۔	S. Basha
9	Syed SAISTA BANO	—	—

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2019-2020.

I Semester.

SL/ML Urdu.

S/No	Names	Assignment Topics.	Signature
1	M. AFZAL ALI KHAN	اردو غزل کا آغاز و ارتقا۔	M. Afzal Ali Khan
2	P. AFZAL KHAN	اردو غزل کی تعریف / فن	P. Afzal Khan
3	SHAIK BIBI AYESHA	میر تقی میر کی غزل گوئی۔	Shaik Bibi Ayesha
4	SHAIK AFSANA	غالب کی غزل گوئی۔	Shaik afsana
5	SHAIK AFZAL	حالی کی غزل گوئی۔	S. Afzal.
6	SHAIK BABA FAKRUDDIN	راسخ عظیم آبادی کی غزل گوئی۔	S. Baba Fakruddin
7	SHAIK DARBAR	یگانہ چنگیزی کی غزل گوئی۔	S. Darbar
8	SHAIK FAHEEM	اقبال کی نظم نگاری۔	S. Faheem
9	SHAIK FAHMIDA	اکبر الہ آبادی کی نظم نگاری۔	Shaik Fahmida
10	SHAIK IMAM HUSSAN	فیض کی نظم نگاری۔	S. Imam Husan
11	SHAIK MEERAN VALI	افتخار الدین کی نظم نگاری۔	S. Meeran vali
12	SHAIK MOHAMMAD	اقبال فہمی کی نظم نگاری۔	S. Mohammad
13	SHAIK MOHAMMED SAWOOD	میر کی غزل کی تشریح۔	S. Md Sawood
14	SHAIK MUHAMMED GHOUSE	غالب کی غزل کی تشریح۔	Smd Ghouse
15	SHAIK NAFEESA	راسخ عظیم آبادی کی غزل کی تشریح۔	S. Nafeesa
16	SHAIK NOORALI SHA	یگانہ چنگیزی کی غزل کی تشریح۔	S. Noor sha
17	SHAIK SHABAZ ALI	اقبال کی نظم کا خلاصہ۔	S. Shabaz Ali
18	SHAIK SHAHEENA BEGUM	اکبر الہ آبادی کی نظم کا خلاصہ۔	S. Shaheenes
19	SHAIK SOFIYA BEGUM	فیض کی نظم کا خلاصہ۔	S. Sofiya
20	SHAIK YOUNUS BASHA	افتخار عالم کی نظم کا خلاصہ۔	S. Younus basha
21	SHAIK ABDUL AZEEZ	اقبال فہمی کی نظم کا خلاصہ	S. Abdul Azeez
22	SHAIK NIHA	اردو غزل کا آغاز و ارتقا۔	S. Niha
23	SYED AMEEN PEER	اردو غزل روایت اور رفت۔	S. Ameen Peer
24	SYED BASHARATULLA BAKHTIYARI	میر تقی میر کی غزل گوئی۔	S. Basharatulla Bakhtiyari
25	SYED MANSOOR	غالب کی غزل گوئی۔	Syed Mansoor
26	SYED NAMEERA	حالی کی غزل گوئی۔	S. Nameera
27	JABEENA	راسخ عظیم آبادی کی غزل گوئی۔	Jabeena
28	SHAIK AYESHA · B.COM (CA)	یگانہ چنگیزی کی غزل گوئی۔	S. Aysha.
29	1. TOUSEEF	اقبال کی نظم نگاری۔	Thuseef
30	G. Hafsa	اکبر الہ آبادی کی نظم نگاری۔	G. Hafsa
31	G. HAJIRA	فیض کی نظم نگاری۔	G. Hajira
32	S. Akhil Ahmmad.	افتخار الدین کی نظم نگاری۔	S. Akhil ahammad
33	S. BAYADDIN	اقبال فہم کی نظم نگاری۔	S. Bayaddin

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2019-20

II Semester

S/NO	Names	Aissignment Topics.	Signature
1	M.AFZAL ALI KHAN.	اردو افسانہ نگاری آغاز وارتقا۔	M-afzal ali khan
2	P. AFZAL KHAN	اردو افسانہ نگاری۔ فن اور روایت۔	P. Afzal khan
3	SHAIK BIBI AYESHA	اردو کے مشہور افسانہ نگار۔	Shaik Bibi Ayesha
4	SHIK AFSANA	سعادت حسن منٹو کی افسانہ نگاری	S. Afsana
5	SHAIK AFZAL	افسانہ "لوبہ ٹیک سنگھ" کی افسانہ نگاری۔	S. Afzal
6	SHAIK BABA FAK RUDDIN	اردو مضمون نگاری۔ آغاز وارتقا۔	S. Baba fakruddin
7	SHAIK DARBAR	فن مضمون نگاری۔	S. Darbar
8	SHAIK FAHEEM	سرسید کی مضمون نگاری۔	S. Faheem
9	SHAIK FAHMIDA	بحث وتکرار کا خلاصہ۔	S. Fahameda
10	SHAIK IMAM HUSSAIN	اردو کے مشہور افسانہ نگار	S. Imam hussan
11	SHAIK MEERAN VALI	اردو کے مشہور مضمون نگار۔	S. Meeran Vali
12	SHAIK MOHAMMAD	اردو ڈرامہ تعریف وروایت۔	S. Mohammad
13	SHAIK MOHAMMAD SAWOOD	اردو ڈرامہ آغاز وارتقا۔	S-M-D-S-AwooD
14	SHAIK MUHAMMED GHOUSE	اردو ڈرامہ نگار۔ مشہور۔	Shaik Md Ghous
15	SHAIK NAFEESA	کریم روشانی کی ڈرامہ نگاری۔	Shaik nafeesa
16	SHAIK NOOR ALI SHA	آڑتہ کی مکالمہ کا خلاصہ۔	shaik noor sha
17	SHAIK SHABAZ ALI	اردو انشائیہ۔ فن اور روایت۔	S. shabaz ali
18	SHAIK SHAHEENA BEGUM	اردو انشائیہ۔ آغاز وارتقا۔	shaik shaeenaBegum
19	SHAIK YOUNUS BASHA	مشتاق احمد یوسفی کی انشائیہ نگاری	shaik younus Basha
20	SHAIK ABDUL AZEEZ	پڑھے گر بیمار کا خلاصہ۔	S. Abdul Azeez
21	SHAIK NIHA	اردو کے مشہور انشائیہ نگار۔	Shaik Niha
22	SYED AMEEN PEER	مرقع نگاری فن اور روایت۔	S. Ameen Peer
23	SYED BASHARATHULLA BAKHTIYARI	مرقع نگاری کا آغاز وارتقا۔	S. bAsharatHulla B
24	SYED MANSOOR	سلیم الزماں صدیقی کی مرقع نگاری۔	S. Mansoor
25	SYED NAMEERA	اردو کے مشہور مرقع نگار۔	S. Nameera
26	JABEENA	اردو افسانہ نگاری کی روایت	Jabeena
27	SHAIK AYESHA. B.com (CA)	سعادت حسن کی افسانہ نگاری۔	S. Ayesha
28	1. TOUSEEF	افسانہ لوبہ ٹیک سنگھ کا خلاصہ۔	G. Hafsa Touseef
29	G. HAFSA	اردو مضمون نگاری۔	G. Hajira Hafsa
30	G. HAFSA	بحث وتکرار کا خلاصہ۔	G Hajira
31	G. HAJIRA	کریم روشانی کی ڈرامہ نگاری۔	Hajira
32	S. AKHIL AHMMAD.	پڑھے گر بیمار کا خلاصہ۔	Akhil Ahmd
33	S. BAYADDI	"انشائیہ مزاح نورصاحب" کا خلاصہ۔	Bayaddi.

LECTURER
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Assignments

2020 - 2021

Second Language Urdu

S/NO	NAMES	Topic	Remarks
1.	Khadar Vali	اردو غزل کا آغاز و ارتقا	
2.	G. Kashib	میر تقی میر کی سوانح حیات	
3.	M. Abdul Basit	نظم نگاری کی تعریف	
4.	M. Bilkhis Banu	اردو نظم کا آغاز و ارتقا	
5.	M. Jawadullah	نظیر اکبر آبادی کی سوانح حیات	
6.	N. Nawaj Khan	نظیر اکبر آبادی کی نظم نگاری	
7.	P. Mehtaj	نظم "کل جگ" کا خلاصہ	
8.	P. Hussain Khan	غالب کی سوانح حیات	
9.	P. AFroz	غالب کی غزل گوئی	
10.	P. Madiha	علامہ شبلی نعمانی کی سوانح حیات	

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Assignments
2020 - 2021
Advanced Urdu

S/No	NAMES	Topic	Remarks
11.	P. Touha Ali khan	علامہ شبلی نعمانی کی نظر نگاری	N. Ahsan
12.	P. Yasmeen	نظم "عدلِ فاروقی" کا خلاصہ	N. Ahsan
13.	S. Abdul Aleem	غزل	N. Ahsan
14.	S. Arshiya	مومن خاں مومن کی سوانح حیات	N. Ahsan
15.	S. Fahmida	مومن خاں مومن کی غزل گوئی	N. Ahsan
16.	S. Farzana	نظم "چاند اور تارے"	N. Ahsan
17.	S. Fouziya Begum	علامہ اقبال کی سوانح حیات	N. Ahsan
18.	S. Hamsheera	علامہ اقبال کی نظر نگاری	N. Ahsan
19.	S. Hasanien	داغ دہلوی کی سوانح حیات	N. Ahsan
20.	S. Heera	داغ دہلوی کی غزل گوئی	N. Ahsan

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GOVT. DEGREE COLLEGE
RAYAGHOTY

Assignments
2021 - 2022

S/No	Names	Topic	Remarks
21.	S. Khamrunnisa	داغؔ دہلوی کی غزل کی تشریح	N. Afsary
22.	S. Mohammed Ali	نظم "نصیحتِ اخلاقی"	N. Afsary
23.	S. Md. Azeemuddin	اکبرالہ آبادی کی سوانح حیات	N. Afsary
24.	S. Mohd. Faiz	اکبرالہ آبادی کی نظر نگاری	N. Afsary
25.	S. Mohd. Suhel	اکبرالہ آبادی کی نظر گوئی	N. Afsary
26.	S. Muskan	جگر مرادآبادی کی سوانح حیات	N. Afsary
27.	S. Nasir Hussain	جگر مرادآبادی کی غزل گوئی	N. Afsary
28.	S. Noor Asif	جگر مرادآبادی کی غزل کی تشریح	N. Afsary
29.	S. Saddam Hussain	نظم "لوح و قلم"	N. Afsary
30.	S. Shabana	فیض احمد فیض کی سوانح حیات	N. Afsary

N. Afsary

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Assignments

2021 - 2022

S/No	Names	Topic	Remarks
1.	Bandugari Dastagiramma	فیض احمد فیض کی نظم نگاری	
2.	P. Khadar Khan	فیض احمد فیض کی نظم "لوح و قلم" کا خلاصہ	
3.	R.K. Sameera	مثنوی سحر البیان	
4.	Shaik Arif	مثنوی کا تعارف	
5.	S. Baddullah	اردو مثنوی کا آغاز و ارتقا	
6.	S. Arshiya	قطب شاہی عہد میں مثنوی	
7.	S. Hameed Vali	میر حسن کی سوانح حیات	
8.	S. Imtiyaz Bashe	مثنوی سحر البیان کی ادبی اہمیت	
9.	S. Irfan	مثنوی سحر البیان کا خلاصہ	
10.	S. Mansoor	مرثیہ کا تعارف اور فن	

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Assignments

2021 - 2022

S/No	Names	Topic	Remarks
11.	S. Mohammed	مرثیے کی اجزائے ترکیبی	
12.	S. Moula Basha	اردو میں مرثیہ نگاری کا آغاز وارتقا	
13.	S. Muzafar Hussain	سوانح حیات میر انیس	
14.	S. Needa	میر انیس کی مرثیہ نگاری	
15.	S. Ruksana	مرثیہ میر انیس کی تشریح	
16.	S. Sadiq	قصیدہ کا تعارف	
17.	S. Sajida	غالب کی قصیدہ نگاری	
18.	S. Shaheen Taj	قصیدہ غالب کا خلاصہ	
19.	S. Sharmila	رباعی کا تعارف	
20.	S. Sumiya	اردو رباعی کا آغاز وارتقا	

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Assignments

2021 - 2022

S/No	Names	Topic	Remarks
21.	S. Tabbasum	امجد حیدر آبادی کی مسدس حیات	N. Afroz
22.	S. Takkala Gouse	امجد حیدر آبادی کی رباعی گوئی	N. Afroz
23.	S. Zainab	امجد حیدر آبادی کی رباعی کی تشریح	N. Afroz
24.	Syed Allahbakash	ساغر جیدی کی سوانح حیات	N. Afroz
25.	Syed. Monsoor Ali	ساغر جیدی کی رباعی گوئی	N. Afroz
26.	Syed. Salma	ساغر جیدی کی رباعی کی تشریح	N. Afroz
27.	S. Adil Basha	افسانوی نثر کا تعارف	N. Afroz
28.	S. Needa	غالب کی غزل گوئی	N. Afroz
29.	S. Sajida	میر تقی میر کی شاعری	N. Afroz
30.	S. Sadiq	غزل کے چند اہم شعراء	N. Afroz

N. Afroz

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Assignments

2022 - 2023

S/No	Names	Topic	Remarks
1.	Mogal Affan Baig	داستان کا آغاز و ارتقا	
2.	Mogal Usma Baig	ڈرامہ کا تعارف	
3.	Nayab Nasreen	اردو ڈرامہ کا آغاز و ارتقا	
4.	P. Mohammed Ali	ناول کا تعارف	
5.	Syed. Altaf	اردو ناول نگاری کا آغاز و ارتقا	
6.	S. Arif Basha	افسانہ کا تعارف	
7.	S. AFsana	داستان 'باغ و بہار'	
8.	S. Altiba	میر امن کی سوانح حیات	
9.	S. Hazrat Bilal	میر امن کی ادبی خدمات	
10.	Shaik Humeera	باغ و بہار کی ادبی اہمیت	

N. Afsana

LECTURER
GOVT. DEGREE COLLEGE
RAYACHOTY

Assignments

2022-2023

S/No	Names	Topic	Remarks
11.	S. Karisma	داستان "باغ و بہار"	N.Afsary
12.	S. Maseera	ڈرامہ "گڑھ کی مکھیاں"	N.Afsary
13.	S. MD. Affan	کریم رومانی کی سوانح حیات	N.Afsary
14.	S. mubarak Basha	ڈاکٹر کریم رومانی کی ڈرامہ نگاری	N.Afsary
15.	S. munaf	ناول "توبۃ النصوح"	N.Afsary
16.	S. Reshma	ڈپٹی نذیر احمد کی سوانح حیات	N.Afsary
17.	S. Rizwan	ڈپٹی نذیر احمد کی ناول نگاری	N.Afsary
18.	S. Soniya Banu	ناول "توبۃ النصوح"	N.Afsary
19.	S. sumiya	افسانہ "ایک اور دن"	N.Afsary
20.	S. wajida Tabbasum	عبدالصمد کی سوانح حیات	N.Afsary

N. Afsary

LECTURER
GOVT. DEGREE COLLEGE
RAYACHOTY

Assignments
2022-2023

S/No	Names	Topic	Remarks
21.	Syed. Abubakar Siddiq	عبدالصمد کی افسانہ نگاری	N.Afsana
22.	Syed . Haleema	افسانہ "ایک عورت"	N.Afsana
23.	Varugu. Abida	افسانہ "ایک عورت" کا خلاصہ	N.Afsana
24.	Nayab Nasreen	نذیر احمد کی ناول نگاری	N.Afsana
25.	S. Hazrat Billal	غالب کی غزل	N.Afsana
26.	MD. AFFan	میر تقی میر کی غزل گوئی	N.Afsana
27.	S. Sumiya	نذیر اکبر آبادی کی نظم نگاری	N.Afsana
28.	mogal usama Baig	جگر مراد آبادی کی غزل	N.Afsana
29.	S. Rizwan	میر انیس کی مرثیہ نگاری	N.Afsana
30.	S. AFsana	داغ دہلوی کی غزل	N.Afsana

N.Afsana

LECTURER
GOVT. DEGREE COLLEGE
RAYACHOTY

GOVERNMENT DEGREE COLLEGE

RAYACHOTY –516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF URDU

(BA.HPU)

Assignment Topic

URDU AFSANAVI ADAB AUR DRAMA

Submitted
BY

Name of the Student: SHAIK ZAINAB

Class : BA. HPU, I SEM

Date : 18-01-2022

Academic Year: 2021-2022

Govt. Degree Collage

Rayachoty

Assignment

2021 - 2022

Subject : M.L

Paper Titel : (Urdu prose)

(اردو نثر)

Topic : (افسانہ) رفیہ سجاد ظہیر

(ڈرامہ) کرشن چندر

Student Name : S. Zainab

Name of the lecturer :

N. Afsana

کرشن چندر کی ڈرامہ نگاری

کرشن چندر ایک ہمہ رقبہ فنکار ہیں۔ ان کا فن زندگی کے ہمہ پہلو تہ در تہ کے ساتھ چلتا ہے یہ ترقی پسند نظریہ کے حامل ہیں اور انسانی دوستی ان کی زندگی کا نقب العین ہے یہی دو بنیادی رویہ ان کی ہر تخلیق کے پیچھے کارفرما ہیں ڈرامہ نگاری کے سلسلے میں بھی انہوں نے اپنی مہارت اور قابلیت کا ثبوت دیا ہے ان کی ڈرامہ نگاری کا جائزہ درج ذیل ہے۔

* موضوع: موضوع کے اعتبار سے کرشن چندر کے ڈرامے بہت اہم ہیں وہ موضوع اپنے گرد و پیش کی دنیا سے لیتے ہیں۔ عوام کے ساتھ ان کی سچی محبت، انسان کے مستقبل پر اعتماد اور ناانصافی کے خلاف اظہار نفرت کی خواہش ان کی کہانیوں کا موضوع ہے۔

* پلاٹ: کرشن چندر پلاٹ کے معاملے میں بہت ترقی پسند واقع ہوئے ہیں ان کے ہاں یہ خوبی ہے کہ وہ تمام ڈرامے میں پلاٹ کو مسلسل میں رکھتے ہیں تاکہ اس کو پڑھنے والا آخر تک پڑھنے پر مجبور ہو سکے اور یہی خوبی ان کے ڈرامہ "دروازہ کھول دو" میں پائی جاتی ہے۔

N. Abbasi
18/12/2022

افسانہ - لال اور پیلا کا خلاصہ

چاروں دیواروں پر تصویریں بنی ہوئی تھیں۔ نیلے نیلے کرشنا! گوری گوری بیاں مروڑ کے گوپیوں کے ساتھ کھیل رہے تھے۔ سفید پروں والے ہنس کنول کے پھولوں کے درمیان پانی میں پھر رہے تھے۔ ایک مغل شہزادی جھروکے سے اپنے گھوڑ سوار عاشق کو جھانک رہی تھی۔ مہاتما بدھ سمادھی لگائے مکتی کے دھیان میں کھوئے ہوئے بیٹھے تھے۔ ایک راجپوت حسینہ آئینے میں اپنا عکس دیکھنے میں مگن تھی۔

خوبصورت چہرے، سڈول جسم، کٹیلی آنکھیں۔ ابھرے ہوئے سینے، کمر تک لٹکتے بال، کھلے ہوئے پھول، ناچتے ہوئے مور...... اور اوپر بہت سے رنگ برنگے بادل نیلے آسمان میں تیر رہے تھے اور ان بادلوں سے ہوتی ہوئی بھگوان کی سنہری رتھ چل رہی تھی۔

گوپال کے اس چھوٹے سے تاریک کمرے میں آرٹ کی ایک دنیا آباد تھی۔ تخیل کا مایا بازار لگا ہوا تھا جہاں حسن تھا، رومان تھا، رنگینی تھا، شانتی تھی۔ مگر جب کھڑکی میں سے اُس نے باہر دیکھا تو وہاں اصلیت کی دنیا بسی ہوئی نظر آئی۔

N. Aleem

18/01/2022

GOVERNMENT DEGREE COLLEGE

RAYACHOTY-516269 ANNAMAYYA DIST.(AP)

DEPARTMENT OF URDU

(BA HPU)

Assignment Topic

GHAIR AFSANAVI ADAB

(Advanced Urdu)

Submitted

By

Name of the Student: Syed Haleema

Class: BA HPU II SEMESTER

DATE: 06/09/2022

Academic Year :2022-23

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Govt Degree college Rayachoty.

Department of Urdu

2022-2023

STUDENT Assignment

GHAIR AFSANAVI ADAB

Name : Sayed Haleema

Group : I B.A (HPU) II SEM

Subject : Advanced Urdu

Topic : سفرنامے کا تعارف، آغاز و ارتقاء،
انشائیہ کا تعارف و ارتقاء

Date : 06/09/2022

Lecturer : N. AFSANA MEDAM

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سفر نامہ کا تعارف

سفر نامہ وہ بیانیہ صنف ہے۔ جس مسافر سفر کے دوران یا منزل پر پہنچ کر اپنے واقعات، تجربات اور مشاہدات کی مدد سے تجربات قلم بند کرتا ہے۔ اور اپنی گزری ہوئی کیفیات سے دوسروں کو واقف کراتا ہے۔ راہ میں پیش آنے والے اپنے واقعات اور مشاہدات کو اس طرح سے قلم بند کرتا ہے۔ کہ پڑھنے والے کے سامنے نہ صرف پوری تصویر آجاتی ہے بلکہ اس مقام سے متعلق تمام معلومات اس کے علم اور آگہی میں اضافہ کر دیتے ہیں۔

سفر نامہ ایک جدید نثری صنف ہے اس میں تخلیق کار کسی سفر سے جڑی ہوئی کہانی یا اس سے متعلق کسی خاص واقعہ کا ذکر کرتا ہے۔ سفر نامہ میں کئی اصناف کی جھلک نظر آتی ہے اس میں خاکے کی بے باکی، انشائیہ کی روانی اور افسانے کا زور ایک ساتھ پایا جاتا ہے۔

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اردو سفرنامے کا آغاز و ارتقاء

اردو میں سفرناموں کی روایت عربی، فارسی سفرناموں کی دین ہے۔ مغرب کے مقابلے میں مشرق میں سفرنامے کی روایت زیادہ پرانی ہے۔ ابن بطوطہ آٹھویں صدی ہجری کا مشہور سیاح گزرا ہے۔ اس نے کم و بیش ربع صدی مشرق و مغرب کی سیاحت میں بسر کی اس نے دلچسپ اور معلوماتی سفرنامہ "تحفتہ النظار" کے نام سے لکھا۔ اس کا خلاصہ اردو میں شائع ہوا۔

یوسف خاں کمبل پوش کا سفرنامہ "عجائبات فرنگ" جو 1847 میں طباعت سے آراستہ ہوا۔ اردو کا اولین سفرنامہ قرار دیا جاسکتا ہے کہ اس سے پہلے اس طرح کی کوئی تحریر اردو میں دستیاب نہ تھی۔ اردو ادب کے سفر ناموں میں مجتبیٰ حسین کے سفرنامے اپنی شگفتہ اور مزاحیہ طرز اسلوب کی وجہ سے ہمیشہ یاد رکھے جائیں گے۔

انشائیہ کا تعارف اور آغاز و ارتقاء

انشائیہ ادب کی ایک نہایت ہی لطیف صنف ہے۔ کسی مضمون ہی کو جب ایک خاص انداز میں تحریر کیا جاتا ہے۔ جس کی بے ترتیبی کا اپنا ایک ربط ہوتا ہے۔ اور بات سے بات نکلتی چلی جاتی ہے۔ بظاہر اس بے ترتیبی سے وجود میں آنے والی صنف کو، جس میں ایک شعوری ربط و تسلسل قائم رہتا ہے۔ انشائیہ کہتے ہیں۔

ملا وجہی کی تحریروں میں انشائیہ کے ابتدائی نقوش تلاش کیے گئے۔ اس کے بعد غالب کی تحریروں میں یہ رنگ مزید نکھر کر سامنے آتا ہے۔ غالب کے بعد ماسٹر رام چندر نے بھی انشائیہ کے بنیادی خدوخال میں حصہ لیا۔ انھوں نے اردو میں مضمون نگاری کی بنیاد رکھی۔ انھی مضامین میں جا بجا انشائیہ کا رنگ نظر آتا ہے۔ سر سید احمد خاں نے 1870 میں "تہذیب الاخلاق" کا اجرا کر کے مضمون نگاری کی روش کی۔

N. Aleem
06/09/2022

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GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF POLITICAL SCIENCE

(UG courses)

Assignment Topic

Anti defection Law [Schedule X]

Topic Submitted
BY

Name of the Student : O. pavan kumar

Class : III BA

Date : 10-02-2020.

Academic Year: 2019-20.

Anti Defection Law

Introduction :-

The Tenth Schedule of the Constitution of India, Commonly known as the Anti-Defection Law, was introduced to address the issue of political defections and promote stability in the functioning of the parliamentary system. Enacted through the 52nd Amendment Act in 1985, this schedule lays down the provisions and disqualifications for members of parliament and state legislatures who defect from their political parties. A Comprehensive examination of Schedule 10 reveals its historial Context, legal intricacies, and its impact on the indian political landscape.

Historical Context :-

Before the enactment of the Anti Defection Law, political defections were rampant, leading to frequent changes in Governments and a lack of stability. The Law was introduced to curb this practice and strengthen the democratic fabric of the Country. The main objective was to discourage elected representatives from changing their party affiliations solely for personal or political gain, thereby ensuring a more stable and accountable Government.

key provisions of Schedule 10 :-

1. Disqualification on Grounds of Detection.

Schedule 10 provides for the disqualification of elected members if they voluntarily give up the membership of their political party or vote contrary to the party's direction on a matter of significance.

2. Exceptions to Disqualification :-

The schedule outlines certain scenarios where defection does not lead to disqualification. for example, if a members joines a political party within a time frame specified by the presiding officer after their election, they may be exempted from disqualification.

3. Merger of political parties

The Schedule allows for exceptions in cases of a merger between political parties, provided that at least two-thirds of the members of the original political party agree to such a merger.

4. Role of the presiding officer

The presiding officer of the house (speaker in the case ~~for~~ of Lok Sabha and state legislative assemblies) plays a crucial role in deciding of defection cases. The decision of the presiding officer is subject to judicial review, and their impartiality is crucial for maintaing the integrity of the process.

5. Time frame for Disqualification proceedings

The Law prescribes a specific time frame within which disqualification proceedings must be Completed. This ensures that Cases are resolved promptly, preventing unnecessary delays in the decision-Making process.

Recent Developments and Amendments

over the years, there have been discussions about potential Amendments to the Anti-Defection Law to Adress its shortcomings and adapt to changing political realities. However, any proposed Amendments must strike a delicate balance between preventing opportunistic defections and protecting the democratic rights of elected representatives.

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF POLITICAL SCIENCE

(UG courses)

Assignment Topic

Indian Act of 1935.

Topic Submitted
BY

Name of the Student : K. Gayathri

Class : I B.A

Date : 02/12/21.

Academic Year: 2020 - 2021.

GOVT. DEGREE COLLEGE: RAYACHOTY
DEPARTMENT OF POLITICAL SCIENCE

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	02/12/21	I B.A	Indian Act of 1935

Sl. NO	Name of the Student	Signature of the Student
1	P.Obul Reddy	Pobul Reddy
2	T.Balaraju	T. Balaraju
3	K. Sivamani	K. Sivamani
4	M. Teja	
5	P. Sravani	P. Sravani
6	C. Sai Kumar	C. Sai Kumar
7	S.Ishadar Vali	S. Ishadar Vali
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Signature of the Lecturer

Signature of the Department I/C

1] Explain the main provisions of the 1935 Act. (08) Explain and criticise the All India federation plan and provincial autonomy as the envisaged in the government of India Act. 1935.

The montford Reforms Act of 1919 introduced dyarchy in the provinces. In practice if failed miserably. To correct those mistake simon commission was appointed [1920]. but the Indians boycotted it. congress at its Lahore meeting declared that attainment of "purna swaraj" was its goal, with the grand success of civil Disobedience movement [1930]. Gandhi became the unquestioned leader of the nation. He went on a fast against communal Award. The issue was settled through Poona Pact. Between 1930-32 three Round Table conferences held.

1. All India federation :-

→ It proposed the All India federation Plan. The federation was to consist of 11 provinces under governor's rule & provinces under chief commissioner's rule. They would automatically join in the federation. But the Indian states- big or small- were given complete freedom to join or not to join in the proposed federation. once joined, they had no right to secede from the federation.

2. Dyarchy :-

→ It introduced dyarchy (double government at] the centre. The Act divided the functions of the centre into two groups (a) reserved subjects and (b) transferred subjects. Defence, foreign affairs, religious matters, tribal affairs were kept under the control of governor general. He had to administer

them with the help of three councillors appointed and responsible to him alone. Transferred subjects were administered by a council of ministers (not exceeding 10 members).

3. Bicameralism:-

It established a bicameral legislature at the centre. The upper house was called council of states and the lower house, federal Assembly. Assembly was elected for a period of 5 years. Governor General, in some special cases, could extend its life. The council was a permant house. A member was elected for a 9 years period. one third of its members were to retire after every three years.

4. Powerless Legislatures:-

The Powers of the legislatures were severely restricted. The federal and provincial legislatures were debarred from making any

laws on king, royal family, British nationality, Army Act, Act of 1935; Governor-General's discreationary Powers etc. They had to seek the Permission of Governor-General or Governor while making laws on important matters, about 80% of the budget constituted non-votable items.

5. Federal Court:-

It consisted of one chief justice and two Puisne judges. It was given the Powers to interpret the constitution and keep the centre and states to function within their respective jurisdiction.

6. Abolition of Indian councils:-

The Act abolished the Indian council and area created the office of secretary of state. He was empowered to appoint advisors not exceeding six and not below three members to help him in service matters.

7. Provincial Authonomy:-

It was the unique feature of this Act. Dyarchy was abolished in the states. The Act gave independent Powers to two states. They were no more than agents of centre. Power was entrusted to the ministers. The governor was to administer the state on their advise. He had to appoint the ministers on the advise of the majority Party leader.

8. Spread of Democracy:-

The Act enhanced the status of legislatures. At the centre, there were 250 members in the council and 325 in the Assembly. Atleast 10% of the Population were given the right to vote. No doubt, communal electorates were introduced. Like wise, governor-general and governor were given the Power to veto the Bills made by their legislature.

9. communal electorates;-

It introduced communal electorates.
It established separate constituencies for Harijans, christians, Anglo-Indians etc.

criticism;-

The Government of India Act, 1935, was subject to severe criticisms. Nehru called it a machine with strong brakes and no engine.

1] Indians were denied the right to carve to their future and to amend their constitution.

2]. It was unfortunate that dyarchy, which way a failure at the state level, was introduced at the national level.

3] The establishment of All India federation become a farce. In reality it established a bastard federalism by giving more Powers to Governors.

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF POLITICAL SCIENCE

(UG courses)

Assignment Topic

Result of Revolt of 1857.

Topic Submitted
BY

Name of the Student : K. Ganga Raju.

Class : III B.A.

Date : 10-08-2022.

Academic Year: 2021-22

1857 తిరుగుబాటు కారణాలు, ఘటనలు ఫలితాలు

ఆధునిక భారతదేశ చరిత్రయందు ప్రాముఖ్యతకల్గిన చారిత్ర
క సంఘటన 1857 తిరుగుబాటు ఆంగ్ల సైన్యంలోని బెంగాల్
తిరుగుబాటుకు చెందిన భారతీయులైన సిపాయిలు వీరి సాయిలలోనే
ఆంగ్లేయులు తన దేశీయ ప్రాంతాల సామ్రాజ్యాన్ని
స్థాపించారు ఈ సిపాయిలు ఆయా అల్లర్లు కారణాలకు
ఆంగ్లేయుల పై తిరుగుబాటు చేయడం జరిగింది. ఉదా: కంపెనీ
అల్లర్లు కారణాలకు ఆంగ్లేయులకు ఆంగ్లేయులపై తిరుగుబాటు
చేయబడింది ఉ: ప్రారంభంలోనే క్రీ.శ. 1806లో సిపాయిలు వెల్లూరు
నందు తిరుగుబాటు చేసిరి. ఇట్లు 1824 సం॥న బారక్‌పూర్‌యందు
అలాగే బెంగాల్ మొదలగు ప్రాంతాలలోను తిరుగుబాటు చేసిరి.
ఇట్టి తిరుగుబాటు అన్నింటియందున పెద్దది 1857 తిరుగుబాటు
ఈ తిరుగుబాటునకు సిపాయిల అసంతృప్తితోపాటు అనేక ఇతర
క్లిష్టమైన రాజకీయ ఆర్థిక, సాంఘిక, మతకారణాలు ఉండుటచే
సిపాయిలతోపాటు ప్రజలు కూడా ఆంగ్లేయులు నెదిరించుటకు సాహసించిరి
అందుచేత దీనిని కొంతమంది చరిత్రకారులు ప్రథమ భారత
స్వాతంత్ర సంగ్రామమని కూడా పిలిచిరి

<u>తిరుగుబాటునకు కారణములు:</u> కేవలము ఆవు క్రొవ్వు పంది
క్రొవ్వు తూటాల వలన సిపాయిల తిరుగుబాటు జరిగినది
కాదు ఈ చారిత్రాత్మక తిరుగుబాటునకు కారణాలనేకము.

అవి ఏమనగా ① రాజకీయ కారణములు, (లేక) డల్హౌసి భావనలు
② సాంఘిక కారణములు ③ మత సంబంధమైన కారణములు
④ ఆర్థిక కారణములు ⑤ సైనిక కారణములు ⑥ తక్షణ కారణము
పరిశీలిస్తే తెలుస్తాయి.

1. <u>రాజకీయ కారణములు (లేక) డల్హౌసి విధానాలు</u>: డల్హౌసి

సామ్రాజ్యవాదము అవలంభించి ముఖ్యముగా రాజ్యసంక్రమణ సిద్ధాంతము ప్రకారం రాజులందరి ఆస్తులను ఆక్రమించాడు. (అ) సతారా నాగపూర్ ఝాన్సీ, రాజ్యాలు ఆక్రమించటం జరిగింది, అయోధ్య ఆక్రమణలను మొగలు చక్రవర్తిని పదవీభ్రష్టుని చేసి ముస్లింలను వారి మతపరమైన ఆస్తులను స్వాధీనం చేసికొనెను (ఇ) పీష్వా రెండవ బాజీరావు పుత్రుడు 8 లక్షల రూపాయల భరణము లేనిదిగా దత్తపుత్రుడైన నానాసాహెబుకు ఇవ్వకపోవడంతో నానాసాహెబు తిరుగుబాటు చేసెను (ఈ) అలాగే ఝాన్సీరాణియైన లక్ష్మీబాయి దత్తతను అంగీకరించక, ఝాన్సీ సంక్రమించుటచే ఆమె కూడా స్వాతంత్ర్య పోరాటానికి సిద్ధపడెను. అప్పుడు (ఉ) శీఘ్ర సంస్థాన సామ్రాజ్య విస్తరణ పొందుటకు డల్హౌసి విప్లవాత్మక సంస్కరణలు చేసి ముఖ్యముగా ఆంగ్ల పాలనకు తెలిసి పెట్టిన భారతీయులను అనేక ప్రాంతాలకు అప్పగించుటచే డల్హౌసి 1857 తిరుగుబాటుకు నాయకుడయ్యాను కారణము డల్హౌసి.

హిందువులు మహమ్మదీయులు అను వారి మతాచారాలు

క్రైస్తవము ఆచారములను ఉల్లంఘించుటచే

<u>ఆర్థిక</u> <u>కారణములు</u>: (ఎ) స్వదేశీ రాజ్యములు ఆక్రమించటం వల్ల ఆ స్వదేశీ రాజ్యములందలి ఉద్యోగులు, సైనికులు నిరుద్యోగులైరి, నిరాశ్రయులైరి (బి) రాజ్య సంక్రమణ సిద్ధాంతమును జమీందారీ భూములకు వర్తింపజేసి డల్హౌసి అనేక జమీందారీ భూములను, మాన్యాలను (సి) బకాయిపడిన జమీందార్ల భూములను ప్రభుత్వము వేలము వేసెను (డి) ఇనాము కమిషను నియమించి. భూమిని అనుభవించు అనేక మంది భూస్వాములకు సరియైన పత్రాలు లేవని సుమారు 20 వేల ఎస్టేట్లను ప్రభుత్వము స్వాధీనము చేసికొనెను. (ఇ) చేతి వృత్తుల క్షేమాభివృద్ధికి ఏ మాత్రం శ్రద్ధాసక్తులు ఆంగ్లేయులు చూపలేదు. భారతీయులకు ఉద్యోగ అవకాశములు లేకపోవు గల్ల ఇటువంటి ఆర్థిక దుస్థితి వల్ల ఆంగ్లేయపాలనను ద్వేషించిరి.

5. సైనిక కారణములు: (ఎ) ఆంగ్ల సైన్యమునందు సిపాయిల సంఖ్య అధిక జీత భత్యములు ఆంగ్ల సైనికులకంటే సిపాయిలకు చాలా తక్కువ (బి) ఉద్యోగము నందు ఉన్నత పదవులు పొందు అవకాశము సిపాయిలకు శూన్యమైనది. (డి) సిపాయిలను ఆంగ్లేయులు హీనముగా చూచిరి (ఇ) సముద్రములను దాటి యుద్ధమునకు వెళ్లుట హిందూ సిపాయిల మతాచారములను గౌరవించుట ప్రభుత్వ దినచర్యలో లేదు ఆంగ్ల సైనికులు కొల్లగొట్టిరి

సాంఘిక కారణాలు :- ఆంగ్లేయులు ప్రవేశపెట్టిన పలు సాంఘిక సంస్కరణలు అనగా సతి, శిశుహత్యా సహగమనము రద్దు విధవా వివాహములు చట్టబద్ధము చేయుట, స్త్రీ విద్యను ప్రోత్సహించుట హిందువులకు వ్యతిరేకంగా సందేహం. పైగా రైలుబండ్లయందు అన్ని వర్ణముల వారు కలిసి కూర్చుండుట వలన వర్ణ వ్యవస్థకు చావుదెబ్బ కనుక ఈ మార్పులన్నియు హిందు సంఘమును నాశనము చేయుటకై ప్రవేశపెట్టబడినవని భావించి ప్రజలు ఆందోళనచెందిరి

మతసంబంధమైన కారణాలు: హిందువులను క్రైస్తవులుగా మార్చినచో వారు తమకు విశ్వాసపాత్రులై యుందురని ఆంగ్లేయులు భావము కనుకనే క్రైస్తవ మతవ్యాప్తి కొరకు వారు అనేక చర్యలు గైకొనిరి (ఎ) క్రైస్తవ మతగురువులు నియమించబడిరి వారు వాడవాడ లతిరిగి మహోన్నతమైన హిందూ మతములు విమర్శిస్తూ క్రైస్తవ మతబోధన సాగించిరి (బి) విద్యా సంస్థలందు బైబిలు బోధన నిర్బంధము చేయబడెను (సి) ఇంగ్లీషును రాజభాష చేసిరి

(డి) హిందూ ధర్మశాస్త్రం ప్రకారము మతము మార్చుకొన్న వ్యక్తికి కుటుంబపు ఆస్తిపై హక్కులేదు. కనుక ఏదైన మారిన క్రైస్తవ మతములోనికి మార్పునొందిరి ఆంగ్లేయులు మతము మార్చుకొన్నవారికి ఆస్తి హక్కును చట్ట రూపమున కల్పించిరి. ఈ చర్యలన్నియు హిందువులను క్రైస్తవులుగా మార్చుటకే ఆంగ్లేయులు చేస్తున్నారని భావించి

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF POLITICAL SCIENCE

(UG courses)

Assignment Topic

Parliament of India

Topic Submitted
BY

Name of the Student : M Ramya.

Class : II. B.A

Date : 07/03/2023

Academic Year: 2022 - 2023.

GOVT. DEGREE COLLEGE: RAYACHOTY
DEPARTMENT OF POLITICAL SCIENCE

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	07-03-22	BA [HEP]	

Sl. NO	Name of the Student	Signature of the Student
1	T. Balaraju	T. Balaraju
2	M. Peddanna	M. peddanna
3	P. obul reddy	P. obul reddy
4	K. Hari	K. Hari
5	T. sreenivasulu	T. sreenivasulu
6	M. Sudha Rani	M. Sudha Rani
7	K. Hari	K Hari
8	P. obul Reddy	P. obul Reddy
9	K. Sivamani	K. Mani
10	B. Prasad	B. Prasad
11		
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Signature of the Lecturer 8/8/23

Signature of the Department I/C

Dr. B.R.AMBEDKAR OPEN UNIVERSITY, HYDERABAD

NAME : M. Samya
Subject : Politics.
Course : BA. [HEP]
year : 2002-2028
Date :
Roll No : 211031036017

Parliament of India

* A brief note on the parliament of India, which has two houses that decides all the legislative matters in our country:

⇒ The president leads indias parliament (or) legislature The Rajya sabha has a six-year tenure, while The Lok sabha has a five-year tenure, out of which one-third of it.

⇒ representatives retire per 2 years, and many are replaced by freshly elected members. it is possible to dissolve the lok-sabha. The Indian parliament, (or) legislative is split into two houses, the upper and the lower houses (or) two house called Rajya-sabha and indeed the lok-sabha respectively.

⇒ The lower Assembly is also known as the lok-sabha, and the upper house is known as the Rajya-sabha.

* The Indian parliament, a parliamentary government system for the people, is

the Country's top legislative body. The Rajya Sabha, (or) state assembly, is the first house and the lok-sabha (or) House of people is Commonly known as the two houses that make up the indian parliament. The lower House is known as the lok-sabha, while the upper house is known as Rajyasabha, while MPs are either chosen by the indian people (or) appointed by the president in the parliament of india

An over-view of the House of Representatives

⇒ The Lok-sabha requires a minimum age of 25 years to become a member. There are 131 reserved seats among the total 543 parliam-entary seats, 84 reserved seats for scheduled Tribes castes (SC) and 47 reserved seats for scheduled Tribes (ST). it is possible dissolve the lok-sabha.

⇒ The states elect 238 representatives of the Rajya sabha, while the president

nominates 12 members for their Contributions to art, literature, science and social service. The voting populace of india elects 543 members to the legislative council and the president elects two Anglo indians. The speaker who also serves as the presiding Judge of the said lok-sabha, gets chosen by the representatives of the house. The vice president also serves as the ex-officio speaker of the Rajya sabha, selected by representatives of an election system made up of members from both Houses of parliament.

A look at the Lower House

⇒ The Rajya sabha can only have a total of 250 members. Two hundred thirty-Eight members will chosen first from states and union territories, while 12 will be appointed by the indian president. The Rajya sabha requires minimum of 30 years to Became a member.

"The council of states"

in the Rajya sabha (upper house).
A Rajya sabha is an indestructible Body that cannot be disBanned.

⇒ Every two years one among three members retires and are replaced freshly. The peoples chosen representatives of a Rajya sabha for a six-year term of different state legislative legislatures.

The upper House of Parliament

⇒

This Rajya-sabha is indeed a Bicameral legislature that it cannot disBanned. Every two years, though, Each of its members leaves. Re-election and re-nomination are available to departing members at any time. unlike the Rajya-sabha, the lok-sabha is not a permanent chamber. it has a five-year tenure immediately preceding the date of the first session after the national election, where By it dissolves automatically.

Some of the most important things that occur in the legislature

→

This Zero hour Commences just after the questioning hour and Continues until the days schedule is completed. In other words Zero-hours is the time interval Between Both the questioning hour and the programme

The Motion of No Confidence

→ According to Article 75 of the indian Constitution, the ministers are collectively liable to the lok sabha. it indicates that the ministry will remain in office as long as most lok-sabha members have faith in it. In other words, a no-confidence resolution against a member can be passed By the lok-sabha. To be accepted, the resolution needs the involvement of 50 members.

A parliamentary Bill.

A Bill (a) legislation in a proposition for legislation that, once Enacted, will Become an act (a) law. its unclear whether its private members Bill (a) Even a public Bill. Public legislation is one that is introduced By a minister, while a confidential Bill is one that is not.

Conclusion

This same indian Judiciary could see itself as the keeper of the constitution. Balancing the Competing positions and responsibilities of a Complicated web of parliament system of government Entities. the inclination to highlight plurality (a) variety cannot be utilized to promote a nationalism divorced from individual rights, a post-modren trend of de-centering the nation / result of india's polity globalisation

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF POLITICAL SCIENCE

(UG courses)

Assignment Topic

The Indian constitution.

Topic Submitted
BY

Name of the Student : D. Kavitha.

Class : II BA.

Date : 04/01/23

Academic Year: 2023.

1. What is meat by philosophy of the constitution?

Some people belive that a constitution merely consists of laws and that laws are one thing, values and morality, quite another. Therefore, we can have only a legalistic, not a political philosophy approch to the constitution.

* First, we need to understand the conceptual structure of the constitution. what does this mean? its means that we must ask questions like what are the possible meanings of terms used in the constitution such as 'rights, citizenship, minority' or 'democracy'?

* Furthermore, we must attempt to work out a coherent vision society and polity conditional upon an interpretation of the key concepts of the constitution.

* our final point is that the indian constitution must be read in conjunction with the constituent Assembly debates in order to refine and raise to a higher theoretical plane.

the justification of values embedded in the constitution. A philosophical tetatment of a value is incomplete if a detailed justification for it is not provided. when the flamers of the constitution chose to guide indian society and polity by a set of values, there must have been a corresponding set of reasons. Many of them, though, may not have been fully explained.

2 Give a short note on charter Acts 1793, 1813, 1833?

Various charter Acts were enable during the east india company rule in indian. They are as follows as:-

* Charter Act - 1793:- This Act extended the powers of the governor general of indian. The company's trading monopoly was extended for another 20 years. The secretary of the Board was allowed to parliament.

* Charter Act -1813:- East indian company extended the charter for another 20 years This act removed the company's monopoly on india trade and made it mere administrative body. Local bodies were empowered to levy taxes and take action against those who did not pay them.

* Charter Act -1833:- Another 20 years of east india company rule was extended. The governor general of Bengal was converted by this act into the 'governor general of India'. The first governor general was william Benting.

3 Explain the elements absorbed in the indian constitution from foreign Constitutions?

The constitution of india was drafted by studying the constitutions of around 60 countries. Majority of these were received from united states of America and united kingdom.

Elements absorbed from different countries:-

* From UK:- Elements like parliament system, president, single citizenship, prerogative writ.
* From USA:- Fundamental rights, preamble, federal structure of government, Supreme court, impeachment of the president elements.
* From Ireland:- Fundamental rights, such as nomination of members to the Rajya Sabha by the president and election of the president.
* From Australia:- joint list of central and states, freedom of trade between states, rules of joint session of parliament.
* France:- The concepts of liberty, equality, fraternity and republican ideals in the preamble.
* From Soviet union:- Social, economic and political idea in the preamble, basic functions of the planning commission.

4 Examine the sequence of evolution of the indian constitution during the rule of the British Crown [1858 - 1947].

* The Crown Rule [1858 - 1947].

During this period various Acts were introduced by British government in india. These Acts were called as indian Council Acts of council Acts in this phase.

a) indian council Act - 1858:- This important act was enacted in the wake of the 1857 rebellion. The act, known as the Act for the good government of india, abolished the east india company in india, government powers, indian territories and their revenues were transferred to the British Crown.

b) government of india acts - 1861 - 1892 - 1909.
After the muting of of 1857, the British government felt the need to seek the co-operation of indians in the administration of the country. Facing following this policy, the British parliament enacted

three Acts in 1861, 1892 and 1909. The Indian councils Act of 1861 is an important milestone in the constitutional and political history of India.

c) Indian Council Act - 1919:- This Act is also known as Montague-Chelmsford Reforms. It came into force in 1921. The Act bdayed central control over the provinces by dividing central and provincial affairs. Dual governance was introduced at the state level.

d) Indian Council Act - 1935:- The government of India Act was passed by the British parliament in August 1935. This Act put an end to the monarchy system introduced by the government of India Act 1919. The Indian council Act of 1935 led to the establishement of the Federation of India. This Act come into force in 1937.

GOVT. DEGREE COLLEGE: RAYACHOTY
DEPARTMENT OF POLITICAL SCIENCE

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	4/01/23	II B.A	

Sl. NO	Name of the Student	Signature of the Student
1	S. Khadar Vali	S. Khadar Vali
2	Sudha Rani	
3	M. peddanna	
4	P. Abul Reddy	
5	S. Badula	
6	S. Hussian	
7	M. Naga Raja	
8	B. Ganesh	
9	C. Sai Kumar	
10	D. Anji	
11	Ajay	
12	Veda Vada prasad	
13	D. Shabath Kumar	
14	Narayan	
15	praveen kumar	
16	M. Shiva mani	
17	Ganath	
18	Mallikarjuna	
19	S. yasmeen	
20	S. Soniya Noor	
21	S. Alia	
22	Shiva mani	
23	Bhargavi	
24	Indramma	
25		
26		
27		
28		
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Signature of the Lecturer

Signature of the Department I/C

2018 - 2019

Name of the Lecturer : Dr. P. Gayathri
Group : III B.Sc.
Paper - V : Ring theory and Vector Calculus
VI : Laplace transforms

S.No	Name of the Student	P-V Asn-I 11.7.18	Asn-II 3.10.18	Sem-V P-VI Asn-I 18.7.18	Asn-II 3.10.18
		Rings	Vector Differentiation	Laplace Transform-I	Application of L.T.
1.	M. Venkatesh				
2.	Arabjan				
3.	K. Nitya Pooja Reddy				
4.	Nagaraja				
5.	Mahendra				
6.	Venkatramana				
7.	R. Praveen				
8.	Y. Rambabu				

P. Gayathri
L.TURER
Dept. of Mathematics
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RAYACHOTY.

Name of the lecturer : Dr. P. Gayathri
Group : III B.Sc.
Paper : VII : Linear Algebra - I
Cluster Papers VIII A : Integral Transforms
VIII B : Numerical Analysis
VIII C - Linear Algebra - II

S.No.	Name of the Student	L.A-I As 16/11	A2 11/12	Integral Trans. A1 18/11	A2 12/12	Numerical A1 18/11	A2 21/12	L.A-II A1 16/11	A2 27/12
		Vector spaces	Linear Transforms	Application of LT	Fourier Transforms	Numerical Comp.	Interpolation-II	Rank of a matrix	Inner Product space
1.	M. Venkatesh								
2.	Arabian								
3.	K. Nitya								
4.	Nagaraja								
5.	Mahendra								
6.	Venkatramana								
7.	R. Praveen								
8.	Y. Rambabu								

P. Gayathri
L.TURER
Dept. of Mathematics
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RAYACHOTY

Name of the Lecturer : Dr. P. Gayathri
Group : II B.Sc.
Paper - I - Abstract Algebra
and
Real Analysis

S.No	Name of the Student	Sem-II Assi-I 5/1/18	Assi-II 4/2/18	Assi-I 8/1/19	Assi-II
1	M. Saleem				
2	S. Mohammad Shaik				
3	S. Masud Alam				
4	B. Karthik				
5	D. Venkateswarlu				
6	K. Annamacharyulu				
7	S. Mohammad Riyaz				
8	D. Reddy Sekhar				

Dept. of Mathematics
Govt. Degree College
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Name of the Lecturer : Dr. P. Gayathri
Group : II B.Sc.
Paper : Differential Equations
and
Solid Geometry

S.No	Name of the Student	Sem-I Assi-I 16/7/18	Assi-II 4/2/18	Sem-II Assi-I 8/1/19	Assi-II 14/2/19
1.	B. V. Sivamma				
2.	C. Chennakesava				
3.	G. Hari Priya				
4.	K. Suresh				
5.	M. Venugopal				
6.	M. Raj Kumar				
7.	R. Sk Hasi				
8.	S. Md Huzaifa				
9.	S. Shameemabeevi				
10.	Syed Najma				

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2019-2020

Name of the lecturer: Dr. P. Gayathri
Group: III B.Sc.
Paper: V - Ring theory and Vector Calculus

Semester - V

S.No.	Name of the Student	Ass-I 25/7/19	Ass-II 19/9/19	Ass-III 17/10/19
1.	M. Saleem	Rings	Vector Differentiation	Vector Calculus
2.	S. Mohammad Ghouse			
3.	S. Masud Alam			
4.	B. Karthik			
5.	D. Venkateswarly			
6.	K. Annamaiah			
7.	S. Mohammad Ziya			
8.	D. Reddy Sekhar			

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Name of the lecturer: Dr. P. Gayathri
Group: III B.Sc.
Paper: VI - Laplace Transformation

Semester - V

S.No.	Name of the Student	Ass-I 26/7/19	Ass-II 20/9/19	Ass-III 18/10/19
1.	M. Saleem	Laplace Transformation	Inverse Laplace Transformation	Application of Laplace Transformation
2.	S. Mohammad Ghouse			
3.	S. Masud Alam			
4.	B. Karthik			
5.	D. Venkateswarly			
6.	K. Annamaiah			
7.	S. Mohammad Ziya			
8.	D. Reddy Sekhar			

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Name of the Lecturer: Dr. P. Gayathri
Group : II B.Sc.
Paper - III - Abstract Algebra

Semester - III

S.No.	Name of the Student	Ass-I 27/7/19	Ass-II 23/9/19	Ass-III 14/10/19
1.	D. V. Sivamma			
2.	C. Chennakesava			
3.	G. Hari priya			
4.	K. Suresh			
5.	M. Venugopal			
6.	M. Raj Kumar			
7.	R. Sri Hari			
8.	S. Md. Huzaiba			
9.	S. Shameem Ahamad			
10.	Syed Najma			

Groups
Normal Subgroups
Cyclic groups

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Govt. Degree College
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Name of the Lecturer: Dr. P. Gayathri
Group : I B.Sc.
Paper - I: Differential Equations.

Semester - I

S.No.	Name of the Student	Ass-I 30/7/19	Ass-II 24/9/19	Ass-III 15/10/19
1.	K. V Prasad			
2	M. Lalitha			
3.	S Md. Rafi			
4	V. Mahesh			
5.	G. V Rajesh			
6	G. Supriya			
7	D. Nagesh			
8.	G. Sai Hari			
9	J Rajasekhar			
10	K. Prasad Naidu			
11	V. S. Kalyan			
12	S Ashok			
13.	T. Druthi			
14.	V. V. Prasad			
15.	G. Afsa			
16	S. Bavaddin			
17.	S Akhil			

Differential Equations
Exact D.E.
Higher order D.E.

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Name of the lecturer : Dr. P. Gayathri
Group : II B.Sc.
Paper : VI - Linear Algebra

Semester - VI

S.No	Name of the Student	Ass-I 28.12.19	Ass-II 23.01.20	Ass-III
1.	M. Saleem	Vector spaces	Dimension & its subspace	-
2.	S. Mohammad Ghouse			
3.	S Masud Alam			
4.	B. Karthik			
5.	D. venkateswarlu			
6.	K. Annamacharyulu			
7.	S. Mohammad Zeya			
8.	D Reddy rekha			

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Name of the lecturer : Dr. P. Gayathri
Group II B.Sc.
Paper IV - Real Analysis

Semester - IV

S.No	Name of the Student	Ass-I 23/12/19	Ass-II 27/01/20	Ass-III
1	B. V. Sivamma	Infinite Series	Limit and continuity	-
2.	C. Chennakesava			
3.	G. Hari priya			
4.	K. Suresh			
5.	M. Venugopal			
6	M. Raj Kumar			
7.	R. Sri Hari			
8	S. Md Huzaifa			
9.	S. Shameem Ahamad			
10	Syed Najma			

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Name of the Lecturer: Dr. P. Gayathri
Group : I B.Sc
Paper : II - Solid geom

Semester - II

S.No	Name of the Student	Ass-I 26/12/19	Ass-II 21/01/20	Ass-III
1.	K.V. Prasad			
2.	M. Lalitha			
3.	S. Md. Rafi			
4.	V. Mahesh			
5.	G.V. Rajesh			
6.	G. Supriya			
7.	G. Hari Hari			
8.	J. Rajasekhar			
9.	K. Prasad Naidu			
10.	V.S. Kalyan			
11.	S. Ashok			
12.	T. Druthi			
13.	V.V. Prasad			
14.	G. Afsa			
15.	S. Bavaddin			
16.	S. Akhil			

Solid Geometry

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2020-2021

Name of the Lecturer: Dr. P. Gayathri
Group : III B.Sc
Paper - I: Ring theory and Vector Calculus

Semester - V

S.No.	Name of the Student	Ass-I 20/11/2020	Ass-II 21/12/20	Ass-III 11/1/21
1	D.V. Sivamma			
2.	c. Chennakesava			
3.	G. Haripriya			
4.	K. Suresh			
5.	M. Venugopal			
6.	M. Raj Kumar			
7.	R. Sri Hari			
8.	S. Md Thuzaita			
9.	S. Shameem Ahamed			
10				

Rings
Vectors
Vector Calculus

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Name of the Lecturer: Dr. P. Gayathri
Group : II B.Sc
Paper : VI - Laplace Transf

Semester - II

S.No	Name of the Student	Ass-I 21/4/2020	Ass-II 10/11/2020	Ass-III
1	D.V. Sivarama	Laplace Transformation	Inverse L.T.	
2	C. Chennakesava			
3	G. Hari Priya			
4	K. Suresh			
5	M. Venugopal			
6	M. Raj Kumar			
7	R. Sri Hari			
8	S. Md. Thzaifa			
9	S. Shameemahmad			

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Name of the Lecturer: Dr. P. Gayathri
Group : II B.Sc
Paper : II - Abstract Algebra

Semester - II

S.No:	Name of the Student	Ass-I 25/11/2020	Ass-II	Ass-III
1	K.V. Prasad	Groups	Normal Subgroups	Cyclic groups
2	M. Lalitha			
3	V. Mahesh			
4	G.V. Rajesh			
5	G. Supriya			
6	G. Sai Hari			
7	K. Prasad Naidu			
8	V.S. Kalyan			
9	S. Ashok			
10	T. Druthi			
11	V.V. Prasad			
12	G. Afsa			
13	S. Bakabba			
14	S. Akhil			

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Name of the Lecturer: Dr. P. Gayathri
Group : III B.Sc.
Paper - VII : Linear Algebra

Semester - VI

S.No.	Name of the Student	Ass-I 14/6/24	Ass-II 17/7/24	Ass-III 26/[illegible]
1.	D. V. Sivamma	Vector spaces	Dimention of a Subspaces.	vector space Isomorphism
2.	C. Chennakesava			
3.	G. Hari priya			
4.	K. Suresh			
5.	M. Venugopal			
6.	M. Raj kumar			
7.	P. Sri Hari			
8.	S. Md. Huzaifa			
9.	S. Shameem Ahamed			

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Name of the Lecturer: Dr. P. Gayathri
Group : II B.Sc.
Paper - V : Real Analysis

Semester - IV

S.No.	Name of the Student	Ass-I 14/6/24	Ass-II 17/7/24	Ass-III 26/7/24
1.	K. V. Prasad	Infinite Series	Limits & Continuity	Riemann Integration
2.	M. Lalitha			
3.	S. Md. Rafi			
4.	V. Mahesh			
5.	G. V. Rajesh			
6.	G. Supriya			
7.	G. Sai Hari			
8.	T. Rajasekhar			
9.	K. Prasad naidu			
10.	V. S. Kalyan			
11.	S. Ashok			
12.	T. Druthi			
13.	V. V. Prasad			
14.	G. Afsa			
15.	S. Bavaddin			
16.	S. Akhil			

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Name of the Lecturer : Dr. P. Gayathri
Group : I B.Sc.
Paper : Differential equa

Semester - I

S.No.	Name of the Student	Ass-I 16/3/21	Ass-II 23/4/21
1.	B. Harinadh	Ordinary D.E.	Higher order D.E.
2.	C. Thirumalesu		
3.	D. Prasanna		
4.	D. Pavankumar		
5.	G.V. Tharun		
6.	K. Bhagya Rekha		
7.	K. Manjunadha		
8.	K. Bhanu Prakash		
9.	M. Sai		
10.	M. Damodara		
11.	P. Nanda kumar		
12.	P. Sathish Kumar		
13.	S. Sreedhar		
14.	S. Khader Basha		
15.	S. Md. Jabeed		
16.	S. Suhel		
17.	S. Abdul		
18.	S. Mazeeda		
19.	S. Muneera		
20.	T. Thirumalesh		
21.	V. Nageswara		
22.	Vanam Ad.		
23.	Y. Ganesh.		

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF Mathematics

(UG courses)

Assignment Topic

RANK OF A MATRIX

Topic Submitted
BY

Name of the Student : M. SAI

Class : II M.P.C.S

Date : 16/07/2022

Academic Year: 2021 – 2022

GOVT. DEGREE COLLEGE: RAYACHOTY
DEPARTMENT OF Mathematics

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	16/7/2024	IIMPCs	Rank of a Matrix

Sl. NO	Name of the Student	Signature of the Student
1	C. Tirumalesu	Tirumalesu
2	D PRASANNA JYOTHI	Prasanna Jyothi
3	D. PAVAN KUMAR	Pavan Kumar
4	G. VENKATA TARUN	Venkata Tarun
5	K. BHAGYAREKHA	Bhagyarekha
6	K. MANJUNADHA	Manjunadha.
7	K. BHANU PRAKASH	Bhanuprakash
8	M. SAI	Sai
9	M. DAMODARA	Damodara
10	P. NANDA KUMAR REDDY	Nandakumar reddy
11	P SATISH KUMAR	Satish Kumar
12	S. SREEDHAR REDDY	Sreedhar reddy
13	S. KHADER BASHA	S. Khadar Basha
14	S. MOHAMMAD JABEED	S. Md. Jabeed
15	S. SUHEL	Suhel
16	S. ABDUL MAHAMMAD	Abdul Mahammad
17	S. MAZEEDA	Mazeeda
18	S. MUNEERA	Muneera
19	T. TIRUMALESH	T. Tirumalesh
20	V. NAGESWARA	Nageswara
21	V. ADI	Adi.
22	Y. GANESH.	Y Ganesh.
23		
24		
25		
26		
27		
28		
29		
30		

Signature of the Lecturer

Signature of the Department I/C

Assignment - I

Reduce the matrix $A=\begin{bmatrix} 2 & 3 & -1 & -1 \\ 1 & -1 & -2 & -4 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}_{4\times4}$ to normal form and hence find its rank.

Sol: Given matrix $A=\begin{bmatrix} 2 & 3 & -1 & -1 \\ 1 & -1 & -2 & -4 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}$

$R_1 \leftrightarrow R_2 \sim \begin{bmatrix} 1 & -1 & -2 & -4 \\ 2 & 3 & -1 & -1 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}$

$R_2 \to R_2 - 2R_1$
$R_3 \to R_3 - 3R_1 \sim \begin{bmatrix} 1 & -1 & -2 & -4 \\ 0 & 5 & 3 & 7 \\ 0 & 4 & 9 & 10 \\ 0 & 9 & 12 & 17 \end{bmatrix}$
$R_4 \to R_4 - 6R_1$

$C_2 \to C_2 + C_1$
$C_3 \to C_3 + 2C_1 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 5 & 3 & 7 \\ 0 & 4 & 9 & 10 \\ 0 & 9 & 12 & 17 \end{bmatrix}$
$C_4 \to C_4 + 4C_1$

$R_2 \to R_2 - R_3 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & -6 & -3 \\ 0 & 4 & 9 & 10 \\ 0 & 9 & 12 & 17 \end{bmatrix}$

$R_3 \to R_3 - 4R_2$
$R_4 \to R_4 - 9R_2 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & -6 & -3 \\ 0 & 0 & 33 & 22 \\ 0 & 0 & 66 & 44 \end{bmatrix}$

$C_3 \to \frac{C_3}{33}$
$C_4 \to \frac{C_4}{22} \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \\ 0 & 0 & 2 & 2 \end{bmatrix}$

$R_4 \to R_4 - 2R_3 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix} = \begin{bmatrix} I_3 & 0 \\ 0 & 0 \end{bmatrix}$

$\therefore \rho(A) = 3$ //

2] Find the inverse of the matrix $A = \begin{bmatrix} 0 & 1 & 2 & 2 \\ 1 & 1 & 2 & 3 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix}$

Sol: Given that $A = \begin{bmatrix} 0 & 1 & 2 & 2 \\ 1 & 1 & 2 & 3 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix}_{4\times4}$

Consider $A = I_4 A$

$$\Rightarrow \begin{bmatrix} 0 & 1 & 2 & 2 \\ 1 & 1 & 2 & 3 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} A$$

$$R_1 \leftrightarrow R_2 \sim \begin{bmatrix} 1 & 1 & 2 & 3 \\ 0 & 1 & 2 & 2 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} A.$$

$$\begin{matrix} R_3 \to R_3 - 2R_1 \\ R_4 \to R_4 - 3R_1 \end{matrix} \sim \begin{bmatrix} 1 & 1 & 2 & 3 \\ 0 & 1 & 2 & 2 \\ 0 & 0 & -2 & -3 \\ 0 & 0 & -3 & -6 \end{bmatrix} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & -2 & 1 & 0 \\ 0 & -3 & 0 & 1 \end{bmatrix} A$$

$$R_1 \to R_1 - R_2 \sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 2 & 2 \\ 0 & 0 & -2 & -3 \\ 0 & 0 & -3 & -6 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & -2 & 1 & 0 \\ 0 & -3 & 0 & 1 \end{bmatrix} A$$

$$R_3 \to R_3 - R_4 \sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 2 & 2 \\ 0 & 0 & 1 & 3 \\ 0 & 0 & -3 & -6 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & -1 \\ 0 & -3 & 0 & 1 \end{bmatrix} A$$

$R_2 \to R_2 - 2R_3$
$R_4 \to R_4 + 3R_3$

$$\sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & -4 \\ 0 & 0 & 1 & 3 \\ 0 & 0 & 0 & 3 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & -2 & -2 & -2 \\ 0 & 1 & 1 & -1 \\ 0 & 0 & 3 & -2 \end{bmatrix} A$$

$$R_4 \to \frac{R_4}{R_3} \sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & -4 \\ 0 & 0 & 1 & 3 \\ 0 & 0 & 0 & 1 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & -2 & -2 & -2 \\ 0 & 1 & 1 & -1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix} A$$

$R_1 \to R_1 - R_4$
$R_2 \to R_2 + 4R_4$
$R_3 \to R_3 - 3R_4$

$$\sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} = \begin{bmatrix} -1 & 1 & -1 & 2/3 \\ 1 & -2 & 2 & -2/3 \\ 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix} A$$

$\Rightarrow I_4 = B \cdot A$ where $B = \begin{bmatrix} -1 & 1 & -1 & 2/3 \\ 1 & -2 & 2 & -2/3 \\ 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix}$

$\Rightarrow I_4 \cdot A^{-1} = (BA) A^{-1}$

$\Rightarrow A^{-1} = B(A \cdot A^{-1})$

$\Rightarrow A^{-1} = B I_4$

$\Rightarrow A^{-1} = B = \begin{bmatrix} -1 & 1 & -1 & 2/3 \\ 1 & -2 & 2 & -2/3 \\ 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix}$ //

3] Solve $x+y-z+t=0$, $x-y+2z-t=0$, $3x+y+t=0$.

Sol: Given system is $x+y-z+t=0$, $x-y+2z-t=0$, $3x+y+t=0$

This can be expressed as $\begin{bmatrix} 1 & 1 & -1 & 1 \\ 1 & -1 & 2 & -1 \\ 3 & 1 & 0 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$ i.e $AX = 0$

$$A=\begin{bmatrix}1 & 1 & -1 & -1\\ 1 & -1 & 2 & -1\\ 3 & 1 & 0 & 1\end{bmatrix},\quad X=\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix},\quad O=\begin{bmatrix}0\\ 0\\ 0\end{bmatrix}$$

Reducing to echelon form.

$$R_2-R_1,\ R_3-3R_1 \sim \begin{bmatrix}1 & 1 & -1 & 1\\ 0 & -2 & 3 & -2\\ 0 & -2 & 3 & -2\end{bmatrix}\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix}=\begin{bmatrix}0\\ 0\\ 0\end{bmatrix}$$

$$R_3-R_2 \sim \begin{bmatrix}1 & 1 & -1 & 1\\ 0 & -2 & 3 & -2\\ 0 & 0 & 0 & 0\end{bmatrix}\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix}=\begin{bmatrix}0\\ 0\\ 0\end{bmatrix}$$

This is in echelon form.

$f(A)=2 <$ no. of variable in $X(4)$

$\therefore AX=O$ has no zero solutions only.

$\Rightarrow x+y-z+t=0 \rightarrow (i)$

$\Rightarrow -2y+3z-2t=0 \rightarrow (ii)$

Let $z=k_1$, $t=k_2$ where k_1, k_2 are two parameters.

ii) $\Rightarrow -2y+3z-2t=0$

$\Rightarrow 2y=3z-2t$

$\Rightarrow y=\frac{3k_1-2k_2}{2}$

i) $\Rightarrow x+y-z+t=0$

$\Rightarrow x=-y+z-t$

$x=-\left[\frac{3k_1-2k_2}{2}\right]+k_1-k_2$

$\therefore x=\frac{-3k_1+2k_2+2k_1-2k_2}{2}=\frac{-k_1}{2}$

$\therefore X=\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix}=k_1\begin{bmatrix}-1/2\\ 3/2\\ 1\\ 0\end{bmatrix}+k_2\begin{bmatrix}0\\ -1\\ 0\\ 1\end{bmatrix}$

ie $x-y+2z+t=2,\ 3x+2y+t=1,\ 4x+y+2z+2t=3.$

Given equations $x-y+2z+t=2,\ 3x+2y+t=1,\ 4x+y+2z+2t=3$

The system can be expressed as

$$\begin{bmatrix}1 & -1 & 2 & 1\\ 3 & 2 & 0 & 1\\ 4 & 1 & 2 & 2\end{bmatrix}\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix}=\begin{bmatrix}2\\ 1\\ 3\end{bmatrix} \quad \text{i.e } AX=B$$

Reducing to echelon form

$$\begin{matrix}R_2-3R_1\\ R_3-4R_1\end{matrix}\sim\begin{bmatrix}1 & -1 & 2 & 1\\ 0 & 5 & -6 & -2\\ 0 & 5 & -6 & -2\end{bmatrix}\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix}=\begin{bmatrix}2\\ -5\\ -5\end{bmatrix}$$

$$R_3-R_2\sim\begin{bmatrix}1 & -1 & 2 & 1\\ 0 & 5 & -6 & -2\\ 0 & 0 & 0 & 0\end{bmatrix}\begin{bmatrix}x\\ y\\ z\\ t\end{bmatrix}=\begin{bmatrix}2\\ -5\\ 0\end{bmatrix}$$

This is in echelon form.

$\rho(A)=2=\rho(AB)<$ no. of variables in $X(4)$

$\therefore AX=B$ has infinity many solutions.

$\Rightarrow x-y+2z+t=2 \quad -(i)$

$\Rightarrow 5y-6z-2t=-5 \quad -(ii)$

Let $z=k_1, t=k_2$ where k_1, k_2 are two parameters

(ii) $\Rightarrow 5y-6z-2t=-5$

$\Rightarrow 5y-6k_1-2k_2=-5$

$\Rightarrow 5y=-5+6k_1+2k_2$

$\Rightarrow y=\dfrac{-5+6k_1+2k_2}{5}$

(i) $\Rightarrow x-y+2z+t=2$

$$\Rightarrow x = 8 + \left[\frac{-5+6k_1+2k_2}{5}\right] - 2k_1 - k_2$$

$$\Rightarrow x = \frac{10-5+6k_1+2k_2-10k_1-5k_2}{5}$$

$$\Rightarrow x = \frac{5-4k_1-3k_2}{5}$$

$$\therefore X = \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} +1 \\ -1 \\ 0 \\ 0 \end{bmatrix} + k_1 \begin{bmatrix} -4/5 \\ 6/5 \\ 1 \\ 0 \end{bmatrix} + k_2 \begin{bmatrix} -3/5 \\ 2/5 \\ 0 \\ 1 \end{bmatrix} //$$

5) Find the characteristic roots and the corresponding characteristic vectors of the matrix $A = \begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$.

Sol: Given matrix is $A = \begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$

The characteristic equation of A is $|A - \lambda I| = 0$

$$\Rightarrow \begin{vmatrix} 8-\lambda & -6 & 2 \\ -6 & 7-\lambda & -4 \\ 2 & -4 & 3-\lambda \end{vmatrix} = 0.$$

$$\Rightarrow (8-\lambda)\left[(7-\lambda)(3-\lambda)-8\right] - (-6)\left[-6(3-\lambda)+8\right] + 2\left[24 - 2(7-\lambda)\right]$$

$$\Rightarrow (8-\lambda)(21-10\lambda+\lambda^2-16) + 6(-18+6\lambda+8) + 2(24-14+2\lambda) = 0$$

$$\Rightarrow (8-\lambda)(\lambda^2-10\lambda+5) + 6(6\lambda-10) + 2(2\lambda+10) = 0$$

$$\Rightarrow 8\lambda^2 - 80\lambda + 40 - \lambda^3 + 10\lambda^2 - 5\lambda + 36\lambda - 60 + 4\lambda + 20 = 0$$

$$\Rightarrow -\lambda^3 + 18\lambda^2 - 45\lambda = 0$$

$$\Rightarrow \lambda(-\lambda^2 + 18\lambda - 45) = 0$$

$$\Rightarrow \lambda(-\lambda^2 + 15\lambda + 3\lambda - 45) = 0$$

$$\Rightarrow \lambda[-\lambda(\lambda-15) - 3(\lambda-15)] = 0$$

$\lambda[(-\lambda+15)(\lambda-3)]=0$

$\Rightarrow \lambda = 0, 3, 15$

The characteristic roots of A are 0, 3, 15.

Case (i) :-

Let $\lambda=0$ characteristic vectors corresponding to the characteristic root '0' are given by $(A-0.I)X=0$.

$$\Rightarrow \begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$R_1 \leftrightarrows R_3 \sim \begin{bmatrix} 2 & -4 & 3 \\ -6 & 7 & -4 \\ 8 & -6 & 2 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\begin{matrix} R_2+3R_1 \\ R_3-4R_1 \end{matrix} \sim \begin{bmatrix} 2 & -4 & 3 \\ 0 & -5 & 5 \\ 0 & 10 & -10 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$R_3+2R_2 \sim \begin{bmatrix} 2 & -4 & 3 \\ 0 & -5 & 5 \\ 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$\Rightarrow 2x-4y+3z=0$ (i)

$-5y+5z=0 \Rightarrow$ (ii)

Let $z=k \ (\neq 0)$

(ii) $\Rightarrow -5y+5z=0$

$\Rightarrow 5y=5z$

$\Rightarrow y=z$

$\Rightarrow \boxed{y=k}$

(i) $\Rightarrow 2x-4y+3z=0$

$2x = 4k - 2k$

$\Rightarrow 2x = k$

$\Rightarrow \boxed{x = k/2}$

$\therefore$ Characteristic vectors corresponding to the characteristic root "0" are given by $X = k\begin{bmatrix} 1/2 \\ 1 \\ 1 \end{bmatrix}$ where k is non-zero parameters.

Case(II): Let $\lambda = 3$ characteristic vectors corresponding the characteristic root 3 are given by $(A - 3I)X = 0$

$$\Rightarrow \left\{\begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix} - \begin{bmatrix} 3 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 3 \end{bmatrix}\right\}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\Rightarrow \begin{bmatrix} 5 & -6 & 2 \\ -6 & 4 & -4 \\ 2 & -4 & 0 \end{bmatrix}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\begin{matrix} 5R_2 + 6R_1 \\ 5R_3 - 2R_1 \end{matrix} \sim \begin{bmatrix} 5 & -6 & 2 \\ 0 & -16 & 8 \\ 0 & -8 & -4 \end{bmatrix}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$2R_3 - R_2 \sim \begin{bmatrix} 5 & -6 & 2 \\ 0 & -16 & -8 \\ 0 & 0 & 0 \end{bmatrix}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$\Rightarrow 5x - 6y + 2z = 0 \quad -(i)$

$-16y - 8z = 0 \quad -(ii)$

Let $z = k (\neq 0)$

$(ii) \Rightarrow -16y - 8z = 0$

$\Rightarrow -16y = 8z$

$\Rightarrow -16y = 8k$

$\boxed{y = -1/2\, k}$

$5x-6y+2z=0$

$\Rightarrow 5x=6y-2z$

$\Rightarrow 5x=6(-k/2)-2k$

$\Rightarrow 5x=-3k-2k$

$\Rightarrow 5x=-5k$

$\Rightarrow \boxed{x=-k}$

∴ Characteristic vectors corresponding to the characteristic root '3' are given by $X=\begin{bmatrix}x\\y\\z\end{bmatrix}=k\begin{bmatrix}-1\\-1/2\\1\end{bmatrix}$ where k is non-zero parameters.

Case-(iii):- Let $\lambda=15$

Characteristic vectors corresponding to the characteristic root 15 are given by $(A-15I)X=0$

$$\Rightarrow \left\{\begin{bmatrix}8&-6&2\\-6&7&-4\\2&-4&3\end{bmatrix}-\begin{bmatrix}15&0&0\\0&15&0\\0&0&15\end{bmatrix}\right\}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$$\Rightarrow \begin{bmatrix}-7&-6&2\\-6&-8&-4\\2&-4&-12\end{bmatrix}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$$\Rightarrow \begin{matrix}7R_2-6R_1\\7R_3+2R_1\end{matrix}\sim\begin{bmatrix}-7&-6&2\\0&-20&-40\\0&-40&-80\end{bmatrix}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$$\Rightarrow R_3-2R_2\sim\begin{bmatrix}-7&-6&2\\0&-20&-40\\0&0&0\end{bmatrix}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$\Rightarrow -7x-6y+2z=0$ —(i)

$-20y-40z=0$ i.e $y+2z=0$ —(ii)

Let $z=k\ (\neq 0)$

(ii) $\Rightarrow y+2z=0 \Rightarrow y=-2z=-2k$ $\boxed{\therefore y=-2k}$

i) $\Rightarrow -7x-6y+23=0 \quad \rightarrow (i)$

$-20y-40z=0 \quad$ i.e. $y+2z=0 \quad \rightarrow (ii)$

Let $z=k \ (\neq 0)$

(ii) $\Rightarrow 7x=-6y+2z$

$\Rightarrow 7x=-6(-2k)+2k=14k$

$\boxed{\therefore x=2k}$

$\therefore$ Eigen vectors corresponding to eigen root 15 are given by $X=\begin{bmatrix} x \\ y \\ z \end{bmatrix}=k\begin{bmatrix} 2 \\ -2 \\ 1 \end{bmatrix}$ where k is non-zero parameter

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF Mathematics

(UG courses)

Assignment Topic

Limits

Topic Submitted
BY

Name of the Student : K. Likhitha

Class : II M.P.Cs

Date : 03-01-2023

Academic Year: 2022-2023

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GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Mathematics

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	3/11/23	II MPCs	Limits

Sl. NO	Name of the Student	Signature of the Student
1	K. Likitha	
2	V. Siva sankar	
3	T. Sreevidya	
4	A. Sravani	
5	B. Reddy prasanthi	
6	S. M. Yousuf	
7	B. Sangeetha	
8	S. Syed Valli	
9	M. Swathi	
10	G. Reddy Lokesh	
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B. M G
Signature of the Lecturer

B. M G
Signature of the Department I/C

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UNIT - 2

Limits and continuity

Limit of a function:-

Let $f: S \to R$ is a function 'a' be a limit point of aggregate 's' and $l \in R$

(i) The function 'f' tends to limit 'l' as 'x' tends to 'a' from left

(ii) If for each $\varepsilon > 0, \exists \delta > 0$, s.t $x \in S$ and $a - \delta < x < a \Rightarrow |f(x) - l| < \varepsilon$

(iii) we write $f(x) \to l$ as $x \to a^-$ (or) $\lim_{x \to a^-} f(x) = R$ (or)

$f(a-0) = l$ is called left hand limit of function f tends to limit l as x tends to a from right

(i) for each $\varepsilon > 0, \exists \delta > 0$ s.t $x \in S$ & $a < x < a + \delta \Rightarrow |f(x) - l| < \varepsilon$ Right

(ii) we write $f(x) \to l$ as $x \to a^+$ (or) $\lim_{x \to a^+} f(x) = l$ (or) $f(a+0) = l$ is called right hand limit of the function.

→ The function f tends to limit l as x tends to a.

If for each $\varepsilon > 0, \exists \delta > 0$ s.t $x \in S$ & $0 < |f(x) - l| < \varepsilon$

→ we write $f(x) \to l$ as $x \to a$ (or) $\lim_{x \to a} f(x) = l$ is called limit of function

P. Define $f: S \to R$ such that $f(x) = x \sin(\frac{1}{x})$ using the definition of limit Prove that $\lim_{x \to 0} f(x) = 0$.

clearly '0' is limit point of 's'

Here $f(x) = x \sin(\frac{1}{x})$

we have to show that $\lim_{x \to 0} f(x) = 0$

we must show that $\varepsilon > 0 \; \exists \delta > 0$ s.t $|f(x) - 0| < \varepsilon$ for $0 < |x - 0| < \delta, x \in S$

Now $|f(x) - 0| = |x \sin y_x - 0| = |x \sin(\frac{1}{x})|$

$= |x| \cdot |\sin(y_x)|$ $\quad (\because \sin(\frac{1}{x}) \leq 1)$

$\leq x$

$\Rightarrow |f(x) - 0| < \varepsilon$ where $0 < x < \varepsilon$

Choose $\delta = \varepsilon$

we have $|f(x) - 0| < \varepsilon$ where $0 < |x - 0| < \delta \; x \in S$

Hence $\lim_{x \to 0} f(x) = 0$

i.e., $\lim_{x \to 0} x \sin(1/x) = 0$.

2) Define $f: R \to R$ s.t $f(x) = x^2+2x$ using the definition lim show that $\lim_{x\to 3} f(x) = 15$

Clearly '3' is limit Point of R

Here $f(x) = x^2+2x$

we have show that $\lim_{x\to 3} f(x) = 15$

Now $|f(x)-15| \Rightarrow |x^2+2x-15| \Rightarrow |(x+5)(x-3)|$

$\Rightarrow |x+5|\,|x-3|$

If $|x-3| < 1$ then $2 < x < 4$ i.e., $x \in (2,4)$

$\Rightarrow x+5 \in (7,9)$

$\Rightarrow |x+3| < 1 \Rightarrow |x+5| < 9$

$\Rightarrow |x^2+2x-15| < 9\,|x-3|$

for $\epsilon > 0$, $9|x-3| < \epsilon \Leftrightarrow |x-3| < \frac{\epsilon}{9}$

If $\delta = \min\{1, \frac{\epsilon}{9}\}$ then

$\Rightarrow |x-3| < \delta \Rightarrow |x+2x-1| < 9\,|x-3|$

for each $\epsilon > 0$, we take $\delta = \min\{1, \epsilon/9\}$

$\Rightarrow x \in R,\ 0 < |x-3| < \delta \Rightarrow |f(x)-15| < \epsilon$

$\lim_{x\to 3} f(x) = 15$

3) If $f(x) = \sin 1/x$, $x \in R - \{0\}$ Prove that $\lim_{x\to 0} \sin 1/x$ does not exist

If Possible $\lim_{x\to 0} f(x) = l$

limit is not unique

Case(i) let $l \neq 1$

for $\epsilon = |l-1| > 0$ $\exists\ \delta > 0$ s.t $0 < |x| < \delta \Rightarrow |\sin 1/x - l| < |l-1|$

By Archimedian Property $\exists\ n \in N$ s.t $0 < \frac{1}{2n\pi + \frac{\pi}{2}} < \delta$

for $x = \frac{1}{2n\pi - \frac{\pi}{2}}$, $|\sin(2n\pi + \frac{\pi}{2} - l| < |l-1|$

$\Rightarrow |1-l| < |l-1|$

This is impossible & hence $l \neq 1$ is not true

Case(ii) let $l = 1$

for $\epsilon = 1$ $\exists\ \delta > 0$ s.t $0 < |x| < \delta$

$|\sin(\frac{1}{n}) - 1| < 1$

for $0 < x = \frac{1}{n\pi} < \delta \Rightarrow |\sin n\pi - 1| < 1 \Rightarrow 1 < 1$

This is an impossible & hence $l = 1$ is not true

$\lim \sin 1/x$ doesn't exist

4) Prove that $\lim_{x\to 0} \frac{3x+|x|}{7x-5|x|}$ doesn't exist

when $x<0$

$\Rightarrow \lim_{x\to 0^-} \frac{3x+|x|}{7x-5|x|}$

$\Rightarrow \lim_{x\to 0^-} \frac{2x}{12x} = \frac{1}{6}$

when $x\geq 0$, $|x| = x$

$\Rightarrow \lim_{x\to 0^+} \frac{3x+|x|}{7x-5|x|}$

$\lim_{x\to 0^+} \frac{3x+x}{7x-5x}$

$\lim_{x\to 0^+} \frac{4x}{2x} = 2$

$\lim_{x\to 0} \frac{3x+|x|}{7x-5|x|}$ is doesn't exist

5) If $f: R \to R$ is such $f(x) = [x]$ when $[x]$ denotes greatest integer not $> x$ then integral part of x show that $\lim_{x\to 1} f(x)$

$\lim_{x\to 1^-} f(x) = \lim_{x\to 1^-} [x]$

$\Rightarrow \lim_{h\to 0} [1-h]$

$\Rightarrow \lim_{h\to 0} (0) = 0$ $[\because 0 \leq 1-h < 1]$

$\lim_{x\to 1^+} f(x) = \lim_{x\to 1^+} [x]$

$\lim_{h\to 1^+} [1+h] = \lim_{h\to 0} (1) = 1$

$\lim_{x\to 0} f(x) \neq \lim_{x\to 1^+} f(x)$

Hence $\lim_{x\to 1} f(x)$ doesn't exist

Uniform continuity:-

Let 'S' be an aggregate and $f: S \to R$ be a function then 'f' is uniformly continuous on 'S' if given $\epsilon > 0$ $\exists$ $\delta > 0$ s.t $x_1, x_2 \in S$, $|x_1 - x_2| < \delta \Rightarrow |f(x_1) - f(x_2)| < \epsilon$

Theorem:-

If a function f is continuous on closed interval a,b then it uniformly continuous on [a,b]

Proof:- let $\epsilon > 0$

f is continuous on [a,b] $\Rightarrow$ for $\epsilon > 0$, we can divide [a,b] into finite numbers say 'n', of sub intervals.

$[a = t_0, t_1], [t_1, t_2] \cdots [t_{r-1}, t_r] [t_r, t_{r+1}] \cdots [t_{n-1}, t_n = b]$

such that $|f(x_1) - f(x_2)| < \frac{\epsilon}{2} \longrightarrow (1)$

for x_1, x_2 belonging to the same sub interval

let $\delta = \frac{1}{2} \min \{ |t_r - t_{r-1}| > 0, \ 1 \le r \le n \}$

let x_1, x_2 any two points of [a,b] s.t $|x_1 - x_2| < \delta$ then x_1, x_2 either belong to the same sub interval or two consecutive sub intervals with a common end point.

case (i):-

let x_1, x_2 belong to the same subinterval

$\Rightarrow |f(x_1) - f(x_2)| < \frac{\epsilon}{2} < \epsilon$ for $|x_1 - x_2| < \delta$ ($\because$ from (1))

case (ii):-

let x_1, x_2 belong to two consecutive sub-intervals with a common end point say t_r.

we have from eq (1) $|f(x_1) - f(x_2)| < \frac{\epsilon}{2}$ and $|f(t_r) - f(x_2)| < \frac{\epsilon}{2}$

$\therefore |f(x_1) - f(x_2)| = |\{f(x_1) - f(t_r)\} + \{f(t_r) - f(x_2)\}|$

$\le |f(x_1) - f(t_r)| + |f(t_r) - f(x_2)|$

GOVERNMENT DEGREE COLLEGE RAYACHOTY.

(Affiliated to Y.V. University, YSR.KADAPA)

ANNAMAYYA (Dist) 516269 (AP)

ASSIGNMENT RECORD

GOVT. DEGREE COLLEGE

RAYACHOTY

ANNAMAYYA (DT)

2019-2020

ASSIGNMENT FILE

Student name ....P. Sudarshan.....

Class .....Accounti.....

Group .....BCOM C:A.....

Subject name .....Advance Accounting.....

... the transaction cost is

~~effectively~~ effectively less.

P. Sudarshan
IInd B.com (CA)
Govt. Degree college Rayachoti

PART - A

Ans

Advantages of E- Business

There are several types of business are there on the market that trade solely through online means. In establishing an online business, the owners must go through the same procedure as a traditional business, in formulating a business plan, by drafting a mission statement and by handling other administrative issues.

1. Easy to set up :- It is easily to set up electric electronic business. you can set up online business even by sitting at home if you have the required software, a divece, and the internet.

2. Cheaper than traditional bussiness :- Electronic business is much cheaper than traditional bussiness The cost taken to setup an e-bussiness is much heigher than the cost required to setup a traditional business. Also the transaction cost is less

3. No Geographical Boundaries :- There are no geographical boundaries for e-business. Anyone can order anything from anywhere at any time. This is one of the benefits of e-business.

4. Government Boundaries :- Online business benefits from a government as the government is tying to promote digitalization.

5. Flexible Business Hours :- Since the internet is always available. E-business breaks down time barries that location-based businesses encounter. As long as someone has an internet connection, you may be able to reach, sell your product or service to them. These visitors find the e-business to your business.

Signature of the students

1. S. Noor Mohammad.
2. L. Mohammed Lalkhan
3. K. Haleeb Bekash.
4. S. Safiya Anjum
5. P. Lakshmi Narayana
6. S. Sheikshar vali
7. S. Jameel Basha
8. A. Bhagyamma
9. S. Shireen.

Lecturer in Commerce
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GOVT. DEGREE COLLEGE

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ANNAMAYYA (DT)

2019-2020

ASSIGNMENT FILE

Student name ..... S. Mahammed Akram .....

Class ..... 2nd B.Com (C/O) .....

Group ..... B.Com (Computers) .....

Subject name ..... ~~Accounts~~ (or) online business.

ic it e-business initiatives.

S. Mohammed Akram

II nd Year B.com. CA

Part - A

A. Strategic Planning is the process of documenting and establishing a direction of your small business - by assesing both where youire going. the strategic plan' given you a place to record your mission, vision. and valus. as well as your long-term goals and the plans you'll use to reach them.

Strategic Planning process:-

there are two broad ciurmstances in which an enterprice will stateg ize it e- business initiatives.

1) on a periodic, formal, scheduled and.

2) when a crisis or significant ev occurs. the timeframe of periodi scheduled strategy development depends on your own organisatio policies.

~~*~~ firstly, filling to engage st holders minimizes or even prop at hand.

~~*~~ secondly filling to engage stak adequately can who are either ried to implement the. is ca by the.

Part - B

10 A) supply chain management (scm refers to the management of int

and sell products to customers.
Normally, scm involves co-ordinating
and suppliers of raw materials,
distributors and retailers. Distinction
can be made between a firm and
(sell-side e-commerce) and it's which
its suppliers and intermediaries
(buy-side e-commerce).

online- or e-Business strategy or
e-strategy is the business use of
the Internet the used results in
a business benefit such as higher
revenue, reduced costs or reaching
e-strategy is an iterative process
to create and/or modify an organ

(5) (A) e-business refer to the busin
and selling of goods and ser
throuch the internet along t
conducting other interent along
fuction is aburoader therm in
e-comemerce.

(7) (A) (9) (A) there e-business process incl
busing and selling good and serv
seringe coutomers processing coll
ting with, running automateld en
ge service rcctiong. the is calle
by the e-business.

(4) e-business describers the basic
information of the business inc
ing goalr vision. product offer
from a which a will offer form
a which a will can revenue.
the is called by th.

Signature of the students

1. B. Ramanjaneyulu
2. A. Bhagyamma.
3. S. Shireen
4. S. Shafiya. Anjum
5. S. Noor mohammad.
6. L. Mohammed lalkhan
7. S. Shaikshavali
8. S. Jameel Basha
9. P. Lakshmidarayana
10. S.

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2019-2020

ASSIGNMENT FILE

Student name ..... b. Bhagyamma .....

Class ..... B.Com (C.A) Accounts .....

Group ..... B.Com C.A .....

Subject name ..... online business .....

A. Bhagyamma 2nd B. COM CA.

online Business.

Advantages of E-Business:-

1) Is the electronic Business was the very useful the busy life

2) The E-Business, online business was the no wast of time.

3) E! Business was no transport issues benifit.

4) E-Business was we are In the home we want any product buying at home.

5) online line was the very safe and secure business. as to the buyers and sellers.

6) E-commerce was the make money trans ferce.

7) The payments was we make at home through the online business.

Part. B

E-Business means online business bying and selling of the goods on the online Electroni business was the easy to buying and selling

with money that was the business.

If No business No usage No production N distribution.

many Importance In Business.

1) online strategy was how to Increase the sa value.

2) how to manage product price when com the other company same product.

3) Increase the Ingredients

4) attracting the consumers with electric advertisement.

5) how to Impayment the product quality.

6) the scope of E-Business was the some cheatings by the online business

7) some time the we are ordering the product that was the change the product

8) some times the money cheating hacking our number and theft the money.

Signature of the students

1. K. Haleeb Bakash..
2. S. Noor Mohammad
3. L. Mohammed lalkhan
4. S. Shafiya Anjum
5. S. Jameel Basha
6. S. Sheikshavali
7. P. Lakshmi Narayana

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GOVT. DEGREE COLLEGE

RAYACHOTY

ANNAMAYYA (DT)

2020 – 2021

ASSIGNMENT FILE

Student name ..P. Ramanaiah.....

Class .....Accounts.....

Group .....B. com (T).....

Subject name ...Bussiness environment.....

Business environment

Internal Exam.

P. Ramanaiah B.com (General) - I Year

Section - A

3. Types of Micro Macro Environment

A. Defination: The business environment is total of all external things to business of Industrial afects in organization and association.

1. types of business Environment

1) Internal environment

2) External environment

External environment:

1. suppliers
2. Intermediaries
3. customers
4. Financers
5. publics
6. competitors

1. Economic Environment
2. Political Environment
3. social-culture environment
4. Techological environment
5. Global environment
6. Nature environment

section-B

6. A. The NITI Aayog was formed on January 1 - 2015 in sanskrit the word NITI morality for behavior guidance. But in the present context It means stands for National Institues making Insfutions which is is expected to blaster the economic growth of country to construct a strong state that will help to create a dynamic and strong nations

7. A. National development council is a execufive body established by the Government india in August 6, 1952 which is neither a constitution nor a statutory by in It is the apex behavior body for decision making to development matters in India, presided over by the prime.

Signature of the students

S. Shahid

S. Shahshad

M. Lakshmideevi

T. Hari prasad

Y. Manohari

Principal

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GOVT. DEGREE COLLEGE ★ RAYACHOTY ★ Pin: 516 269 (A.P.)

GOVT. DEGREE COLLEGE

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ANNAMAYYA (DT)

2020 – 2024

ASSIGNMENT FILE

Student name ..... K. Bhargav .....

Class ..... 1st year .....

Group ..... B.com (CA) .....

Subject name ..... Business .....

K. Bhargav. B.com [G]

I.

1.

A. 1. Influence Business planning and Performce:- the Influence the planning and perfomce of Business. Planning and the Eenvorment go together. All plans and policies of business are farmed in accordanc withe situations of Enviomed.

2. Requires Adaptability:- Business Gniroment directly environment changes. Business nced woorks According withe it Cnviroment. Every change in the business

3. Interconnected componets:- several facoters that make up Busines environment are Interleted with each change in any one of the facotors of the Business enviorment

4. unpredictable:- The Business envivoment is uncertain in nature and cannot be predicited. Business environment changes very rapidly and no one can determine them in Advance.

5. Brings strengths and weakness:- Environment change brings certain strengths and weakens to buiness they man be brings unfevourble situtions or thearts to business.

6. Relative in nature :- the Business Environment di from business to busines or from contry to cont from place to place the Envirmeat of business has Related in nature [r]

II 4. A. Importance of business environment

1. Deterning opportunities and threats :- the interaction between and its environment would idenfiy opportunits for and threast to that busing environment.

2. Giving Direction of Growth :- the interaction with the environment leads to opening up new frontiers for the business firms. It enble for of growth for the business of growth.

Giving Diraction of Growth.

3. Continous Learning :- Learning is a most Importance of Human Environment of Business. the manages are motivated to continous upadated that their knowldege, undestanding and skills. importances.

4. Image Builder :- Envoring understan them. Beider is a image by showing their senstinets to the Envirometh within whic the are working

Signature of the students

m. Lakshmidevi

S. Dilshad

T. Hariprasad

M. Uday kumar

K. Manmodhini

P. Ramanaiah

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ANNAMAYYA (DT)

2020-2021

ASSIGNMENT FILE

Student name ..... K. Habeeb Bakash .....

Class ..... 2nd .....

Group ..... B.Com .....

Subject name ..... Online Bussiness .....

stakeholder's of all kind can provide the

PART - A

3A] ⟹ Strategic planning is the process of documenting and establishing a direction of your small bussiness - by accessing both where you are and where youre going. The strategic plan gives you a place to record your mission, vision, and values. as well as your longeterm goals and the action plan you'll use to reach them.

The strategic planning Procen :

There are two broad circumstances in which an ehhterprise will strategize its e-bussines initiatives.

A. On a periodic, formal, schedule basis and

B. When a chrisis or significant event cross occurs. The time frame periodic scheduled strategy development depends on your own organizations policies.

Managers need to be aware that developing a strategy in isolation failing to include stakeholder's significally increases the risks of failure. Risks are increased for two main reasons.

∴ Firstly, failing to engage stakeholder's minimizes or even eliminates the ability to again a wider understanding of the problems at hand. stakeholder's of all kind can provide the

Secondly, failing to engage stakeholder's adequately can create a future problem for strategy implementation stake holder's who are either required to implement the strategy.

The important characteristics are :

1. Sales
2. Financials
3. Inventory
4. Distribution and
5. Customer

I
i) [B]
ii) [C]
iii) [A]
iv) [B]
v) [A]

II
i) [C]
ii) [B]
iii) [D]
iv) [E]
v) [A]

K. Habeeb Bakash
2nd BCom
Govt Degree Coll

Signatures of the students

1. P. Lakshminarayana
2. K. Habeeb Bakash
3. L. Mohammed lalkhan
4. S. Shafiya Anjum
5. S. Noor Mohammad
6. S. Shaikshavali
7. S. Tameel Rashi
8. Imran Ali Khan
9. S. Akram
10. Z. Ali
11. P. Imran Khan
12. S. Gaffar
13. S. Ashraf
14. Jama
15. Sumanth

Lecturer in Commerce
Govt. Degree College
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GOVT. DEGREE COLLEGE

RAYACHOTY

ANNAMAYYA (DT)

2021- 2022

ASSIGNMENT FILE

Student name ..... Shaik. Mansoor .....

Class ..... 1st B.com (G) Business Envio .....

Group ..... B.com (G) .....

Subject name ..... Business .....

Global Environment

Name:- Shaikmastan

Subject:- Business Enviroment

Date:- 26/3/2022 Group:- B.com (G)

College:- Govt Degree college Rayachoty 2021-2022

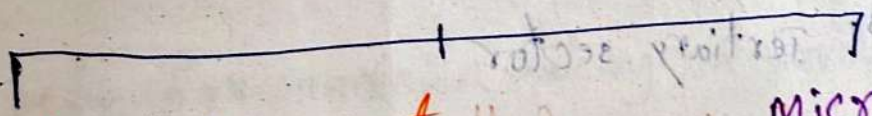
3) **Definition:-** Business Enviroment is the total of all things external to the business firm and industries which affect their organization and operations.

Types of Enviroment:-

Business Enviroment is divided into twoo types.

1. Internal Enviroment
2. External Enviroment

External Enviroment:-



Enviroment macro Enviroment

1. suppliers
2. Intermediaries
3. Customers
4. finances
5. publics
6. competitors

Micro.

1. Economic Enviroment
2. political Enviroment
3. socio-cultural enviroment
4. Technological Enviroment
5. Global Enviroment
6. Demographic Enviroment

the companies immediate enviroment. the
are the factors of micro enviroment.

macro enviroment:-

the micro forces are generally uncontrollable then the micro forces. the success of a company depends on its adaption to the business enviroment.

II 5) the strcture of economic of Indian economy consists of three broad sectors. they

1. primary sector
2. secondary sector
3. Tertiary sector

structure of the economic:-

primary sector	secondary sector	Tertiary sector
Agriculture Animal husbandry forests fisheries mining	1) Small scale and cottage industries 2) Large scale industries	* power * Transport and communication * Internal and International * Banking and

NITI Aayog:-

The NITI Aayog was formed on January 1, 2015. In sanskrit the word NITI means morality, behaviour, guidance. But in the present context it means policy and the NITI stands for National Institution for Indian. It is the country's premier policy.

National Development Council (NDC):-

National Development council (NDC) is an executive body established by the Govt of India in August 6, 1952, which is neither a constitutional nor a statutory body. It is the apex body for decision making on development matters.

Economic Reforms:-

Economic reforms refer to the fundament changes that were launched in 1991 with the plan of liberalising the economic

the Narasimha Rao govt in 1991 started th economic reforms in order to rebuild inter and external faith in the indian economy.

g) fiscal polisy:-

fiscal polisy helps to boost econo growth in a preriod of recession. fiscal pol is the way by which a govt adjusts its taxa and spending rates so as to monitor and in nation's macroeconomic conditions. It is used conjunction with monetary policy.

(iii)

A) Liberatisetion — Remoral is unnecesary controlsend restriction on busine

B) legal enviroment — respmsibility cutoues caul trations rules

c) privatisation — extent and nature or govt intervation in business

d) social enviroment — greater role to the privata sector in the nation building proces.

(j) (b) false

(e) (d) continuous

(f) (d) All of the above

end of License of

Signature of the students

Siddu hanan
S. Dilshad
M. Lakshmidevi
T. Hariprasad
K. Manodari
P. Ramanaiah
M. Uday kumar

Lecturer in Commerce
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GOVT. DEGREE COLLEGE

RAYACHOTY

ANNAMAYYA (DT)

2021-2022

ASSIGNMENT FILE

Student name ..... B. Ramanjaneyulu .....

Class ..... Accounts .....

Group ..... B.Com (CBA) .....

Subject name ..... Accounts .....

2) Ubiquity :- e-business is just about availability everywhere the market

Rayachoty.

MID EXAMINATIONS

1) Characteristics of E-Bussiness.

A) e-business (or) online business means business transations that take place online, with the help of the internet. The term e-business can be come into existance in the year 1996. e-business is an observation for electronic business. So the buyer can be store into the online perpose.

online. So the buyer and the seller can be don't meet personaly.

e-business in to day's world, we are exposed to various forms of e-business since its emergence, of the e-business can be meet at personaly. online business can be use only on internet perpose. it has grown by leaps and bounds. while that remains it may be an way soon plays in the current globe economy.

fatures:-

1) effectives of efficiency:- electronic business can increase the efficiency and effectiveness of public relation programmes, broad cast, press releases, financial updates and other coroplate communications.

2) ubiquity:- e-business is ubiquitous, meaning that it is avaidable just about everywhere all times. it libraries the market

Consumer desktop.

3) Global Reach: ebusiness technology permits commercial transactions to cross cultural and national boundaries far more conveniently and effectively as compared to traditional commerce. As a result, the potential market size for e-business merchants is thought to equal the size of world's online population.

4) strong relations with Customer.

5) universal standards.

6) Expedites and streamlines reporting.

7) Interactivity.

Part-II

a) E-procurement:

Purchasing & procurement of goods and services through electronic methods, such as internet. eg. Procurement web site allow qualified and registered user to bow for buying (or) selling may specify price (or) bid prices. The ultimate goal of e-procurement / purchasing is Paperless trend towards computer management.

Signature of the students

1. S. shaiksha vali
2. K. [illegible]
3. A. Bhagyamma
4. S. Shireen
5. S. Shatiya Anjum
6. S. Noor Mohammad.
7. L. Mohammed lal khan
8. P. Lakshmi Narayana
9. S. Jameel Basha
10. S. Gaffar
11. S. Ashraf
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GOVT. DEGREE COLLEGE

RAYACHOTY

ANNAMAYYA (DT)

2021 – 2022

ASSIGNMENT FILE

Student name ..... S. Shiveen .....

Class ..... B.Com (C/A) Accounts .....

Group .... B.Com (C/A) .....

Subject name ..... Online business .....

and values as well as long term a the goals

G.D.C Rayachoti

Name :- Shaik . Shoreen

Class :- B.com 2nd year

3rd Sem

Time :- 1 hour

Marks :- 20 Marks

8)

A) Online business strategy :-

An E-business Strategy is the set plans and objects by online business which applications of internal and external electronically mediated communication contribute to the corporate strategyc planning comprises a district class of decisions and objectives, and its has to be called online business strategy.

3)

A) Strategic planning is process documentest of established and the depreciation of bothe we are making were the problems to the records to your mission and values as well as longterm a the goals you will use to reach him.

2)
4) E-business or online business means business transactions that take place online with the help of the internet. The term e-business came into existence in the year 1996. The seller don't meet personally.

In today's world, we are exposed to various forms of e-business. Since its emergence, it has grown by leaps and bounds.

Characteristics :-

1) Effectiveness and Efficiency
2) Ubiquity
3) Global Reach
4) Strong relation with customer

→

Signature of the students:-

1. L. Mohammed lallchan
2. K. Habeeb Bakash..
3. S. Noor mohammad.
4. S. Jamal Basha
5. S. Sheiksha vali
6. P. Lakshminarayana
7. S. Shafiya. Anjum
8. A. Bhagyamma
9. S. Shigeen
10. B. Ramayaneyulu
11. Imran Ali

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RAYACHOTY

ANNAMAYYA (DT)

2021-2022

ASSIGNMENT FILE

Student name ..... S. shaiksha vali .....

Class ..... 2nd year .....

Group ..... B.com (C.A) .....

Subject name ..... Advance Accounting .....

S. Shaikshavali
2nd B.com (C.A)
Govt Degree college

PART - A

2. Advantages of E-Business / online Business:-

There are actualy ennumerated advantages of E-Business the most obvious one being the case of doing Business. Some of the major advantages of the E-Business are as follows:-

1) Easy to set up:-

It is easy to set up with a device, software and with the service of net internet connection.

2) cheaper than traditional Business:-

It is cheaper than traditional Business even if is setting in the home we can purchase.

3) No Geographical boundaries:-

There is no Geographical boundaries to sell and purchase the goods from any other countries.

4) Government Subtitilies:-

Online Business get the ~~government~~ benefits from the government as the government is being to promote the digitalization.

5) Flexible business hours:-

Since internet is available. E-business break down the home and the time barries that location based business encounter.

As long as some one as has an Internet connection.

10. Supply chain management (SCM) :-

Supply chain is a network of facilities and dri distribution options that perform the functions of procurement of materials, transformation of these materials into intermediate and fi finished products and distribution of these fin SCM deals with the planning and excoation issues involved in managing a supply chain.

It has three type.

1. supply side
2) manufacting side.
3) distribution side

8. online business strategy :-

An e-business strategy is the set of plans and objectivities by which application of internal and external eletronically mediated communications contribute to the corporate Stategy.

Stractegic planning comprises a distict class of decisions and objectives and has to be positioned next to next to tedtial planning and operations planning.

4. Electronic business :-

Electronic business any kind of business or Commericial transactions that includes thing information accro across for the would and the internet. commerce contributes the exchange of production and Servilles between process.

It is the business transactions do with the online process. with the service connection of internet.

Signature of the students

1. S. Jameel Basha
2. S. Shaikshavali
3. K. Habeeb Baksh...
4. S. Noor mohammad
5. L. Mohammed lalkhan
6. S. Shafiya Anjum
7. A. Bhogyamma.

Lecturer in Commerce
Degree College

GOVERNMENT DEGREE COLLEGE RAYACHOTY.

(Affiliated to Y.V. University, YSR.KADAPA)

ANNAMAYYA (Dist) 516269 (AP)

2022-23

ASSIGNMENT RECORD

Name of Students D. Sireesha

Class IV Sem

Group B.Com CA

Subject Name Income TAX

Name of the Topic Agricultural Income

① what are the ten Exempted Incomes u/s 10?

Ans
* Agricultural income - fully Exempted u/s 10 (1)
* Share of income from HUF - fully Exempted u/s 10 (2)
* perquisites and allowances given by govt to its Employees posted abroad - fully Exempted u/s 10 (7)
* Gratuity - fully Exempted u/s 10 (10)
* Payment received out of statutory provident fund - fully Exempted u/s 10 (11)
* Educational scholarships - fully Exempted u/s 10 (16)
* Allowances received by MP/MLA/MLC - fully exempted u/s 10 (17)
* Any award instituted or by state or Central government u/s 10 (17A)
* Any amount has subsidiary from teeaboard u/s-10 (30)
* Income by way of divident from indian Company fully Exemted u/s 10 (34)
* Income of seduled tribe members Exented has for condition given Sec 10 (26)

2) Explain about the agriculture income?

Ans

Agriculture income is fully Exemted U/s 10(1) to 10U/s 42(1) has a result agricutral income does not form part of total income agriculture income is Exempted because under our Constitution central government has no right to levy tax on a state subject.

Type of agricutural income:-

* Rent on revenue derived from land:-

Income received from land situated in india in the form of rent it may be in cast or in kind it is Essencial that land must be used for agricutural perposes.

* Cultivation of land:-

The land should be used for agricul preposes any income derived by owner of agricul land by cultivating it is agricultural income it inculdes plantations, floughing, irrigating etc.,

* Performances of any process :-

The process employeed inclurig of copy curing of tubaco, cotton etc, ore taken has agricultural income.

* Income from sale of production :-

Income derived by owner from the sale of produce arrigied by his by agricultural income agricultural produces may be showed after proforming the storage the income remaining agricultural income

* Income from agricultural hause property :-

A) House property must be situated in the near of agricultural land.

B) Land shauld be used for agricultural proposes.

C) The hause is situated in any area beyond a maximum distance of 8 km from the local limites of any municipality and city.

D) it is with in munipal limites but the population of town in below 10 thousand it is created has been outside municipal limits.

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GOVERNMENT DEGREE COLLEGE RAYACHOTY.

(Affiliated to Y.V. University, YSR.KADAPA)

ANNAMAYYA (Dist) 516269 (AP)

2023-24

ASSIGNMENT RECORD

Name of Students M. Teja

Class Business Economics

Group B. Com CA

Subject Name Business Economics

Name of the Topic Nature of the Economics

M. Teja Rayachoty.
Degree 1st B.com [CA]

1) Exceptions (or) limitations to the Law of Demand
2) Explain different types of price Elasticity of Demand
3) ~~Explain Scope of~~
3) What are the Nature and Scope of demand.

Answers

2A) 1) Geffen paradox :-

When the It is a British Robert Geffen paradox is to purchased on who works are purchased more bread it is raising in price is Increase. on demand will be decreased in Geffen paradox This is against the Elascticity of demand.

2) prestiage goods :-

When to costly the purchased on A Face is Air, Condition. er and, water, Jewellers It is are prestiage goods on some levels in sometimes up to downwards in these prestiage goods This is called as Elasticity of demand.

3) Speculation :-

When the prices are. Sometimes are raising in price of

of demand on. when it is it does not change in speculation of demand It is called as This is price elascitity of demand.

4) price in change Trade cycle :-

When the price changes Trade cycle of prices are Increased on Trade cycle. It is Introduced on Geffen paradox. price change Trade Cycle in prices of demand.

It is a goods in Increased and are prices will be Increased are another one is goods will be demand also will be decrease It is called as This is price Elascitty of demand.

4A) Law of demand :-

The Law of demand when that is pricies raises it is Increase in demand. when it is demand is decrease. The Law of demand it Relation ship between the prices are Increase by demand will be decrease.

Hence to the law of demand it is percentage change in prices are demand will be decrease. and percentage prices are will be decrease. the law of demand prices will be increase it is also will be a prices will be decrease. The Relation ship between the law of demand it is called as law of demand.

proporcinate of demand :-

The Relationship between the proporcinate of demand when pricies will be percentage in change in demand and pricies are change in demand

$$EP = \frac{\text{percentage change in demand}}{\text{pricies will be increase.}}$$

$$EP = \frac{\Delta Q}{\Delta Q} \cdot \frac{\Delta QP}{\Delta QQ}$$

3A) Nature and scope of demand :-

The Nature and scope of demand will be pricies are Increa. so on Demand will be falls down in decreased in Nature and scope of demand.

Introduction :-

The definition of Nature and scope of demand It is a when goods are to purchased in pricies are to be Increase. the goods are to be pricies is decrease.

1. micro in Nature :-

Business Economics is micro in nature because it studies about a business firm. Its knowledge enables business men to take decisions in demand analysis, Cost analysis and in fixing Prices.

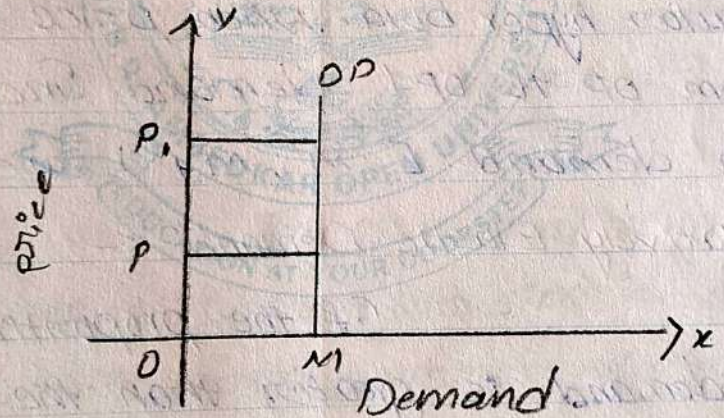
2) practical in Approach :-

It is a practical in its approac It is the application of economic analysis to decision making

In the above diagram, demand is shown is on x-axis and price is shown an y-axis DD is the demand curve. It is parallel to x-axis Here demand increases from OM to OM, even though the price remains constant at OP.

2) Perfectly Inelastic Demand :-

If the change in price does not bring any change in demand it is called perfectly Inelastic demand. In the case of perfectly Inelastic demand, demand remains constant whether the price rises (or) falls. Its numerical value is zero. This is shown in the following diagram

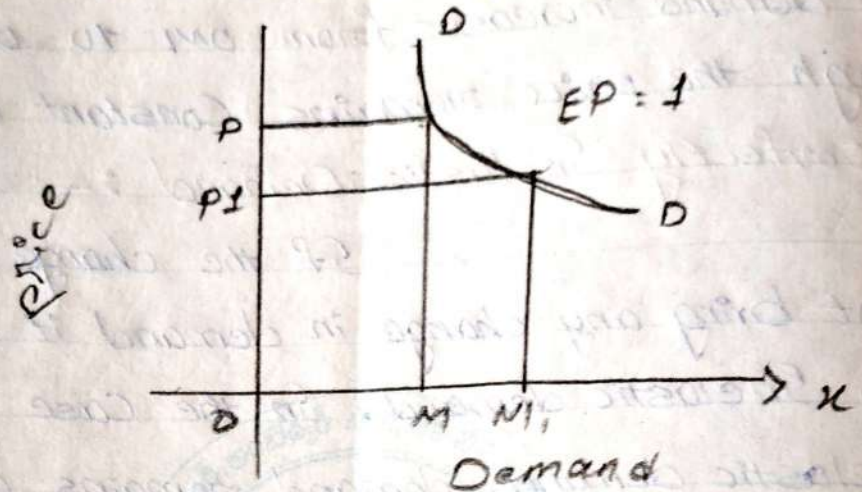


In the above diagram DD is the Demand Curves. It is parallel to y-axis. Here demand remains constant at OM even though the price increases from OP to OP,

3) Unitary Elastic Demand :-

If the proportionate change in price and proportionate change in demand are

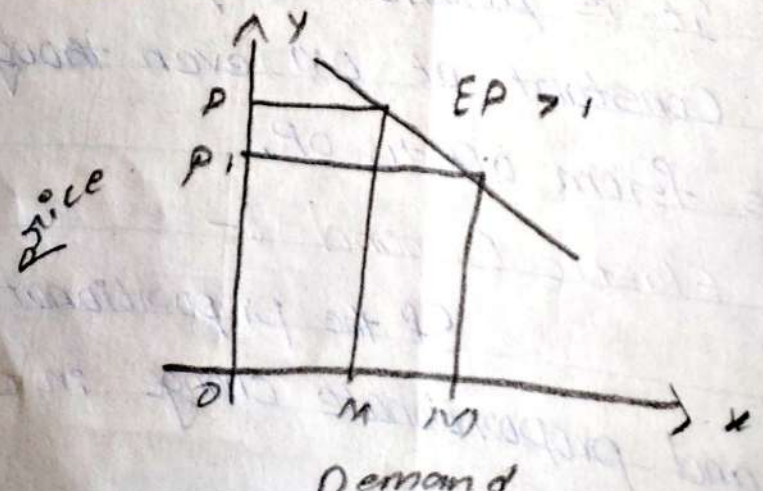
equal, it is called unitary elastic demand. Its numerical value is equal to 1. This is shown in the following diagram.



In the above diagram, DD is the demand curve. It is the shape of Rectangular hyperbola. When price decreases from OP to OP1 demand increases change in demand [M , M1) are equal.

4) Relatively Elastic Demand :-

If the proportionate in price in demand is greater than the proportionate change in price, it is called relatively Elastic demand.



3) Normative Science :-

It is normative study. It prescribes standards for policy making. In economic theory we try to explain economic behaviour. But in business economics we try to prescribe policies to the business manager.

4) A Scientific Art :-

Business firm employ Scientific methods in Analyzing business problems. Business Economics may also be called on art because it helps management in the efficient utilization of scarce resources

5) Study of macro Environment :-

The macro Environment relating to National Income, Business (or) Trade cycles. Economic policies of the govt etc. are Important to managers. Business firms operate on the basis of forecasts of National Income, price levels, Inflation rates etc.

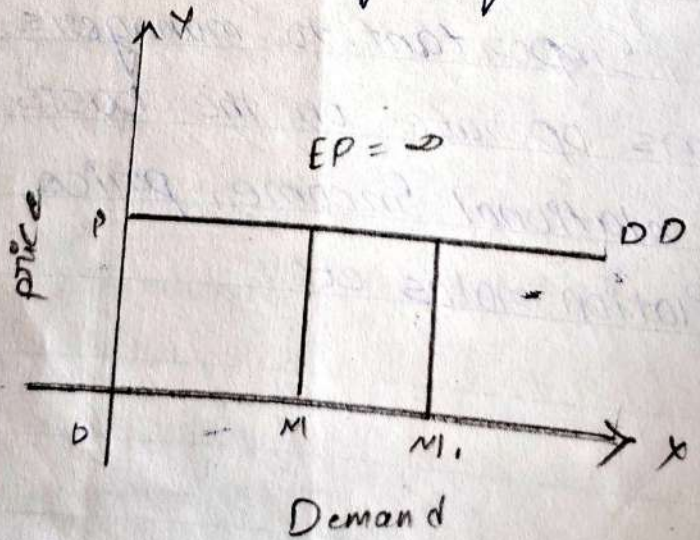
21) Types of price Elasticity of Demand :-

price Elasticity of demand is classified into 5 types. They are

1) perfectly Elastic Demand [EP = ∞]
2) perfectly Inelastic Demand [EP = 0]
3) Unitary Elastic Demand [EP = 1]
4) Relatively Elastic Demand [EP > 1]
5) Relatively InElastic Demand. [EP < 1]

1) perfectly Elastic Demand :-

If an infinite quantity is purchased at the same price it is called perfectly elastic demand. In the case of perfectly Elastic changes without any change in price. Its numerical value is infinity. This is shown in the following diagram.



2023-24

ASSIGNMENT RECORD

Name of Students K. Ramu

Class II years

Group B. Com CA

Subject Name Business Economics

Name of the Topic Scope of Business Economics

Date: 20/4/23

Assignment

Business Economics

II sem – B.Com

Topic : Scope of Business Economics

presented
by
K. Raju

EXAM

Name :- K. RAJU class :- 1st year (CA) B.Com(G)

Business economics :- Business Economics is known as managerial Economics. It is nothing but the application of economic theories and principles to Business managers. It deals with decision making at the level of a business firm. Business managers use economic theories to make decisions. The primary function of a business economics helps the managers to perform these functions. Economic concepts and theories like demand, costs, pricing, production etc. are applied in decision making. So Business economics is a Applied Economics.

Definition :-

1. According to Mc. NAIR and MERIAM, "Business Economics consists of the use of economic mode of thought to analyze business problems".

2. According to SPENCER and SIEGELMAN "Business Economics is the integration of economics theory with business practice for the purpose of facilitating decision making and forward planning by management.

Scope of Business Economics :-

1. Demand Analysis and forecasting :-
A business firm converts raw material into finished product. These products to be sold in the market. Hance the fi has to estimate the demand for the pr A forecast of demand is essential t determine the volume of out put. Se demand analysis and forecasting plays important role in business economies.

2. Cost Analysis :- Cost estimates are esse for decision making managers must know the causes for variations in co There is an element of uncertainty because all causes are not known advance. cost control is essential f pricing and profit planning.

3. Pricing Policy :- The prices of the produ that the firm sells bring income to firm. The sucess of the firm depe on correct price fixing pricing poli cover price dedermin on correct price fixing policies cover prices determin in various markets.

4. Profit management:- The main aim of a firm is to make maximum profits. Profits depend upon the difference between revenue and costs. Under profit management, we study the nature of profit, profit policies and profit techniques like Break-Even analysis etc.

5. Capital management:- Capital management refers to the planning and control of capital expenditure. The main topic under capital management are cost of capital, rate of return and selection of project.

Nature of Business Economics:-

1. Micro in nature:- Business Economics is micro in nature because it studies about a business firm. Its knowledge enables business men to take decisions in demand analysis, cost analysis and in fixing prices.

$$EP = \frac{\text{percentage change in the quantity demanded}}{\text{percentage change in price.}}$$

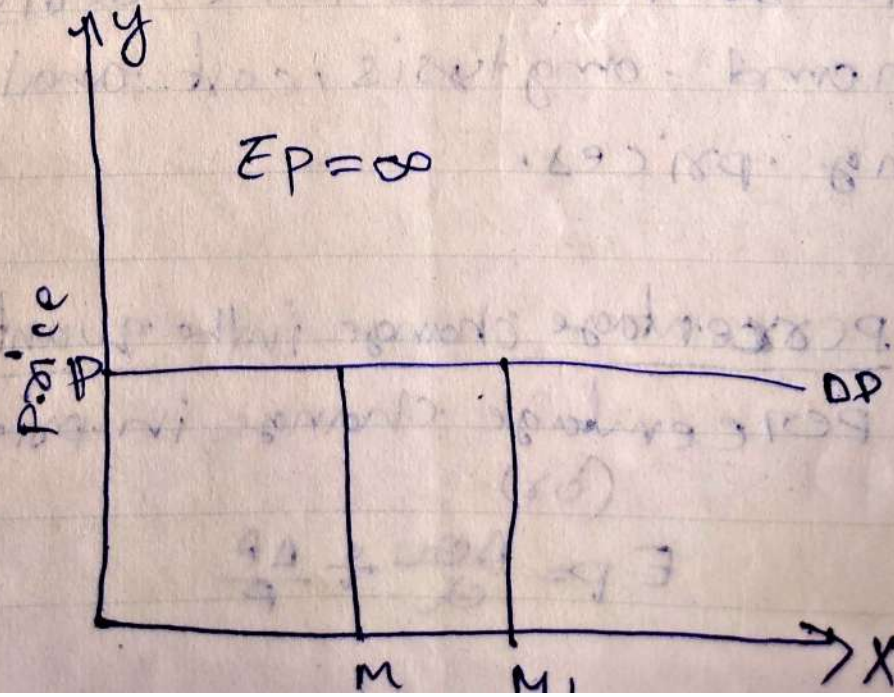
(or)

$$EP = \frac{\Delta Q}{Q} \div \frac{\Delta P}{P}$$

Types of price Elasticity of demand :- price Elasticity of demand is classified into 5 types. They are.

1) perfectly elastic demand (Ep = ∞)
2) perfectly Inelastic demand (Ep = 0)
3) unitary elastic demand (Ep = 1)
4) Relatively elastic demand (Ep > 1)
5) Relatively Inelastic demand (Ep < 1)

1. perfectly Elastic Demand :- It an individual is purchased at the same price it is called perfectly elastic demand. In the case of perfectly Elastic demand changes without any change in price demand, demand changes without any change in price. Its numerical value is infinity. This is shown in the following diagram.



when price falls demand also falls. This is against the law of demand.

4. Price changes in Trade cycles: The law will not apply when prices changes in trade cycle. In times of economic depression: Prices are very low but demand is also very low because the incomes of the people are very low. In low because the prosperity prices are high but demand is also very high because the incomes of the people are very high.

The law of demand explains that when price rises demand falls. But it does not explain the rate of change in demand as a result of a change in price. Hence to explain the relationship between the rate of change in price and the rate of change in demand; the relationship between the percentage change

demand is called Elasticity of demand. The Elasticity of demand is classified into 3 types. They are

1. Price Elasticity of demand
2. Income Elasticity of demand
3. Gross Elasticity of demand

(1) Price Elasticity of demand :- The relationship between proportionate change in price and proportionate change in demand is called price Elasticity of demand. It can be measured with the help of the following formula.

K. Raju
B.Com (CA)
Sub: Business Economics

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Rayachoty - 516 269

ASSIGNMENT RECORD

Name of Students S. Amarnath

Class II - Sem

Group B.Com CA

Subject Name Business Economics

Name of the Topic Nature of Business Economics

Date: 20/4/2023

Assignment

II Sem - B.Com

Sub: Business Economics

Topic Nature of Business Economics

presented by

S. Amanulla

SEcond SEm B.Com Ist Year

Introduction :- Business economics was formerly known as Business economics In simple words business economic Is the Discipline which help a business manager In Decision. business economics formerly the larger and economics In the economics.

mc Nair and merim :- Business economics consists of the use of economic modes of thaght to analyze business situations.

Joel Deal :- Business economics was formerly economically the Joel Deal was a business economics manager In Decisions on the economics.

1. macro Economic In nature :-

use of managerial economics of business and macro economics and nature macro means big In economics was formerly known as this economics was a mainly natures and then macro economically and business.

2. macro Economic factor :- macro economic factors and it's mainly Involved Into the business and these economically this was a scope and nature of business Purpose In macro economics factors.

3. Combination of management :- Business economics was combination management system and also economics was mostly managerial are these combination of management of business nature and scopes of business management

4. Normative :- Normally that are business usually this economics normative and that are mainly Invalued Into the non-business economics are also called as this business and also normative and this economics was scopes.

5. Perscriptive :- mainly economics was perscriptive and then that are managerial resources and then that have economics and its business any reasons and then perscriptive of business of economics Into the business and nature are also called as mainly that have Praided Into the perscriptive of them.

6. Descriptive :- That are mainly business economics are descriptive and perscriptive are also can be maintained and economics as a Important things and then descriptive are business economics Include they have descriptive

7. Pragma
was a
resources
most

8. Concep
matical
Importa
economi
business

9. Goal
That ar
Goal
orientat
business
Problems

10. Applic
economic
business

7. Pragmatic :- Generally they are business economics are pragmatically contains and then it's implemen was a economically periods and during they have and resources and a mainly pragmatic business and it's most important things in economics.

8. Conceptual and matrical :- Conceptual and matrical and economist in they have its matrical business economics was a knowing has a its important things into the conceptual and matrical economics include they have mainly involve into the business and then matricals on then.

9. Goal oriented and problem solving :-

They are many kinds of problems and solving into the goal oriented and business problems solves in they have orientally must be problem and then its simply business oriented problems and solving and non-solving problems into they have entrance of business.

10. Application oriented :- Application oriented and then its business economics and non-business economics application oriented system into that are called business and economics and they applications.

Q4. Introduction:- The Law of Demand must be stated as other things being constant the higher the Price of the Commodity The Lower is the Quantity Demanded of the Demand of the Commodity and Law of Demand In the Demand

Determ
1. Prestige Goods
2. Giffen's Paradox
3. Speculation
4. Inflation
5. Depression
6. Demonstration effect
7. Ignorance of the Consumer.

1. Prestige Goods:- The Goods and buying and selling the prestige Goods and curr Demand are also Goods and buyers are also these Goods curr Solutions curr Goods and they have maintd Induced Into the Goods and Demanded.

2. Giffen's Paradox:- Giffen's was a rabbat scientist In 19th Century he's a Philosopher In Giffen's Paradox In the Demand In their hav Paradox and Giffen's was a Philosopher and rabbat and Giffen's Paradox and also Paradox

3. Speculation :- They are mainly Demanded and Speculation on Demanded and Specially they are mainly Speculated by the Demanded any Persons and non Demanded has a Execution of Demand and then.

4. Inflation :- Inflation and Provided into they have mainly quantity and Demanded are also called as Inflation as a Commodity and then its supply and things and higher the Price any lower is the quantity demanded include the Inflation.

5. Depression :- Depression and Demanded Provided and quantity and Resources and Depression are also it's mainly Providing and non Provided Depression are also Quantity demanded any Demand Persons.

6. Demonstration effect :- Demonstration of effectiveness and it's mainly Invokes Demanded and as Demonstration effects are Generally basis this of effects and then Demanded of Stated.

7. Ignorance of the Consumer :- The Ignorance of they Consumer into the Demand Commodity and Demanded constants of the Ignorance of the Consumer and Demanded quantity.

STUDENTS ASSIGNMENTS Departments of Science & Commerce 2021-22

GOVT. DEGREE COLLEGE: RAYACHOTY
DEPARTMENT OF ZOOLOGY

ASSIGNMENTS - ACADEMIC YEAR: 2021 –2022

Name of the Lecturer: Dr.M.Muniya Naik

S.No.	Date	Class	Topic
1	08-4-22	III BZC	Golgi Complex.
2	17-2-22	III BZC	Nucleus.
3	08-4-22	III BZC	Ultra structure of Animal cell.
4	19-2-22	III BZC	Endoplasmic reticulum.
5	08-4-22	III BZC	Gene interaction
6	20-3-22	III BZC	Polygenes
7	12-04-22	III BZC	Chromosomes.
8	17-3-22	III BZC	Multiple alleles.
9	8-4-22	III BZC	Mutation theory.
10	8-4-22	III BZC	Replication of Bacteriophage
11	2-2-22	III BZC	Sex determination.
12	8-4-22	III BZC	Lethal gene.
13	5-3-22	III BZC	Ribosomes.
14	8-4-22	III BZC	co-dominance - incomplete dominance.
15	3-3-22	III BZC	Mycoplasma.
16	3-2-22	III BZC	prokaryotic and Eukaryotic cell.
17	8-4-22	III BZC	Viruses.
18	8-4-22	III BZC	Viroid.
19	20-3-22	III BZC	Lysosomes.
20			
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COMMISSIONERATE OF COLLEGIATE EDUCATION

GOVERNMENT OF ANDHRA PRADESH

ZOOLOGY

(UG courses)

GOVERNMENT DEGREE COLLEGE

RAYACHOTY, ANNAMAYYA (Dist.)

DEPARTMENT OF ZOOLOGY

Name of the Lecturer : Dr. M. MUNIYA NAIK

M.Sc. M.Phil., Ph.D., CSIR-NET.,

Name of the Department : ZOOLOGY

Academic Year : 2021-22

STUDENT ASSIGNMENTS REGISTER

intercross: AaBb × AaBb
mulattos mulattos

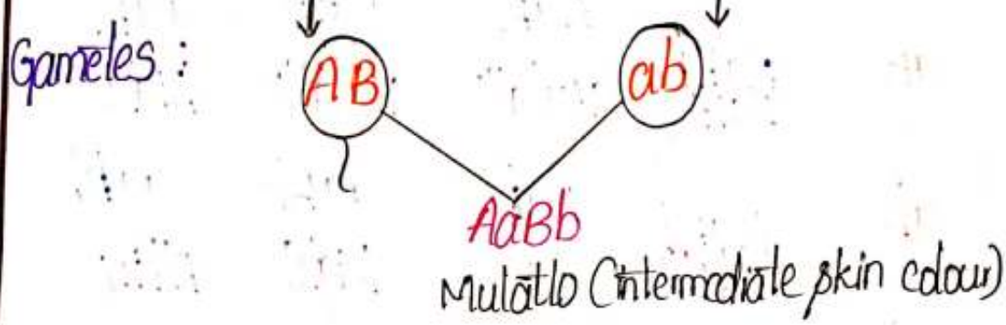
♀ \ ♂	AB	Ab	aB	ab
AB	AABB Negro	AABb Dark	AaBB Dark	AaBb Mulatto
Ab	AABb Dark	AAbb Mulatto	AaBb Mulatto	Aabb Light
aB	AaBB Dark	AaBb Mulatto	aaBB Mulatto	aaBb Light
ab	AaBb mulatto	Aabb Light	aaBb Light	aabb Albino

F2: 1/16 - 4/16 - 6/16 - 4/16 - 1/16
Negro Mulatto Negro Mulattoes Light Albino

posses the genotype AaBb. The Mulattos contain only two dominant genes and they produce only 50% pigments when compared to the negro who has 4 dominant genes. A mating of two such mutlattoes produces a wide variety of skin colour in the offspring, ranging from skins as dark as the original negro parent to as white as the the original albino parent. The result of this cross has been shown below:

parents: Negro X Albino

AA BB aa bb



Mulatto (intermediate skin colour)

Eg: Skin colour in man:

For example human skin colour varies in the population in gradation. It is called a quantitatives character. In man, skin colour is depend up on the prezence or absence of pigment melanin. Black skin is due to the prezence of melanin white skin is due to the absence of melanin.

Skin pigmentation in humans is controlled by atleast two or more inherited genes. In 1913 Development observed that black colour in Negro is controlled by the action of two types of dominant genes. They are A and the white skin is due to the prezence of recessive gene a and b. ∴ a pure negro has a genotype AABB and the pure white has aabb.

Marriage b/w black negroes & white albinos, race results in F1 offspring are intermediate b/w both parents. These are called 'mutttons'. Mulattos.

polygenes

The inheritance of two or more non-allelic gene controlling a single quantitive character in a cumulative fashion is called multiple gene inheritance. These genes are called pollygenes. The inheritance of polygene is called quantitative inheritance (or) polygenic inheritance.

Characteristic of polygene:

* polygenes for quantitative traits have following characters.
* Each contributing allele in the series of polygenes produces an equal effect.
* effect of each contributing alleles are cumulative (or) additive
* There is no epistasis among genes at different loci
* There is no linkage involved.
* Skin colour, height, weight in man and intelligence are the examples of polygenic inheritance.

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GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, KADAPA DISTRICT. (A.P.)

DEPARTMENT OF ZOOLOGY

(UG courses)

Assignment on

polygenes

Topic Submitted
BY

Name of the Student : P. VaNItha

Class : Degree 2nd yr

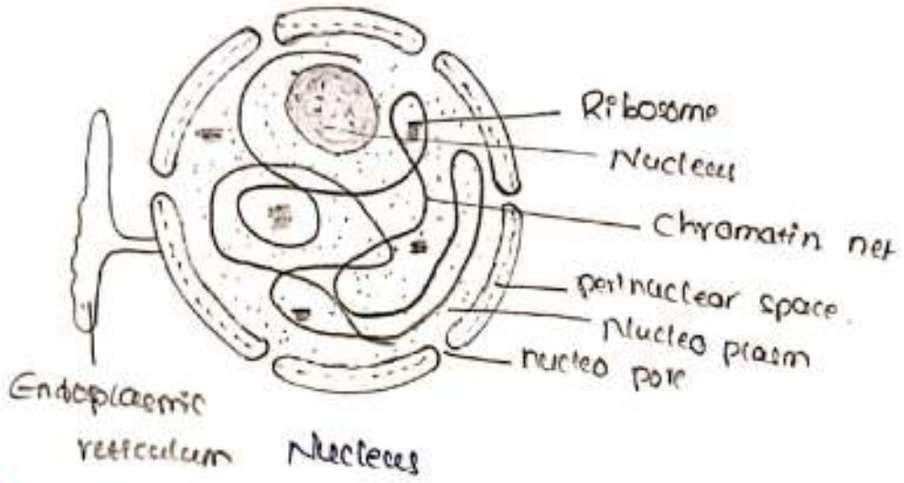
Date : 20-3-22

Academic Year: 2021- 2022

and inner layer.

2. Nuclear sap | Nucleoplasm :- The nucleus is filled with transport, semi-solid, acidophilic substance known as the nuclear sap or nucleoplasm or karyolymph.

3. Chromatin Reticulum :- The nucleoplasm contains many treated like structures called chromosomes, which form a network called the chromatin reticulum.



Function of Nucleus :-

* Nucleus contain the master plan for protein synthesis.
* Nucleous contains & associated with the formation of ribosomes.
* The synthesis of ribosomal RNA takes place in the nucleus.
* The nucleus regulates the cell cycle.

nuclei are known as polynuclear cells.

Eg:- Opalina.

The shape of the nucleus is related with the shape of the cell. Generally the nucleus is spherical.

The size of the nucleus is not constant. Generally nucleus occupies about 10 percent of the total cell volume. Nuclei vary in size from about 3 μm to 25 μm in diameter depending on cell type.

$$\text{Nucleocytoplasmic index} = \frac{\text{volume of the nucleus}}{\text{volume of the cytoplasm - volume of nucleus}}$$

$$NP = \frac{Vn}{Vc - Vn}$$

$\therefore Vn$ = Volume of the nucleus

Vc = volume of the cytoplasm.

Structure :- The nucleus is composed of following four parts. They are :

(1) Nuclear membrane

(2) Nuclear cap / Nucleoplasm

(3) Chromation reticulum

(4) Nucleolus.

Nuclear envelop :- The nucleus is separated from the cytoplasm by a semipermeable membrane called nuclear membrane. Nuclear membrane is double layered namely outer layer

NUCLEUS

Nucleus is the most important part of the cell. It controls all the cellular activities. So it is refferred to as the controlling centre of the cell. Nucleus was first discovered by Robert Brown. The study of nucleus of nucleus is called karyology. The nucleus is present in all eukaryotic cells. However it is absent from RBC of man and some lens cells of eye.

Generally, a cell contains only one nucleus. But some times two or more nuclei are present. Based on the the number of nucleus, the cells are classified onto the following types.

1. Mononucleate Cells :-

The cells which contain single nucleus. Such cells are called mononucleate cells. Eg :- Amoeba, a typical cell.

2. Binucleate cells :- The cells which contain two nuclei are known as binucleate cells.

Eg : paramecium and cells of cartilage and liver.

3. polynucleate cells :- The cells which contain many

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GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, KADAPA DISTRICT. (A.P.)

DEPARTMENT OF ZOOLOGY

(UG courses)

Assignment on

NUCLEUS

Topic Submitted
BY

Name of the Student : S. Nageswari

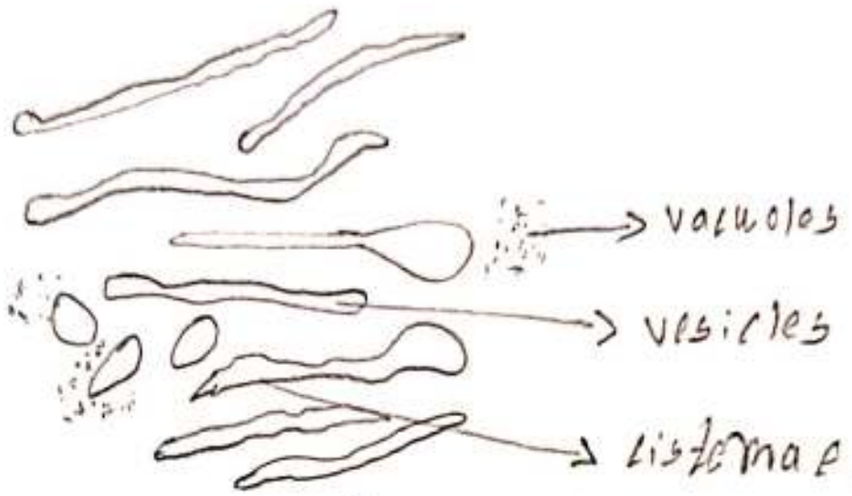
Class : 2nd year (BZC)

Date : _____

Academic Year: 2021- 2022

of the cisternae They develop either by budding or by constriction of the ends of the cisternae

The membrane of the golgi body is an used membrane and innilipid layer and two outer protein layers.



Golgi complex

functions of Golgi complex :-

1. The across soma of sperm is developed from golgi complex spermatogenesis.
2. golgi complex is involved in cell wall formation in plant cells.
3. Golgi complex involves in the formation of plasma membrane in animal cell.

of about 20-30nm. They are arranged in parallel bundles one above the other. In a Golgi complex the number of cisternae various from 3-7 in a animal cells and 10-20 in plant cells. the cisternae are slightly curved.

Hence the cisternae have convex and concave surface. cisternae has two sides namely forming face and maturing face.

the convex surface is the forming face Here new cisternae are added from endoplasmic reticulum.

② vacuoles :-

These are large spherical round sacs found at edges of cisternae these are formed by the expansion of the cisternae in which the two membranes are widely separated the cavity is about 60-200 nm.

③ vesicles :-

These are small drop like structure of about 40A in diameter. These are closely associated with the periphery

GOLGI COMPLEX

Golgi complex was discovered by camillo golgi in the nerve cells of barn owl. The golgi complex has been variously named as golgi golgi apparatus lipoeudrion dicoty some by various workers. Generally the term dictyosome is used for the golgi complex of lower invertebrate and plant cells.

Golgi complex is found in our eukaryotic cells exept RBC and sperms of mammaous and absent in prokaryotic cells. The shape of the golgi complex varies from one cell to another. They may be in the from of rods, granules vesicles or network - even in the same cell. there are variations with functional stages.

structure :-

under the electron microscope, the golgi apparatus cheppers to consist of three components they are : 1 cisternae 2 -vacuoles 3. vesicles.

1. cisternae :- these are flattended fluid filled sacs separated by intercisternal space

①

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, KADAPA DISTRICT. (A.P.)

DEPARTMENT OF ZOOLOGY

(UG courses)

Assignment on

GOLGI COMPLEX.

Topic Submitted BY

Name of the Student : B. obulesu

Class : BSc. BZC IInd year III SEM

Date : 08-04-2022

Academic Year: 2021- 2022

the support and development of life. In addition to nitrogen gas and oxygen also contains small quantities of argon (0.9%) and carbon dioxide [0.03%] and traces of inert gas ozone sulphurdioxide Ammonia Carbon monoxide and a varying percentage of water vapour.

4. Biosphere :- In addition to the three constituents of the environment the biosphere namely the living organisms around man play an important role in influencing him the plants play an important role in maintaining the oxygen and Carbondioxide levels of the atmosphere. In other words they exert a profound influence on life.

Biosphere also comprises of the organisms that are essential as well as harmful to humans. These organisms include plants species such as algae and fungi and bacteria viruses and microbes

1) The lithosphere :- Ay. - the name indicates the rocks that form the earth Constitute this part of environment However the top layers of the earth mainly from this part of environment o/. lithosphere these top layers consists of several metalic silicates and other minerals and humus which is the vital organic part that is formed from the decayed plants and animals

2) The hydrosphere :- The development of human civilization and the recognition of the importance of water almost began at the same time Water is as essential as food for the survival of living beings About 97% of the water available is in the form of sea only 1% of water is good for human consumption

3. The atmosphere :- The atmosphere is an important part of man's environment it Contains mostly of 2 elements Nitrogen and oxygen [78 & 21 %] respectively these two elements play a vital role for

1. What is environment ? And explain the segments of environment

Ans: The environment of man comprises of the following segments

a) Lithosphere:- This is the upper layer of the earth and the minerals and rocks that forms from this layer

b) Hydrosphere:- This is the water that is on the earth All sources of water viz the sea the rivers and ground water are parts of the segments

c) Atmosphere:- this is the air around man the gases that form part of the atmosphere and their influence on life are discussed under this heading

d) Biosphere:- The living organisms that form part of man's environment are discussed in this and their inform of man are also envisaged

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Chemistry

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	25-2-22	III - B.Sc	Environment - Segments

Sl. NO	Name of the Student	Signature of the Student
1	G. Praveen Kumar	G. Praveen kumar
2	S. Irfan Basha	S. Irfan Basha
3	S. Akbar Basha	S. Akbar Basha
4	S. Yasar	S. Yasar
5	B. Raghavudu	B. Raghavudu
6	B. Sai Kumar.	B. Sai kumar
7	M. Reddappa Reddy	M. Reddappa Reddy
8	N. Satish Kumar	N. Satish kumar
9	P. Ram Mohan	P. Ram Mohan
10	G. Hajira	G. Hajira
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Signature of the Lecturer

Signature of the Department I/C

GOVT.DEGREE COLLEGE
RAYACHOTY

Department of chemistry

Name of the student : G. praveen kumar

Group : III BZC

Course : BSC

Roll No : 190310633001

Title of the Assignment : Environment - Segements

prevention measures:-

(1) waste water management:-

waste water treatment consists of removing pollutants from waste water through a physical chemical or biological process.

(2) Green agriculture:-

Globally, agriculture accounts for 70% of water resources, so it is essential to have climate friendly crops, efficient irrigation that reduces the need of water. Green agriculture is also crucial to limit the chemicals that enter the water.

(3) storm water management:-

storm water management is the effort to reduce runoff of rain water or melted snow into streets, Lawns and other sites and the improvement of water quality.

(4) Air pollution prevention:-

Air pollution has a direct impact on water contamination as 25% of human induced CO_2 emissions are absorbed by oceans. this pollution causes a rapid acidification of our oceans, and threatens marine life and corals. preventing air pollution is the best way to prevent this from happening.

(4) Marine dumping:

Every day, garbage such as plastic paper, aluminum, food, glass, or rubber are deposited in to the sea. these items take weeks to hundreds of years to decompose, and thus they are a major cause of water pollution.

water pollution effects:

(1) on the environment:

Water pollution truly harms biodiversity and aquatic ecosystems. the toxic chemicals can change the colour of water and increase the amount of minerals also known as eutrophication.

(2) ON human health:

Water pollution has very negative effects on public health. A lot of diseases results from drinking or being in contact with contaminated water, such as diarrhea, cholera, typhoid, or skin infections.

sources of water pollution:-

unsurprisingly, human activity is primarily responsible for water pollution, even if natural phenomenon such as landslides and floods can also contribute to degrade the water quality.

(1) Sewage and wastewater:

Inadequate sewage collection and treatment are sources of water pollution. According to the united Nations, more than 80% of the world wide wastewater goes back in the environment without being treated or reused.

(2) Agriculture:

Agriculture has an impact on water pollution due to the use of chemicals such as fertilizers, pesticides, Fungicides, herbicides or insecticides running off in the water, as well as livestock excrement, manure, and methane (green house effect).

(3) Industries:-

Industries produce a lot of waste containing toxic chemicals and pollutants. A huge amount of the industrial waste is drained in the fresh water which then flows in to canals, rivers and eventually in the sea.

(5) what is water pollution? Explain it's sources, effects and controls?

(A) water pollution can be defined as the contamination of a stream, river, lake, ocean or any other stretch of water, depleting water quality and making it toxic for the environment and humans.

There are two types of water pollution:-

(1) organic pollution due to micro-organisms - bacteria, and viruses - present in the water, generated by excrement, animal and vegetable waste.

(2) chemical pollution generated by the nitrates and phosphates of pesticides human and animal drugs, household products, heavy metals, acids and hydrocarbons used in industries.

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Chemistry

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	7-4-22	III - B.Sc	Water pollution

S.NO	Name of the Student	Signature of the Student
1	G. praveen kumar	G. praveen kumar
2	S. Irfan basha	S. Irfan Basha
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5	B. Raghavulu.	B. Raghavulu
6	B. Sai kumar	B. Sai kumar
7	N. Reddyppa reddy.	N. Reddyppa reddy
8	N. Sateesh kumar	N. Sateesh kumar
9	P. Ramamohan	P. Ram mohar
10	G. Hajira.	G. Hajira
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Signature of the Leeturer

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GOVT.DEGREE COLLEGE
RAYACHOTY

Department of chemistry

Name of the student	:	N. Satish Kumar
Group	:	III - BZC
Course	:	B.Sc
Roll No	:	190310633011
Title of the Assignment	:	Water pollution

This is turn results in a great threat to the very existence of life on earth. All the dereloped countries which widely use the CFC's for air-conditioning by now are aware of the situation and are trying to find out safer substitutes for CFC's.

iii) ozone depletion :-

The ozone layers exists at a hight of 1kilo meters and beyond in the strato sphere segment of the atmosphere. the temperature of the stratosphere is around $-55^{\circ}c$ which reduces upto $-2^{\circ}c$ with the increasing altitude. Even though ozone (O_3) is very unstable in the ordinary temperature it is quite stable at very low temperature of the stratosphere.

Scientists have discovered that in the recent years the increased human activity is over crowding the stratosphere with the oxides of nitrogen from nuclear explosions conducted by scientists at various places.

A new places of species compound which deplates the ozone layer was also found to be rapidly polluting the stratosphere namely the chloroflora carbons.

2) Green house effect:-

A Green house is a glass house created in the open to grow plants in it without exposing them to the external temperature in cold countries.

In recent years with the global increase in the carbon dioxide production with the great industrial development and the increase in the population of the present day world. man is subjecting the earth to unlimited deforestation and is increasingly produce a large excess of carbondioxide by burning the carbonaceous fuels. the carbon dioxide produced forms a protective umbrella like the glass house walls. It lets in the solar radiations on to the earth which warm it up but do not permit the infrared and other longer wave length radiations to escape. consequently the earth gets heated up and remains warm and the temperature of earth rises. this is called the green house effect. In effect the "green house effect" is the progressive "global warming."

$SO_2 + H_2O \longrightarrow H_2SO_3$

$NO + NO_2 + H_2O \longrightarrow 2HNO_3$

These reactions are better catalysed by the particulate matter in the atmosphere such as soot and metal oxides. thus the chief acids responsible for the acid rain are sulphuric and nitric acids.

Besides the sulphuric and nitric acids, acid rains also contains HCl gas form natural and anthropogenic sources. the adverse effects of acid rain are many. pure water from a rainfall has the pH around 6.0 to 7.0 due to the dissolved atmospheric CO_2 and natural gases. However acidi rain exhibits a pH 5.00 or much below depending upon the strength of acid involved in its formation. In agriculture acid rains retards the growth of all plants especially the leguminous ones as it effect the nitrogen fixing bacteria.

4 Explain the following

i) Acid rains

ii) Green house effect

iii) Ozone depleciation.

1) i) Acid rains :-

Acid rain is a result of acidic oxides dissolving in water this is due to several industries releasing acid exhaust gases into the atmosphere the oxides responsible for acid rain are the oxides of carbon, Nitrogen and sulphur

Sources of the acidic oxides - Industries using coal and sulphur releases the oxides of carbon and sulphur in large quantities

$C + O_2 \longrightarrow CO_2$; $S + O_2 \longrightarrow SO_2$

SO_2 gets oxidised to SO_3 in the presence of ozone and other gases

$SO_2 + O_3 \longrightarrow SO_3 + O_2$

These oxides interact with rain water to form acids.

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Chemistry

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	24-3-22	III-B.Sc	Acid Rains, Green house effect.

Sl.NO	Name of the Student	Signature of the Student
1	G. Praveen Kumar	G. Praveen kumar
2	S. Irfan Basha	S. Irfan Basha
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GOVT.DEGREE COLLEGE
RAYACHOTY

Department of chemistry

Name of the student	:	CH. HAJERA
Group	:	3rd B.Z.C
Course	:	B.Sc
Roll No	:	190316633014
Title of the Assignment	:	ACID RAINS & GREEN HOUSE EFFECT.

* NO to plastic bags
* Reduction of forests fires and
* use filters for chimneys
* Avoid using of products with chemicals
* Implement Afforestation

* Most of air pollution comes from energy use and production says John Wake Director of Tec clean air project part of Tec air pollution
* Respiratory and heart problems
* The effect of air pollution are alarming
* Child health problems
* CO on inhalation it passes are alarming lungs into blood stream
* It reacts with heamoglobin (Hb) of RBC forming a stable coordination complex called carboxy hoemoglobin
* If ~~react~~ CO causes difficulty in breathing
* It also causes mental disturbances and irritation of mue membrane
* CO causes dizziness headache cardiac and pulmonary changes

Control :-

* using public transports
* Turn off the lights when not in use
* Recycle and Reuse

like the Sahara the Gobi and Harlamatta are responsible for $PM_{2.5}$ pollution due be the size of the Grains Spread

* Wild fires generate high levels of Pm pollution along with CO and NOX
* Volcanoes release NH_3 and SO_2 during eruptions which can from secondary pm when combined other pollutants in the atmosphere
* Volcanoes release NH_3 and SO_2 during eruption along with CO and ~~NOX~~ in the atmosphere
* Salt from Sea Spray also constitutes as Pm pollution contributing up to 80% of particle levels in coastal areains
* Stationary Sources such as Power plants oil refineries industrial Facilities and factories
* Area Sources, such as agriculture area aries and wood burning fireplaces
* Natural Sources such as wind blown dust wild fires and volcanoes

Effects: Because of air pollution so many effects in nature

3 what is air pollution? Explain its source effects and controls

Ans

Air pollution:-

Air pollution is the contamination of air due to the presence of substances in the atmosphere that are harmful to the health of humans and other living beings or cause damage to the climate or to materials

Sources:

The major sources of air pollution include

* The combustion of coal oil gas and other fuels for the generation of electricity
* Burning gasoline diesel and other fuels for transportation
* Emission from various industrial processes
* Burning wood and other fuels for heating and cooking
* Agricultural burning land clearing and man made fires
* Natural sources including volcanoes forest fires and dust storms
* Sand and dust storms from deserts

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Chemistry

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	11-3-22	III - B.Sc	Air pollution

Sl. No	Name of the Student	Signature of the Student
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2	S. Irfan Basha	S. Irfan Basha
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5	D. Nagaveni	D. Nagaveni
6	B. Sai kumar	B. Sai kumar
7	M. Reddepa Reddy	M. Reddepa reddy
8	N. Sathish kumar	N. sathish kumar
9	T. Ramamohan	T. Ramamohan
10	G. Nagesa	G. nagesa
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Signature of the Lecturer

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GOVT.DEGREE COLLEGE
RAYACHOTY

Department of chemistry

Name of the student	:	Shaik Yasar
Group	:	Final BZC
Course	:	B.Sc
Roll No	:	1903/06 33 005
Title of the Assignment	:	Air pollution

man for drinking & agriculture in the streams & rivers (0.0001) lake (0.009%) under grown areas (5.625%) & ice caps (2.15%).

ii forest resources:-

forests are the reserves for fire wood grass fruits nuts vegetbles & medicinal herbs besides giving shelter to wild animals having culture heritage.

iii fossil fuels like coal:-

* petrol hydrocarbons & natural gas produce non-renewable types of energy fire wood & wood provide non-renewable types of energy.

* coal is the buried from of trees enlaged in soil layers during earth quakes our country.

* oil & natural gas comission has been involved in extracting these underground oils.

iii. Tidal energy:

waves, tides of oceans are continous this can be converted into electrical energy (or) mechanical energy

Atomic or Nuclear energy:

The energy obtained in the nuclear reactions (fission & fusion) is known as Atomic energy.

Non-Renewable Resources:

These cannot be renewed once they are used. The land area, minerals oceanic underground resources fossil oils, coal etc.

it is estimated that the energy utilization will be develop double once in 40 years at the current rate of population growth.

Water resources:

Through water appears to be plenty in our surrounding as we see it seas only 2.7% is available to

a. Renewable Resources:-

forests, grasslands wild life aquatic organisms & water constitute both renewable & non renewable resources. Judicious use of these resources help in their conservation & continious availability. in discriminate use of these resources to fall fill the temperory selfish needs may result in total disappearence with in no time though they are renewable

i. solar energy:-

This is the major energy source for the production of vegetation which serves as food & fuel for mankind. it can be used for cooking using solar cookers efforts are being made to convert solar energy into electrical energy

ii. wind energy:-

wind currents can also be harvested into mechanical energy for uplifting water form the well of rivers This devices used for this purpose called mills.

2. What are natural resources? Explain there classification & renewable & non-renewable resources?

Food shelter & reproduction & the primary requirements for any organism to live along with them water, air, light, temp & nutrients are also necessary most of these abiotic factors constitute the energy resources & are available in nature.

There utility increases with the increases in population. Total depletion of these resources may lead to the death of the organisms.

Energy resources of our country :-

Natural energy resources may be broadly divided into two types.

1. Renewable Resources
2. Non-renewable resources.

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Chemistry

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	[illegible]22	III B.Sc	[illegible]

S.NO	Name of the Student	Signature of the Student
1	G. Praveen kumar	[signature]
2	S. Irfan basha	[signature]
3	S. Afthar basha	[signature]
4	S. Irshad	[signature]
5	B. Ragavulu	[signature]
6	B. Saikumar	[signature]
7	M. Reddeppareddy	[signature]
8	N. Satheesh kumar	[signature]
9	P. Ramamohan	[signature]
10	G. Nageera	[signature]
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Signature of the Lecturer

Signature of the Department I/C

GOVT.DEGREE COLLEGE
RAYACHOTY

Department of chemistry

Name of the student	:	S. Irfan basha
Group	:	BZC IIIrd year
Course	:	BSc
Roll No	:	190310633003
Title of the Assignment	:	Renewable - non-renewable sources

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF HISTORY.

(UG courses)

Assignment Topic

Freedom Movement in India.

Topic Submitted
BY

Name of the Student : A.S. Hussain.

Class : IInd B.A.

Date : _____

Academic Year: 2021- 2022.

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF History

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
		IInd and IIIrd	Freedom Movement in India.

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1	M. Vijay Kumar	M. Vijay Kumar
2	A. Prabha Kara	A. Prabha Kara
3	Shaik. Abdulla	S. Abdulla
4	P. Afridi Khan	P. Afridi Khan
5	P. Fardeen khan	P. Fardeen Khan.
6	S. Akram	S. Akkram
7	P. Irfan	P. Irfan
8	S. Manjunadha	S. Manjunatha
9	A. Mahesh naidu	A. Mahesh naidu
10	V. Anusha	V. ANUSHA
11	N. Sivaiah	N. Sivaiah
12	D. Eswara	D. Eswara
13	G. Arun kumar	G. Arun Kumar
14	S. Malik basha	S. Malik basha
15	N. Siva Prasad	N. Siva Prasad
16	A. Mohammed thanveer	A. mohammed thanveer.
17	J. Sudharshan	J. Sudharshan
18	A. Reddy krishna	A. Reddy krishna.
19	K. Gayathri	K. Gayathri
20	Y. Kiran kumar	Y. Kiran Kumar
21	C. Kumar Swami	C. Kumar Swami
22	M. Shravani	M. Shravani
23	S. Imran	S. Imran
24	V. Jaya Simha	V. Jaashua
25	N. Anji kumar yadav	N. Anji Kumar Yadav
26	M. Devaj Naik	M. Devaj Naik
27	M. Sai kumar naik	M. Sai Kumar naik
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K. Guru
Signature of the Lecturer

K. Guru
Signature of the Department I/C

GOVT. DEGREE COLLEGE: RAYACHOTY

DEPARTMENT OF Mathematics

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
	16/7/2024	IIMPCs	Rank of a Matrix

Sl. NO	Name of the Student	Signature of the Student
1	C. Tirumalesu	Tirumalesu
2	D. PRASANNA JYOTHI	Prasanna Jyothi
3	D. PAVAN KUMAR	Pavan Kumar
4	G. VENKATA TARUN	Venkata Tarun
5	K. BHAGYAREKHA	Bhagyarekha
6	K. MANJUNADHA	Manjunadha.
7	K. BHANU PRAKASH	Bhanuprakash
8	M. SAI	Sai
9	M. DAMODARA	Damodara
10	P. NANDAKUMAR REDDY	Nandakumar reddy
11	P SATISH KUMAR	Satish Kumar
12	S. SREEDHAR REDDY	Sreedhar reddy
13	S. KHADER BASHA	S. Khader Basha
14	S. MOHAMMAD JABEED	S. Md. Jabeed
15	S. SUHEL	Suhel
16	S. ABDUL MAHAMMAD	Abdul Mahammad
17	S. MAZEEDA	Mazeeda
18	S. MUNEERA	Muneera
19	T. TIRUMALESH	T. Tirumalesh
20	V. NAGESWARA	Nageswara
21	V. ADI	Adi.
22	Y. GANESH.	Y Ganesh.
23		
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Signature of the Lecturer

Signature of the Department I/C

GOVERNMENT DEGREE COLLEGE

RAYACHOTY – 516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF Mathematics

(UG courses)

Assignment Topic

RANK OF A MATRIX

Topic Submitted
BY

Name of the Student : M. SAI

Class : II M.P.C.S

Date : 16/07/2022

Academic Year: 2021 – 2022

i) $\Rightarrow -7x-6y+23=0 \quad \rightarrow (i)$

$-20y-40z=0$ i.e $y+2z=0 \quad \rightarrow (ii)$

Let $z=k \ (\neq 0)$

(ii) $\Rightarrow 7x=-6y+2z$

$\Rightarrow 7x=-6(-2k)+2k=14k$

$\boxed{\therefore x=2k}$

$\therefore$ Eigen vectors corresponding to ei

given by $X=\begin{bmatrix} x \\ y \\ z \end{bmatrix}=k\begin{bmatrix} 2 \\ -2 \\ 1 \end{bmatrix}$ where k

i) $\Rightarrow 5x-6y+2z=0$

$\Rightarrow 5x=6y-2z$

$\Rightarrow 5x=6(-k/2)-2k$

$\Rightarrow 5x=-3k-2k$

$\Rightarrow 5x=-5k$

$\Rightarrow \boxed{x=-k}$

$\therefore$ Characteristic vectors corresponding to the characteristic root '3' are given by $X=\begin{bmatrix}x\\y\\z\end{bmatrix}=k\begin{bmatrix}-1\\-2\\1\end{bmatrix}$ where k is non-zero parameters.

Case-(iii): Let $\lambda=15$

Characteristic vectors corresponding to the characteristic root 15 are given by $(A-15I)X=0$

$$\Rightarrow \left\{\begin{bmatrix}8&-6&2\\-6&7&-4\\2&-4&3\end{bmatrix}-\begin{bmatrix}15&0&0\\0&15&0\\0&0&15\end{bmatrix}\right\}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$$\Rightarrow \begin{bmatrix}-7&-6&2\\-6&-8&-4\\2&-4&-12\end{bmatrix}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$$\Rightarrow \begin{matrix}7R_2-6R_1\\7R_3+2R_1\end{matrix}\sim\begin{bmatrix}-7&-6&2\\0&-20&-40\\0&-40&-80\end{bmatrix}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$$\Rightarrow R_3-2R_2\sim\begin{bmatrix}-7&-6&2\\0&-20&-40\\0&0&0\end{bmatrix}\begin{bmatrix}x\\y\\z\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$$

$\Rightarrow -7x-6y+2z=0$ —(i)

$-20y-40z=0$ i.e $y+2z=0$ —(ii)

Let $z=k\ (\neq 0)$

(ii) $\Rightarrow y+2z=0 \Rightarrow y=-2z=-2k$ $\boxed{\therefore y=-2k}$

$\Rightarrow 2x = 4k - 3k$

$\Rightarrow 2x = k$

$\Rightarrow \boxed{x = k/2}$

$\therefore$ Characteristic vectors corresponding to the characteristic root "0" are given by $X = k\begin{bmatrix} 1/2 \\ 1 \\ 1 \end{bmatrix}$ where k is non-zero parameters.

Case(ii): Let $\lambda = 3$ characteristic vectors corresponding the characteristic root 3 are given by $(A - 3I)X = 0$

$$\Rightarrow \left\{\begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix} - \begin{bmatrix} 3 & 0 & 0 \\ 0 & 3 & 0 \\ 0 & 0 & 3 \end{bmatrix}\right\}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\Rightarrow \begin{bmatrix} 5 & -6 & 2 \\ -6 & 4 & -4 \\ 2 & -4 & 0 \end{bmatrix}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\begin{matrix} 5R_2 + 6R_1 \\ 5R_3 - 2R_1 \end{matrix} \sim \begin{bmatrix} 5 & -6 & 2 \\ 0 & -16 & 8 \\ 0 & -8 & -4 \end{bmatrix}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$2R_3 - R_2 \sim \begin{bmatrix} 5 & -6 & 2 \\ 0 & -16 & -8 \\ 0 & 0 & 0 \end{bmatrix}\begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$\Rightarrow 5x - 6y + 2z = 0 \quad \text{---(i)}$

$-16y - 8z = 0 \quad \text{---(ii)}$

Let $z = k (\neq 0)$

(ii) $\Rightarrow -16y - 8z = 0$

$\Rightarrow -16y = 8z$

$\Rightarrow -16y = 8k$

$\boxed{y = -\frac{1}{2}k}$

$\Rightarrow \lambda[(-\lambda+15)(\lambda-3)]=0$

$\Rightarrow \lambda = 0, 3, 15$

The characteristic roots of A are 0, 3, 15.

Case (i) :-

Let $\lambda=0$ characteristic vectors corresponding to the characteristic root '0' are given by $(A-0I)X=0$.

$$\Rightarrow \begin{bmatrix} 9 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$R_1 \leftrightarrow R_3 \sim \begin{bmatrix} 2 & -4 & 3 \\ -6 & 7 & -4 \\ 9 & -6 & 2 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$\begin{matrix} R_2+3R_1 \\ R_3-4R_1 \end{matrix} \sim \begin{bmatrix} 2 & -4 & 3 \\ 0 & -5 & 5 \\ 0 & 10 & -10 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$$R_3+2R_2 \sim \begin{bmatrix} 2 & -4 & 3 \\ 0 & -5 & 5 \\ 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$$

$\Rightarrow 2x-4y+3z=0$ (i)

$-5y+5z=0 \Rightarrow$ (ii)

Let $z=k \ (\neq 0)$

(ii) $\Rightarrow -5y+5z=0$

$\Rightarrow 5y=5z$

$\Rightarrow y=z$

$\Rightarrow \boxed{y=k}$

(i) $\Rightarrow 2x-4y+3z=0$

$\Rightarrow 2x=4y-3z$

$$\Rightarrow x = 8 + \left[\frac{-5+6k_1+2k_2}{5}\right] - 2k_1 - k_2$$

$$\Rightarrow x = \frac{10-5+6k_1+2k_2-10k_1-5k_2}{5}$$

$$\Rightarrow x = \frac{5-4k_1-3k_2}{5}$$

$$\therefore X = \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} +1 \\ -1 \\ 0 \\ 0 \end{bmatrix} + k_1 \begin{bmatrix} -4/5 \\ 6/5 \\ 1 \\ 0 \end{bmatrix} + k_2 \begin{bmatrix} -3/5 \\ 2/5 \\ 0 \\ 1 \end{bmatrix}$$

5) Find the characteristic roots and the corresponding characteristic vectors of the matrix $A = \begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$.

Sol: Given matrix is $A = \begin{bmatrix} 8 & -6 & 2 \\ -6 & 7 & -4 \\ 2 & -4 & 3 \end{bmatrix}$

The characteristic equation of A is $|A - \lambda I| = 0$

$$\Rightarrow \begin{vmatrix} 8-\lambda & -6 & 2 \\ -6 & 7-\lambda & -4 \\ 2 & -4 & 3-\lambda \end{vmatrix} = 0$$

$$\Rightarrow (8-\lambda)\left[(7-\lambda)(3-\lambda)-8\right] - (-6)\left[-6(3-\lambda)+8\right] + 2\left[24-2(7-\lambda)\right] = 0$$

$$\Rightarrow (8-\lambda)(21-10\lambda+\lambda^2-16) + 6(-18+6\lambda+8) + 2(24-14+2\lambda) = 0$$

$$\Rightarrow (8-\lambda)(\lambda^2-10\lambda+5) + 6(6\lambda-10) + 2(2\lambda+10) = 0$$

$$\Rightarrow 8\lambda^2 - 80\lambda + 40 - \lambda^3 + 10\lambda^2 - 5\lambda + 36\lambda - 60 + 4\lambda + 20 = 0$$

$$\Rightarrow -\lambda^3 + 18\lambda^2 - 45\lambda = 0$$

$$\Rightarrow \lambda(-\lambda^2 + 18\lambda - 45) = 0$$

$$\Rightarrow \lambda(-\lambda^2 + 15\lambda + 3\lambda - 45) = 0$$

$$\Rightarrow \lambda\left[\lambda(-\lambda+15) - 3(-\lambda+15)\right] = 0$$

4) Solve $x-y+2z+t=2$, $3x+2y+t=1$, $4x+y+2z+2t=3$.

Sol: Given equations $x-y+2z+t=2$, $3x+2y+t=1$, $4x+y+2z+2t=3$

The system can be expressed as

$$\begin{bmatrix} 1 & -1 & 2 & 1 \\ 3 & 2 & 0 & 1 \\ 4 & 1 & 2 & 2 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} 2 \\ 1 \\ 3 \end{bmatrix} \quad \text{i.e } AX = B$$

Reducing to echelon form

$$\begin{matrix} R_2 - 3R_1 \\ R_3 - 4R_1 \end{matrix} \sim \begin{bmatrix} 1 & -1 & 2 & 1 \\ 0 & 5 & -6 & -2 \\ 0 & 5 & -6 & -2 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} 2 \\ -5 \\ -5 \end{bmatrix}$$

$$R_3 - R_2 \sim \begin{bmatrix} 1 & -1 & 2 & 1 \\ 0 & 5 & -6 & -2 \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} 2 \\ -5 \\ 0 \end{bmatrix}$$

This is in echelon form.

$\rho(A) = 2 = \rho(AB) < \text{no. of variables in } X(4)$

$\therefore AX = B$ has infinity many solutions.

$\Rightarrow x-y+2z+t=2$ — (i)

$\Rightarrow 5y-6z-2t=-5$ — (ii)

Let $z=k_1$, $t=k_2$ where k_1, k_2 are two parameters

ii) $\Rightarrow 5y-6z-2t=-5$

$\Rightarrow 5y-6k_1-2k_2=-5$

$\Rightarrow 5y = -5+6k_1+2k_2$

$\Rightarrow y = \dfrac{-5+6k_1+2k_2}{5}$

i) $\Rightarrow x-y+2z+t=2$

Where $A=\begin{bmatrix}1 & 1 & -1 & -1\\ 1 & -1 & 2 & -1\\ 3 & 1 & 0 & 1\end{bmatrix}$, $X=\begin{bmatrix}x\\y\\z\\t\end{bmatrix}$, $O=\begin{bmatrix}0\\0\\0\end{bmatrix}$

Reducing to echelon form.

R_2-R_1, R_3-3R_1 $\sim\begin{bmatrix}1 & 1 & -1 & 1\\ 0 & -2 & 3 & -2\\ 0 & -2 & 3 & -2\end{bmatrix}\begin{bmatrix}x\\y\\z\\t\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$

R_3-R_2 $\sim\begin{bmatrix}1 & 1 & -1 & 1\\ 0 & -2 & 3 & -2\\ 0 & 0 & 0 & 0\end{bmatrix}\begin{bmatrix}x\\y\\z\\t\end{bmatrix}=\begin{bmatrix}0\\0\\0\end{bmatrix}$

This is in echelon form.

$\rho(A)=2 <$ no. of variables in $X(4)$

$\therefore AX=O$ has no zero solutions only.

$\Rightarrow x+y-3+t=0 \rightarrow (i)$

$\Rightarrow -2y+3z-2t=0 \rightarrow (ii)$

Let $z=k_1$, $t=k_2$ where k_1, k_2 are two parameters.

(ii) $\Rightarrow -2y+3z-2t=0$

$\Rightarrow 2y=3z-2t$

$\Rightarrow y=\frac{3k_1+2k_2}{2}$

(i) $\Rightarrow x+y-z+t=0$

$\Rightarrow x=-y+z-t$

$x=-\left[\frac{3k_1-2k_2}{2}\right]+k_1-k_2$

$\therefore x=\frac{-3k_1+2k_2+2k_1-2k_2}{2}=\frac{-k_1}{2}$

$\therefore X=\begin{bmatrix}x\\y\\z\\t\end{bmatrix}=k_1\begin{bmatrix}-1/2\\3/2\\1\\0\end{bmatrix}+k_2\begin{bmatrix}0\\-1\\0\\1\end{bmatrix}$

$R_2 \to R_2 - 2R_3$
$R_4 \to R_4 + 3R_3$

$$\sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & -4 \\ 0 & 0 & 1 & 3 \\ 0 & 0 & 0 & 3 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & -2 & -2 & -2 \\ 0 & 1 & 1 & -1 \\ 0 & 0 & 3 & -2 \end{bmatrix} A$$

$$R_4 \to \frac{R_4}{R_3} \sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & -4 \\ 0 & 0 & 1 & 3 \\ 0 & 0 & 0 & 1 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & -2 & -2 & -2 \\ 0 & 1 & 1 & -1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix} A$$

$R_1 \to R_1 - R_4$
$R_2 \to R_2 + 4R_4$
$R_3 \to R_3 - 3R_4$

$$\sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} = \begin{bmatrix} -1 & 1 & -1 & 2/3 \\ 1 & -2 & 2 & -2/3 \\ 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix} A$$

$\Rightarrow I_4 = B \cdot A$ where $B = \begin{bmatrix} -1 & 1 & -1 & 2/3 \\ 1 & -2 & 2 & -2/3 \\ 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix}$

$\Rightarrow I_4 A^{-1} = (BA) A^{-1}$

$\Rightarrow A^{-1} = B(A \cdot A^{-1})$

$\Rightarrow A^{-1} = B I_4$

$\Rightarrow A^{-1} = B = \begin{bmatrix} -1 & 1 & -1 & 2/3 \\ 1 & -2 & 2 & -2/3 \\ 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -2/3 \end{bmatrix}$ //

3] Solve $x+y-3+t=0$, $x-y+2z-t=0$, $3x+y+t=0$.

Sol: Given system is $x+y-3+t=0$, $x-y+2z-t=0$, $3x+y+t=0$

This can be expressed as $\begin{bmatrix} 1 & 1 & -1 & 1 \\ 1 & -1 & 2 & -1 \\ 3 & 1 & 0 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \\ t \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$ i.e. $AX = 0$

$R_4 \to R_4 - 2R_3 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix} = \begin{bmatrix} I_3 & 0 \\ 0 & 0 \end{bmatrix}$

$\therefore \rho(A) = 3$ //

2] Find the inverse of the matrix $A = \begin{bmatrix} 0 & 1 & 2 & 2 \\ 1 & 1 & 2 & 3 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix}$

Sol: Given that $A = \begin{bmatrix} 0 & 1 & 2 & 2 \\ 1 & 1 & 2 & 3 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix}_{4\times4}$

Consider $A = I_4 A$

$\Rightarrow \begin{bmatrix} 0 & 1 & 2 & 2 \\ 1 & 1 & 2 & 3 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} A$

$R_1 \leftrightarrow R_2 \sim \begin{bmatrix} 1 & 1 & 2 & 3 \\ 0 & 1 & 2 & 2 \\ 2 & 2 & 2 & 3 \\ 3 & 3 & 3 & 3 \end{bmatrix} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix} A$

$R_3 \to R_3 - 2R_1$
$R_4 \to R_4 - 3R_1$
$\sim \begin{bmatrix} 1 & 1 & 2 & 3 \\ 0 & 1 & 2 & 2 \\ 0 & 0 & -2 & -3 \\ 0 & 0 & -3 & -6 \end{bmatrix} = \begin{bmatrix} 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & -2 & 1 & 0 \\ 0 & -3 & 0 & 1 \end{bmatrix} A$

$R_1 \to R_1 - R_2 \sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 2 & 2 \\ 0 & 0 & -2 & -3 \\ 0 & 0 & -3 & -6 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & -2 & 1 & 0 \\ 0 & -3 & 0 & 1 \end{bmatrix} A$

$R_3 \to R_3 - R_4 \sim \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 2 & 2 \\ 0 & 0 & 1 & 3 \\ 0 & 0 & -3 & -6 \end{bmatrix} = \begin{bmatrix} -1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & -1 \\ 0 & -3 & 0 & 1 \end{bmatrix} A$

Assignment - I

1] Reduce the matrix $A=\begin{bmatrix} 2 & 3 & -1 & -1 \\ 1 & -1 & -2 & -4 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}_{4\times4}$ to normal form and hence find its rank.

Sol: Given matrix $A=\begin{bmatrix} 2 & 3 & -1 & -1 \\ 1 & -1 & -2 & -4 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}$

$R_1 \leftrightarrow R_2 \sim \begin{bmatrix} 1 & -1 & -2 & -4 \\ 2 & 3 & -1 & -1 \\ 3 & 1 & 3 & -2 \\ 6 & 3 & 0 & -7 \end{bmatrix}$

$R_2 \to R_2 - 2R_1$
$R_3 \to R_3 - 3R_1 \sim \begin{bmatrix} 1 & -1 & -2 & -4 \\ 0 & 5 & 3 & 7 \\ 0 & 4 & 9 & 10 \\ 0 & 9 & 12 & 17 \end{bmatrix}$
$R_4 \to R_4 - 6R_1$

$C_2 \to C_2 + C_1$
$C_3 \to C_3 + 2C_1 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 5 & 3 & 7 \\ 0 & 4 & 9 & 10 \\ 0 & 9 & 12 & 17 \end{bmatrix}$
$C_4 \to C_4 + 4C_1$

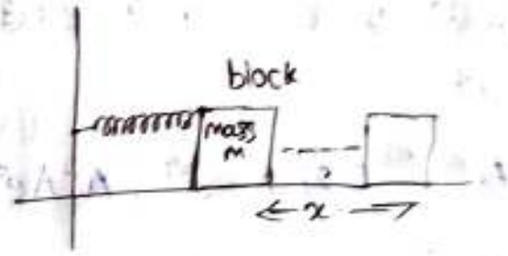
$R_2 \to R_2 - R_3 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & -6 & -3 \\ 0 & 4 & 9 & 10 \\ 0 & 9 & 12 & 17 \end{bmatrix}$

$R_3 \to R_3 - 4R_2$
$R_4 \to R_4 - 9R_2 \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & -6 & -3 \\ 0 & 0 & 33 & 22 \\ 0 & 0 & 66 & 44 \end{bmatrix}$

$C_3 \to \frac{C_3}{33}$
$C_4 \to \frac{C_4}{22} \sim \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \\ 0 & 0 & 2 & 2 \end{bmatrix}$

2. What is Damped harmonic motion, derivative differential equation for it and find its solution.

Damped harmonic motion:- when a body oscillates in air (or) any other medium the amplitude of oscillations decreases gradually and finally the body comes to rest. This is due to the medium offers frictional force to the body. These oscillations are called Damped harmonic motion. And the body which executes Damped harmonic motion is called Damped harmonic oscillator.



1. Consider a block of mass m attach to a spring and placed on a horizontal surface.
2. If we displace the block by x to the disp right side and two forces acting on it.

$F_{restoring} = -kx$ ——①

$F_{frictional} = -rv$ ——②

Net force $F_{Net} = -kx - rv$

$ma = -kx - rv$

$a = -k/m\,x - \frac{r}{m}v$

GOVERNMENT DEGREE COLLEGE

RAYACHOTY -516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF PHYSICS

(UG courses)

Assignment Topic

What is damped harmonic oscillator? Derive differential equation for it and find solution?

Topic Submitted
BY

Name of the Student : T SREEVIDYA

Class : I M.P.Cs

Date : 05-01-2022

Academic Year: 2021-22

GOVT. DEGREE COLLEGE: RAYACHOTY
DEPARTMENT OF PHYSICS

ASSIGNMENT REGISTER

S.NO	DATE	CLASS	TOPIC
1	05/01/2022	I MPCs	What is damped harmonic oscillator? Derive differential equation for it and find solution?

Sl. NO	Name of the Student	Signature of the Student
1	A. SRAVANI	
2	B REDDI PRASANTHI	
3	G REDDI LOKESH	
4	M FATHIMA MISBHA	
5	M SWATHI	
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05/01/2022

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$= e^{-bt}\left[A_1 + A_1 bt + A_2 - A_2 bt\right]$

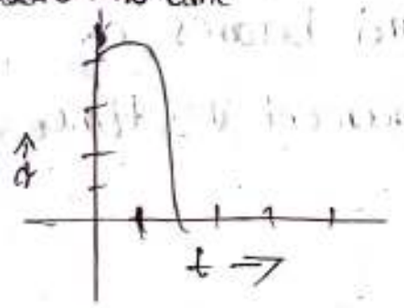
$x = e^{-bt}\left[(A_1 + A_2) + b(A_1 - A_2)t\right]$

Let $A_1 + A_2 = P$; $b(A_1 - A_2) = q$

$\therefore x = e^{-bt}\left[P + qt\right]$

In this case time increase, displacement decreases rapidly and becomes 0.

Displacement V/S time



Ex:- Motion of a pointer exhibit in galvanometer, Ammeter.

Case 3:- $(b^2 < \omega^2)$

Under D.M:-

$x = Ae^{(-b+\sqrt{b^2-\omega^2})t} + A_2 e^{(-b-\sqrt{b^2-\omega^2})t}$

$= A_1 e^{(-b+i\beta)t} + A_2 e^{(-b-i\beta)t}$ $\left[\because \sqrt{b^2-\omega^2} = i\beta \quad \sqrt{\omega^2-b^2} = \beta\right]$

$= e^{-bt}\left[A_1 e^{i\beta t} + A_2 e^{-i\beta t}\right]$

$= e^{-bt}\left[A_1(\cos\beta t + i\sin\beta t) + A_2(\cos\beta t - i\sin\beta t)\right]$ $\left[\because e^{i\beta t} = \cos\beta t + i\sin\beta t \quad e^{-i\beta t} = \cos\beta t - i\sin\beta t\right]$

This is the solution for Damped harmonic oscillator.

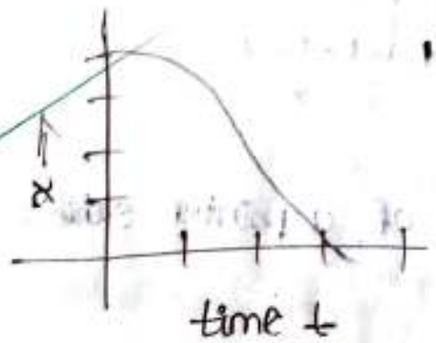
Case-1:- $(b^2 > \omega^2)$

over damped motion:-

when $b^2 > \omega^2$, then $b > \sqrt{b^2-\omega^2}$

* The terms $-b+\sqrt{b^2-\omega^2}$, $-b-\sqrt{b^2-\omega^2}$ both are negative.
* As the time increases, displacement decreases and becomes 0 without any oscillation.
* In this case only the body once displace equilibrium position without performing any oscillations and becomes 0.

Distance Displacement V/s time



Ex:- Motion of pendulum moving in thick oil.

Case-2:- $(b^2 = \omega^2)$

critical damped motion:-

* $b^2 = \omega^2$, $\sqrt{b^2-\omega^2} = h$ (very small number)

$$x = A_1 e^{(-b+h)t} + A_2 e^{(-b+h)t}$$

$$= A_1 e^{-bt} \cdot e^{ht} + A_2 e^{-bt} \cdot e^{-ht} \qquad [\because x >> 1,\ e^x = 1+x]$$

$$= e^{-bt}\left[A_1 \cdot e^{ht} + A_2 e^{-ht}\right]$$

$$= e^{-bt}\left[A_1 \cdot e(1+ht) + A_2(1-ht)\right]$$

$$\frac{d^2x}{dt^2} = -\omega^2 x - 2b\frac{dx}{dt}$$

$$\boxed{\frac{d^2x}{dt^2} + 2b\frac{dx}{dt} + \omega^2 x = 0} \rightarrow (3)$$

This is the differential equation for D.H.O.

Solution for D.H.O:-

Let $x = Ae^{\alpha t} \rightarrow (4)$

differ. equ (4) we get,

$$\frac{dx}{dt} = A.\alpha e^{\alpha t} \rightarrow (5)$$

$$\frac{d^2x}{dt^2} = A\alpha^2 e^{\alpha t} \rightarrow (6)$$

equ (4), (5), (6) sub in equ (3) we get,

$$\Rightarrow A\alpha^2 e^{\alpha t} + 2bA.\alpha e^{\alpha t} + \omega^2 A e^{\alpha t} = 0$$

$$\Rightarrow Ae^{\alpha t}[\alpha^2 + 2b\alpha + \omega^2] = 0.$$

$$\alpha^2 + 2b\alpha + \omega^2 = 0$$

$$\alpha = \frac{-2b \pm \sqrt{4b^2 - 4.1.\omega^2}}{2.1}$$

$$= \frac{-2b \pm 2\sqrt{b^2 - \omega^2}}{2}$$

$$= -b \pm \sqrt{b^2 - \omega^2}$$

$\therefore \alpha_1 = -b + \sqrt{b^2 - \omega^2}$, $\alpha_2 = -b - \sqrt{b^2 - \omega^2}$

$$\therefore \boxed{x = A_1 e^{(-b+\sqrt{b^2-\omega^2})t} + A_2 e^{(-b-\sqrt{b^2-\omega^2})t}}$$

GOVERNMENT DEGREE COLLEGE

RAYACHOTY –516269, ANNAMAYYA DISTRICT. (A.P.)

DEPARTMENT OF COMMERCE

(B.COM ,GEN)

Assignment Topic

TYPES OF BUSINESS ENVIRONMENT

Submitted
BY

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Class :B.COM, I SEMESTER

Date :17-03-2022

Academic Year: 2021-2022

Types of Micro Macro Environment

Defination: The business environment is total of all external things to business of Industrial afects in organization and association.

types of business Environment

1): Internal environment

2) External environment

External environment:

Marco	Mirco.
1. suppliers	1. Economic Environment
2. Intermediaries	2. Political Environment
3. customers	3. social culture environment
4. Financers	4. techological environment
5. publics	5. Global environment
6. competitors	6. Nature environment

structure of economy is three types there are.

1. Primary sector
2. secondary sector
3. Tertiary sector

Primary sector	secondary sector	Tertiary sector
1. Agriculture 2. Mining 3. Forest 4. Fisheries 5. Animal husbandry	1. small scall Industries 2. large scale Industries	1. Power 2. Transport and communication 3. Internal and International 4. Banking and finace 5. other services

Economic Reforms refer to the fundamental changes that were lunched with the plan of liberalising the economy and to quicken its rate of economic. Narasimha Rao goverment in 1991 started the economic reforms in order internal and external faith in the Indian economy.

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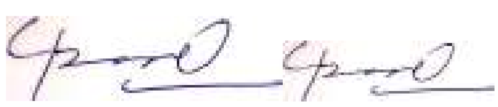

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