FRAMEWORK-SYLLABUS

AY 2020-21

BSC (Mathematics, Physics, Computer Science)

SRI VENKATESWARA UNIVERSITY: Tirupati
(w.e.f 2020-2021)
B.Sc(Mathematics, Physics, Computer Science)
SEMESTER-I

S.No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
1	English	100	25	75	4	3
2	Second Language (Hindi/Telugu/Sanskrit/Tamil/Urdu)	100	25	75	4	3
3	Life Skill Course (Human Values and Professional Ethics)	50	0	50	2	2
4	Skill Development Courses (Insurance promotion)	50	0	50	2	2
5	Core-1	100	25	75	4	3
6	Core-1 Practical	50	0	50	4	2
7	Core-2	100	25	75	4	3
8	Core-2 Practical	50	0	50	4	2
9	Core-3	100	25	75	4	3
10	Core-3 Practical	50	0	50	4	2
Total		**750**	**--**	**--**	**36**	**25**

SRI VENKATESWARA UNIVERSITY: Tirupati
(w.e.f 2020-2021)
B.Sc(Mathematics, Physics, Computer Science)
SEMESTER-II

S. No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
1	English	100	25	75	4	3
2	Second Language (Hindi/Telugu/Sanskrit/Tamil/Urdu)	100	25	75	4	3
3	Skill Development Course (Advertising)	50	0	50	2	2
4	Skill Development Course (business communication)	50	0	50	2	2
5	Life skill Course (Indian culture and science)	50	0	50	2	2
6	Core-1	100	25	75	4	3
7	Core-1 Practical	50	0	50	4	2
8	Core-2	100	25	75	4	3
9	Core-2 Practical	50	0	50	4	2
10	Core-3	100	25	75	4	3
11	Core-3 Practical	50	0	50	4	2
Total		**800**	**--**	**--**	**38**	**27**

SRI VENKATESWARA UNIVERSITY: Tirupati
(w.e.f 2016-17)
B.Sc(Mathematics, Physics, Computer Science)
SEMESTER-III

S. No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
1	First Language English	100	25	75	4	3
2	Second Language (Tel/Hin/Urdu/Sans…)	100	25	75	4	3
3	*Foundation Course - 5* Entrepreneurship	50	0	50	2	2
4	*Foundation course– 6* CSS – II	50	0	50	2	2
5	DSC 1 Paper-3 (Core)	100	25	75	4	3
6	DSC 1 Practical	50	0	50	2	2
7	DSC 2 Paper-3 (Core)	100	25	75	4	3
8	DSC 2 Practical	50	0	50	2	2
9	DSC 3 Paper-3 (Core)	100	25	75	4	3
10	DSC 3 Practical	50	0	50	2	2
	Total	**750**	**-**	**-**	**30**	**25**

SRI VENKATESWARA UNIVERSITY: Tirupati
(w.e.f 2016-17)
B.Sc(Mathematics, Physics, Computer Science)
SEMESTER-IV

S. No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
1	*Foundation Course – 7* CSS – 3	50	0	50	2	2
2	*Foundation Course – 8* Analytical Skills	50	0	50	2	2
3	*Foundation Course - 9* ICT – II	50	0	50	2	2
4	*Foundation course – 10* Leadership Education	50	0	50	2	2
5	DSC 1 Paper-4 (Core)	100	25	75	4	3
6	DSC 1 Lab Practical	50	0	50	2	2
7	DSC 2 Paper-4 (Core)	100	25	75	4	3
8	DSC 2 Lab Practical	50	0	50	2	2
9	DSC 3 Paper-4 (Core)	100	25	75	4	3
10	DSC 3 Lab Practical	50	0	50	2	2
	Total	**650**	**-**	**-**	**30**	**23**

*Analytical Skills: To be taught by Maths/Stat Teachers (may be partly by English Teachers)
Leadership Education: To be taught by Telugu Teachers

SRI VENKATESWARA UNIVERSITY: Tirupati
(w.e.f 2016-17)
B.Sc(Mathematics, Physics, Computer Science)
SEMESTER-V

S. No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
□	□S□ □ P□□□r□□ □□ □r□□	□□□	□□	□□	□	□
□	□S□ □ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	□S□ □ P□□□r□□ □□ □r□□	□□□	□□	□□	□	□
□	□S□ □ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	□S□ □ P□□□r□□ □□ □r□□	□□□	□□	□□	□	□
□	□S□ □ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	□S□ □P□□□r□□ □□ □r□□	□□□	□□	□□	□	□
□	□S□ □ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	□S□ □ P□□□r □□ □□ □r□□	□□□	□□	□□	□	□
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□□	□S□ □ □□□ Pr□□□□□□□	□□	□	□□	□	□
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SRI VENKATESWARA UNIVERSITY: Tirupati
(w.e.f 2016-17)
B.Sc(Mathematics, Physics, Computer Science)
SEMESTER-VI

S. No	Course	Total Marks	Mid Sem Exam	Sem End Exam	Teaching Hours	Credits
□	E□□□□□□□□ □□ □S□ □, P□□□r □□ □□□□□□□d□□d□□	□□□	□□	□□	□	□
□	E□□□□□□□□□□ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	E□□□□□□□□□□ □S□ □, P□□□r □□ □□□□□□□d□□d□□	□□□	□□	□□	□	□
□	E□□□□□□□□□□ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	E□□□□□□□□□□ □S□ □, P□□□r □□ □□□□□□□d□□d□□	□□□	□□	□□	□	□
□	E□□□□□□□□□□ □□□ Pr□□□□□□□	□□	□	□□	□	□
□	E□□□□□□□□ □□□ □S□ □, P□□□r □□ A□□□l□□□r□ d□□ □□□□□ □□ E□	□□□	□□	□□	□	□
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□□	E□□□□□□□□□□ □□□ Pr□□□□□□□	□□	□	□□	□	□
□□	E□□□□□□□□ □□□ □S□ □, P□□□r □□ A□□□l□□□r□ d□□ □□□□□ □□ E□	□□□	□□	□□	□	□
□□	E□□□□□□□□□□ □□□ Pr□□□□□□□	□□	□	□□	□	□
	T□□□□	□□□	□	□	□□	□□

SRI VENKATESWARA UNIVERSITY:: TIRUPATI

THREE YEAR B.A. / B.Com. / B.Sc. DEGREE COURSES

English Syllabus-Semester-I

W.E.F.2020-21

English Praxis Course-I

A Course in Communication and Soft Skills

I. UNIT: Listening Skills

i. Importance of Listening
ii. Types of Listening
iii. Barriers to Listening
iv. Effective Listening

II. UNIT: Speaking Skills

a. Sounds of English: Vowels and Consonants
b. Word Accent
c. Intonation

III. UNIT: Grammar

a) Concord
b) Modals
c) Tenses (Present/Past/Future)
d) Articles
e) Prepositions
f) Question Tags
g) Sentence Transformation (Voice, Reported Speech & Degrees of Comparison)
h) Error Correction

IV. UNIT: Writing

i. Punctuation
ii. Spelling
iii. Paragraph Writing

V. UNIT: Soft Skills

a. SWOC
b. Attitude
c. Emotional Intelligence
d. Telephone Etiquette
e. Interpersonal Skills

Approved by BOS (PASS)
w.e.f. 2020-2021

Chairperson 3/9/2020
BOS in English
(PASS)

SRI VENKATESWARA UNIVERSITY
FIRST YEAR B.A. / B.Com. / B.Sc.
FIRST SEMESTER
Under CBCS W.E.F. 2020-21
ENGLISH PRAXIS COURSE-1
A COURSE IN COMMUNICATION AND SOFT SKILLS
GENERAL ENGLISH MODEL PAPER

Time: 3 hours Max Marks: 75

1. Answer any THREE of the following questions (3X5=15)
   a) What is the importance of Listening?
   b) Write a note on the types of Listening?
   c) What are the barriers to listening?
   d) Explain the strategies for effective listening.
   e) Describe the traits of a good listener.

2. Answer any TWO of the following questions (2X5=10)
   a. Write about consonant sounds with examples.
   b. Explain Word Accent
   c. What are the different kinds of intonation?
   d. Mark the stress of the following words.
      i) itself ii)alone iii)wonderful iv)pronunciation v)Electricity

3. Attempt the following questions: (2X1=2)
   a. Concord
      (i) Each of the cars____ very well designed by the company.
      (ii) The average worker's earnings_____ gone up dramatically
   b. Fill in the blanks with suitable Modals: (2X1=2)
      (i) Do we_____ to take our certificates for the Interview?
      (ii) You_____ get an easy question paper this time.
   c. Fill in the blanks with appropriate forms of the Verbs given in brackets. (5X1=5)
      (i) Satya_____(come) to college regularly.
      (ii) When the police came, the thief_____(escape)
      (iii) The President_____(address) the public tomorrow
      (iv) I_____(live) in a pent house for the last six months.
      (iv) Aishu_____(go)to school now.

   d. Fill in the blanks with suitable Articles: (2x1=2)
      (i) I met_____European last month
      (ii)_____poor need our support.

   e. Fill in the blanks with suitable prepositions (2x1=2)
      (i) The patient is suffering_____fever
      (ii) The sweets are distributed_____children.

   f. Add Question Tags to the following statements (2x1=2)
      (i) Sita is not writing_____?
      (ii) I am late,_____?

   g. Transform the following sentences as directed. (5x1=5)

(i) The officer ordered the soldiers to open fire(change it into Direct speech)
(ii) Akbar is one of the greatest kings(change it into positive degree)
(iii) Bhavanasays,"I write a novel"(change it into Indirect speech)
(iv) Jim Corbett had killed many tigers(Change it into passive voice)
(iv) Mary is as clever as Lily. (Change it into Comparitive degree).

h. Correct the following sentences (5x1=5)
(i) could you return back the library cards to me, please
(ii) The painting is too beautiful.
(iii) Ram camped besides the lake.
(iv) I have read the book yesterday.
(v) The news are very pathetic.

4. Answer any TWO of the following questions. (2x5=10)
i. Punctuate the following

The dog grinned sardonically down on him over the edge for a moment as if he thought it would be a good lark to drop the cartridge down on jim.

ii. Pick out the correct word:

a)	A. company	B. Compony	C. Kompony	D. Komphony
b)	A. Techanology	B. Technalogy	C. Tachnology	D. Technology
c)	A. achievement	B. acheivement	C. acheevement	D. achieevement
d)	A. psychology	B. Psychologi	C. acheevement	D. achieevement
e)	A. Occassion	B. occasion	C. Occaassion	D. occasion

iii. Write a meaningful paragraph using the hints given below and suggest a suitable title

Reading hobby---good and bad books---of the hour and forever---books as best companions--- they entertain, educate and enlighten---make one forget one's loneliness.

iv) Expand any one of the following idea:
a) A stitch in time saves nine
b) Rome was not built in a day.

5. Answer any THREE of the following questions: (3x5=15)
a. What are the benefits of 'SWOC' analysis?
b. Explain the importance of positive attitude. How can we develop it?
c. Describe the qualities needed to develop emotional intelligence
d. What is Telephone Etiquette? Explain
e. How do you demonstrate good interpersonal skills?

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(Dr M.SREELATHA),
Chairman,
BOS in English(PASS).

NEW

SRI VENKATESWARA UNIVERSITY-TIRUPATI

I B.A.,/B.Com.,/B.Sc., - SEMESTER – I : GENERAL HINDI PAPER – I

W.E.F. 2020-21

(Prose, Short Stories and Grammar)

Subject Code : 18-HIN-101 **Credits : 03** Teaching Hrs/Week : 04

SYLLABUS

I. **गद्य संदेश** (PROSE)

१. भारतीय साहित्य की एकता – नन्द दुलारे वाजपायी

२. आत्मनिर्भरता - पं. बालकृष्ण भट्ट

३. अन्दर की पवित्रता - डॉ. हजारी प्रसाद द्विवेदी

II. **कथा लोक** (SHORT STORIES)

४. ठाकुर का कुआँ - प्रेमचंद

१. वापसी - उषा प्रियंवदा

२. सदाचार का तावीज – हरिशंकर परसाई

III. **व्याकरण** (GRAMMAR)

लिंग, वचन,

काल

विलोम शब्द

IV. कार्यालयीन शब्दावली - अंग्रेजी से हिन्दी, हिन्दी से अंग्रेजी

V. पत्र लेखन – व्यक्तिगत पत्र (छुट्टी पत्र , पिता, मित्र के नाम पत्र, पुस्तक विक्रेता के नाम पत्र)

SRI VENKATESWARA UNIVERSI
TIRUPATI

I B.A.,/B.Com.,/B.Sc., SEMESTER –I: GENERAL HINDIPAPER – I

Subject Code: 18-HIN-101 Time: 3hrs Max Marks :75

MODEL QUESTION PAPER

PART - A

I. किन्हीपाँचप्रश्नोंकेउत्तरदीजिए |5 X 5 = 25
Short Q & ANS

1. Annotation - Prose
2. Annotation - Prose
3. Short Question - Prose
4. Short Question - Short Stories(Non-detailed)
5. Short Question - Short Stories(Non-detailed)
6. Short Question - Short Stories(Non-detailed)
7. Short Question –Grammar
8. Short Question - Grammar

PART - B

II. निम्न लिखित सभी प्रश्नों के उत्तर दीजिए |5 X10 = 50

1. PROSE 10 Marks

(अथवा)

PROSE

2.PROSE 10 Marks

(अथवा)

Short Stories(Non-detailed)

3. Short Stories(Non-detailed) 10 Marks

(अथवा)

Short Stories(Non-detailed)

4. LETTER WRITING पत्र लेखन 10 Marks

(अथवा)

LETTER WRITINGपत्र लेखन

5. निम्न लिखितनिम्नलिखित शब्दों के जवाब लिखिए। Total 10 Marks

a) निम्न लिखित शब्दों केलिंग बदलिए। 2 Marks

b) निम्न लिखित शब्दों केवचन बदलिए| 2Marks

c) कॉल निम्न लिखित शब्दों केकाल बदलिए | 2Marks

d) निम्न लिखित विलोम शब्द के विलोम शब्द लिखए। 4Marks

1. 2. 3. 4

(अथवा)

निम्न लिखित अंग्रेजी शब्दों का हिन्दी में अनुवाद कीजिए |

(a) 1. Part time 2. Memorandum 3. Conference 4. Certificate 5. Circular

(b)निम्न लिखित हिन्दी शब्दों का अंग्रेजी में अनुवाद कीजिए

6. चुनाव 7. सचिव 8. लेखाकार 9. राज्यपाल 10. नगर निगम

SRI VENKATESWARA UNIVERSITY: TIRUPATHI

B.A., B.Com., & B.Sc., etc., Programmes

Revised Syllabus under CBCS Pattern w.e.f. 2020-21

Language Subjects – SANSKRIT

Revised Syllabus of
SANSKRIT

Subject Curricular Framework

Semester	Course	Title	Hrs/Wk	Credits	Max. Marks IA	Max. Marks SE	Total
I	I	POETRY, PROSE & GRAMMAR	04	03	25	75	100
II	II	POETRY, PROSE & GRAMMAR	04	03	25	75	100

SRI VENKATESWARA UNIVERSITY: TIRUPATHI

B.A., B.Com., & B.Sc., etc., Programmes

Revised Syllabus under CBCS Pattern w.e.f. 2020-21

II Language Subject-SANKSRIT

Part I (B) Subject : **SANSKRIT**

SEMESTER – I

PAPER – I : POETRY, PROSE & GRAMMAR . (w.e.f. 2020-21)

UNIT – I OLD POETRY:

1. "**Arya Padukabhishekaha**",
Valmiki Ramayanam- Ayodhya Kanda, Sarga-100 Geetha Press, Gorakhpur.
2. " **YakshaPrasnaha**", Mahabharatam of Vedavyasa, Vanaparva, Adhyaya -313, Geeta Press, Gorakhpoor.

UNIT – II MODERN POETRY:

1." **Mevada Rajyastapanam"** 4th Canto, Srimat Pratapa Ranayanam, Mahakavyam, Pt.Ogeti Parikshit sarma, Published by, Pt.Ogeti Parikshitsarma, 10/11, Sakal nagar, Pune, 1989.

2.**"VivekanandaSuktayaha"**, Vivekanandasuktisudha by Dr.SamudralaLakshmanaiah, Published by Author, 18-1-84, Yasoda Nagar, Tirupati. Selected Slokas 25.

(Slokas Nos.11,14,18,20,22,23,29,33,34,37,48,49,50,58,60,71,88, 89,94,101,104,115,116,125 & 139).

UNIT – III PROSE:

1. "**Atyutkataihi papapunyairihaiva phalamasnute**",
Hitopadesaha-Mitralabha 2 & 3 stories, Pages 61-84.
2. " **Sudraka -Veeravarakatha"**, Hitopadesaha-Vigraham, 8th story, Pages 63-70,Chowkhamba krishadas academy,Varanasi, 2006.

UNIT - IV GRAMMAR: 1.**DECLENSIONS** Nouns ending in vowels Deva, Kavi, Bhanu, Dhatru, Pitru, Go, Ramaa, Mati.

2.CONJUGATIONS

1st Conjugation - Bhoo, Gam, Shtha, Drusir, Labh, Mud.

2nd Conjugation - As. 10th Conjugation – Bhaash.

UNIT – V GRAMMAR: 1. **SANDHI - Swara Sandhi** : Savarnadeergha, ayavayava, Guna,Vruddhi, yaanadesa.
-**Halsandhi**:Schutva, Stutva, Anunasika.2.**SAMASA** Dwandwa, Tatpurusha, Karmadharaya,, Dwigu.

SRI VENKATESWARA UNIVERSITY: TIRUPATHI

I SEMESTER - W.E.F.2020-21

QUESTION PAPER PATTERN

प्रश्नापत्रप्रणाली

Time : 3 Hours Max. Marks : 75

सूचना :- द्वितीय-तृतीय-चतुर्थ-पञ्चम-दशम-प्रश्नाः संस्कृत भाषायामेव समाधेयाः।

Q.No. 2, 3, 4, 5 & 10 Should be answered in Sanskrit Only

प्रथमो भागः (25 Marks)

1. श्लोकपूरणं भावं लिखत (नक्षत्राङ्कितश्लोकेभ्यः देयाः)	(Unit-I)	2 Out of 4	2 x 3 = 06
2. शब्दाः (सम्पूर्ण शब्दरूपाणि)		2 Out of 4	2 x 3 = 06
3. धातवः(लकारे सर्वाणि रूपाणि)		2 Out of 4	2 x $2^{1/2}$ = 05
4. सन्धिः (नामनिर्देशपूर्वकं)		4 Out of 8	4 x 1 = 04
5. समासाः (नामनिर्देशपूर्वकं)		4 out of 8	4 x 1 = 04
			25

द्वितीयो भागः (50 Marks)

6.	आन्ध्रभाषायां वा आग्लभाषायां वा अनुवदत (from Unit-III only)	2 out of 4	2 x 3 = 06
7.	निबन्धप्रश्नः (Unit-I)	1 out of 2	1 x 08 = 08
8.	निबन्धप्रश्नः (Unit-II)	1 out of 2	1 x 08 = 08
9.	निबन्ध प्रश्नः (Unit-III)	1 out of 2	1 x 08 = 08
10.	लघुप्रश्नाः	(from Unit I & III)	4 x 02 = 08
11.	सन्दर्भ वाक्यानि	(from Unit I & III)	3 x 04 = 12
			50

प्रथमोभागः - 25
द्वितीयोः भागः - 50
अन्तर्गतपरीक्षा -25

100

Internal Assessment Mid-Sem - 15
Assignment / Seminar - 5 Attendance - 5

25

4

S.V.University
B.A. / B.Sc. / B.Com
Sub : I (B) - SANSKRIT
PAPER -I : Poetry, Prose & Grammar

Time : 3 Hours Max. Marks : 75

सूचना :- द्वितीय-तृतीय-चतुर्थ-पञ्चम-दशम-प्रश्नाः संस्कृत भाषायामेव समाधेयाः।
Q.No. 2, 3, 4, 5 & 10 Should be answered in Sanskrit Only

प्रथमो भागः (25 Marks)

I. **द्वौ श्लोकौ पूरयित्वा भावं च लिखत ।** 2 x 3 = 06

1. अद्यार्य ----------दिशो दश ॥
2. सत्यमेवेश्वर ---------- परं पदम् ॥
3. माता ----------तृणात् ॥
4. अतिथिः ----------जगत् ॥

II. **द्वयोः सम्पूर्ण शब्दरूपाणि लिखत ।** 2 x 3 = 06

1.कवि 2. पितृ 3. रमा 4. मति

III. **द्वयोः धातोः लकारे सर्वाणिरूपाणि लिखत** 2 x $2^{1/2}$ = 05

1. भविष्यति 2. गच्छेत्
3. मोदते 4. भाषताम्

IV. **चतुर्णां नामनिर्देशपूर्वकं सन्धिं विभजत** 4 x 1 = 04

1. गौरीयम् 2. तावत्र 3. नवोदयः
4. तथैव 5. साध्विति 6. तच्च
7. पेष्टा 8 पन्नगः

V. **चतुर्णां नामनिर्देशपूर्वकंविग्रहवाक्यानि लिखत** 4x1=04

1. पूर्वकायः 2. मासपूर्वः
3. नीलोत्पलम् 4. शीतोष्णम्
5. नरसिंहः 6. मुखचन्द्रः
7. पञ्चवटी 8 दम्पती

द्वितीयो भागः (50 Marks)

VI. द्वयोः आन्ध्रभाषायां **वा आग्लभाषायां वा अनुवदत** 2 x 3 = 06

a. निर्गुणेष्वपि सत्त्वेषु दयां कुर्वन्ति साधवः।
न हि संहरते ज्योत्स्नां चन्द्रश्चण्डालवेश्मनः

b. परोक्षे कार्यहन्तारं प्रत्यक्षे प्रियवादिनम् ।
वर्जयेत्तादृशं मित्रं विषकुम्भं पयोमुखम् ॥

c. दुर्जनः प्रियवादी च नैतद्विश्वासकारणम् ।
मधु तिष्ठति जिह्वाग्रे हृदि हालाहलं विषम् ॥

d. धनानि, जीवितश्चैव परार्थे प्राज्ञ उत्सृजेत् ।
तन्निमित्तो वरं त्यागो, विनाशे नियते सति ॥

VII. 1 x 08 = 08

a. आर्य पादुकाभिषेकः इति पाठ्यभागस्य सारांशं लिखत।

(अथवा)

b. यक्षप्रश्ना मधिकृत्य संग्रहेण लिखत।

VIII. 1 x 08 = 08

a. मेवाड राज्यपालनम् इति पाठस्य कथासारं लिखत ।

(अथवा)

b. विवेकानन्दः कथं विद्यार्थिनां आदर्शप्रायः अभवत्?

IX. 1 x 08 = 08

a. ''अत्युत्कटैः पापपुण्यैः इहैव फलमुस्नते'' सोदाहरणं विवृणुत।

(अथवा)

b. वीरवरः कथं स्वाभि भक्तिं प्रदर्शितवान्?

X. **चतुर्णां** लघुसमाधानानि लिखत 4 x 02 = 08

1. श्रीरामः कीदृशं भरतं ददर्श?
2. अपूर्णमनोरथः भरतः किं अकरोत्?
3. किस्विदेकपदं धर्म्यं। किंस्तिदेकपदं यशः ?
4. किं ज्ञानं प्रोच्यते राजन्। कः रामश्च प्रकीर्तितः ?
5. मृगः केन वञ्चितः ?
6. प्रियवदी दुर्जनः कीदृशः?
7. वीरवरः कस्य राज्ये आसीत् ?
8. वीरवरस्य वर्तनं कियत् ?

11. **चतुर्णां ससन्दर्भं व्याख्यात ।** 4 x 03 = 12

1. न हि त्वं जीवतस्तस्य वनमागन्तुमर्हसि।
2. सत्ये लोकः प्रतिष्ठितः।
3. बुद्धिमान् वृद्धसेवया।
4. लाभानां श्रेयः आरोग्यं सुखानां तुष्टिरुत्तमा।।
5. मधुतिष्ठति जिह्वाग्रे हृदि हलाडलं विषम्।
6. अज्ञातकुलशीलस्य वासो न देयः।
7. द्वौ बाहौ, तृतीयश्च खड्गः।
8. जीवनान्तेऽपि तव राज्य भङ्गो नास्ति।

శ్రీ వేంకటేశ్వర విశ్వవిద్యాలయం, తిరుపతి

బి.ఏ., బి.కాం., బి.యస్ సి., మెదలైన కోర్సులు

జనరల్ తెలుగు సెమిస్టర్ 1

పాఠ్య ప్రణాళిక - (2020 -21 నుండి)

ప్రాచీన తెలుగు సాహిత్యం

యూనిట్ I

రాజనీతి - నన్నయ

ఆంధ్రమహాభారతం - సభాపర్వం – ప్రధమాశ్వాసం –(26 – 57) పద్యాలు

యూనిట్ II

కుచేలోపాఖ్యానం - పోతన

ఆంధ్ర మహాభాగవతం-దశమ స్కంధము – (966 – 1005) పద్యాలు

యూనిట్ III

ధౌమ్య ధర్మోపదేశము - తిక్కన

ఆంధ్ర మహాభారతం – విరాట పర్వం – ప్రధమాశ్వాసం –(116 -146) పద్యాలు

యూనిట్ IV - శ్రీనాథుడు (పలనాటి వీరచరిత్ర –ద్విపద కావ్యం పుట 108 - 112

'బాలచంద్రుడు భీమోబాగు సంగ్రామం బొనర్చుట ..నుండి ....వెఱగంది కుంది... వరకు

సం. అక్కిరాజు ఉమాకాంతం . ముద్రణ . వి.కె.స్వామి ,బెజవాడ 1911.

యూనిట్ V

సీతా రావణ సంవాదం - మొల్ల రామాయణము – సుందరకాండము – (40 -87) పద్యాలు

*__వ్యాకరణం__

సంధులు : ఉత్వ, త్రిక, ద్రుతప్రకృతిక , నుగాగమ,ద్విరుక్తటకారాదేశ, యణాదేశ, వృద్ధి, శ్చుత్వ, జశ్త్వ,

. అనునాసిక సంధులు

సమాసాలు : అవ్యయీభావ, తత్పురుష, కర్మధారయ, ద్వంద్వ, ద్విగు, బహువ్రీహి

అలంకారాలు :

అర్థాలంకారాలు : ఉపమ ఉత్ప్రేక్ష, రూపక, స్వభావోక్తి, అర్థాంతర, అతిశయోక్తి

శబ్దాలంకారాలు : అనుప్రాస, (వృత్యనుప్రాస, ఛేకాను ప్రాస, లాటానుప్రాస, అంత్యానుప్రాస)

ఛందస్సు :

వృత్తాలు : ఉత్పలమాల, చంపకమాల, శార్దూలము, మత్తేభము

జాతులు :కాండం, ద్విపద; ఉపజాతులు : ఆటవెలది, తేటగీతి, సీసం మరియు ముత్యాలసరాలు

డా. జి. డి. జ్యోతీశ్వరి దేవి

బి.టి.కళాశాల , మదనపల్లి.

శ్రీ వేంకటేశ్వర విశ్వవిద్యాలయం, తిరుపతి

బి.ఏ., బి.కాం., బి.యస్ సి., మెదలైన కోర్సులు

జనరల్ తెలుగు సెమిస్టర్ 1

మాదిరి ప్రశ్న పత్రము - (2020 -21 నుండి)

సమయం : 3 గం. మార్కులు : 75

విభాగము – ఎ

క్రిందివానిలో ఏవైనా ఐదింటికి సమాధానములు రాయండి. వానిలో 3,4 ప్రశ్నలకు తప్పనిసరిగా సమాధానములు రాయవలెను. 5 X 5 = 25 మా

1. రాజు కొలువులో సేవకుడు చేయకూడని పనులేవి
2. సాందీపుని వృత్తాంతాన్ని తెలపండి.
3. క్రిందివానిలో ఒక దానికి సందర్భ సహిత వ్యాఖ్య రాయండి.
   (అ) కలుగు వారికైన గార్య మగునె
   (ఆ) ముని పుంగవు లెంత వారలున్.
4. క్రిందివానిలో ఒక దానికి సందర్భ సహిత వ్యాఖ్య రాయండి
   (అ)వార్త యందు జగము వర్ధిల్లుచున్నది .
   (ఆ) తుచ్చపు బల్కులు పల్క బాడియే?
5. వార్త యొక్క ప్రాముఖ్యాన్ని తెలపండి.
6. సీత రావణుని తెగడిన విధమెట్టిది.
7. కుచేలుని దారిద్ర్య మెట్టిది .
8. పలనాటి వీరచరిత్ర గురించి రాయండి.
9. అకార, ఇకార, ఉకార సంధులను గురించి రాయండి.
10. ఉపమ లేదా ఉత్ప్రేక్షాలంకారమును సోదాహరణముగా వివరించుము.

(తిప్పి చూడుము

విభాగము – బి

అన్ని ప్రశ్నలకి సమాధానములు రాయండి. 5 X 10 = 50 మా

11. క్రింది వానిలో ఒక పద్యమునకు ప్రతిపదార్థ తాత్పర్యము రాయండి

(అ)ఉత్తమ మధ్యమాధమ నియోగ్యత బుద్ధి నెఱింగి వారి న
య్యుత్తమ మధ్యమాధమ నియోగములన్ నియమించితే నరేం
ద్రోత్తమ! భృత్యకోటికి ననూనముగా దాగు జీవితంబు లా
యత్తము సేసి యిత్తె దయ నయ్యయి కాలము దప్పకుండగన్.

(లేదా)

(ఆ)తన మృదు తల్పమందు వనితామణి యైన రమాలలామ పొం
దును నెడగా దలంపక యదుప్రవరుం డెదురేగి మోదముం
దనుకగ గౌగిలించి యుచితక్రియలం బరితుష్టు జేయుచున్
వినయమునన్ భజించె ; ధరణీసురుడెంతటి భాగ్యవంతుడో ?

12.నన్నయ తెలిపిన రాజనీతి ఎట్టిది.

(లేదా)

దౌమ్య ధర్మోపదేశము ఆధారంగా తిక్కన కవితారీతులను వివరించండి.

13. 'కుచేలోపాఖ్యానం' పాఠ్య భాగం ఆధారంగా స్నేహమాధుర్యాన్ని వర్ణించండి.

(లేదా)

దౌమ్యుడు చెప్పిన సేవకుని ధర్మాలను వివరించండి.

14. బాలచంద్రుని పరాక్రమాన్ని వర్ణించండి.

(లేదా)

సీత రావణ సంవాద సారాంశాన్ని రాయండి.

15. కర్మధారయ సమాసములను నాల్గింటిని సోదాహరణముగా వివరించండి.

లేదా)

ఉత్పలమాల, చంపమాల పద్యములలో ఒకదానికి లక్ష్య, లక్షణములను రాయండి.

డా. జి. డి. జ్యోతీశ్వరి దేవి
బి.టి.కళాశాల , మదనపల్లి.

SRIVENKATESWARA UNIVERSITY
LIFESKILL COURSES for B.A / B.Com / B.Sc.

HUMAN VALUES AND PROFESSIONAL ETIDCS (HYPE)
Revised Syllabus Under CBCS W.E.F. 2020-21

I SEMESTER **(SYLLABUS)**

Learning Outcome:

On completion of this course. the UG students will be able to

- ✓ Understand the significance of value inputs in a classroom and start applying them in their life and profession
- ✓ Distinguish between values and skills. happiness and accumulation of physical facilities. the Self and the Body. Intention and Competence of an individual. etc.
- ✓ Understand the value of harmonious relationship based on trust and respect in their life and profession
- ✓ Understand the role of a human being in ensuring harmony in society and nature..
- ✓ Distinguish between ethical and unethical practices. and start working out the strategy to actualize a harmonious environment wherever they work.

UNIT: 1 Introduction – Definition, Importance, Process & Classifications of Value Education

- ❖ Understanding the need. basic guidelines. content and process for Value Education
- ❖ Understanding the thought provoking issues: need for Values in our daily life
- ❖ Choices making – Choosing. Cherishing & Acting
- ❖ Classification of Value Education: understanding Personal Values. Social Values. Moral Values & Spiritual Values.

UNIT: 2 Harmony in the Family – Understanding Values in Human Relationships

- ✓ Understanding harmony in the Family- the basic unit of human interaction
- ✓ Understanding the set of proposals to verify the Harmony in the Family:
- ✓ Trust (*Vishwas*) and Respect (*Samman*) as the foundational values of relationship
- ✓ Present Scenario: Differentiation (Disrespect) in relationships on the basis of body. physical facilities. or beliefs.
- ✓ Understanding the Problems faced due to differentiation in Relationships
- ✓ Understanding the harmony in the society (society being an extension of family): *Samadhan. Samridhi. Abhay. Sah-astitva* as comprehensive Human Goals
- ✓ Visualizing a universal harmonious order in society- Undivided Society (*AkhandSamaj*). Universal Order (*SarvabhaumVyawastha*)- from family to world family.

UNIT: 3Professional Ethics in Education

- ✓ Understanding about Professional Integrity. Respect & Equality. Privacy. Building Trusting Relationships.
- ✓ Understanding the concepts: Positive co-operation. Respecting the competence of other professions.
- ✓ Understanding about Taking initiative and Promoting the culture of openness.
- ✓ Depicting Loyalty towards Goals and objectives.

Approved by
G.D. Jyotheeswari Devi
(Dr. G.D. Jyotheeswari Devi)

Text Books:

R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics.

Bhatia, R. & Bhatia, A (2015) Role of Ethical Values in Indian Higher Education.

References:

- Ivan Illich, 1974, Energy & Equity, The Trinity Press, Worcester, and Harper Collins, U
- E.F. Schumacher, 1973, Small is Beautiful: a study of economics as if people mattered, Blond & Briggs, Britain.
- Sussan George, 1976, How the Other Half Dies, Penguin Press. Reprinted 1986, 1991
- Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, 1972, Limits to Growth – Club of Rome's report, Universe Books.
- A Nagraj, 1998, Jeevan Vidya EkParichay, Divya Path Sansthan, Amarkantak.
- P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
- A N Tripathy, 2003, Human Values, New Age International Publishers.

Mode of Evaluation:

Assignment/ Seminar/Continuous Assessment Test/Semester End Exam.

Co curricular Activities:

1. Visit to an Old Age Home and spending with the inmates for a day.
2. Conduct of Group Discussions on the topics related to the syllabus.
3. Participation in community service activities.
4. Working with a NGO like Rotary Club or Lions International, etc.

SRI VENKATESWARA UNIVERSITY :: TIRUPATI

HUMAN VALUES AND PROFESSIONAL ETHICS

MODEL QUESTION PAPER

I SEMESTER - W.E.F. 2020-21

Time: 1½ Hour(90 Min.) Max.Marks: 50

SECTION-A

I. Answer any **FOUR** Questions: 4x5=20

1. Illustrate the content of Value Education.
2. What are the basic guidelines for Value Education?
3. Explain Moral Values in Value Education?
4. Write on basic unit of the Human Interactions?
5. What do you mean by differentiation in relationship?
6. What can be the basis of undivided society for the word family?
7. Write about the need of Professional Integrity?
8. Explain the significance of positive cooperation in professions.

II. Answer any **THREE** Questions 3X10=30

9. Explain and justify the need of the Value Education in our daily life?
10. Brief about the classification of the Value Education.
11. Explain Set of proposals to verify Harmony in the Family?
12. Write the role of trust and respect as Foundation Value in Complete Human Relationship?
13. Write about role of loyalty in achieving the goals and objectives?
14. Write the need and significance of promoting the culture of openness?

Approved by
G. D. Jyothi Devi
(Dr G. D. Jyotheeswari Devi)

SRI VENKATESWARA UNIVERSITY, TIRUPATI
Revised CBCS w.e.f. 2020-21
SKILL DEVELOPMENT COURSES

SCIENCE STREAM
FIRST YEAR B.SC. - FIRST SEMESTER
Syllabus of
ELECTRICAL APPLIANCES

Total 30 hrs (02h/wk), ***02 Credits & Max Marks :50***

Learning Outcomes:
By successful completion of the course, students will be able to:

1. *Acquire necessary skills/hand on experience/ working knowledge on multimeters, galvanometers, ammeters, voltmeters, ac/dc generators, motors, transformers, single phase and three phase connections, basics of electrical wiring with electrical protection devices.*
2. *Understand the working principles of different household domestic appliances.*
3. *Check the electrical connections at house-hold but will also learn the skill to repair the electrical appliances for the general troubleshoots and wiring faults.*

SYLLABUS:

UNIT-I **(6 hrs)**
Voltage, Current, Resistance, Capacitance, Inductance, Electrical conductors and Insulators, Ohm's law, Series and parallel combinations of resistors, Galvanometer, Ammeter, Voltmeter, Multimeter, Transformers, Electrical energy, Power, Kilowatt hour (kWh), consumption of electrical power

UNIT-II **(10 hrs)**
Direct current and alternating current,RMS and peak values, Power factor, Single phase and three phase connections , Basics of House wiring , Star and delta connection , Electric shock, First aid for electric shock, Overloading , Earthing and its necessity, Short circuiting , Fuses , MCB , ELCB, Insulation, Inverter, UPS

UNIT-III **(10 hrs)**
Principles of working, parts and servicing of Electric fan, Electric Iron box, Water heater; Induction heater, Microwave oven; Refrigerator, Concept of illumination, Electric bulbs, CFL, LED lights, Energy efficiency in electrical appliances, IS codes & IE codes.

Co-curricular Activities (Hands on Exercises): (04 hrs)
[Any four of the following may be taken up]

1. Studying the electrical performance and power consumption of a given number of bulbs connected in series and parallel circuits.
2. Measuring parameters in combinational DC circuits by applying Ohm's Law for different resistor values and voltage sources

3. Awareness of electrical safety tools and rescue of person in contact with live wire.
4. Checking the specific gravity of lead acid batteries in home UPS and topping-up with distilled water.
5. Identifying Phase, Neutral and Earth on power sockets.
6. Identifying primary and secondary windings and measuring primary and secondary voltages in various types of transformers.
7. Observing the working of transformer under no-load and full load conditions.
8. Observing the response of inductor and capacitor with DC and AC sources.
9. Observing the connections of elements and identify current flow and voltage drops.
10. Studying electrical circuit protection using MCBs, ELCBs
11. Assignments, Model exam etc.

Reference Books:

1. A Text book on Electrical Technology, B.L.Theraja, S.Chand& Co.,
2. A Text book on Electrical Technology, A.K.Theraja.
3. Performance and design of AC machines, M.G.Say, ELBSEdn.,
4. Handbook of Repair & Maintenance of domestic electronics appliances; BPB Publications
5. Consumer Electronics, S.P.Bali, Pearson
6. Domestic Appliances Servicing, K.P.Anwer, Scholar Institute Publications

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V. Ballow

BOS CHAIRMAN

SRI VENKATESWARA UNIVERSITY, TIRUPATI

I SEMESTER - MODEL QUESTION PAPER

SKILL DEVELOPMENT COURSES

SCIENCE STREAM

ELECTRICAL APPLIANCES

Max. Marks : 50 Time :1 ½ hrs (90 minutes)

(4x5M=20 Marks)

SECTION – A

Answer any four questions. Each answer carries 5 Marks

1. Define current and resistance?
2. Explain the Ohm's law
3. What is earthling and why is it necessary?
4. Define RMS & Peak values?
5. What in over loading explain?
6. Explain Induction heater
7. Write brief note on refrigerator
8. Write a note on IS codes and IE codes.

SECTION - B (3x10M=30 Marks)

Answer any four questions. Each answer carries 10 Marks

9. Derive equivalent resistance when resistors are connected in parallel?
10. Explain the Star equivalent for delta connected network
11. Explain working of Fuse, MCB and Inverter
12. Explain the Principal and working of Electric fan
13. Describe Electric bulbs, CFL and LED Lights

SRI VENKATESWARA UNIVERSITY
SKILL DEVELOPMENT COURSES

COMMERCE STREAM
FIRST YEAR B.Com. – FIRST SEMESTER

INSURANCE PROMOTION
Under CBCS W.E.F. 2020-21

Learning Outcomes:
By successful completion of the course, students will be able to;

1. *Understand the field level structure and functioning of insurance sector and it's role in protecting the risks*
2. *Comprehend pertaining skills and their application for promoting insurance coverage*
3. *Prepare better for the Insurance Agent examination conducted by IRDA*
4. *Plan 'promoting insurance coverage practice' as one of the career options.*

SYLLABUS:

Section I: 06 Hrs

Introduction of Insurance - Types of insurances. Growth of Insurance sector in India - Regulatory mechanism (IRDA) - Its functions

Section II: 10 Hrs

Life Insurance plans. Health insurance plans.Products and features. Contents of documents– Sales Promotion methods - Finding prospective customers –Counselling – Helping customers in filing - Extending post-insurance service to customers.

Section III : 10 Hrs

General Insurance - It's products (Motor, Marine,Machinery, Fire, Travel and Transportation) and features.Contents of documents.Dealing with customers – Explaining Products to Customers - Promoting Customer loyalty. Maintenance of Records.

Co-curricular Activities Suggested: (4 hrs)

1. Collection of pamphlets of various insurance forms and procedures
2. Invited Lectures by Development Officers concerned
3. Mock practice of selling of insurance products
4. Preparation of working documents
5. Assignments, Group discussion, Quiz etc.

Reference books:

1. Principles of Insurance, Himalaya publishing House
2. Principles and Practice of Insurance, "
3. Fundamentals of insurance, "
4. Life and General Insurance Management, "
5. Financial services, Tata McGraw hill
6. Insurance Principles and Practices, Sultan Chand &Son
7. Websites on insurance promotion.

SRI VENKATESWARA UNIVERSITY

SKILL DEVELOPMENT COURSES
COMMERCE STREAM

I SEMESTER

INSURANCE PROMOTION

Revised Syllabus under CBCS W.E.F. 2020-21

MODEL PAPER

[Max. Marks: 50] **[Time: 1½ Hours (90 Min.)]**

Section – A

[Total: 4 X 5 = 20 Marks]

(Answer any FOUR questions. Each answer carries 5 marks)

1. Define Insurance.
2. Write about Life Insurance plan.
3. Brief about IRDA regulatory mechanism
4. General Insurance.
5. Explain about post insurance service.
6. What are sales promotion methods?
7. Travel Insurance
8. What is Counselling?

Section – B

[Total: 3 X 10 = 30 Marks]

(Answer any THREE questions. Each answer carries 10 marks)

9. Write about the growth in Insurance sector.
10. Explain the types of Insurance.
11. Explain about Products and features of Health Insurance and also write the contents of documents.
12. What are the products of General Insurance?
13. Explain the steps involved regarding to customers.

SRI VENKATESWARA UNIVERSITY : TIRUPATI

B.A./B.Sc. MATHEMATICS

REVISED SYLLABUS FOR CORE COURSES

CBCS/ SEMESTER SYSTEM

(w.e.f. 2020-21 Admitted Batch)

CORE COURSES STRUCTURE

(Sem-I to Sem-IV)

Course	Subject	Hrs.	Credits	IA	ES	Total
Course -I	Differential Equations & Differential Equations Problem Solving Sessions	6	5	25	75	100
Course -II	Three dimensional analytical Solid geometry & Three dimensional analytical Solid Geometry Problem Solving Sessions	6	5	25	75	100
Course -III	Abstract Algebra & Abstract Algebra Problem Solving Sessions	6	5	25	75	100
Course -IV	Real Analysis & Real Analysis Problem Solving Sessions	6	5	25	75	100
Course -V	Linear Algebra & Linear Algebra Problem Solving Sessions	6	5	25	75	100

SRI VENKATESWARA UNIVERSITY : TIRUPATI

SEMESTER-I

CBCS/ SEMESTER SYSTEMB.A./B.Sc. MATHEMATICS (w.e.f. 2020-21 admitted Batch)
DIFFERENTIAL EQUATIONS
SYLLABUS (75 Hours)

Course Outcomes:

After successful completion of this course, the student will be able to;

1. Solve linear differential equations
2. Convert non-exact homogeneous equations to exact differential equations by using integrating factors.
3. Know the methods of finding solutions of differential equations of the first order but not of the first degree.
4. Solve higher-order linear differential equations, both homogeneous and non homogeneous, with constant coefficients.
5. Understand the concept and apply appropriate methods for solving differential equations.

Course Syllabus:

UNIT – I (12 Hours)

Differential Equations of first order and first degree:

Linear Differential Equations; Differential equations reducible to linear form; Exact differential equations; Integrating factors; Change of variables.

UNIT – II (12 Hours)

Differential Equations of first order but not of the first degree:

Equations solvable for *p*; Equations solvable for *y*; Equations solvable for *x*; Equations that do not contain x (or y); Equations homogeneous in x and y; Equations of the first degree in *x* and *y* – Clairaut's Equation.

UNIT – III (12 Hours)

Higher order linear differential equations-I:
Solution of homogeneous linear differential equations of order n with constant coefficients; Solution of the non-homogeneous linear differential equations with constant coefficients by means of polynomial operators.

General Solution of f(D)y=0. General Solution of f(D)y=Q when Q is a function of x,

P.I. of f(D)y = Q when Q= be^{ax}

P.I. of f(D)y = Q when Q is bsinax or bcos ax.

UNIT – IV (12 Hours)

Higher order linear differential equations-II:

Solution of the non-homogeneous linear differential equations with constant coefficients.
P.I. of f(D)y = Q when Q= bx^k
P.I. of f(D)y = Q when Q= $e^{ax}V$ **,** where V is a function of x.
P.I. of f(D)y = Q when Q= xV **,** where V is a function of x.

UNIT –V (12 Hours)

Higher order linear differential equations-III :

Method of variation of parameters; Linear differential Equations with non-constant coefficients; The Cauchy-Euler Equation, Legendre's linear equations.

Co-Curricular Activities(15 Hours)

Seminar/ Quiz/ Assignments/ Applications of Differential Equations to Real life Problem /Problem Solving.

Text Book :

Differential Equations and Their Applications by Zafar Ahsan, published by Prentice-Hall of India Pvt. Ltd, New Delhi-Second edition.

Reference Books :

1.A text book of Mathematics for B.A/B.Sc, Vol 1, by N. Krishna Murthy & others, published by S.Chand & Company, New Delhi.
2.Ordinary and Partial Differential Equations by Dr. M.D,Raisinghania, published by S. Chand & Company, New Delhi.
3.Differential Equations with applications and programs – S. Balachandra Rao & HR Anuradha-Universities Press.
4.Differential Equations -Srinivas Vangala & Madhu Rajesh, published by Spectrum University Press.

Dr.G.Sreenivasulu Reddy, BOS Chairman.

Mathematics, S.V.University, Tirupati

Recommended Question Paper Patterns and Models BLUE PRINT FOR

QUESTION PAPER PATTERN COURSE-I, DIFFERENTIAL EQUATIONS

Unit	**TOPIC**	**S.A.Q**(including choice)	**E.Q**(including choice)	**Total Marks**
I	Differential Equations of 1^{st} order and 1^{st} degree	2	2	30
II	Orthogonal Trajectories, Differential Equations of 1^{st} order but not of 1^{st} degree	2	2	30
III	Higher Order Linear Differential Equations (with constant coefficients) – I	1	2	25
IV	Higher Order Linear Differential Equations (with constant coefficients) – II	2	2	30
V	Higher Order Linear Differential Equations- III (with non constant coefficients)	1	2	25
TOTAL		8	10	140

S.A.Q. = Short answer questions (5 marks)

E.Q. = Essay questions (10 marks)

Short answer questions : 5 X 5 M = 25 M

Essay questions : 5 X 10 M = 50 M

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Total Marks = 75 M

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SRI VENKATESWARA UNIVERSITY : TIRUPATI

CBCS/ SEMESTER SYSTEM

I SEMESTER

(W.e.f 2020-21 Admitted Batch) B.A./B.Sc. MATHEMATICS

SE-I, DIFFERENTIAL EQUATIONS

MATHEMATICS MODEL PAPER

Time: 3Hrs **Max.Marks:75M**

SECTION - A

Answer any FIVE questions. Each question carries FIVE marks5 X 5 M=25 M

1. Solve $x\frac{dy}{dx}+2y-x^2\log x=0$
2. Solve $y + px = p^2x^4$.
3. Solve $(px - y)(py + x) = 2p$
4. Solve $(D^2 - 3D + 2) = \cosh x$
5. Solve $(D^2-3D+2)y=\sin e^{-x}$
6. Solve $(D^2-6D+13)y=8e^x\sin 2x$
7. Solve $(D^2 - 4D + 3)y = \sin 3x \cos 2x$.
8. Solve $x^2y'' - 2x(1 + x)y' + 2(1 + x)y = x^3$

SECTION - B

Answer ALL the questions. Each question carries TEN marks. 5 X 10 M = 50 M

9 a) Solve $(xy^3+y)dx+2(x^2y^2+x+y^4)dy=0$

(Or)

9b). Solve $\frac{dy}{dx}(x^2y^3+xy)=1$

10.a) Solve $p^2+2py\cot x=y^2$

(Or)

10 b) Find the orthogonal trajectories of the family of curves $x^{2/3}+y^{2/3}=a^{2/3}$ where 'a' is the parameter.

11a) Solve $(D^3+D^2-D-1)y=\cos 2x$

(Or)

11b) Solve $(D^2-4D+3)y=\sin 3x\ \cos 2x$

12 a) Solve $(D^2 - 2D + 4)y = 8(x^2 + e^{2x} + \sin 2x)$

(Or)

12b) Solve $(D^2 + 3D + 2)y = x e^x \sin x$

13a) Solve $(D^2 - 2D)y = e^x \sin x$ by the method of variation of parameters.

(Or)

13 b) Solve $3x^2 \frac{d^2y}{dx^2} + x\frac{dy}{dx} + y = x$

Dr.G.Sreenivasulu Reddy, BOS Chairman.

Mathematics, S.V.University, Tirupati.

SRI VENKATESWARA UNIVERSITY :: TIRUPATI

FIRST YEAR B.Sc. PHYSICS (WITH MATHEMATICS)
FIRST SEMESTER

Revised Syllabus Under CBCS W.E.F. 2020-21

STRUCTURE

Year	***Semester***	***Course***	***Title of the Course***	***Marks***	***No.ofHrs /Week***	***No.of Credits***
I	I	I	Mechanics, Waves and Oscillations	100	4	03
			Practical Course- I	50	2	02

SRI VENKATESWARA UNIVERSITY :: TIRUPATI

FIRST YEAR B.Sc. PHYSICS (WITH MATHEMATICS)
FIRST SEMESTER

Revised Syllabus Under CBCS W.E.F. 2020-21

Course I: MECHANICS, WAVES AND OSCILLATIONS

Work load: 60 hrs per semester **4 hrs/week**

Course outcomes:

On successful completion of this course, the students will be able to:

- *Understand Newton's laws of motion and motion of variable mass system and its application to rocket motion and the concepts of impact parameter, scattering cross section.*
- *Apply the rotational kinematic relations, the principle and working of gyroscope and itapplicationsand the precessional motion of a freely rotating symmetric top.*
- *Comprehend the general characteristics of central forces and the application of Kepler's laws to describe the motion of planets and satellite in circular orbit through the study of law of Gravitation.*
- *Understand postulates of Special theory of relativity and its consequences such as length contraction, time dilation, relativistic mass and mass-energy equivalence.*
- *Examinephenomena of simple harmonic motionand the distinction between undamped, damped and forced oscillations and the concepts of resonance and quality factor with reference to damped harmonic oscillator.*
- *Appreciate the formulation of the problem of coupled oscillations and solve them to obtain normal modes of oscillation and their frequencies in simple mechanical systems.*

- *Figure outthe formation of harmonics and overtones in a stretched string and acquire the knowledge on Ultrasonic waves, their production and detection and their applications in different fields.*

UNIT-I:

1. **Mechanics of Particles** **(5 hrs)**

Review of Newton's Laws of Motion, Motion of variable mass system, Motion of a rocket, Multistage rocket, Concept of impact parameter, scattering cross-section, Rutherford scattering- Derivation.

2. **Mechanics of Rigid bodies** **(7 hrs)**

Rigid body, rotational kinematic relations, Equation of motion for a rotating body, Angular momentum and Moment of inertia tensor, Euler equations, Precession of a spinning top, Gyroscope, Precession of the equinoxes

Unit-II:

3. **Motion in a Central Force Field** **(12hrs)**

Central forces, definition and examples, characteristics of central forces, conservative nature of central forces, Equation of motion under a central force, Kepler's laws of planetary motion- Proofs, Motion of satellites, Basic idea of Global Positioning System (GPS),

UNIT-III:

4. **Relativistic Mechanics** **(12hrs)**

Introduction to relativity, Frames of reference, Galilean transformations, absolute frames, Michelson-Morley experiment, negative result, Postulates of Special theory of relativity, Lorentz transformation, time dilation, length contraction, variation of mass with velocity, Einstein's mass-energy relation

Unit-IV:

5. **Undamped, Damped and Forced oscillations: (07 hrs)** Simple harmonic oscillator and solution of the differential equation, Damped harmonic oscillator, Forced harmonic oscillator – Their differential equations and solutions, Resonance, Logarithmic decrement, Relaxation time and Quality factor.

6. **Coupled oscillations:** **(05 hrs)**

Coupled oscillators-Introduction, Two coupled oscillators, Normal coordinates and Normal modes- N-coupled oscillators and wave equation.

Unit-V:

7. **Vibrating Strings:** **(07 hrs)**

Transverse wave propagation along a stretched string, General solution of wave equation and its significance, Modes of vibration of stretched string clamped at ends, Overtones and Harmonics,Melde's strings.

8. **Ultrasonics:** **(05 hrs)**

Ultrasonics, General Properties of ultrasonic waves, Production of ultrasonics by piezoelectric and magnetostriction methods, Detection of ultrasonics, Applications of ultrasonic waves.

REFERENCE BOOKS:

- B. Sc. Physics, Vol.1, Telugu Academy, Hyderabad
- Fundamentals of Physics Vol. I - Resnick, Halliday, Krane ,Wiley India 2007
- College Physics-I. T. Bhimasankaram and G. Prasad. Himalaya Publishing House.
- University Physics-FW Sears, MW Zemansky& HD Young,Narosa Publications, Delhi
- Mechanics, S.G.Venkatachalapathy, Margham Publication, 2003.
- Waves and Oscillations. N. Subramanyam and Brijlal, VikasPulications.
- Unified Physics - Waves and Oscillations, Jai PrakashNath&Co.Ltd.
- Waves & Oscillations. S.Badami, V. Balasubramanian and K.R. Reddy, Orient Longman.
- The Physics of Waves and Oscillations, N.K.Bajaj, Tata McGraw Hill
- Science and Technology of Ultrasonics- Baldevraj, Narosa, New Delhi,2004

BOS Chairman

Practical Course 1: Mechanics, Waves and Oscillations

Work load: 30 hrs per semester **2 hrs/week**

Course outcomes (Practicals):

On successful completion of this practical course, the student will be able to;

- Perform experiments on Properties of matter such as the determination of moduli of elasticity *viz.*, Young's modulus, Rigidity modulus of certain materials; Surface tension of water , Coefficient of viscosity of a liquid , Moment of inertia of some regular bodies by different methods and compare the experimental values with the standard values.
- Know how to determine the acceleration due to gravity at a place using Compound pendulum and Simple pendulum.
- Notice the difference between flat resonance and sharp resonance in case of volume resonator and sonometer experiments respectively.
- Verify the laws of transverse vibrations in a stretched string using sonometer and comment on the relation between frequency, length and tension of a stretched string under vibration.
- Demonstrate the formation of stationary waves on a string in Melde's string experiment.
- Observe the motion of coupled oscillators and normal modes.

Minimum of 6 experiments to be done and recorded:

1. Young's modulus of the material of a bar (scale) by uniform bending
2. Young's modulus of the material a bar (scale) by non- uniform bending
3. Surface tension of a liquid by capillary rise method
4. Viscosity of liquid by the flow method (Poiseuille's method)
5. Bifilar suspension –Moment of inertia of a regular rectangular body.
6. Fly-wheel -Determination of moment of inertia
7. Rigidity modulus of material of a wire-Dynamic method (Torsional pendulum)
8. Volume resonator experiment

9. Determination of 'g' by compound/bar pendulum
10. Simple pendulum- normal distribution of errors-estimation of time period and the error of the mean by statistical analysis
11. Determination of the force constant of a spring by static and dynamic method.
12. Coupled oscillators
13. Verification of laws of vibrations of stretched string –Sonometer
14. Determination of frequency of a bar –Melde's experiment.
15. Study of a damped oscillation using the torsional pendulum immersed in liquid-decay constant and damping correction of the amplitude.

RECOMMENDED CO-CURRICULAR ACTIVITIES:

MEASURABLE

- Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
- Student seminars (on topics of the syllabus and related aspects (individual activity)
- Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams)
- Field studies (individual observations and recordings as per syllabus content and related areas (Individual or team activity)
- Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity)

GENERAL

- Group Discussion
- Visit to Research Stations, Science Museum Centres to understand the basic principles of mechanics with live examplesand related industries
- Visit to Satellite launching station at Sri Harikota.

RECOMMENDED ASSESSMENT METHODS

Some of the following suggested assessment methodologies could be adopted;

- The oral and written examinations (Scheduled and surprise tests)
- Problem-solving exercises
- Practical assignments and Observation of practical skills
- Individual and group project reports
- Efficient delivery using seminar presentations
- Viva voce interviews.

BOS Chairman

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SRI VENKATESWARA UNIVERSITY :: TIRUPATI

B.Sc PHYSICS

[For Mathematical Combination] - W.E.F. 2020-21

Model question paper

Time: 3 hrs Max. Marks: 75

SECTION–A

(Short Answer Type Questions)

Answer any five out of the following eight questions 5x5=25

1. Write a note on scattering cross-section.
2. Write Euler's equations for a rigid rotating body.
3. If the mean distance of Mars from the Sun is 1.524 times that of the earth. Find the period of revolution of Mars about the Sun.
4. What is length contraction and obtain an expression for it
5. At what speed the mass of an object will be double of its value at rest.
6. Write briefly on forced oscillations
7. Write a short note on coupled oscillators
8. Write any five applications of ultrasonic waves

SECTION-B

(Essay type questions)

Answer All questions with internal choice from each Unit 5x10=50

9. a).Derive an expression for the velocity of a rocket moving under the influence of earth's gravitational field.

Or

b).Define rigid body. Deduce an equation of motion for a rotating rigid body.

10. a).What is a central force? Deduce an equation of motion of a particle underthe action of central force.

Or

b).State and prove Kepler's laws of planetary motion.

11. a).Describe the Michelson-Morley experiment and explain the significance ofnegative result.

Or

b).State postulates of special theory of relativity. Derive Einstein's mass energy relation

12. a).What is simple harmonic motion and derive an equation of motion of asimple harmonic oscillator.

Or

b).Determine spring constant of springs in series method by dynamic method.

13. a).What are transverse waves? Derive an expression for its velocity along astretched string.

Or

b).What are Ultrasonics? Derive any method of production of Ultrasonics.

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SRI VENKATESWARA UNIVERSITY :: TIRUPATI

FIRST YEAR B.Sc. COMPUTER SCIENCE / INFORMATION TECHNOLOGY
FIRST SEMESTER
Revised Syllabus Under CBCS W.E.F. 2020-21

PROBLEM SOLVING IN C

Semester	Course Code	Course Title		
I	C1	PROBLEM SOLVING IN C		

Objectives:

This course aims to provide exposure to problem-solving through programming. It introduces the concepts of the C Programming language.

Course Learning Outcomes:

Upon successful completion of the course, a student will be able to:

1. Understand the evolution and functionality of a Digital Computer.
2. Apply logical skills to analyse a given problem
3. Develop an algorithm for solving a given problem.
4. Understand 'C' language constructs like Iterative statements, Array processing, Pointers, etc.
5. Apply 'C' language constructs to the algorithms towrite a 'C' language program.

UNIT I

General Fundamentals: Introduction to computers: Block diagram of a computer, characteristics and limitations of computers, applications of computers, types of computers, computer generations.

Introduction to Algorithms and Programming Languages: Algorithm – Key features of Algorithms, Flow Charts, Programming Languages – Generations of Programming Languages – Structured Programming Language- Design and Implementation of Correct, Efficient and Maintainable Programs.

UNIT II

Introduction to C: Introduction – Structure of C Program – Writing the first C Program – File used in C Program – Compiling and Executing C Programs – Using Comments –Keywords – Identifiers – Basic Data Types in C – Variables – Constants – I/O Statements in C- Operators in C- Programming Examples.

Decision Control and Looping Statements: Introduction to Decision Control Statements– Conditional Branching Statements – Iterative Statements – Nested Loops – Break and Continue Statement – Goto Statement

UNIT III

Arrays: Introduction – Declaration of Arrays – Accessing elements of the Array – Storing Values in Array– Operations on Arrays – one dimensional, two dimensional and multi dimensional arrays, character handling and strings.

UNIT IV

Functions: Introduction – using functions – Function declaration/ prototype – Function definition – function call – return statement – Passing parameters – Scope of variables – Storage Classes – Recursive functions.

Structure, Union, and Enumerated Data Types: Introduction – Nested Structures – Arrays of Structures – Structures and Functions– Union – Arrays of Unions Variables – Unions inside Structures – Enumerated Data Types.

UNIT V

Pointers: Understanding Computer Memory – Introduction to Pointers – declaring Pointer Variables – Pointer Expressions and Pointer Arithmetic – Null Pointers - Passing Arguments to Functions using Pointer – Pointer and Arrays – Memory Allocation in C Programs – Memory Usage – Dynamic Memory Allocation – Drawbacks of Pointers

Files: Introduction to Files – Using Files in C – Reading Data from Files – Writing Data to Files – Detecting the End-of-file – Error Handling during File Operations – Accepting Command Line Arguments.

BOOKS

1. E Balagurusamy – Programming in ANSIC – Tata McGraw-Hill publications.
2. Brain W Kernighan and Dennis M Ritchie - The 'C' Programming language" - Pearson publications.
3. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Publications.
4. YashavantKanetkar - Let Us 'C' – BPB Publications.

RECOMMENDED CO-CURRICULAR ACTIVITIES:

(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning)

A. Measurable

1. Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
2. Student seminars (on topics of the syllabus and related aspects (individual activity))
3. Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams))
4. Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity

B. General

1. Group Discussion
2. Try to solve MCQ's available online.
3. Others

RECOMMENDED CONTINUOUS ASSESSMENT METHODS:

Some of the following suggested assessment methodologies could be adopted;

1. The oral and written examinations (Scheduled and surprise tests),
2. Closed-book and open-book tests,
3. Problem-solving exercises,
4. Practical assignments and laboratory reports,
5. Observation of practical skills,
6. Individual and group project reports like “Creating Text Editor in C”.
7. Efficient delivery using seminar presentations,
8. Viva voce interviews.
9. Computerized adaptive testing, literature surveys and evaluations,
10. Peers and self-assessment, outputs form individual and collaborative work

Problem solving in C LAB

Semester	Course Code	Course Title	Hours	Credits
I	**C1-P**	**PROBLEM SOLVING IN C LAB**	**30**	**2**

1. Write a program to check whether the given number is Armstrong or not.
2. Write a program to find the sum of individual digits of a positive integer.
3. Write a program to generate the first n terms of the Fibonacci sequence.
4. Write a program to find both the largest and smallest number in a list of integer values
5. Write a program to demonstrate refection of parameters in swapping of two integer values using **Call by Value**&**Call by Address**
6. Write a program that uses functions to add two matrices.
7. Write a program to calculate factorial of given integer value using recursive functions
8. Write a program for multiplication of twoN X N matrices.
9. Write a program to perform various string operations.
10. Write a program to search an element in a given list of values.
11. Write a program to sort a given list of integers in ascending order.
12. Write a program to calculate the salaries of all employees using ***Employee (ID, Name, Designation, Basic Pay, DA, HRA, Gross Salary, Deduction, Net Salary)*** structure.
    a. DA is 30 % of Basic Pay
    b. HRA is 15% of Basic Pay
    c. Deduction is 10% of (Basic Pay + DA)
    d. Gross Salary = Basic Pay + DA+ HRA
    e. Net Salary = Gross Salary – Deduction

13. Write a program to illustrate pointer arithmetic.
14. Write a program to read the data character by character from a file.
15. Write a program to create ***Book (ISBN,Title, Author, Price, Pages, Publisher)*** structureand store book details in a file and perform the following operations
    a. Add book details
    b. Search a book details for a given ISBN and display book details, if available
    c. Update a book details using ISBN
    d. Delete book details for a given ISBN and display list of remaining Books

SRI VENKATESWARA UNIVERSITY

B.Sc. DEGREE COURSE IN COMPUTER SCIENCE

W.E.F. 2020-21

MODEL QUESTION PAPER

Time: 3 hours Marks: 75 marks

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer any five of the following questions in Part A.
Part B consists of 5 Units. Answer one full question (A or B) from each unit (i.e., Q.No 9 from Unit – I, Q.No 10 from Unit – II, Q.No 11 from Unit – III, Q.No 12 from Unit – IV, Q.No 13 from Unit – V). Each question carries 10 marks.

PART – A

Answer any *Five* of the following question. (5X5=25M)

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

(P.T.O)

PART – B

Answer All The Questions. Each question carries 10 marks (5X10= 50M)

9.	(A) OR (B)
10.	(A) OR (B)
11.	(A) OR (B)
12.	(A) OR (B)
13.	(A) OR (B)

SRI VENKATESWARA UNIVERSITY

B.A. / B.Com. / B.Sc. DEGREE COURSE IN ENGLISH

FIRST YEAR - SECOND SEMESTER

(Revised Syllabus under CBCS w.e.f. 2020-21)

ENGLISH PRAXIS COURSE - II
A COURSE IN READING & WRITING SKILLS

I. UNIT

Prose	: 1. How to Avoid Foolish Opinions	Bertrand Russell
Skills	: 2. Vocabulary: Conversion of Words	
	: 3. One Word Substitutes	
	: 4. Collocations	

II. UNIT

Prose	: 1. The Doll's House	Katherine Mansfield
Poetry	: 2. Ode to the West Wind	P B Shelley
Non-Detailed Text	: 3. Florence Nightingale	Abrar Mohsin
Skills	: 4. Skimming and Scanning	

III. UNIT

Prose	: 1. The Night Train at Deoli	Ruskin Bond
Poetry	: 2. Upagupta	Rabindranath Tagore
Skills	: 3. Reading Comprehension	
	: 4. Note Making/Taking	

IV. UNIT

Poetry	: 1. Coromandel Fishers	Sarojini Naidu
Skills	: 2. Expansion of Ideas	
	: 3. Notices, Agendas and Minutes	

V.UNIT

Non-Detailed Text	: 1. An Astrologer's Day	R K Narayan
Skills	: 2. Curriculum Vitae and Resume	
	: 3. Letters	
	: 4. E-Correspondence	

Approved by BOS (PASS)
w.e.f. 2020-2021

3/9/2020
Chairperson
BOS in ENGLISH
(PASS)

SRI VENKATESWARA UNIVERSITY
B.A. / B.Com. / B.Sc. DEGREE EXAMINATION IN ENGLISH
FIRST YEAR - SECOND SEMESTER
(Revised Syllabus under CBCS w.e.f. 2020-21)

ENGLISH PRAXIS COURSE-II
A COURSE IN READING & WRITING SKILLS

Time: 3 hours **Max Marks: 75**

I) Answer any **THREE** of the following questions **(3X5=15)**

a. Summarize Russell's, "How to Avoid Foolish Opinion"

b. Write Noun forms for the following words by adding a Suffix:

i) Manage ii) free iii) pollute iv) create v) Maintain

c. Write one word substitutes for the following

i) A Government by one
ii) One who looks at the bright side of things
iii) A position for which no salary is paid
iv) One who eats too much
v) That which cannot be avoided.

d. Match the following into appropriate collocations:

A	B
i) Strong	i) Privacy
ii) Happy	ii) mistake
iii) some	iii) ending
iv) works	iv) coffee
v) Terrible	v) perfectly

e. Avoiding stupidity is easier than seeking brilliance. Explain

II) Answer any **THREE** of the following questions; **(3X5=15)**

a. Compare Torvald's and Nora's attitudes toward money
b. How does Shelley describe the power of West Wind
c. Describe Florence Nightingale
d. Define Skimming
e. Define Scanning

III) Answer any **THREE** of the following questions **(3X5=15)**

a. What's the theme of "The Night" Train at Deoli?
b. Critically appreciate the poem "Upagupta"
c. Why does the narrator say it is a game in the Night Train at Deoli
d. Read the following passage and answer the questions that follow.

Slavery can broadly be described as the ownership, buying and selling of human beings for the purpose of forced labour. The institution of slavery is as old as civilization. Many nations and empires were built by the muscles of the slaves.

Overtime people have found many reasons to justify slavery. Slaves were ususally considered somehow different than their owners. They may belong to different race, religion, nationality or ethnic background. By focussing on such differences, slave owners felt that they could deny basic human rights to their slaves.

i) What is the purpose of the institution of slavery?
ii) What is a slavery?
iii) How were the empires built?
iv) How were the slaves different from their masters?
v) Give the meaning of 'deny'

e. Make notes on the following passage.
Early rising is the secret for a happy life. We all wish to live long but we cannot. We go against Nature. Nature likes us to work during day and to rest at night. But we do not obey this law of Nature. We do not go to bed early.We read or write late into night. Some of us keep playing, dancing and drinking whole night. So, we do not rise early. Our health breaks down and we fall ill. Nature takes revenge. We have to suffer for our disobedience. But birds and animals are healthy. They do not need a doctor every day. They sleep early and rise early. This simple habit will give everything.So, it is said: "Early to bed and early to rise makes a man healthy, wealthy and wise"

IV) Answer any **THREE** of the following questions. **(3X5=15)**

a. Write a critical appreciation of the poem the Coromandel Fishers
b. Make hay while the sun shines. Expand
c. How does Sarojini Naidu a day in the lives of the fishermen?
d. Imagine that you are the manager of a company. You want to inform your employees of an important meeting. Write a suitable notice.
e. Explain minutes.

V) Answer any **THREE** of the following questions **(3X5=15)**

a. Justify the title "An Astrologer's Day"
b. Prepare a CV for the post of a Sales Executive
c. Write a letter to your friend about Carona crisis at your native place
d. Write a resume for your dream job
e. Assume that you received the letter of appointment for the post of General Manager from Splendour Pvt Ltd. Send an email to the company thanking them for the offer.

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(05.12.2020)
(Dr M.SREELATHA),
Chairman,
BOS English(PASS).

శ్రీ వేంకటేశ్వర విశ్వవిద్యాలయం, తిరుపతి

బి.ఏ., బి.కాం., బి.యస్ సి., మెదలైన కోర్సులు

జనరల్ తెలుగు సెమిస్టర్ 2

ఆధునిక తెలుగు సాహిత్యం

పాఠ్య ప్రణాళిక - (2020 -21 నుండి)

యూనిట్ - I : ఆధునిక కవిత్వం

1. ఆధునిక కవిత్వం – పరిచయం
2. కొండవీడు - దువ్వూరి రామిరెడ్డి
   ('కవికోకిల' గ్రంధావళి – ఖండ కావ్యాలు-నక్షత్రమాల సంపుటి నుండి)
3. మాతృ సంగీతం - అనిశెట్టి సుబ్బారావు (అగ్ని వీణ కవితా సంపుటి నుండి)
4. తాతకో నూలు పోగు - బండారు ప్రసాద మూర్తి ('కలనేత' కవితా సంపుటి నుండి)

యూనిట్ – II : కథానిక

5. తెలుగు కథానిక - పరిచయం
6. భయం (కథ) - కాళీపట్నం రామారావు
7. స్వేదం ఖరీదు ...? (కథ) - రెంటాల నాగేశ్వర రావు

యూనిట్ - III : నవల

8. తెలుగు నవల - పరిచయం
9. రథ చక్రాలు (నవల) - మహీధర రామ్మోహన రావు (సంక్షిప్త ఇతి వృత్తం మాత్రం)
10. రథ చక్రాలు (సమీక్షా వ్యాసం) – డా. యల్లాప్రగడ మల్లికార్జునరావు

యూనిట్ – IV : నాటకం

11. తెలుగు నాటకం - పరిచయం
12. యక్షగానము (నాటిక) - ఎం.వి.ఎస్. హరనాధ రావు
13. అపురూప కళారూపాల విధ్వంసదృశ్యం 'యక్షగానం'(సమీక్షా వ్యాసం)- డా. కందిమళ్ళ సాంబశివరావు

యూనిట్ – V : విమర్శ

14. తెలుగు సాహిత్య విమర్శ – పరిచయం
15. విమర్శ-స్వరూప స్వభావాలు : ఉత్తమ విమర్శకుడు-లక్షణాలు.

Approved by B.o.S.

Dr.G.D.Jyotheeswari Devi

B.T.College,Madanapalli

ఆధార గ్రంథాలు : వ్యాసాలూ

1.ఆధునిక కవిత్వం – పరిచయం : చూ. 'దృక్పథాలు' పుట 1-22 ఆచార్య ఎస్వీ.సత్యనారాయణ

2. తెలుగు కథానిక – పరిచయం : చూ. మన నవలలు-మన కథానికలు. పుట 118 – 130
ఆచార్య రాచపాలెం చంద్ర శేఖర రెడ్డి

3. తెలుగు నవల – పరిచయం : చూ. నవలా శిల్పం. పుట 1-17, వల్లంపాటి వెంటక సుబ్బయ్య

4. తెలుగు నాటకం – పరిచయం : చూ. తెలుగు నాటక రంగం. పుట 17-25, ఆచార్య ఎన్.గంగప్ప

5. తెలుగు సాహిత్య విమర్శ-పరిచయం – చూ. తెలుగు సాహిత్య విమర్శ –నాడు,నేడు పుట 213 – 217
తెలుగు వాణి, అయిదవ అఖిల భారత తెలుగు మహాసభల ప్రత్యేక సంచిక
ఆచార్య జి.వి.సుబ్రహ్మణ్యం

6. నూరేళ్ళ తెలుగు నాటక రంగం - ఆచార్య మొదలి నాగభూషణ శర్మ

7. నాటక శిల్పం - ఆచార్య మొదలి నాగభూషణ శర్మ

8. సాంఘిక నవల – కథన శిల్పం - ఆచార్య సి.మృణాలిని

***సూచించబడిన సహ పాఠ్య కార్యక్రమములు**

1. ఆధునిక కవిత్వానికి సంబంధించిన కొత్త కవితలను/అంశాలను ఇచ్చి, విద్యార్థుల చేత వాటిమీద అసైన్మెంట్లు రాయించడం

2. పాఠ్యాంశాలకు సంబంధించిన విషయాలపై వ్యాసాలూ రాయించడం(సెమినార్ / అసైన్మెంట్లు)

3. తెలుగు సాహిత్యంలోని ప్రసిద్ధ కథలపై,కవితలపై సమీక్షలు రాయించడం

4. ఆధునిక పద్య నిర్మాణ రచన చేయించడం .

5. విద్యార్థులను బృందాలుగా విభజించి,నాటికలపై/నవలలపై సమీక్షలు రాయించడం.

6.సాహిత్య వ్యాసాలూ సేకరించడం. బృంద చర్చ నిర్వహించడం, క్షేత్ర పర్యటనలు.

7. ప్రసిద్ధుల విమర్శా వ్యాసాలూ చదివించి, వాటిని విద్యార్థుల సొంత మాటలలో రాయించడం.

8. పాఠ్యాంశాలపై స్వీయ విమర్శా వ్యయాలు రాయించడం.

Approved by B.o.S.

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శ్రీ వేంకటేశ్వర విశ్వవిద్యాలయం, తిరుపతి

బి.ఏ., బి.కాం., బి.యస్ సి., మెదలైన కోర్సులు

జనరల్ తెలుగు సెమిస్టర్ 2

ఆధునిక తెలుగు సాహిత్యం

మాదిరి ప్రశ్న పత్రము

సమయం:: 3 గం. మార్కులు: 75

అ – విభాగము

క్రింది వానిలో ఐదింటికి సంక్షిప్త సమాధానాలు రాయండి .

ప్రతి సమాధానానికి 5 మార్కులు. 5X5 = 25 మా

1.కొండవీడు
2. తెలుగు నవల
3. తెలుగు నాటకం
4. ఆధునిక కవిత్వం
5. యక్షగానం
6. కథానిక
7. విమర్శ
8. అనిసెట్టి సుబ్బారావు
9. కాళీపట్నం రామారావు
10.జానపద కళారూపాలు

ఆ – విభాగము

క్రిందివానిలో అన్ని ప్రశ్నలకు సమాధానాలు రాయండి.

ప్రతి సమాధానానికి 10 మార్కులు. 5X10 = 50 మా

11. ఆధునిక కవిత్వ ఆవిర్భావ వికాసాలను వివరించండి. (లేదా)
    కొండవీడులో దువ్వూరి రామిరెడ్డి గారి సందేశాన్ని వివరించండి.
12. తెలుగు కథానికను పరిచయం చేయండి. (లేదా)
    భయం కథ లోని రచయిత సందేశాన్ని రాయండి.
13. సాహిత్య ప్రక్రియగా నవల స్థానాన్ని విమర్శించండి. (లేదా)
    రథచక్రాలు నవలలోని ఇతివృత్తాన్ని విశ్లేషించండి.
14. తెలుగు నాటక పరిణామాన్ని గూర్చి రాయండి. (లేదా)
    యక్షగానం నాటికపై సమీక్షా వ్యాసం రాయండి.
15. తెలుగు సాహిత్య విమర్శను పరిచయం చేయండి. (లేదా)
    విమర్శ స్వరూప స్వభావాలను వివరిస్తూ, ఉత్తమ విమర్శకుని లక్షణాలను రాయండి.

Approved by B.o.S.

Dr.G.D.Jyotheeswari Devi

B.T.College,Madanapalli

SRI VENKATESWARA UNIVERSITY
B.A. / B.Com. / B.Sc. DEGREE COURSE IN SANSKRIT
FIRST YEAR - SECOND SEMESTER
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PAPER - II : POETRY, PROSE & GRAMMER

UNIT – I OLD POETRY:

1."Indumateeswayamvaram", Raghuvamsam of kalidasa, 6th canto (67 to 86 slokas) Chowkhamba krishadas academy, Varanasi-2012.

2. "Deekshaapradanam", Buddacharitam of Aswagosha, 16th canto. Selected verses.

UNIT – II MODERN POETRY:

1. "Gangavataranam", Bhojas Champu Ramayanam, Balakanda.
2. "Mohapanodaha", 4th cant. Dharma Souhrudam by P.Pattabhi Ramarao, , Published by Author, Ramanth Nagar.
3. "VandeKasmeerabharatam", by Doolypala Ramakrishna from Samskrita pratibha, sahitya academy , New Delhi -2018.

UNIT – III PROSE:

1. "Avantisundarikatha", 5th Chapter. Dasakumara Charitam, Purva peetika.
2. "Charudattacharitam", Bhasakathasaraha by Y.Mahalingasastry.

UNIT - IV GRAMMAR:

1. DECLENSIONS :Nouns ending in vowels
   Nadee, Janu, vadhoo, Matru, Vana, Phala, Vaari & Madhu.
2. CONJUGATIONS
   III Conjugation- Yudh, IV Conjugation- Ish, VIII Conjugation- Likh, Kru, IX Conjugation-Kreen X, Conjugation-Kath, Ram, Vand.

UNIT – V GRAMMAR:

1. SANDHI - Halsandhi : Latva, Jastva
   -Visarga sandhi: Utva, Visargalopa, Rephadesa, Ooshma.

2.SAMASA
Avyayeebhava, Bahruvrihi.

SRI VENKATESWARA UNIVERSITY
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FIRST YEAR - SECOND SEMESTER
(Revised Syllabus under CBCS w.e.f. 2020-21)
PAPER - II : POETRY, PROSE, CHAMPU & GRAMMER

MODEL QUESTION PAPER

प्रश्नापत्रप्रणाली

Time : 3 Hours Max. Marks : 75

सूचना :- द्वितीय-तृतीय-चतुर्थ-पञ्चम-दशम-प्रश्नाः संस्कृत भाषायामेव समाधेयाः।

Q.No. 2, 3, 4, 5 & 10 Should be answered in Sanskrit Only

प्रथमो भागः (25 Marks)

1.	श्लोकपूरणं भावं लिखत (नक्षत्राङ्कितश्लोकेभ्यः देयाः)	(Unit-I) 2 Out of 4	2 x 3 = 06
2.	शब्दाः (सम्पूर्ण शब्दरूपाणि)	2 Out of 4	2 x 3 = 06
3.	धातवः(लकारे सर्वाणि रूपाणि)	2 Out of 4	2 x $2^{1/2}$ = 05
4.	सन्धिः (नामनिर्देशपूर्वकं)	4 Out of 8	4 x 1 = 04
5.	समासाः (नामनिर्देशपूर्वकं)	4 out of 8	4 x 1 = 04
			25

द्वितीयो भागः (50 Marks)

6.	आन्ध्रभाषायां वा आग्लभाषायां वा अनुवदत (from Unit-III only)	2 out of 4	2 x 3 = 06
7.	निबन्धप्रश्नः (Unit-I)	1 out of 2	1 x 08 = 08
8.	निबन्धप्रश्नः (Unit-II)	1 out of 2	1 x 08 = 08
9.	निबन्ध प्रश्नः (Unit-III)	1 out of 2	1 x 08 = 08
10.	लघुप्रश्नाः (from Unit I & III)	4 out of 8	4 x 02 = 08
11.	सन्दर्भ वाक्यानि (from Unit I & III)	4 out of 8	4 x 03 = 12
			50

प्रथमोभागः - 25
द्वितीयोः भागः - 50
अन्तर्गतपरीक्षा -25

100

Internal Assessment Mid-Sem - 15
Assignment / Seminar - 5 Attendance - 5

25

SRI VENKATESWARA UNIVERSITY
B.A. / B.Com. / B.Sc. DEGREE EXAMINATION IN SANSKRIT
FIRST YEAR - SECOND SEMESTER
(Revised Syllabus under CBCS w.e.f. 2020-21)
PAPER - II : POETRY, PROSE, CHAMPU & GRAMMER

MODEL QUESTION PAPER

Time : 3 Hours Max. Marks : 75

सूचना :- द्वितीय-तृतीय-चतुर्थ-पञ्चम-दशम-प्रश्नाः संस्कृत भाषायामेव समाधेयाः।
Q.No. 2, 3, 4, 5 & 10 Should be answered in Sanskrit Only

प्रथमो भागः (25 Marks)

I. **द्वौ श्लोकौ पूरयित्वा भावं च लिखत ।** 2 x 3 = 06

1. संचारिणी ----------भूमिपालः ॥
2. सा चूर्णगोरं ----------मूर्तमिवानुरागम् ॥
3. शरीरेण गृहं ---------- कथ्यते ॥
4. पृथक् पृथग् ----------दीनानुपदिशन्तु तान् ॥

II. **द्वयोः सम्पूर्ण शब्दरूपाणि लिखत ।** 2 x 3 = 06

1.तनु 2. मातृ 3. वारि 4. नदी

III. **द्वयोः धातोः लकारे सर्वाणिरूपाणि लिखत** 2 x $2^{1/2}$ = 05

1. एषिष्यति 2. अलिखत्
3. करोति 4. वन्दे

IV. **चतुर्णां नामनिर्देशपूर्वकं सन्धत्त** 4 x 1 = 04

1. तत्+लयः 2. अच् + अन्तः 3. नृपः + जयति
4. नराः + इमे 5. गुरो + आज्ञा 6. धनैः + च
7. प्रत्यङ् + आत्मा 8 सुप् + अन्तः

V. **चतुर्णाः नामनिर्देशपूर्वकं विग्रहवाक्यानि लिखत** 4 x 1 = 04

1. उपकृष्णम् 2. प्रत्यक्षम्
3. दत्तपशुः 4. सकलाः
5. दक्षिणापूर्वा 6. उपदशाः
7. चक्रपाणिः 8 अनुरूपम्

द्वितीयो भागः (50 Marks)

VI. द्वयोः आन्ध्रभाषायां आग्लभाषायां वा अनुवदत । 2 x 3 = 06

a. सा मनसीत्थमचिन्तयत् - 'अनन्यसाधारणसौन्दर्येणानेन कस्यां पुरि भाग्यवतीनां तरुणीनां लोचनोत्सवः क्रियते? पुत्ररत्नेनामुना पुरन्ध्रीणां पुत्रवतीनां सीमन्तितनां का नाम सीमन्तमौक्तिकीक्रियते?

b. 'सुभग कुसुमसुकुमारं जगदनवद्यं विलोक्य ते रूपम्।
मम मानसमभिलषति त्वं चित्तं कुरु तथा मृदुलम् ॥'

c. स कदाचित्कामदेवानुयानावसरे वसन्तसेनां नाम युवजनोन्मादिनीं ललामभूता-मुज्जयिन्याः प्रतिनवयौवनोन्मेषमधुरां गणिकादारिकां दृष्ट्वा मनसिजशरव्यतामयासीत्।

d. कः श्रद्धास्यति भूतार्थं सर्वो मा तूलयिष्यति।
शङ्कनीया हि दोषेषु निष्प्रभावा दरिद्रता॥

VII. 1 x 08 = 08

a. ''इन्दुमती स्वयंवरम्'' इति पाठ्यभागस्य सारांशं लिखत

(अथवा)

b. बुद्धोपदेशान् विवृणुत ।

VIII. 1 x 08 = 08

a. भगीरथः किं निमित्तीकृत्य घारें तपस्तेपे ?

(अथवा)

b. राजकुमार्याः सुनन्दायाः मोहः कथं अपनीतः?

IX. 1 x 08 = 08

a. ''अवन्तिसुन्दरीकथा'' इति पाठस्य सारांशं

(अथवा)

b. वसन्तसेनायाः पात्रचित्रणं कुरुत।

X. चतुर्णां लघुसमाधानानि लिखत 4x 02 = 8

1. कालिदासस्य नाटकेषु किं श्रेष्ठतमम् ?

2. वनस्थः कः ?

3. चम्पूरामायणस्य कर्ता कः?

4. दण्डिनः कृती लिखत ?

5. मैत्रेयः वसन्तसेनां किमवोचत् ?

6. अजः कस्य पुत्रः?

7. कः विमुक्तः?

8. गङ्गा कथं जह्नवी अभवत्?

9. राजवाहनः कस्यां अनुरागबद्धः?

10. मैत्रेयः चारुदत्तं किमुवाच?

XI. **चतुर्णां ससन्दर्भ वाक्यानि लिखित ।** 4 x 03 = 12

1. विवर्णभावं स स भूमिपालः।

2. रत्नं समागच्छतु काञ्चनेन ।

10

3. पुत्रशोकाद् दिवं गतः।

4. भगीरथः पुरीं प्राप परिपूर्णमनोरथः।

5. को भवान् ? कस्यां विद्यायां निपुणः?

6. निःशङ्कमित आगम्यताम् इति।

7. युवति विदघृणाया मा शरीरं च रक्ष।

8. एकाकिन्यां मयि किमकार्यमेतौ पापौ न करिष्यतः।

* * *

SUBJECT EXPERTS

Prof.G.Padmanabham
Dept of Sanskrit
Sri Venkateswara University, Tirupati

Prof. P.Varaprasada Murthy,
Dept of Telugu & Sanskrit
Acharya Nagarjuna University, Guntur

Prof. C.Lalitha Rani,
Dept of Sahitya
National Sanskrit University, Tirupati

Dr.G.Sireesha
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Sri B. Surendra
Dept of Sanskrit
S.V. Oriental College, Tirupati

SRI VENKATESWARA UNIVERSITY

B.A. / B.Com. / B.Sc. DEGREE COURSES
LIFE SKILL COURSE

FIRST YEAR – SECOND SEMESTER
UNDER CBCS W.E.F. 2020-21

INDIAN CULTURE & SCIENCE

Learning Outcomes:

By successful completion of the course, students will be able to:

1. Understand the evolution of India's culture
2. Analyze the process of modernization of Indian society and culture from past to future
3. Comprehend objective education and evaluate scientific development of India in various spheres
4. Inculcate nationalist and moral fervor and scientific temper

Syllabus:

Unit – I: Unity in Diversity in India: (09 hrs)

Coexistence of various religions since ancient times - Hinduism, Buddhism, Jainism and Atheism, and later Sikhism, Islam and Christianity

The Bhakti (Vishnavite and Saivaite) and Sufi Movements

The concepts of seela, karuna, kshama, maitri, vinaya, santhi and ahimsa Achievements in Literature, Music, Dance, Sculpture and Painting - Craftsmanshipin cloth, wood, clay, metal and ornaments

Cultural diversity, Monogamy, Family system, Important seasonal festivals

Unit – II: Social Reforms and Modern Society: (09 hrs)

Reforms by Basaveswara - Raja Rama Mohan Roy – Dayananda Saraswathi –Swamy Vivekananda –Mahatma Gandhi - B. R. Ambedkar - Reforms in Andhra by Vemana, Veerabrahmam, Gurajada, Veeresalingam and GurramJashua (only reforms in brief, biographies not needed)

Modern Society: Family unity, Community service, Social Harmony, Civic Sense, Gender Sensitivity, Equality, National Fervor

Unit – III: Science and Technology: ((09 hrs)

Objectivity and Scientific Temper – Education on Scientific lines (Bloom's Taxonomy) - Online Education

Developments in Industry, Agriculture, Medicine, Space, Alternate Energy, Communications, Media through ages

Co-curricular Activities Suggested: (03 hrs)

1. Assignments, Group discussions, Quiz etc
2. Invited Lecture by a local expert
3. Visit to a scientific institutions, local heritage sites, museums, industries etc

Approved by
G.D. Jyothi &
Dr G.D. Jyotheeswari Devi

Reference Books:

1. History of India and Culture (Upto 1526 A.D), Telugu Academy
2. History of India and Culture (1526 A.D to 1964), Telugu Academy
3. Basham, A.L (ed), A Cultural History of India
4. Hana S. Noor Al-Deen&J.A.Hendricks, Social Media : Usage and Impact
5. Bipan Chandra, Aditya Mukherjee, Mridula Mukherjee, India After Independence
6. S.K.Thakur, ISRO: History and Acheivements
7. V. Ramakrishna, Social Reform Movement Andhra, Vikas Publications

SRI VENKATESWARA UNIVERSITY

B.A. / B.Com. / B.Sc. DEGREE COURSES
LIFE SKILL COURSE
FIRST YEAR – SECOND SEMESTER
UNDER CBCS W.E.F. 2020-21
INDIAN CULTURE & SCIENCE

Time: 1½ Hour **MODEL QUESTION PAPER** Max.Marks: 50

SECTION-A

I. Answer any **FOUR** Questions: 4x5=20

1. Hinduism
2. Cultural Diversity
3. The Concept of Seetha, Karuna,
4. Importance of Seasonal Festivals
5. Gender Sensitivity
6. Bloom's Taxonomy
7. Civic Sense
8. Dr.B.R.Ambedkar and Dayananda Saraswathi

II. Answer any **THREE** Questions 3X10=30

1. How online Education, Bridge Learning gaps during the present days and justify it?
2. What are the challenges of Scientific Temper among the students?
3. Explain Unity in Diversity in India?
4. Narrate the Bhakti and Sufi Movements?
5. What are the social reforms done by the Telugu Poets?
6. Explain the importance of Community Service and Social Harmony?

Approved by
G. D. Jyothi
(Dr G. D. Jyotheeswari Devi)

SRI VENKATES WARA UNIVERSITY
SKILL DEVELOPMENT COURSE
SCIENCE STREAM
FIRST YEAR - SECOND SEMESTER
(UNDER CBCS W.E.F. 2020-21)

SOLAR ENERGY

Total 30 hrs (02h/wk), *02 Credits & Max Marks: 50*

Learning Outcomes:

After successful completion of the course, students will be able to:

1. *Acquire knowledge onsolarradiation principles with respect to solar energy estimation.*
2. *Get familiarized with various collecting techniques of solar energy and its storage*
3. *Learn the solar photovoltaic technology principles and different types of solar cells for energy conversion and different photovoltaic applications.*
4. *Understand the working principles of several solar appliances like Solar cookers, Solar hot water systems, Solar dryers, Solar Distillation, Solar greenhouses*

SYLLABUS:

UNIT-I – Solar Radiation: **(6 hrs)**

Sun as a source of energy, Solar radiation, Solar radiation at the Earth's surface, Measurement of Solar radiation-Pyroheliometer, Pyranometer, Sunshine recorder, Prediction of available solar radiation, Solar energy-Importance, Storage of solar energy, Solar pond

UNIT-II – Solar Thermal Systems: **(10 hrs)**

Principle of conversion of solar radiation into heat, Collectors used for solar thermal conversion: Flat plate collectors and Concentrating collectors, Solar Thermal Power Plant, Solar cookers, Solar hot water systems, Solar dryers, Solar Distillation, Solar greenhouses.

UNIT-III – Solar Photovoltaic Systems: **(10 hrs)**

Conversion of Solar energy into Electricity - Photovoltaic Effect, Solar photovoltaic cell and its working principle, Different types of Solar cells, Series and parallel connections, Photovoltaic applications: Battery chargers, domestic lighting, street lighting and water pumping

Co-curricular Activities (Hands on Exercises): (04 hrs)

[Any four of the following may be taken up]

1. *Plot sun chart and locate the sun at your location for a given time of the day.*
2. *Analyse shadow effect on incident solar radiation and find out contributors.*
3. *Connect solar panels in series & parallel and measure voltage and current.*
4. *Measure intensity of solar radiation using Pyranometer and radiometers.*
5. *Construct a solar lantern using Solar PV panel (15W)*
6. *Assemble solar cooker*
7. *Desigining and constructing photovoltaic system for a domestic house requiring 5kVA power*
8. Assignments/Model Exam.

Reference Books:

1. Solar Energy Utilization, G. D. Rai, Khanna Publishers
1. Solar Energy- Fundamentals, design, modeling & applications, G.N. Tiwari, Narosa Pub., 2005.
2. Solar Energy-Principles of thermal energy collection & storage, S.P. Sukhatme, Tata Mc-Graw Hill Publishers, 1999.
3. Solar Photovoltaics- Fundamentals, technologies and applications, Chetan Singh Solanki, PHI Learning Pvt. Ltd.,
4. Science and Technology of Photovoltaics, P. Jayarama Reddy, BS Publications, 2004.

V. Balaji

BOS chairman

SRI VENKATES WARA UNIVERSITY
SKILL DEVELOPMENT COURSE
SCIENCE STREAM
FIRST YEAR - SECOND SEMESTER
(UNDER CBCS W.E.F. 2020-21)

SOLAR ENERGY

MODEL QUESTION PAPER

Max. Marks : 50 Time :1 ½ hrs (90 minutes)

(4x5M=20 Marks)

SECTION – A

Answer any four questions. Each answer carries 5 Marks

1. Explain solar Radiation at the Earth's surface
2. Write short note on solar pond.
3. Explain Pyranometer.
4. Explain the Principal of conversion of solar radiation into heat
5. Write a note on solar green houses
6. Describe about solar cookers
7. Write a note on battery charges.
8. Mention the applications of photo voltaic system

SECTION - B (3x10M=30 Marks)

Answer any four questions. Each answer carries 10 Marks

1. Explain solar energy storage systems
2. Describe the experimental set up used in measurement of solar radiation by pyroheliometer.
3. Explain the flat plate collectors
4. Explain the concentrating collectors
5. What is photo voltaic effect? describe working Principal of solar photo voltaic cell
6. Explain various solar cells.

SRI VENKATES WARA UNIVERSITY
SKILL DEVELOPMENT COURSE
SCIENCE STREAM
FIRST YEAR - SECOND SEMESTER
(UNDER CBCS W.E.F. 2020-21)

FOOD ADULTERATION

Total 30 hrs (02h/wk), *02 Credits & Max Marks: 50*

Learning Outcomes:
After successful completion of the course, students will be able to:

1. *Get basic knowledge on*various *foods and about adulteration.*
2. *Understand the adulteration of common foods and their adverse impact on health*
3. *Comprehend certain skills of detecting adulteration of common foods.*
4. *Be able to extend their knowledge to other kinds of adulteration, detection and remedies.*
5. *Know the basic laws and procedures regarding food adulteration and consumer protection.*

SYLLABUS:

UNIT-I – Common Foods and Adulteration: (07hrs)

Common Foods subjected to Adulteration - Adulteration – Definition – Types; Poisonous substances, Foreign matter, Cheap substitutes, Spoiled parts. Adulteration through Food Additives – Intentional and incidental. General Impact on Human Health.

UNIT-II –: Adulteration of Common Foods and Methods of Detection: (10hrs)

Means of AdulterationMethods of Detection Adulterants in the following Foods; Milk, Oil, Grain, Sugar, Spices and condiments, Processed food, Fruits and vegetables. Additives and Sweetening agents (at least three methods of detection for each food item).

UNIT-III –: Present Laws and Procedures on Adulteration: (08hrs)

Highlights of Food Safety and Standards Act 2006 (FSSA) –Food Safety and Standards Authority of India–Rules and Procedures of Local Authorities.
Role of voluntary agencies suchas, Agmark, I.S.I.Qualitycontrol laboratories of companies, Private testing laboratories,Quality controllaboratoriesofconsumerco-operatives.
Consumer education,Consumer's problemsrightsandresponsibilities, COPRA 2019 - Offenses and Penalties – Procedures to Complain – Compensation to Victims.

Recommended Co-curricular Activities (including Hands on Exercises): (05hrs)

1. Collection of information on adulteration of some common foods from local market
2. Demonstration of Adulteration detection methods for a minimum of 5 common foods (one method each)
3. Invited lecture/training by local expert.
4. Visit to a related nearby laboratory
5. Assignments, Group discussion, Quiz etc

Reference e Books and Websites:

1. A firstcourseinFoodAnalysis–A.Y.Sathe,NewAgeInternational(P)Ltd.,1999
2. FoodSafety,casestudies–Ramesh.V.Bhat,NIN,1992
3. https://old.fssai.gov.in/Portals/0/Pdf/Draft_Manuals/Beverages and confectionary.pdf
4. https://cbseportal.com/project/Download-CBSE-XII-Chemistry-Project-Food-Adulteration#gsc.tab=0 (Downloadable e material on food adulteration)
5. https://www.fssai.gov.in/
6. https://indianlegalsolution.com/laws-on-food-adulteration/
7. https://fssai.gov.in/dart/
8. https://byjus.com/biology/food-adulteration/
9. Wikiepedia
10. Vikaspedia

SRI VENKATES WARA UNIVERSITY
SKILL DEVELOPMENT COURSE
SCIENCE STREAM
FIRST YEAR - SECOND SEMESTER
(UNDER CBCS W.E.F. 2020-21)

FOOD ADULTERATION

MODEL QUESTION PAPER

Max. Marks: 50 *Time: 1½ hrs (90 Minutes)*

SECTION- A (4x5M=20 Marks)

Answer any four questions. Each answer carries 5 marks
(At least 1 question should be given from each Unit)

1. Define food adulteration?
2. Explain the adulteration through Food Additives
3. Name few cheap substitutes used in food adulteration
4. Give examples for food additives and sweetening agents
5. Write a short notes on processed food
6. Explain the procedures to complain about the food adulteration
7. Name the laws that governs the food adulteration
8. Explain the procedure to get ccompensation to the victims of food adulteration

SECTION B (3x10M = 30 Marks)

Answer any three questions. Each answer carries 10 marks
(At least 1 question should be given from each Unit)

9. Write an essay on the common Foods which are subjected to Adulteration and explain the types poisonous substances added for food adulteration
10. Describe the highlights of Food Safety and Standards Act 2006 (FSSAI)
11. Explain the food testing and standardized testing methods and protocols
12. Write in detail about the general Impact of food adulteration on Human Health
13. Write an essay on different types of offenses of food adulteration and the penalties imposed

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SRI VENKATESWARA UNIVERSITY
B.A. / B.Sc. DEGREE COURSE IN MATHEMATICS
FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY
Syllabus (75 Hours)

Course Outcomes:

After successful completion of this course, the student will be able to;

1. get the knowledge of planes.
2. basic idea of lines, sphere and cones.
3. understand the properties of planes, lines, spheres and cones.
4. express the problems geometrically and then to get the solution.

Course Syllabus:

UNIT – I (12 Hours)

The Plane :

Equation of plane in terms of its intercepts on the axis, Equations of the plane through the given points, Length of the perpendicular from a given point to a given plane, Bisectors of angles between two planes, Combined equation of two planes, Orthogonal projection on a plane.

UNIT – II (12 hrs)

The Line :

Equation of a line; Angle between a line and a plane; The condition that a given line may lie in a given plane; The condition that two given lines are coplanar; Number of arbitrary constants in the equations of straight line; Sets of conditions which determine a line; The shortest distance between two lines; The length and equations of the line of shortest distance between two straight lines; Length of the perpendicular from a given point to a given line.

UNIT – III (12 hrs)

The Sphere :

Definition and equation of the sphere; Equation of the sphere through four given points; Plane sections of a sphere; Intersection of two spheres; Equation of a circle; Sphere through a given circle; Intersection of a sphere and a line; Power of a point; Tangent plane; Plane of contact; Polar plane; Pole of a Plane; Conjugate points; Conjugate planes;

UNIT – IV (12 hrs)

The Sphere and Cones :

Angle of intersection of two spheres; Conditions for two spheres to be orthogonal; Radical plane; Coaxial system of spheres;

Definitions of a cone; vertex; guiding curve; generators; Equation of the cone with a given vertex and guiding curve; equations of cones with vertex at origin are homogenous; Condition that the general equation of the second degree should represent a cone;

UNIT – V (12 hrs)

Cones :

Enveloping cone of a sphere; right circular cone: equation of the right circular cone with a given vertex, axis and semi vertical angle: Condition that a cone may have three mutually perpendicular generators; intersection of a line and a quadric cone; Tangent lines and tangent plane at a point; Condition that a plane may touch a cone; Reciprocal cones;

Co-Curricular Activities(15 Hours)

Seminar/ Quiz/ Assignments/Three dimensional analytical Solid geometry and its applications/ Problem Solving.

Text Book :

Analytical Solid Geometry by Shanti Narayan and P.K. Mittal, published by S. Chand & Company Ltd. 7th Edition.

Reference Books :

1. A text book of Mathematics for BA/B.Sc Vol 1, by V Krishna Murthy & Others, published by S. Chand & Company, New Delhi.
2. A text Book of Analytical Geometry of Three Dimensions, by P.K. Jain and Khaleel Ahmed, published by Wiley Eastern Ltd., 1999.
3. Co-ordinate Geometry of two and three dimensions by P. Balasubrahmanyam, K.Y. Subrahmanyam, G.R. Venkataraman published by Tata-MC Gran-Hill Publishers Company Ltd., New Delhi.
4. Solid Geometry by B.Rama Bhupal Reddy, published by Spectrum University Press.

Dr.G.Sreenivasulu Reddy, BOS Chairman.

Mathematics, S.V.University, Tirupati.

BLUE PRINT FOR QUESTION PAPER PATTERN

COURSE-II, THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY

Unit	**TOPIC**	**S.A.Q**(including choice)	**E.Q**(including choice)	**Total Marks**
I	The Plane	2	2	30
II	The Right Line	2	2	30
III	The Sphere	2	2	30
IV	The Sphere & The Cone	1	2	25
V	The Cone	1	2	25
TOTAL		8	10	140

S.A.Q. = Short answer questions (5 marks)

E.Q. = Essay questions (10 marks)

Short answer questions : 5 X 5 M = 25 M

Essay questions : 5 X 10 M = 50 M

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Total Marks = 75 M

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SRI VENKATESWARA UNIVERSITY
B.A. / B.Sc. DEGREE EXAMINATION IN MATHEMATICS
FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

THREE DIMENSIONAL ANALYTICAL SOLID GEOMETRY

MODEL QUESTION PAPER

Time: 3Hrs **Max.Marks:75 M**

SECTION - A

Answer any FIVE questions. Each question carries FIVE marks 5 X 5 M=25 M

1. Find the equation of the plane through the point (-1,3,2) and perpendicular to the planes x+2y+2z=5 and 3x+3y+2z=8.
2. Find the bisecting plane of the acute angle between the planes 3x-2y-6z+2=0,-2x+y-2z-2=0.
3. Find the image of the point (2,-1,3) in the plane 3x-2y+z =9.
4. Find the equation of the plane through the origin and containing the line $x-3y+2z+3=0=3x-y+2z-5$
5. A variable plane passes through a fixed point (a, b, c). It meets the axes in A,B,C. Show that the centre of the sphere OABC lies on $\frac{a}{x}+\frac{b}{y}+\frac{c}{z}=2$
5. Show that the plane 2x-2y+z+12=0 touches the sphere $x^2+y^2+z^2-2x-4y+2z-3=0$ and find the point of contact.
6. Find the equation to the cone which passes through the three coordinate axes and the lines $\frac{x}{1}=\frac{y}{-2}=\frac{z}{3}$ and $\frac{x}{2}=\frac{y}{1}=\frac{z}{1}$
7. Find the equation of the enveloping cone of the sphere $x^2 + y^2 + z^2 + 2x - 2y = 2$ with its vertex at (1, 1, 1).

SECTION - B

Answer ALL the questions. Each question carries TEN marks. 5 X 10 M = 50 M

9(a) A plane meets the coordinate axes in A, B, C. If the centroid of ΔABC is (a,b,c), show that the equation of the plane is $\frac{x}{a}+\frac{y}{b}+\frac{z}{c}=3.$

(OR)

(b) A variable plane is at a constant distance p from the origin and meets the axes in A,B,C. Show that the locus of the centroid of the tetrahedron OABC is $x^{-2}+y^{-2}+z^{-2}=16p^{-2}$.

10(a) Find the shortest distance between the lines

$$\frac{x-3}{3}=\frac{y-8}{-1}=\frac{z-3}{1};\ \frac{x+3}{-3}=\frac{y+7}{2}=\frac{z-6}{4}.$$

(OR)

(b) Prove that the lines

$$\frac{x-1}{2}=\frac{y-2}{3}=\frac{z-3}{4};\ \frac{x-2}{3}=\frac{y-3}{4}=\frac{z-4}{5}$$

are coplanar. Also find their point of intersection and the plane containing the lines.

11 (a) Show that the two circles $x^2+y^2+z^2-y+2z=0$, $x-y+z=2$; $x^2+y^2+z^2+x-3y+z-5=0$, $2x-y+4z-1=0$ lie on the same sphere and find its equation.

(OR)

(b) Find the equation of the sphere which touches the plane $3x+2y-z+2=0$ at $(1,-2,1)$ and cuts orthogonally the sphere $x^2+y^2+z^2-4x+6y+4=0$.

12 (a) Find the limiting points of the coaxial system of spheres $x^2+y^2+z^2-8x+2y-2z+32=0$, $x^2+y^2+z^2-7x+z+23=0$.

(OR)

(b) Find the equation to the cone with vertex is the origin and whose base curve is $x^2+y^2+z^2+2ux+d=0$.

13 (a) Prove that the equation $\sqrt{fx}\pm\sqrt{gy}\pm\sqrt{hz}=0$ represents a cone that touches the coordinate planes and find its reciprocal cone.

(OR)

(b) Find the equation of the sphere $x^2+y^2+z^2-2x+4y-1=0$ having its generators parallel to the line $x=y=z$.

Dr.G.Sreenivasulu Reddy, BOS Chairman.
Mathematics, S.V.University, Tirupati.

SRI VENKATESWARA UNIVERSITY
B.Sc. DEGREE COURSE IN PHYSICS WITH MATS
FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

Course II: WAVE OPTICS
(For Mathematics Combinations)

Work load:60 hrs per semester **4 hrs/week**

Course outcomes:

On successful completion of this course, the student will be able to:

- *Understand the phenomenon of interference of light and its formation in (i) Lloyd's single mirror due to division of wave front and (ii) Thin films, Newton's rings and Michelson interferometer due to division of amplitude.*
- *Distinguish between Fresnel's diffraction and Fraunhoffer diffraction and observe the diffraction patterns in the case of single slit and the diffraction grating.*
- *Describe the construction and working of zone plate and make the comparison of zone plate with convex lens.*
- *Explain the various methods of production of plane, circularly and polarized light and their detection and the concept of optical activity..*
- *Comprehend the basic principle of laser, the working of He-Ne laser and Ruby lasers and their applications in different fields.*
- *Explain about the different aberrations in lenses and discuss the methods of minimizing them.*
- *Understand the basic principles of fibreoptic communication andexplore the field of Holography and Nonlinear optics and their applications.*

UNIT-I Interference of light: (12hrs) Introduction, Conditions for interference of light, Interference of light by division of wave front and amplitude,Phase change on reflection-Stokes' treatment, Lloyd's single mirror,Interference in thin films: Plane parallel and wedge-shaped films, colours in thin films, Newton's rings in reflected light-Theory and experiment, Determination of wavelength of monochromatic light, Michelson interferometer and determination of wavelength.

UNIT-II Diffraction of light:(12hrs)

Introduction, Types of diffraction: Fresnel and Fraunhoffer diffractions, Distinction between Fresnel and Fraunhoffer diffraction,Fraunhoffer diffraction at a single slit, Plane diffraction grating,Determination of wavelength of light using diffraction grating, Resolving power of grating, Fresnel's half period zones, Explanation of rectilinear propagation of light, Zone plate, comparison of zone plate with convex lens.

UNIT-III Polarisation of light:(12hrs)

Polarized light: Methods of production of plane polarized light, Double refraction, Brewster's law, Malus law, Nicol prism, Nicol prism as polarizer and analyzer, Quarter wave plate, Half wave plate, Plane, Circularly and Elliptically polarized light-Production and detection, Optical activity, Laurent's half shade polarimeter: determination of specific rotation.

UNIT-IV Aberrations and Fibre Optics: (12hrs)

Monochromatic aberrations, Spherical aberration, Methods of minimizing spherical aberration, Coma, Astigmatism and Curvature of field, Distortion; Chromatic aberration-the achromatic doublet; Achromatism for two lenses (i) in contact and (ii) separated by a distance.

Fibre optics: Introduction to Fibers, different types of fibers, rays and modes in an optical fiber, Principles of fiber communication (qualitative treatment only), Advantages of fiber optic communication.

UNIT-V Lasersand Holography:(12hrs)

Lasers: Introduction, Spontaneous emission, stimulated emission, Population Inversion, Laser principle, Einstein coefficients, Types of lasers-He-Ne laser, Ruby laser, Applications of lasers; Holography: Basic principle of holography, Applications of holography

REFERENCE BOOKS:

- BSc Physics, Vol.2, Telugu Akademy, Hyderabad
- A Text Book of Optics-N Subramanyam, L Brijlal, S.Chand& Co.
- Optics-Murugeshan, S.Chand& Co.
- Unified Physics Vol.IIOptics, Jai PrakashNath&Co.Ltd., Meerut
- Optics,F.A. Jenkins and H.G.White, McGraw-Hill
- Optics, AjoyGhatak,TataMcGraw-Hill.
- Introduction of Lasers – Avadhanulu, S.Chand& Co.
- Principles of Optics- BK Mathur, Gopala Printing Press, 1995

BOS Chairman

SRI VENKATESWARA UNIVERSITY

B.Sc. DEGREE COURSE IN PHYSICS (WITH MATHS)

FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

PRACTICAL COURSE II WAVE OPTICS

Work load: 30 hrs **2 hrs/week**

Course outcomes (Practicals):

On successful completion of this practical course the student will be able to,

1. *Gain hands-on experience of using various optical instruments like spectrometer, polarimeterand making finer measurements of wavelength of light using Newton Ringsexperiment, diffraction grating etc.*
2. *Understand the principle of working of polarimeter and the measurement of specific rotatory power of sugar solution*
3. *Know the techniques involved in measuring the resolving power of telescope and dispersive power of the material of the prism.*
4. *Be familiar with the determination of refractive index of liquid by Boy's methodand the determination of thickness of a thin wire by wedge method.*

Minimum of 6 experiments to be done and recorded

1. Determination of radius of curvature of a given convex lens-Newton's rings.
2. Resolving power of grating.
3. Study of optical rotation –polarimeter.
4. Dispersive power of a prism.
5. Determination of wavelength of light using diffraction grating-minimum deviation method.
6. Determination of wavelength of light using diffraction grating-normal incidence method.
7. Resolving power of a telescope.
8. Refractive index of a liquid-hallow prism
9. Determination of thickness of a thin wire by wedgemethod
10. Determination of refractive index of liquid-Boy'smethod.

RECOMMENDED CO-CURRICULAR ACTIVITIES:

MEASURABLE

- Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
- Student seminars (on topics of the syllabus and related aspects (individual activity)
- Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams)
- Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity)

GENERAL

- Group Discussion
- Visit to Research Stations/laboratories and related industries

RECOMMENDED ASSESSMENT METHODS

Some of the following suggested assessment methodologies could be adopted;

- The oral and written examinations (Scheduled and surprise tests),
- Practical assignments and laboratory reports,
- Efficient delivery using seminar presentations,
- Viva voce interviews.

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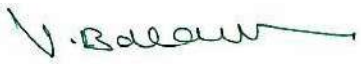

BOS Chairman

SRI VENKATESWARA UNIVERSITY
B.Sc. DEGREE COURSE IN PHYSICS (WITH MATHS)

FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

COURSE II: WAVE OPTICS
[For Mathematical Combination]

MODEL QUESTION PAPER

Time: 3 hrs Max. Marks: 75

SECTION-A
(Short Answer Type Questions)

Answer any five out of the following ten questions **5x5=25**

1. Explain the conditions for interference of light.
2. In an experiment with Michelson interferometer it is found that 40 tings to merge the centre, the mirror had to be moved through 0.01 mm. calculate the wavelength of the light used.
3. What is diffraction of light and discuss its types.
4. Write a short note on Fresnel's half period zones.
5. Explain law of Malus.
6. A half wave plate is construct for a wavelength of 6000 A^0. For what wavelength does it work as a quarter wave plate.
7. Find the focal lengths of the two component lenses of an achromatic doublet of focal length 25 cm. the dispersive powers of the crown and flint glasses are 0.022 and 0. 044 respectively.
8. Explain the advantages of optical fibres in communication systems.
9. Distinguish between spontaneous and stimulated emission.
10. State some applications of holography.

SECTION–B
(Essay type questions)

Answer All questions with internal choice from each Unit **5x10=50**

11. What is meant by phase change on reflection. Describe an experimental arrangement for observation and measurement of Lloyd's mirror fringes.

    Or

    Describe Newton's rings experiment to determine the wavelength of monochromatic light.

12. Discuss the fraunhoffer diffraction at a single slit and deduce intensity distribution.

    Or

    Explain construction and working of Zone plate. Derive the formula for its focal length.

13. Describe the construction and working of a Nicol's prism. Explain how it can be used as a polarizer and analyser.

    Or

    Describe the construction and working of Laurent's half shade polarimeter. Determine the specific heat of rotation of sugar solution.

14. Explain chromatic aberration. Obtain an expression for chromatic aberration of a thin lens when the object situated at infinity.

    Or

    What is an optical fibre and describe different types of fibres based on refractive index.

15. Define Einstein coefficients and obtain relationship between them.

    Or

    What is holography? Describe the basic principle of holography

SRI VENKATESWARA UNIVERSITY

B.Sc. DEGREE COURSE IN COMPUTER SCIENCE

FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

DATA STRUCTURES USING C

Semester	Course Code	Course Title	Hours	Credits
II	C2	DATA STRUCTURES USING C	60	3

Course Objectives

To introduce the fundamental concept of data structures and to emphasize the importance of various data structures in developing and implementing efficient algorithms.

Course Learning Outcomes:

Upon successful completion of the course, a student will be able to:

1. Understand available Data Structures for data storage and processing.
2. Comprehend Data Structure and their real-time applications - Stack, Queue, Linked List, Trees and Graph
3. Choose a suitable Data Structures for an application
4. Develop ability to implement different Sorting and Search methods
5. Have knowledge on Data Structures basic operations like insert, delete, search, update and traversal
6. Design and develop programs using various data structures
7. Implement the applications of algorithms for sorting, pattern matching etc

UNIT - I:

Introduction to Data Structures: Introduction to the Theory of Data Structures, Data Representation, Abstract Data Types, Data Types, Primitive Data Types, Data Structure and Structured Type, Atomic Type, Difference between Abstract Data Types, Data Types, and Data Structures, Refinement Stages

Principles of Programming and Analysis of Algorithms: Software Engineering, Program Design, Algorithms, Different Approaches to Designing an Algorithm, Complexity, Big 'O' Notation, Algorithm Analysis, Structured Approach to Programming, Recursion, Tips and Techniques for Writing Programs in 'C'

UNIT – II:

Arrays: Introduction to Linear and Non- Linear Data Structures, One- Dimensional Arrays, Array Operations, Two- Dimensional arrays, Multidimensional Arrays, Pointers and Arrays, an Overview of Pointers

Linked Lists: Introduction to Lists and Linked Lists, Dynamic Memory Allocation, Basic Linked List Operations, Doubly Linked List, Circular Linked List, Atomic Linked List, Linked List in Arrays, Linked List versus Arrays

UNIT – III:

Stacks: Introduction to Stacks, Stack as an Abstract Data Type, Representation of Stacks through Arrays, Representation of Stacks through Linked Lists, Applications of Stacks, Stacks and Recursion

Queues: Introduction, Queue as an Abstract data Type, Representation of Queues, Circular

Queues, Double Ended Queues- Deques, Priority Queues, Application of Queues

UNIT – IV:

Binary Trees: Introduction to Non- Linear Data Structures, Introduction Binary Trees, Types of Trees, Basic Definition of Binary Trees, Properties of Binary Trees, Representation of Binary Trees, Operations on a Binary Search Tree, Binary Tree Traversal, Counting Number of Binary Trees, Applications of Binary Tree

UNIT – V:

Searching and sorting: Sorting – An Introduction, Bubble Sort, Insertion Sort, Merge Sort, Searching – An Introduction, Linear or Sequential Search, Binary Search, Indexed Sequential Search

Graphs: Introduction to Graphs, Terms Associated with Graphs, Sequential Representation of Graphs, Linked Representation of Graphs, Traversal of Graphs, Spanning Trees, Shortest Path, Application of Graphs.

BOOKS:

1. "Data Structures using C", ISRD group Second Edition, TMH
2. "Data Structures through C", YashavantKanetkar, BPB Publications.
3. "Data Structures Using C" Balagurusamy E. TM

RECOMMENDED CO-CURRICULAR ACTIVITIES:

(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning)

A. **Measurable**

1. Assignments (in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
2. Student seminars (on topics of the syllabus and related aspects (individual activity))
3. Quiz (on topics where the content can be compiled by smaller aspects and data (Individuals or groups as teams))
4. Study projects (by very small groups of students on selected local real-time problems pertaining to syllabus or related areas. The individual participation and contribution of students shall be ensured (team activity))

B. **General**

1. Group Discussion
2. Others

RECOMMENDED CONTINUOUS ASSESSMENT METHODS:

Some of the following suggested assessment methodologies could be adopted;

1. The oral and written examinations (Scheduled and surprise tests),
2. Closed-book and open-book tests,
3. Programming exercises,
4. Practical assignments and laboratory reports,
5. Observation of practical skills,
6. Individual and group project reports.
7. Efficient delivery using seminar presentations,
8. Viva voce interviews.
9. Computerized adaptive testing, literature surveys and evaluations,
10. Peers and self-assessment, outputs form individual and collaborative work

SRI VENKATESWARA UNIVERSITY

B.Sc. DEGREE COURSE IN COMPUTER SCIENCE

FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F.
2020-21)

DATA STRUCTURES USING C LAB

Semester	Course Code	Course Title	Hours	Credits
II	C2-P	DATA STRUCTURES USING C LAB	30	2

1. Write a program to read 'N' numbers of elements into an array and also perform the following operation on an array
    a. Add an element at the begging of an array
    b. Insert an element at given index of array
    c. Update a element using a values and index
    d. Delete an existing element
2. Write a program using stacks to convert a given
    a. postfix expression to prefix
    b. prefix expression to postfix
    c. infix expression to postfix
3. Write Programs to implement the Stack operations using an array
4. Write Programs to implement the Stack operations using Liked List.
5. Write Programs to implement the Queue operations using an array.
6. Write Programs to implement the Queue operations using Liked List.
7. Write a program for arithmetic expression evaluation.
8. Write a program for Binary Search Tree Traversals
9. Write a program to implement dequeue using a doubly linked list.
10. Write a program to search an item in a given list using the following Searching Algorithms
    a. Linear Search
    b. Binary Search.
11. Write a program for implementation of the following Sorting Algorithms
    a. Bubble Sort
    b. Insertion Sort
    c. Quick Sort
12. Write a program for polynomial addition using single linked list
13. Write a program to find out shortest path between given Source Node and Destination Node in a given graph using Dijkstrar's algorithm.
14. Write a program to implement Depth First Search graph traversals algorithm
15. Write a program to implement Breadth First Search graph traversals algorithm

SRI VENKATESWARA UNIVERSITY

B.Sc. DEGREE EXAMINATION IN COMPUTER SCIENCE

FIRST YEAR - SECOND SEMESTER
(Under CBCS W.E.F. 2020-21)

DATA STRUCTURES USING C

MODEL QUESTION PAPER

Time: 3 hours Marks: 75

marks

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer any five of the following questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks

PART – A

Answer any *Five* of the following question.
(5X5=25M)

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

PART – B

Answer All The Questions. Each question carries 10 marks (5X10= 50M)

9.	(A) OR (B)
10.	(A) OR (B)
11.	(A) OR (B)
12.	(A) OR (B)
13.	(A) OR (B)

SUBJECT EXPERTS

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Degree College,
Repalle

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