

Teacher Eligibility Test – 2026



PAPER – I(B)

Structure and Content (All Compulsory)

A	Child Development and Pedagogy, ICT (Special Education)	30 MCQs	30Marks
B	Language I (Telugu/Urdu/Hindi/Kannada/Tamil/ Odia)	30 MCQs	30Marks
C	Language II (English)	30 MCQs	30Marks
D	Mathematics	30 MCQs	30Marks
E	Environmental Studies	30 MCQs	30Marks
	Total	150 MCQs	150 Marks

I. CHILD DEVELOPMENT AND PEDAGOGY (SPECIAL EDUCATION) (30 Marks)

1. CHILD DEVELOPMENT:

- Nature of Child development
- Principles and approaches of growth and development
- Theories of learning
- Methods of child study
- Individual differences

2. PEDAGOGY IN SPECIAL EDUCATION

- Characteristics and educational needs of Children with Special Needs
- Types and approaches to assessment of Children with Special Needs
- Statistical Analysis of Student Assessment data
- Curriculum Development and Curricular adaptations
- Concept of Individual Educational Plan and Individualized Family Services Plan
- Teaching strategies for Children with Special Needs
- Individualized Education Plan (IEP)

3. EDUCATION COMMISSIONS AND POLICIES (SCHOOL EDUCATION)

- Constitutional provisions on education that reflect National Ideals: Equality, liberty, secularism, and social justice
- National Commissions and Policies: Education Commission (1964), NPE and POA (1986, 1992), National Policy for Persons with Disabilities (2006), NCF-2005, RTE-2010, APSCF-2011, National Education Policy 2020, NCFPE-2022, NCFSE-2023
- National Acts: RCI Act, 1992, PWD Act, 1995, NT Act, 1999, RTE Act (2009 & 2012).

RPWD Act2016

- Programmes and Schemes: IEDC (1974, 1983), SSA (2000, 2011), RMSA, 2009, IEDSS, 2009
 - International Conventions and Policies: Salamanca Declaration and Framework, 1994; UNCRPD, 2006; MDG, 2015; INCHEON strategies
 - New trends and strategies in implementing inclusive education for CWSN
 - 4. ICT (Information & Communication Technology)
- A. ICT Fundamentals
- Core Concepts: Understanding ICT, computer hardware, software, input, output devices, the internet, and netiquette. etc.
 - Content Creation: Content development in various formats (text, documents, presentations, spreadsheets etc.) and explore Open Educational Resources (OERs).
 - ICT Policies & Learning
 - Policies: Key features of National and State-level ICT policies
 - Learning Processes: Utilize ICT to create effective learning environments and support pedagogical practices, including educational games, puzzles, Quizzes, etc.
- B. ICT Resources & Integration
- Resource Exploration: Explore various hardware (CD/DVD, Projectors, Interactive boards) and software (audio, video, multimedia, editing) in a computer lab setting.
 - Web & Media: Usage of web applications, the Internet, Animations, and Simulations etc.
 - Evaluation & Adoption: Evaluate and adopt suitable ICT resources for educational purposes.
 - Pedagogical Integration: content analysis and methods to map them with appropriate ICTs, alternatives, and organization of classrooms for integrated lessons.
- C. Assessment & Professional Development
- Assessment: Integrate ICT into assessment methods and tools.
 - Cyber security & Tools: Cyber law, Security, Freeware, Snippets, and Multimedia utilities.
 - Social Media: Importance of social media in learning.
 - Teacher Development: Usage of online courses and connected groups like subject forums for Continuous Professional Development.
 - Educational Software: Educational software like Canva, Tutor, and Moodle.
 - Open Platforms: Utilization of Open Educational Resources and different ICT platforms like MOOCs, DIKSHA etc.

B.1 Language - 1 Telugu (30 Marks)

కంటెంట్ (24 మార్కులు)

1. పఠనావగాహన

ఎ) అపరిచిత పద్యం బి) అపరిచిత గద్యం

2. తెలుగు వాచకాలలోని

ఎ) కవి పరిచయాలు బి) విశేషాంశాలు సి) ఉద్దేశాలు, ఇతివృత్తాలు డి) ప్రక్రియలు

3. పదజాలం

ఎ) అర్థాలు బి) పర్యాయపదాలు సి) ప్రకృతి-వికృతులు డి) నానార్థాలు
ఇ) జాతీయాలు ఎఫ్) సామెతలు జి) పొడుపు కథలు హెచ్) వ్యుత్పత్త్యర్థాలు
ఐ) మాండలిక పదాలు

4. భాషాంశాలు

ఎ) భాషాభాగాలు బి) కాలాలు సి) లింగాలు డి) విభక్తులు
ఇ) పురుషలు ఎఫ్) విరామ చిహ్నాలు హెచ్) వచనాలు ఐ) వ్యాకరణ పారిభాషిక పదాలు

జె) అక్షర విభాగం : అచ్చులు, హల్లులు, ఉభయాక్షరాలు, ద్విత్వ, సంయుక్తాక్షరాలు, పరుషాలు సరళాలు, అనునాసికాలు, ఊష్ణములు, అంతస్థాలు, వర్గయుక్కులు, స్పర్శాలు, స్థిరాలు కె) వర్ణోత్పత్తి స్థానాలు :

ఎల్) సంధులు - నిర్వచనాలు

తెలుగు సంధులు - అత్వ, ఇత్వ, ఉత్వ, యదాగమ, సరళాదేశ, గసడదవాదేశ, ఆమ్రేడిత, ద్విరుక్తటకార, లు, ల,

న, ల సంధులు, సంస్కృత సంధులు - సవర్ణదీర్ఘ, గుణ, యణాదేశ, వృద్ధిసంధులు

సంధులకు సంబంధించిన పదాలను విడదీయడం సంధి చేయడం

ఎమ్) సమాసాలు - నిర్వచనాలు

విగ్రహవాక్యాలను గుర్తించడం, విగ్రహవాక్యాలను సమాస పదాలుగా కూర్చడం

ఎన్) ఛందస్సు - గురు లఘువుల లక్షణాలను గుర్తించడం, చంపకమాల పద్య లక్షణాలు

ఒ) అలంకారాలు - పాఠ్యపుస్తకమునందలి అలంకారాలు గుర్తించడం.

పి) వాక్యాలు - రకాలు, క్రియలు - రకాలు

తెలుగు బోధనా పద్ధతులు (6 మార్కులు)

ఎ) భాష - మాతృభాష, చరిత్ర, స్వభావం, పరిధి

బి) భాషా నైపుణ్యాలు - మాతృభాషా బోధనా లక్ష్యాలు - సాధించాల్సిన సామర్థ్యాలు

సి) బోధనా పద్ధతులు

డి) ప్రణాళికా రచన - వనరుల వినియోగం

ఇ) బోధనాభ్యసన ఉపకరణాలు

ఎఫ్) మూల్యాంకనం - నిరంతర సమగ్ర మూల్యాంకనం (నిర్మాణాత్మక, సంగ్రహణాత్మక) దత్తాంశ విశ్లేషణ-పరిపుష్టి

Paper - I (A)

B 2 Language - I URDU (30 Marks)

Content - 24 Marks مواد

- I۔ مطالعہ کا فہم:
(A) ان دیکھی نظم (B) ان دیکھی نثر
- II۔ جماعت سوم تا جماعت ہشتم تک کے درسی کتب کا نصاب
A۔ درسی کتب میں موجود شعرا اور ادباء کا تعارف
B۔ سوانح حیات اور ادبی کارنامے
C۔ اسباق (نثر و نظم) کے موعظات، مقاصد اور اس میں موجود مواد
D۔ شعری و نثری اصناف
- III۔ جماعت سوم تا جماعت ہشتم درسی کتب میں موجود لفظیات
- IV۔ جماعت سوم تا جماعت ہشتم درسی کتب میں موجود زبان شناسی - قواعد

URDU Methodology - (06 Marks) طریقہ تدریس اردو

- A۔ زبان - مادری زبان - مادری زبان کے تدریسی مقاصد
- B۔ زبان کی مہارتیں - استعدادوں کا حصول
- C۔ طریقہ تدریس - وسائل کا استعمال
- D۔ تدریسی منصوبہ کی تیاری - تدریسی و اکتسابی آلات
- E۔ اردو کی ترقی میں معاون ادارے
- F۔ پیمائش و جانچ - مسلسل جامع جانچ (مجموعی جانچ، تشکیلی جانچ)

CONTENT (24 MARKS)

1. अवबोध : पठित - अपठित - पद्य - गद्य
2. कवि -काव्य- रचनाकार -लेखक -रचनाएं
3. वर्णमाला: स्वर, व्यंजन, वर्ण विच्छेद, अक्षर, संयुक्ताक्षर, द्वित्वाक्षर
4. शब्द भेद, शब्द ध्वनिया, शब्द रूप, परिवर्तन के आधार पर विकारी और अविकारी शब्द
5. व्याकरण : वचन, लिंग, कारक, काल, विराम चिह्न, संधि, समास, विलोम, समानार्थी शब्द, भिन्नार्थी, मुहावरे, कहावतें, लोकोक्तियां, उपसर्ग, प्रत्यय
6. अकर्मक -सकर्मक क्रिया, वाक्य भेद, वाक्य क्रम
7. हिंदी पाठ्य पुस्तके (द्वितीय भाषा) छठवीं कक्षा से आठवीं कक्षा तक(पठन हेतु) सहित

METHODOLOGY (6 Marks)

- भाषा
- भाषा का स्वरूप, साहित्य
- भाषा अधिगम
- भाषा शिक्षण के सूत्र
- पाठ योजना
- भाषा की शिक्षा और उपकरण
- व्याकरण की शिक्षा
- हिंदी में मूल्यांकन

Content (24 Marks)

1. ಓದುವ ತಿಳುವಳಿಕೆ :

- ಎ) ಅಪರಿಚಿತ ಗದ್ಯ ಬಿ) ಅಪರಿಚಿತ ಪದ್ಯ

2. ಕನ್ನಡ ಪಠ್ಯಪುಸ್ತಕಗಳು, ಪೂರಕ ಪಾಠಗಳಲ್ಲಿನ ವಿಷಯಗಳು :

- ಎ) ಕವಿ ಪರಿಚಯ ಬಿ) ಕಾವ್ಯಗಳು ಸಿ) ಹಿನ್ನೆಲೆ, ನಿದರ್ಶನಗಳು

3. ಪದಜಾಲ ಸಂಪತ್ತು :

- ಎ) ಅರ್ಥಗಳು ಬಿ) ಸಮನಾರ್ಥಕ ಪದಗಳು ಸಿ) ನಾನಾರ್ಥಗಳು
ಡಿ) ತತ್ಸಮ - ತದ್ಭವಗಳು ಇ) ನುಡಿಗಟ್ಟುಗಳು ಎಫ್) ಗಾದೆಗಳು
ಜಿ) ಸಕರ್ಮಕ - ಅಕರ್ಮಕ ಪದಗಳು

4. ಭಾಷಾಂಶಗಳು :

- + ಕಾಲಗಳು, ಲಿಂಗಗಳು, ವಚನಗಳು
- + ವಿಭಕ್ತಿ ಪ್ರತ್ಯಯಗಳು, ಲೇಖನ ಚಿಹ್ನೆಗಳು, ಪಾರಿಭಾಷಿಕ ಪದಗಳು, ಪುರುಷಗಳು.
(ಧ್ವನ್ಯಂಗಗಳು, ವ್ಯಂಜನಗಳು, ಸ್ವರಗಳು, ಅನುನಾಸಿಕಗಳು, ಸಂಯುಕ್ತಾಕ್ಷರಗಳು, ದ್ವಿತ್ವ ಇತ್ಯಾದಿ.)
- + ಸಂಧಿಗಳು - ವ್ಯಾಖ್ಯಾನಗಳು
ಕನ್ನಡ ಸಂಧಿಗಳು, ಸಂಸ್ಕೃತ ಸಂಧಿಗಳು
ಸಂಧಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಪದಗಳನ್ನು ಬಿಡಿಸಿ ಬರೆಯುವುದು, ಪದಗಳನ್ನು ಸಂಧಿ ಮಾಡುವುದು.
- + ಸಮಾಸಗಳು - ವ್ಯಾಖ್ಯಾನಗಳು
ವಿಗ್ರಹ ವಾಕ್ಯಗಳನ್ನು ಗುರ್ತಿಸುವುದು, ವಿಗ್ರಹ ವಾಕ್ಯಗಳನ್ನು ಸಮಾಸ ಪದಗಳಾಗಿ ಜೋಡಿಸುವುದು.
- + ಛಂದಸ್ಸು - ಗುರು, ಲಘುಗಳ ಲಕ್ಷಣಗಳನ್ನು ಗುರುತಿಸುವುದು.
- + ಅಲಂಕಾರಗಳು - ಪಠ್ಯಪುಸ್ತಕದಲ್ಲಿನ ಅಲಂಕಾರಗಳನ್ನು ಗುರ್ತಿಸುವುದು.
- + ವಾಕ್ಯಗಳು - ವಿಧಗಳು - ಸಾಮಾನ್ಯ, ಸಂಯುಕ್ತ, ಮಿಶ್ರ ವಾಕ್ಯಗಳನ್ನು ಗುರ್ತಿಸುವುದು.

Methodology (6 Marks)

ಕನ್ನಡ ಭಾಷಾ ಬೋಧನಾ ಪದ್ಧತಿಗಳು :

- + ಭಾಷೆ, ಮಾತೃಭಾಷೆ ಬೋಧನೆ ಮತ್ತು ಬೋಧಕ : ಬೋಧನೆಯ ಉದ್ದೇಶಗಳು ಮತ್ತು ಗುರಿಗಳು.
- + ಭಾಷಾ ಕೌಶಲ್ಯಗಳು - ಸಾಧಿಸಬೇಕಾದ ಸಾಮರ್ಥ್ಯಗಳು
- + ಬೋಧನಾ ಪದ್ಧತಿಗಳು
- + ಯೋಜನೆಗಳ ರಚನೆ - ಸಂಪನ್ಮೂಲಗಳ ಬಳಕೆ
- + ಬೋಧನೋಪಕರಣಗಳ ಮಹತ್ವ - ಪಾತ್ರ
- + ಮೌಲ್ಯಮಾಪನ : ನಿರಂತರ ಸಮಗ್ರ ಮೌಲ್ಯಮಾಪನ (ರಚನಾತ್ಮಕ ಮತ್ತು ಸಂಗ್ರಹಣಾತ್ಮಕ)

B.5 LANGUAGE - I TAMIL (30 Marks)

Content (24 Marks)

I. புரிந்துகொள்ளுதல் - விடையளித்தல்

அ) அறியாப் பத்தி ஆ) அறியாச் செய்யுள்

II. 3ஆம் வகுப்பிலிருந்து 8ஆம் வகுப்பு வரை தமிழ் பாடப் புத்தகத்திலுள்ள அனைத்தும்.

அ) ஆசிரியர் குறிப்பு (3ஆம் வகுப்பிலிருந்து 8ஆம் வகுப்புவரை)

ஆ) சிறப்பம்சங்கள் (3ஆம் வகுப்பிலிருந்து 8ஆம் வகுப்புவரை செய்யுள்)

சொல்லாக்கம் :

3ஆம் வகுப்பிலிருந்து 8ஆம் வகுப்புவரையுள்ள

அ) சொற்பொருள் ஆ) தொகைச்சொல் இ) பிரித்து எழுதுக

ஈ) சேர்த்துஎழுதுக உ) மரபுச் சொற்கள் ஊ) பிறமொழி சொல்லுக்கு தமிழ்ச்சொல்

ஏ) வழக்கு (பேச்சு, எழுத்து) ஏ) ஒரு பொருள் குறித்த பல சொற்கள்.

III. மொழித்திறன் :

3ஆம் வகுப்பிலிருந்து 8ஆம் வகுப்புவரையுள்ள

அ) எழுத்து (முதலெழுத்து, சார்பெழுத்து) ஆ) காலம் இ) பால் ஈ) இடம் உ) திணை
ஊ) மூவகைப்போலி ஏ) நால்வகைச்சொற்கள் ஏ) வேற்றுமை உருபுமட்டு ஜ) புணர்ச்சி
(இயல்பு, விகாரம்) ஓ) யாப்பு (அசைகளை அடையாளம் காணல்) ஐ) அணி செய்யுளில்
அமைந்துள்ள அணியை அடையாளம் காண் ஒ) தொடர்கள் (செய்வினை, உணர்ச்சி,
கட்டளை, எதிர்மறை)

Methodology (06 Marks)

* தமிழ்மொழி கற்பித்தல் முறைகள் :

முதலாம் ஆண்டு D.Ed.

* தமிழ் மொழித்திறன் வளர்த்தல்.

* மொழியின் இயல்பும் கற்பித்தலும்.

* அடிப்படைத் திறன்கள் - பாடங்களைக் கற்பித்தல்.

* பாடம் கற்பிப்புத் திட்டம்.

இரண்டாம் ஆண்டு D.Ed.

* பாட ஏற்பாடு - சொற்களஞ்சியம் பெருக்குதல்.

* தமிழ் மொழித்திறன் வளர்த்தல்.

* தமிழ் கற்பித்தலில் தகவல் தொழில் நுட்பம்.

* தேர்வும் - மதிப்பீடும்.

Odia : 30 Marks**Content : 24 Marks****1. ଅବବୋଧ ପରୀକ୍ଷଣ :**

କ) ଅପରିଚିତ ପଦ୍ୟ ଖ) ଅପରିଚିତ ଗଦ୍ୟ

2. ଓଡ଼ିଆ ସାହିତ୍ୟ :

କ) କବି/ଲେଖକ ପରିଚୟ ଖ) ବିଷୟବସ୍ତୁ ଗ) ପୃଷ୍ଠଭୂମି

3. ଶବ୍ଦ ଭଣ୍ଡାର :

କ) ଶବ୍ଦାର୍ଥ ଖ) ପ୍ରତିଶବ୍ଦ ଗ) ଭିନ୍ନାର୍ଥବୋଧକ ଶବ୍ଦ ଘ) ବିପରୀତାର୍ଥବୋଧକ ଶବ୍ଦ
ଙ) ସମୋଚ୍ଚାରିତ ଶବ୍ଦ ଚ) ଯୁଗ୍ମଶବ୍ଦ

4. ଭାଷା ପ୍ରକରଣ :

କ) ଭାଷା ପରିଚୟ ଖ) ଧ୍ବନି ଓ ଲିପି, ବର୍ଣ୍ଣ ଓ ଅକ୍ଷର, ମାତ୍ରା ଓ ଫଳା ଗ) ଶବ୍ଦ ବିଭାଗ
ଘ) ପଦ ପ୍ରକରଣ – ବିଶେଷ୍ୟ, ବିଶେଷଣ, ସର୍ବନାମ, କ୍ରିୟା ଓ ଅବ୍ୟୟର ସଂଜ୍ଞା ଏବଂ ପ୍ରକାର ଭେଦ
ଙ) ସନ୍ଧି – ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାର ଭେଦ
ଚ) ସମାସ – ସଂଜ୍ଞା, ସମାସର ନାମ, ସମସ୍ତ ପଦ, ବିଗ୍ରହ ବାକ୍ୟ ଓ ପ୍ରକାର ଭେଦ
ଛ) ଛନ୍ଦ – ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାର ଭେଦ
ଜ) ଅଳଙ୍କାର – ସଂଜ୍ଞା, ପ୍ରକାର ଭେଦ, ଲକ୍ଷଣ ଓ ଉଦାହରଣ
ଝ) ବାକ୍ୟ – ବାକ୍ୟର ଗଠନମୂଳକ ପ୍ରକାର ଭେଦ, ବାକ୍ୟର ବ୍ୟବହାର ମୂଳକ ପ୍ରକାର ଭେଦ,
ସଂଜ୍ଞା ଓ ସ୍ୱରୂପ

Methodology : 6 Marks

କ) ମାତୃଭାଷା ଶିକ୍ଷାଦାନ
ଖ) ଜ୍ଞାନ ପାଇଁ ପଠନ
ଗ) ଲିଖନ କୌଶଳ
ଘ) ଶିକ୍ଷଣ କାର୍ଯ୍ୟଭିତ୍ତିକ ପାଠଯୋଜନା
ଙ) ଶିକ୍ଷଣ ଉପକରଣ
ଚ) ମୂଲ୍ୟାୟନ

C. Language - 2 English (30 Marks)

Content (24 Marks)			
TOPIC	S.No.	DETAILS OF THE TOPIC	STRATA OF TESTING
1 Vocabulary	1	Synonyms	Recognition
	2	Antonyms	Recognition
	3	Homophones	Recognition
	4	Homonyms	Recognition
	5	Idioms and Phrases	Identification of meanings
	6	Phrasal Verbs	Identification of meanings
	7	Spellings	Identification of wrongly spelt words, Differentiate between British and American spellings
	8	Word formation	Suffixation, Prefixation, Unscrambling letters Conversion of Verb-Noun, vice versa; Noun - Adjectives, vice versa, Compound words
	9	Singular- Plural Words	Identification
	10	One word Substitutes	Identification of meanings
	11	Collocations	Identification of meanings
	12	Ordinal numbers	Understanding of position
	13	Anagrams	Identification
	14	Figures of Speech	Identification
	1	Parts of Speech	All types, their functions and usage
2 Grammar	2	Articles	All types, their functions and usage
	3	Tenses	All types, structure, forms and usage
	4	Voice	Active Voice to Passive Voice conversion
	5	Reported Speech/Direct Speech & Indirect Speech	For all types of sentences
	6	Types of Sentences	Assertive, Interrogative, Imperative & Exclamatory
	7	Degrees of Comparison	Positive, Comparative, Superlative, degrees of adjectives, their identification and conversions
	8	Linkers	Identification of functions, usages, position, cohesion with appropriate linkers
	9	Language Functions	Recognising real life communicative purposes
	10	Agreement of subject with verb	Right form of verbs

	11	Clause	If clause -Type I, Type II, Main Clause- Sub ordinate Clause, Subject- Predicate, Noun Clause, Adverbial Clause, Participle Clause, Relative Clause, Finite, Non - finite Clause
	12	Helping Verbs/ Modal Auxiliaries	Types, Form, Contractions, Negatives
	13	Framing Wh-Questions	Identification of right Wh-word, Syntax, Agreement of tense with subject
	14	Order of Adjectives	Knowledge of standard order, Correct placement, Contextual appropriateness
	15	Transitive -Intransitive Verbs	Recognition
3 Conventions of Writing	1	Punctuation and Capitalisation	Usage of Capital letters, Full stop, Comma, Question mark, Exclamation mark, Inverted commas, Apostrophe, etc.
4 Discourses	1	Letter Writing	Types, Format, Punctuation marks, Features
	2	Diary Entry	Format, Features
	3	e- mail	Format, Features, Communication
	4	Paragraph writing	Format, Features
	5	Dialogue writing	Format, Features
	6	Notice /Invitation	Format
	7	Biographical Sketch	Format, Features
	8	Speech	Format, Types of Speeches
5 Dictionary Skills	1	Alphabetical order	Recognition of letter sequences, word sequences
	2	Dictionary Entry	Efficiency in the usage of Dictionary
6 Reading Comprehension	1	Prose	Textual / General
	2	Poetry	Textual /General

Methodology (6Marks)

METHODOLOGY	STRATA OF TESTING
- Aspects of language-English language history, nature, importance, principles of English as second language and-Problems of teaching / learning English - Objectives of teaching English - Development of language skills-Listening, Speaking, Reading and Writing (LSRW)-Communicative skills and imparting values through communication. - Approaches, methods and techniques of teaching English (Introduction, definition, types of approaches, methods and techniques of teaching including remedial teaching. - Teaching of structures, vocabulary and grammar. - Teaching learning materials in English - Lesson planning - Curriculum and textbooks – importance and need. - Evaluation in English language	Detailed and deep understanding with application in broader sense.

Content (24 Marks)**1. NUMBERS**

Numbers - Four fundamental operations (Addition, Subtraction, Multiplication, Division) - Knowing about Numbers - Hindu-Arabic system of numeration (Indian system of numeration) - International system of numeration (British system of numeration) - Place value and Face values of a digit in a number - Comparing and Ordering of Numbers - Whole Numbers - Factors and Multiples - Prime and Composite numbers - Even and Odd numbers - Tests for Divisibility of Numbers - Common Factors and Common Multiples - Prime factorization - Highest Common Factor (G.C.D) - Lowest Common Multiple - Integers - properties and fundamental operations - Fractions and decimals - Types of fractions - comparison - Applications of fractions in daily life - four fundamental operations on fractions and decimals - Rational Numbers - Properties of Rational Numbers - Rational Numbers between two rational numbers - Four fundamental Operations on Rational Numbers - Product of reciprocals - Squares - Square roots (Numbers and Decimals) - Properties of Square Numbers - Cubes - Cube roots of Numbers - Playing with Numbers – Shifting Digits.

2. ARITHMETIC

BODMAS rule - Ratios and Proportions (Direct, Inverse) - comparing quantities using ratios, proportion, percentage and their applications - Profit and Loss - Discount - Sales Tax/Value Added Tax/Goods and Services Tax - Simple, Compound Interest and their applications.

3. GEOMETRY

Basic geometrical concepts (Point, Line, Line segment, Ray, Curves, Polygons, Angles) - Measuring of Lines - Pairs of Lines - Elements of Angles - Measuring of Angles - Types of Angles - Naming of the given 2D figures of Triangles, Square and Rectangle - The Triangle - Types of Triangles and its Properties - Classification of Polygons - Angle sum property - Kinds of Quadrilaterals (Trapezium, Kite, Parallelogram) - Some special parallelograms (Rhombus, Rectangle, Square) - Constructing different types of Quadrilaterals - Views of 3D-Shapes - Identification of Edges, Vertices and Faces of 3D figures (Euler's Rule) - Nets for building 3D shapes.

4. DATA HANDLING

Reading and interpreting and analysing the Data (pictograph, tally marks, bar graphs, double

bar graph, pie charts) - Arithmetic Mean - Mode - Median of un-grouped data - Chance and Probability.

5. ALGEBRA

Patterns - making rules - The idea of variables - formation of algebraic expressions - Terms, Factors and Coefficients - Linear equations in one variable - terms and types of algebraic expressions - finding the value of an expression - Addition, Subtraction and Multiplication of Algebraic Expressions - Multiplying a Monomial by a Monomial and polynomial - Multiplying a Polynomial by a Polynomial - Standard Identities and their applications - Applications of simple equations to practical situations - Exponents and Powers - Negative exponents - Laws of exponents - Expressing large numbers in the standard form - Factorisation - Division of Algebraic Expressions Continued (Polynomial $\div$ Polynomial) - Linear Graphs.

6. MENSURATION

Measuring Length, Weight, Capacity, Time-Seasons, Calendar, Money, Area - Symmetry (Line and Rotational) - Perimeter of Triangle, Square, Rectangle, Rhombus, Trapezium, Parallelogram, Circle and Polygon), Area of a Quadrilateral, Surface Area and Volume of Cube, Cuboid and Cylinder –Volume.

Methodology (6 Marks)

- History, Nature and Definitions of Mathematics
- Aims, values and instructional objectives of teaching Mathematics
- Methods of Teaching & Remedial measures in Mathematics
- Instructional Material, TLM and Resource Utilization in Mathematics
- Curriculum, Text Book & Instructional Planning.
- Assessment - Evaluation and Continuous Comprehensive Evaluation, Assessment analysis - feedback

Content (12 Marks)**E (i) SCIENCE****1. LIVING WORLD**

Living and non-living things - Characteristics of living organisms

Plants -Types of plants- Herb, shrub, Tree, basing on habitat – Terrestrial, Aquatic, Desert etc, plant parts -functions

Animals – Animals around us – Oviparous, viviparous; herbivore, carnivore, omnivore; shelters of different animals, Birds – beaks, Domestic animals, Wild animals, Types of animals basing on habitat, herbivore, carnivore, omnivore, Animals sounds, Movements in animals, Different types of habitat and adaptation, Homes of animals, Nests of birds.

Human beings - Body parts, Healthy body – good habits, Sense organs and their care, concern for differently abled persons, Good touch and Bad touch, Skeletal parts – Bones, Joints, Cartilage; muscles, Safety measures – at home, school safety, Road safety, water hazards, First- aid.

Food - Food, Need of food, Sources of food – plants, animals, Types of food, Cooked and raw foods, Utensils, Mid-day meal, Methods of preparing food, Food wastage, Preservation of food, Good food habits, Our food, Components of food, Balanced diet, Junk food, Deficiency diseases

Agricultural Practices, Tools used in agriculture, Methods of agriculture, Storage of food, Food from Animals, Food for birds and animals.

Family - Role of family members, Family Tree, Types of family, Changing family structure, Family Budget, Shelter for all, Different types of houses, Home appliances, Migration – Reasons, Effects, Slums, Homeless people.

Cell – The basic unit of life, Types of cells, Cell structure and function.

Microorganisms - Introduction to microorganisms – types, Useful Microorganisms, Harmful microorganism.

Games and recreation- indoor, outdoor, local games, uses, materials used and the rules.

2. LIFE PROCESSES

Nutrition - Nutrition in plants – Autotrophic, Parasitic, saprophytic, Insectivorous, Different ways of taking food, Digestion in humans, Digestion in grass eating animals, feeding and digestion in amoeba.

Respiration - Types of respiration, Respiration in animals, Respiration in plants, Circulation - Circulatory system in human being -Transport of substances in plants. Excretion in animals, Coordination- Nervous system,

Reproduction - Modes of reproduction – sexual, asexual and vegetative, Seed dispersal, Sexual and Asexual Reproduction in Animals, Adolescence and puberty – changes, role of hormones, Reproductive phase, Sex determination, Hormones other than sex hormones, Metamorphosis, Reproductive health

3. NATURAL PHENOMENA

OBJECTS AND MATERIALS

Objects around us – Properties of materials - classification of materials, Properties and uses of Metals and Non-metals, Reactivity order of metals, Methods of separation– Saturated and unsaturated solutions. Acids, bases and salts, indicators, Neutralization, Physical and chemical changes, Rusting of Iron, Galvanization, Crystallization,

MEASUREMENT OF DISTANCES – MOTION

Measurement of distances, Standard units and non-standard units of measurements, Motion and rest, Types of motion, Motion and time – speed, average speed, Uniform and non-uniform motions, Measurement of time, Time period, Units of time and speed, Measuring speed, Distance-time graph,

LIGHT

Light, shadows, and reflections, Transparent, opaque and translucent objects, pin hole camera, mirrors and reflection, Regular and Diffused Reflection, multiple images, kaleidoscope, periscope, Characteristics of images formed by mirrors, Spherical mirrors and images, Lenses and images, Sunlight – dispersion, Human Eye, Care of the Eyes, Braille System, Visually Impaired Persons

ELECTRICITY

Simple electric circuit and its components, Symbols of electric components, Electric conductors and insulators, Heating effects of electric current, CFL, LED, Fuse and MCB, Magnetic effects of electric current, Electromagnet, Electric bell, Chemical Effects Of Electric Current, Good/ Poor Conducting Liquids, Electroplating.

MAGNETISM

Magnets – Discovery of magnets, Magnetic and nonmagnetic substances, Types of magnets, Properties of magnets, Magnetic compass, Storing of magnets.

HEAT

Heat – temperature, measuring temperature, Units of temperature, Types of Thermometers, Transfer of heat – conduction, convection, radiation.

FORCE, FRICTION AND PRESSURE

Force – push or pull, Exploring forces, net force, Effect of force on objects, Contact and noncontact forces, Pressure, Fluid pressure, Atmospheric pressure, Friction, Factors effecting friction, Friction: A necessary evil, Increasing and reducing friction, Types of friction.

COMBUSTION AND FUELS

Exhaustible and inexhaustible resources, Fuels – Types, Coal, Uses of Coal and Coal products, Refining of petroleum, Petrochemical products in various sectors, Various Constituents of Petroleum and their Uses, Formation of coal and petroleum, Natural Gas, Misuse of Energy resources and Consequences. Combustion, Types of Combustion, Ignition temperature, Inflammable substances, Flame, Fuel Efficiency, Burning of Fuels Leads to Harmful Products, Fire control, Structure of flame – colour zones – Intensities.

SOUND

Sound - a form of energy, Production of sound, some musical instruments, Propagation of sound, Human ear, Hearing Impairment, Noise and Music, Types of waves (longitudinal and transverse), Characteristics of sound waves (Wavelength, Frequency, Time period, Speed of the wave), Pitch, Loudness and Quality, Audible and Inaudible sounds, Noise pollution.

SOME NATURAL PHENOMENA

The Story of Lightning, charging by Rubbing, Electric charge and properties of electric charge, Types of charges and their interactions, Transfer of charge, lightning, lightning safety, lightning

conductors, Earthquake, Tsunami, Causes and effects, Protective measures.

4. TRANSPORTATION AND COMMUNICATION

Transportation - Story of transport – Objects- signs and signboards used for transport- Places associated with transport- Modes of travel in the present and in the past- Methods of transport in different topographical conditions (Transport in hilly areas, Forest, Deserts, Snowy areas, Rivers & Canals)- Need for an international transport -Import and export of the goods- different means of transport of goods- Importance of tourism and seven wonders of the world.

Communication - Means and objects of Communication- Types of Communication both in Human and Animals (different feelings and gestures) Modern forms of communication- Communication used in the past and present- Advantage of Mass Communication- Communication through Postcard, Cell Phone, E-Mail, News Paper, Radio, TV, and Social Media etc.,
How communication and transport brings the entire world together.

5. PROFESSIONS AND SERVICES

House hold materials with reference to profession (farmer, cobbler, tailor etc)-Different professions and their need to the society- villager/farmer (seeds/manure/ agri methods etc.), helping agents (bank, e- seva, PHC, panchayat office, post office/etc.,) Governance and Services - Local Self Govt, State, Central Govt, Judiciary.

6. OUR ENVIRONMENT

Climate– Climate change, Weather- Climate- rain- floods- Cyclones- disaster management, Global environmental issues – Green house effect, Global warming, Acid rains. Ecofriendly activities, Say no to plastic.

Air - Presence of air, Components of air, Properties of air, Availability of oxygen to animals and plants, Replacement of oxygen in the atmosphere, uses of air, Nitrogen cycle, Air pollution -causes, effects and prevention.

Water - Forms of water, Use of water, source, scarcity, protected water, wastage of water, Water resources, Tank pollution, safe drinking water, tank management, journey of rain drop – Water cycle, water magic, water properties, Water resources, major rivers in AP, fisherman, water transport, tragedy of rivers, drought and floods, water pollutions - Causes, effects and prevention. Sewage, Treatment of polluted water, Better housekeeping practices, Sanitation and Disease, Alternative arrangement for sewage disposal.

Biodiversity - Forests, Flora, fauna, interrelation of organisms, Green world, Advantages of forests,

Deforestation - effects, Chipko movement, Conservation of forest and wildlife – Protecting areas, endangered and endemic species.

Methodology (3 Marks)

- Histroy, Nature and Definitions of Science
- Aims, values and instructional objectives of teaching Science
- Methods of Teaching & Remedial measures in Science
- Instructional Material, TLM and Resource Utilization in Science
- Curriculum, Text Book & Instructional Planning.
- Assessment - Evaluation and Continuous Comprehensive Evaluation, Assessment analysis - feedback

E (ii) SOCIAL STUDIES

Content (12Marks)

OUR UNIVERSE

- The shape of the Earth, The Universe- Origin, solar System, Our Earth in the Solar System – Celestial bodies, Constellations, Realms of the Earth- Latitudes and Longitudes -Movements of Earth – Solar System- Globe-Model of Earth – Axis of Earth, Equinox – Eclipses.
- Maps – Directions, Scale, Symbols, Patterns, Types, where are We-Village, Mandal, District, country maps.
- The Earth- Environment – Components, Interior of the Earth, Atmosphere, Biosphere, Pollution, Disasters.
- Land Forms – Major Land Forms in AP, Podu cultivation, Diversity in Lifestyles.
- Forests-Climatic Regions - Types of Forests, Forests in AP, Uses- Deforestation, Conservation of Forests.
- Land, Soil, Water, Natural Vegetation and Wildlife Resources.

PRODUCTION EXCHANGE AND LIVELIHOODS

- Resources – Types, Conservation, Mineral and Power Resources – Types of Minerals, Distribution, Conservation Power Resources: Conventional, Non-Conventional.
- Human Resources- Distribution of Population, Density of Population, Population Change, population composition.
- Agriculture – Types of farming, Major crops; industries- Classification and Distribution. Manufacturing industries environmental degradation, control of environmental degradation.
- Industrial pollution
- Public facilities, Water as a part of fundamental Right to Life- Govt. Role.
- Markets Around Us- Types of Markets- Consumer Protection.
- Transport system, International Transport, Exports and Imports, Global Village, Road ways, My bicycle, Vehicles other than Transport, Transport in Hill areas, Forests, deserts, snowy areas, rivers and canals, Road Safety, Traffic symbols, Road safety measures, pedestrian safety, safe cycling, safety travelling. Lifelines of national economy. Major sea ports-international trade, tourism as a trade.
- Development
- Money and credit
- Globalization and Indian economy
- Consumer rights.

POLITICAL SYSTEMS AND GOVERNANCE

- Early Life to Settled life- Early people, Nomadic life, Belum caves, Rock paintings, Growing

plants, Rearing animals, Towards a settled life, Emergence of Kingdoms and Republics, Mahajanapadas, Magadha, Vaggi Kingdoms and Empires- Mauryan, Guptas, Satavahanas, Pallava, Chalukya Dynasties.

- Delhi Sultanate, Kakatiyas, Vijayanagara Empire, Mughals, Contemporary Kingdoms.
- Governments – Types, Monarchy, Democracy, Different levels, Local and Self Government, State and Central Governments; Parliament and the making of laws, The role of the Parliament, Who are the people in the parliament?; State Government – Legislature, Executive, Judiciary- Role, Independent Judiciary, Structure of Courts in India, Different Branches of the legal system- Law and Social Justice – Bhopal gas Tragedy, Enforcement of Safety Laws, New laws to protect the Environment.
- The Indian Constitution, key features – Fundamental Rights – Fundamental Duties; Understanding Secularism, Understanding Laws.
- - Civilizing the “Native” Educating the nation- How the British saw Education? – What happened to the local schools?- the agenda for a National Education, How Important are
- Dates, How do we periodise, What is Colonial?,- From Trade to Territory-The Company establishes Power, East India Company, Battle of Plassey, Tippu Sultan, The Doctrine of Lapse, Setting up a new administration – Ruling the countryside – Diwani system, Munro system, Demand for Indian Indigo, The Blue Rebellion and after – Tribals, Dikus and the vision of Golden age-How did Tribal groups live?, How did colonial rule effect Tribal lives?, Forest Laws and their impact- Birsa Munda.
- Indian Freedom struggle, When people Rebel 1857 and after- Policies and the people, Through the Eyes of the people, A Mutiny becomes a popular Rebellion, the company fights back, The making of the National Movement: 1870’s to 1947- The emergence of nationalism, The growth of mass nationalism, The March to Dandi, Quit India and Later.
- The rise of nationalism in Europe. The French revolution and the making of Germany and Italy.
- The making of global world – The pre modern world, silk routs link the world, The 19th century (1815 to 1914) A world economy take shapes. Role of technology. Latr 19th century colonialism, The cattle plague. The interior war economy. The grate depression and India and the grate depression. Rebuilding a world economy.
- The age of industrialization – Before the industrial revolution, The pace of industrial change, The age of Indian textiles etc.
- The print culture and modern world.

4.SOCIAL ORGANISATION AND INEQUITIES

- Towards Equality- Diversity, Discrimination, prejudice, stereo type, Types of Discrimination – Inequality, Steps towards equality – Constitutional provisions, Remedial measures for abolishing inequality, Will Discrimination and inequalities stop people from achieving their goal.
- Women Change the World, Women’s movement, Inspirational Women- Women, Caste and

Reforms- Working towards change: Changing the lives of Widows, Girls begin going to School, Women write about women, Caste and social reform: Gulamgiri who could enter, The Non Brahman Movement.

- Understanding Marginalization – Adivasis and Development, Minorities and Marginalization- Confronting Marginalization- Invoking Fundamental Rights-Laws for the Marginalized, Protecting the rights of the Dalits and Adivasis, Adivasis Demands and the 1989 Act.
- Power sharing – Belgium and Srilanka majoritarianism in Srilanka, accomidation in Belgium. Forms of power sharing etc.
- Federalism
- Political parties
- Outcomes of democracy.

5.RELIGION AND SOCIETY

- Religions – Hinduism, Jainism, Buddhism, Islam and Sikhism, Unity in Diversity; Bhakthi and Sufi Movements
- Gender, religion and caste.

6.CULTURE AND COMMUNICATION

- Together with everyone – communication, Postal services, mobiles, E-mail, Mass communication, Newspaper, Radio, TV, Social Media.
- Let us Visit-Historical and Tourist places in AP; Early Civilizations- Indus Valley civilization, vedic period, vedic literature; Indian Culture, Languages.

Methodology (3 Marks)

- Histroy, Nature and Definitions of Social
- Aims, values and instructional objectives of teaching Social
- Methods of Teaching & Remedial measures in Social
- Instructional Material, TLM and Resource Utilization in Social
- Curriculum, Text Book & Instructional Planning.
- Assessment - Evaluation and Continuous Comprehensive Evaluation, Assessment analysis - feedback