NIRMALA MATHA CENTRAL SCHOOL, THRISSUR

CLASS VII

QUESTION BANK

TERM I

2022-23

English

UNIT - 1 SCHOOL YEARS

A Hero

1. How did Swami react when his father challenged him to sleep alone in the office room?
2. How was Swami honoured by his classmates, teacher and headmaster?
3. Swami's father drew his attention to a report in the newspaer. What was the report about?
4. Why did Swami's father expect him to sleep alone in the office room?
5. Though Swami was not courageous he became a hero overnight. How?

Scholarship Jacket

1. What kind of person was Martha?
2. Why was it important for Martha to get the Scholarship Jacket?
3. Martha's grandfather refused to pay the 15 dollars for the Scholarship Jacket.... Why?
4. With whom did Martha live. Why?
5. Why was Martha and her siblings unable to take up sports?

The Flower School

1. What is the poem about?
2. What rumbles in the sky?
3. How did the crowds of flower come out?
4. Which season is described in the poem?
5. Who are the flowers compared to?
6. Why are the flower children raising their arms?

UNIT 2 WANDERLUST

Section 1

The Quest for El Dorado

1. What is Eldorado? Where is it located?

2. Why was the explorers forced to give up their search?

3. Who is Mr. Berrio? How did he help Raleigh in his expedition?

4. Who is Mr. Topiawara?

5. What did Raleigh learn from Topiawara?

6. Explain the beautiful city which Raleigh reached during his expedition.

Section 2

The Diary of Space Traveller

1. What was professors reason for taking Prahlad with him?

2. What were the professors view about life on Mars?

3. How did the creature on Mars look like?

4. What is the 'complex venture'?

5. Who is Bidhushekhar?

Section 3

Trains

1. What does the child watch from his window?

2. What are these trains compared to? Why?

3. How is the second train different from the first?

4. What makes you think that the poet loves watching trains?

5. How does the speaker describe the hot weather?

6. Why does the speaker call the trains 'tireless'?

7. What does the speaker mean by the long shadowy outline?

UNIT 3 -REAL LIFE HEROES

Section 1

The One Who Survived: Ada Blackjack

1. Who was Bennet? What happened to him?

2. Who was the leader of Ada's crew? Name the other crew members.

3. Who is Mr. Lorne Night? Does he survive in Arctic?

4. How did Ada survive in the Arctic region?

Section 2

The Narayanpur Incident

1. What is the significance of the role of Patil, the Sub Inspector?

2. What was in the 'mysterious parcel'?

3. Why had the students been marching? How was it unusual march?

4. Why were Babu and Manju disappointed with the way of marching?

5. Why had Patil come to the teacher's house? What was the result?

Section 3

The Ballad of Mulan

1. Who was Mulan?

2. What did Mulan buy from the market?

3. What geographical places did Mulan travel by?

4. How did Mulan's family prepare for her returrn?

5. What did Mulan do first when she came home?

മലയാളം

പാഠം 1

അർഥം അനർഥം

1. 'തൃപ്തിയാകാമനസ്സിന്നൊരുകാലം' – എപ്പോഴാണ് മനുഷ്യമനസ്സിന് തൃപ്തി ലഭിക്കാത്തത്?

2. 'പാശം' എന്ന് വിശേഷിപ്പിക്കുന്നതെന്തിനെ?

3. 'ആയുതമാകിലാശ്വര്യം' എന്ന് ചിന്തിക്കുന്നതെപ്പോൾ?

4. 'അർഥത്തിൽ സ്വല്പമാത്രംകൊടാചില ദുഷ്ടന്മാർ' – ആർക്കാണ് കൊടു ക്കാത്തത്?

5. ചത്തുപോകുന്നേരം കൊണ്ടുപോകാൻ ഒരുത്തർക്കും പറ്റാത്തതെന്ത്?

6. ദുഷ്ടരായ ധനികർ അല്പം പോലും പശ്ചാത്തപമില്ലാതെ ചെയ്യുന്ന കാര്യ മെന്ത്?

7. സത്യത്തെ തൃജിക്കുന്നതെപ്പോഴാണ്?

8. സജ്ജനങ്ങൾ സത്യത്തെ എന്തായിട്ടാണ് കരുതുന്നത്?

9. അർഥം അനർത്ഥം പദ്യം എഴുതിയതാരാണ്?

10. മനുഷ്യന്റെ ആശകൾ കൂടികൂടികൊണ്ടിരിക്കുന്നു എന്ന് പൂന്താനം വ്യക്ത മാക്കുന്നതെങ്ങനെ?

പാഠം 2

കൃഷിക്കാരൻ

1. കേശവൻനായരുടെ അമ്പതുപറ നിലത്തിന് ചുറ്റും കൃഷി ചെയ്യുന്ന വൻകൃ ഷിക്കാരൻ ആര്?

2. 'കേശവൻനായർ എന്തായാലും ആ അധർമ്മം ചെയ്യുകയില്ലെന്നു പറഞ്ഞു' – ഏത് അധർമ്മം?

3. 'ആ ചോദ്യം കേശവൻനായരുടെ കരളിൽ ഒന്നുകൊണ്ടു' – ഏത് ചോദ്യം?

4. "രാത്രീല് ആ മട തിരിച്ചുമുറിത്തുവച്ചാലോ? കേശവൻനായരോട് ഇങ്ങനെ ചോദിച്ചതാര്?

5. "കൃഷിക്കാരൻ അത് ചെയ്യുമോ കുട്ടീ, ഞാൻ മുടിഞ്ഞോട്ടെ – എന്നാലും ചെയ്യരുതാത്തത് ചെയ്യുകയില്ല" – പുഞ്ചക്കണ്ടത്തിൽ ചെയ്യാൻ പാടില്ലാത്ത തെന്ത്?

6. എന്നെന്നും തന്നെ പിന്തുടരുമെന്ന് കേശവൻനായർ ഭയപ്പെട്ടത് ഏത് ദുഷ്പേ രിനെക്കുറിച്ചാണ്?

7. എന്ത് ചെയ്താലാണ് തന്റെ നെല്ല് ഒന്നാന്തരമാകും എന്ന് കേശവൻനായർ ചിന്തിച്ചത്?

8. കേശവൻനായർ അമ്പതുപറനിലം ആരിൽ നിന്നാണ് പാട്ടത്തിനെടുത്ത്?

9. കേശവൻനായരുടെ ജന്മി ആരാണ്?

10. പിടിപ്പില്ലാത്തവരെ നിലം ഏൽപ്പിക്കുന്നതേ ഇനിയത്തെകാലത്തു ശരിയല്ല" – ആര് ആരോട് പറഞ്ഞു?

11. "ഈ കൃഷി കൊണം പിടിക്കത്തില്ല' – എന്ന് കണ്ണീരോടെ പിരാകിയതാര്?

പാഠം 3

കരളിലെ നോവ്

1. അന്തിയാവുമ്പോഴേയ്ക്കും എന്ത് പണിയാണ് കർഷകസ്ത്രീക്ക് ചെയ്യാനു ള്ളത്?

2. ഞാനയഞ്ഞ് മടത്തെപായിലങ്ങ് കോട്ന്. വരി സൂചിപ്പിക്കുന്നതെന്തിനെ യാണ്?

3. എള്ള് ഉണങ്ങുന്നതെന്തിന് വേണ്ടിയാണ്?

4. കർഷകസ്ത്രീ പൊരിവെയിലിൽ കഷ്ടപ്പെടുനത് ആർക്ക് വേണ്ടി?

5. അച്ഛനും അമ്മയും തന്നെ എങ്ങനെ നോക്കിക്കാണുന്നു എന്നാണ് കർഷ കസ്ത്രീ ദുഃഖത്തോടെ പറയുന്നത്?

6. തന്റെ കരളിലെ വേദനകളെ ഏതിനോടാണ് ഉപമിച്ചിരിക്കുന്നത്?

7 പദ്യഭാഗം ഏത് സാഹിത്യവിഭാഗത്തിൽ ഉൾപ്പെടുന്നു?

പാഠം 4

ടോൾസ്റ്റോയ് മന്ദിരം

1. ടോൾസ്റ്റോയ് മന്ദിരം എന്ന പാഠഭാഗം ഏത് സാഹിത്യവിഭാഗത്തിൽപ്പെടുന്നു?

2. വിദ്യാർത്ഥിയായിരുന്ന കാലത്ത് എസ്.കെ. പൊറ്റെക്കാട്ടിനെ വശീകരിച്ച രണ്ട് ഗ്രന്ഥങ്ങൾ ഏതെല്ലാമാണ്?

3. ടോൾസ്റ്റോയിയുടെ പൈതൃകഗൃഹവും എസ്റ്റേറ്റുകളും സ്ഥിതി ചെയ്തിരു ന്നതെവിടെ?

4. ടോൾസ്റ്റോയിക്കു സാഹിത്യരചന ചെയ്യാൻ സാധിച്ചിരുന്നതെപ്പോഴാണ്?

5. യുദ്ധവും സമാധാനവും എന്ന നോവൽ എത്ര പ്രാവശ്യം പകർത്തി എഴുതി?

6. ടോൾസ്റ്റോയ് സ്വന്തം കൈ കൊണ്ട് നിർമ്മിച്ച ഷൂസ് ഏത് സുഹൃത്തിനാണ് സമ്മാനിച്ചത്?

7. ടോൾസ്റ്റോയി സമ്മാനിച്ച ഷൂസ് അലമാരയിൽ നിക്ഷേപിച്ച് എന്ത് കുറിപ്പാണ് ഫാറ്റ് എഴുതി വച്ചത്?

8. ടോൾസ്റ്റോയ് നടക്കാൻ താല്പര്യം കാണിച്ചിരുന്നതെന്തുകൊണ്ട്?

9. പട്ടാളക്കാരനായ കൂട്ടുകാരന്റെ ജീവിതാനുഭവത്തെ തന്മയത്വത്തോടെ പകർത്തിയ കഥയേത്?

10. ടോൾസ്റ്റോയിയുടെ വീട് ഒരു മ്യൂസിയമായി പുനരുദ്ധരിക്കാൻ തീരുമാ നിച്ചതാരാണ്?

11. 'ടോൾസ്റ്റോയ് മന്ദിരം' എന്ന പാഠഭാഗം എഴുതിയതാരാണ്?

12. ഏത് യാത്രാവിവരണഗ്രന്ഥത്തിൽ നിന്നാണ് പാഠഭാഗം എടുത്തത്?

പാഠം 5

നാടെവിടെ മക്കളേ?

1. വേരുകൾ ഇല്ലാതായതെന്തിനാണ്?

2. കുട്ടിക്കരിങ്കുയിൽ കൂവിത്തിമിർത്തിരുന്നതെവിടെ?

3. പ്ലാവുകളിലും മാവുകളിലും പാടിക്കളിച്ചിരുന്നതാര്?

4. കായലുകൾക്കും തോടുകൾക്കും എന്ത് സംഭവിച്ചു?

5. 'കേരതരു' എന്ന് വിശേഷിപ്പിക്കുന്ന വൃക്ഷം ഏത്?

6   ഫാക്ടറിപ്പുകയുറഞ്ഞാസ്ത്മാവലിക്കാത്തൊ
     രോക്സിജൻ വീശുന്ന നാട് – എന്തിനെ സൂചിപ്പിക്കുന്നു?

7.   പത്തിരിക്കറി കൂട്ടി മണവാട്ടി നുണയുന്നൊ-
     രൊപ്പനകൾ പാടുന്നനാടെവിടെ.
     എന്താണ് സൂചിതമാകുന്നത്?

8.   വിഷവാതം, വിഷവാണി, വിഷനീർ – പ്രയോഗങ്ങളുടെ അർത്ഥം?

9.   എങ്ങനെയുള്ള നാടാണ് കവിയുടെ സ്വപ്നം?

10. 'നാടെവിടെ മക്കളേ' – കവിത എഴുതിയതാര്?

പാഠം 6

ചിത്രകാരന്റെ മാതൃക

1.   ആരുടെ ജീവചരിത്രമാണ് ചിത്രകാരൻ പള്ളിചുമരുകളിൽ ചിത്രീകരിക്കാൻ
     തുടങ്ങുന്നത്?

2.   ആരുടെ രൂപങ്ങളുടെ തക്കമാതൃകകൾ കിട്ടാതെയാണ് ചിത്രകാരൻ വിഷമി
     ച്ചത്?

3.   ചിത്രകാരനെ ഭയപ്പെടുത്തിയത് എന്താണ്?

4.   പ്രാകൃതരൂപത്തിൽ കണ്ട മനുഷ്യന്റെ മുഖത്ത് ചിത്രകാരൻ ദർശിച്ചതെന്ത്?

5.   "എന്താ നിങ്ങൾക്ക് പെട്ടെന്ന് വല്ല സങ്കടവും നേരിട്ടോ?" – ആരാണ് ഇങ്ങനെ
     ചോദിച്ചത്?

6.   യൂദാസിന്റെ മാതൃകയായി ചിത്രകാരൻ കണ്ടെത്തിയ പ്രാകൃതൻ ആരായി
     രുന്നു?

7   യേശുവിന്റെ ശൈശവാകൃതിയ്ക്ക് മാതൃകയായ കുട്ടിയെ എവിടെ നിന്നാണ്
     കണ്ടെത്തിയത്?

8.   'അയാളുടെ സ്ഥിരപരിശ്രമം വീണ്ടും ആരംഭിച്ചു' – എന്തിനുള്ള പരിശ്രമം?

9.   ജൂഡാസിന്റെ മാതൃകയാവാൻ വന്ന മുഖങ്ങളൊന്നും ചിത്രകാരനെ തൃപ്തി
     പ്പെടുത്താതിരുന്നതെന്നതുകൊണ്ട്?

10. പാഠഭാഗം എഴുതിയതാരാണ്?

പാഠം 7

മഴമുകിൽ പെൺകൊടി

1. കുയിലുകൾ പാടിക്കുഴയുന്നതെവിടെ?

2. മഴമുകിൽ പെൺകൊടി വെള്ളവും കൊണ്ട് പതിവായി അണയുന്നതെവിടെ?

3. കരിമുകിൽപ്പെൺകൊടി പുറമേയ്ക്ക് പോയതെപ്പോൾ?

4. കതിരിന്റെ മുത്തൊളിപ്പല്ല് കാണുന്നതെപ്പോൾ?

5. ഒരു തുള്ളി വെള്ളം കൊടുക്കുമ്പോൾ വയലിന് എന്ത് മാറ്റമുണ്ടാകും?

6. തളിരിന്റെ മർമ്മരക്കൊഞ്ചൽ കേൾക്കാൻ എന്ത് ചെയ്യണം?

7. കരിമുകിൽപെൺകൊടി എത്താറുള്ളത് എപ്രകാരമാണ്?

8. 'മഴമുകിൽപെൺകൊടി' പദ്യഭാഗം എഴുതിയതാര്?

HINDI

पाठ - 1

हम पंछी उन्मुक्त गगन के

I. एक वाक्य में उत्तर लिखो।

1. पंछी के पंख्र कैसे होते है?

2. पंख्र कैसे टूट जाएँगे?

3. पंछी को कैसा जल पसंद है?

4. पंछी नीड़ कैसे बनाते है?

5. पंछी कहाँ उड़ना चाहती है?

6. पंछी अपन गति और उड़ान कब भूल जाती है?

7. पंछी की अरमान क्या है?

8. लाल किरणों की तुलना किससे की है?

9. कनक कटोरी की मैदा से ज्यादा पंछी को क्या पसंद है?

10. पंछी सपनों में क्या देखती है?

11. पंछी क्या सोचा रही है?

12. नभ कैसा दिखता है?

13. कहाँ झूले टँगे है?

14. चोंच कैसी दिखती है?

15. पाँच संज्ञा शब्द चुनकर लिखो।

16. कवि का नाम क्या है?

17. साँसों की डोरी को क्या हुआ?

18. २ सर्वनाम चुनकर लिखो।

19. २ विशेषण चुनकर लिखो।

20. पंछी का पर्यायवाची शब्द लिखो।

21. क्षितिज का अर्थ लिखो।

22. उड़ते पंछी का चित्र खींचो।

23. पंछी को मनपसंद नाम दो।

24. इस कवि के अन्य कविताओं के नाम लिखो।

25. 'पाएँगे' का समान तुकवाले शब्द लिखो।

26. श्रृंखला किससे बना है?

27. पंछी की दो विशेषता लिखो।

28. विपरीत शब्द लिखो - आसमान, कडुवा

29. अनेक वचन शब्द - तारा, निबौरी

30. इस कविता में आए रंगों के नाम लिखो।

पाठ - 2
कठपुतली

1. कठपुतलती कैसे उबली?

2. धागे कहाँ बँधे थे?

3. कठपुतली को कैसे छोड़ दे?

4. बहुत दिनों से, उनको क्या नहीं छुए?

5. कवि का नाम लिखो।

6. कठपुतली का चित्र बनाओ।

7. कठपुतली किससे बंधि थी?

8. कठपुतली की साथियाँ क्या चाहती थी?

9. समान शब्द लिखो - कठपुतली

10. किसके आगे पीछे धागे थे?

11. किसे पाँवों पर छोड़ दे?

12. कठपुतली की बात सुनकर कौन बोल उठी?

13. सहेलियों की इच्छा क्या थी?

14. कठपुतली बनाओ।

15. सर्वनाम चुनकर लिखो।

16. समान तुक वाले शब्द लिखें।

17. संज्ञाएँ चुनकर लिखो।

18. बच्चों को कठपुतली क्यों पसंद है?

19. स्वतंत्रता का समान शब्द लिखो।

20. धागों का उपयोग लिखो।

21. कविता में कितने छंद है?

22. कठपुतली को कैसे खड़ी होने की चाह थी?

23. 'धागे क्यों .... आगे' किसने किससे कहा?

24. 'कैसी इच्छा ...... जगी' किसने कहा?

25. दो महिला स्वतंत्रता सेनानियों के नाम लिखो।

26. मनोरंजन के दो उपाय।

27. बचपन में खेलने में आए दो खिलौने के नाम लिखो।

28. भवानी प्रसाद जी का अन्य कविताओं के नाम?

29. कठपुतली अच्छी है या बुरी? क्यों?

30. हमारे राष्ट्रपिता का नाम लिखो।

पाठ – 3

मिठाईवाला

1. मिठाईवाला पहले क्या बेचने आया?

2. पिताजी का नाम क्या है?

3. बच्चों का नाम क्या है?

4. मुरलीवाला कितने महीनों बाद आया?

5. विजयबाबू क्या पढ़ रहे थे?

6. मिठाईवाला कितने महीने बाद आया?

7. मुरलीवाले ने कितने मुरलियाँ बनवाए?

8. मिठाई के गुण लिखो।

9. मिठाईवाले के घर में कौन कौन थे?

10. लेखक का नाम?

11. चुन्नु ने क्या खरीदा?

12. मुन्नु ने क्या खरीदा?

13. चुन्नु मुन्नु की माँ का नाम क्या है?

14. मुरलीवाले के हाथ में कितने मुरली थे?

15. मुरलीवाले ने कितनी मुरली बनवाई थी?

16. विजयबाबु ने कितनी मुरलियाँ खरीदी?

17. मुरलीवाला मुरली बेचने केलिए कितने महीनों बाद आता है?

18. मुरलीवाला का साफा किस रंग का था?

19. मिठाईवाला क्या कहते हुए आया?

20. मिठाई का दाम कितना था?

21. खिलौने वाला कितने रुपये में खिलौने बेचता था?

22. मिठाईवाले के कितने बच्चे थे?

23. मिठाईवाला मिठाइयाँ क्यों बेचता था?

24. 'मिठाईवाला' पाठ का लेखक कौन है?

25. मिठाईवाला क्या-क्या बेचता था?

26. रोहिणी को मुरलीवाले के स्वर से किसका स्मरण आया?

27. चुन्नु कौन है?

28. मुन्नु कौन है?

29. मुरलीवाल मुरली कैसे बेचता था?

30. मुरलीवाले की उम्र कितनी है?

पाठ – 9
चिड़िया की बच्ची

1. इस पाठ के लेखक कौन है?

2. माधवदास की कोठरी किससे बनी है?

3. माधवदास को चिड़िया कैसी लगी?

4. चिड़िया कैसी थी?

5. चबूतरे पर क्या डलवाता था?

6. वह किसके सहारे गलीचे पर बैठता था?

7. गलीचे पर बैठकर वह क्या करता था?

8. हुक्का कहा रखा था?

9. संध्या कैसे गुजारते थे?

10. चिड़िया कहा आकर बैठी थी?

11. चिड़िया का वर्णन करो।

12. चिड़िया को क्या बहुत प्यारी थी?

13. "आओ; तुम बडी अच्छी आई।" किसने किससे कहा?

14. माधवदास को देख्वनेपर चिड़िया ने क्या किया?

15. माधवदास के पास क्या था?

16. माधवदास चिड़िया को क्या बनाकर देना चाहता था?

17. घोंसले के बाहर क्या था?

18. चिड़िया को दाने कौन लाकर देती है?

19. चिड़िया क्या क्या जानती है?

20. सेठ ने किसको इशारा किया?

21. सेठ के इशारे पर दास ने क्या किया?

22. चिड़िया के कितने बहन है?

23. चिड़िया के कितने भाई है?

24. चिड़िया न सेठ से क्या कहा?

25. चिड़िया को क्या बोध हुआ?

26. वह माँ के पास कैसे पहुँची?

27. उसने सुबकने हुए क्या कहा?

28. माँ ने बच्ची को क्या किया?

29. बच्ची कैसे माँ की छाती पर चिपकी?

30. माधवदास का स्वभाव का वर्णन करो।

Lesson-1

NUTRITION IN PLANTS

I. One mark questions.

1. What are nutrients?

2. Name the components of food.

3. Name the process of which plants prepare thier own food.

4. What are the raw materials for photosynthesis?

5. What will happens if there is no green plants on the earth?

6. What are the end products of photosynthesis?

7. Name the substances from which plants get nitrogen.

8. Which are host?

9. What are insectivorous plants?

10. Why insectivorous plants eat insects?

II. 2 marks questions

11. Explain various modes of nutrition.

12. What are the functions of food?

13. "All animals depend upon the plants for their food" Justify the statement.

III. 3 marks questions

14. Write the differences between autotrophic and heterotrophic mode of nutrition.

15. Write the importance of Rhizobium bacteria for the farmers.

16. In the absence of photosynthesis, life is impossible on the earth. Explain.

IV. 5 marks questions.

17. Explain the mechanism of eating insects by pitcher plant.

18. What is photosynthesis? Explain the process of photosynthesis in the plants.

Lesson-2

NUTRITION IN ANIMALS

I. One mark questions.

1. Name the parts of the digestive system where bile juice is produced.

2. What is assimilation?

3. What is peristalsis?

4. What is rumination?

5. Name the parts of the digestive system where digested food gets absorbed.

II. 2 marks questions

6. What is ORS? When it is given?

7. Name the organs involved in the digestion of food in humans.

8. Where is the bile produced? Which component of the food does it help to digest?

9. Ruminants such as cows and buffaloes swallow their food hurriedly and then it restfully and chew their food. Can you reason why?

10. Explain the various types of teeth in humanbeings.

III. 5 marks questions.

11. a) Draw a labelled diagram of the digestive system.

   b) Identify the following parts in the human body.

      i) The largest gland in our body.

   ii) The organ where protein digestion starts.

iii) The organ that releases digestive juice into the small intestine.

iv) The organ where bile juice gets stored.

12. Write the functions of the following:

a) tongue b) stomach c) small intestine d) large intestine

13. List the five steps food undergoes during digestion.

14. Draw a labelled diagram of a tongue showing the taste zones.

15. How does Amoeba get food? Give a diagram to support your answer.

IV. 3 marks questions.

16. How does food move in opposite direction during vomiting?

17. Why does a doctor put a glucose drip to a patient who has just been operated?

18. Match the following

a) Housefly   i. biting and chewing

b) Cockroach   ii. sucking

c) Mosquito   iii. sponging

d) Infants   iv. sucking

19. True or false

a) Digestion of starch starts in the stomach.

b) The tongue helps in mixing food with saliva.

c) The large intestine is longer and wider than the small intestine of human alimentary canal.

20. Distinguish between milk teeth and permanent teeth Ingestion and Egestion.

Lesson-4
HEAT

1. In a mercury thermometer, the level of mercury rises when its bulb comes in contact with a hot objects. What is the reason for this rise in the level of mercury?

2. At what temperature will the reading on the Fahrenheit scale be double of the reading on the celsius scale?

3. Why is it advised not to hold the thermometer by its bulb while reading it?

4. Give two examples each of conductors and insulators of heat.

5. Why do gases expand more than liquids?

6. What precautions should you take while reading a clinical thermometer?

7. What precautions should you take while using a laboratory thermometer?

8. Distinguish between Land breeze and Sea breeze.

9. Distinguish between convection and conduction.

10. Which will cool faster - water kept in a black pot or kept in a silver pot?

11. Match the following.

a) Land breeze blows during   i) summer

b) Sea breeze blows during   ii) winter

c) Dark coloured clothes arepreferred during   iii) day

d) Light-coloured clothes are preferred during iv) night

12. Answer the following.

a) An instrument used to measure temperature.

b) Mode of transfer of heat from one particle to another in solids.

c) The degree of hotness of body.

d) Mode of transfer of heat through liquids and gases by the actual movement of heated particles with the medium.

e) Mode of transfer of heat from a source to a cold object without there being a direct contact betwen them.

13. Name any two types of thermometers.

14. Give three reasons why mercury is used as an indicator in a thermometer.

15. a) What is the process by which heat of sun is able to reach us?

b) Draw a labelled diagram of a clinical thermometer.

Lesson-5

ACID BASES AND SALT

1. What is the nature of acids?

2. Give two examples for acidic foods.

3. Name the latin word which means "sour"

4. What is the nature of baking soda?

5. What is the taste of basic substances?

6. Name the substance which is used to test acid and base.

7. Name two natural indicators.

8. What is the other name of China rose?

9. Name two synthetic indicators.

10. The solutions which doesn't change colour with either red or blue litmus paper.

11. Name the substance from which Litmus is obtained?

12. The acid contained in the ant's sting?

13. What is the colour change shown by red litmus paper when dipped in basic solutions

14. What happens when red litmus is dipped in acidic solution?

15. What is the base present in the Milk of Magnesia?

16. What happens if china rose is used as an indicator to test a basic solution?

17. What is the nature of distilled water?

18. Name the products formed as a result of neutralisation.

19. Write the equation to show neutralisation.

20. If the solution is basic ,what is the colour change given by Phenolphthalein?

21. Which acid is present in our stomach?

22. What is acid rain?

23. Name the acid present in the cell of our body.

24. Why are acid and bases should be handled with care?

25. Name the base present in the calamine solution.

26. Name the base in the soap.

27. What make the soil acidic?

28. Name the two types of Litmus paper.

29. Name any two base used in our daily life.

30. What is the nature of lime water?

31. What is the chemical name of the following:

    i) Quick lime   ii) Slaked lime iii) Calamine solution

    iv)Baking soda   v) Lime water

Lesson-6

PHYSICALAND CHEMICAL CHANGES

I.   1 mark questions.

1.   Which method is used to prevent rusting?

2. What do you mean by rusting?

3. What is the nature of aqueous solution of magnesium oxide?

4. What is the colour of copper sulphate solution?

5. What are the essential condition for rusting?

6. Name the gas released when baking soda is mixed with vinegar.

7. What do you understand by crystallisation?

8. What is galvanisation?

9. What happens when carbondioxide is passed through lime water?

10. What kind of change takesplace when iron reacts with copper sulphate?

II. 2 marks questions.

11. Differentiate between physical change and chemical change.

12. Write the characteristics of a chemical change.

13. Which gas is called natural shield against the radiations? Explain how?

14. How do we prevent rusting?

15. Explain that sulphur dioxide is an acidic gas.

III. 3 mark questions.

16. Explain that carbon dioxide is an acidic oxide with the help of an activity.

17. What happen when iron nails are dipped in copper sulphate solution?

IV. 5 mark questions.

18. In addition to form new products what changes the chemical changes accompany.

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Lesson-7

WEATHER, CLIMATE AND ADAPTATIONS OF ANIMALS

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I. 1 mark questions.

1. What is humidity?

2. Who prepares the weather reports?

3. Name any two main elements of weather.

4. What type of climate is there in Rajasthan?

5. What is the main cause of the changes in weather?

6. Name some animals found in rainforests.

7. Name some countries belong to tropical rainforests.

II. 2 marks questions.

8. Write the differences between weather and climate of a place.

9. Explain the climate of polar regions.

10. Explain the adaptations of penguins to live in polar regions.

III. 3 marks questions.

11. Explain the adaptations of elephant to live in tropical rainforests.

12. Explain the adaptations of Red eyed frog to live in tropical regions.

13. What is the climate of tropical regions?

IV. 5 marks questions.

14. Explain the adaptations of polar bear to live in polar regions.

15. Show the adaptations of polar bear with the help of a flow chart.

Lesson- 11

TRANSPORTATION

1. Which vessel carries oxygen rich blood?

2. What is called pulse rate?

3. What system removes waste from the body?

4. What is the fluid part of blood called?

5. What does human sweat contain?

6. Which veins carry oxygen rich blood?

7. What makes the blood look red?

8. What is normal resting pulse rate of human body?

9. What is the function of valves in veins?

10. What is function of xylem?

11. Why is heart known as the pumping organ of the human body?

12. What are the three main types of blood vessels?

13. State one function of the following:

    a) Arteries   b) Veins   c) Capillaries

14. What are stomata? Give two functions of stomata.

15. Differentiate between arteries and veins.

16. Red blood cells, also called RBCs, have iron pigments known as _____.

17. White blood cells, or WBCs, defend the body against _____

18. Name the waste products formed in body.

19. What is osmoregulation?

20. Name the instrument used to measure blood pressure.

Lesson - 15

LIGHT

I. Name the following:-

1. The mirrors used as side mirrors in scooters?

2. The phenomenon that is involved in the formation of image of an object by a concave mirror.

3. Two type of lenses.

4. We see reflection of trees or buildings in water

5. Image of the sun on a paper with the help of a concave mirror burn the paper

II. Give Reasons

6. Concave mirror is known as a converging mirror.

7. We need a shiny surface for reflection

8. In ambulance words are written laterally inverted

9. Concave and convex mirrors called spherical mirrors

10. Convex mirror is used as a side mirror in a scooter

III. Fill in the blanks

11. _____ is used as the rear view mirror of vehicles.

12. The mirror which can form both real and virtual images in a _____

13. The image formed by a plane mirror is _____

14. An image formed by a device is erect, magnified and on the same side of the device with respect to the object. The device will have a _____

15. The device used for making peepholes in the doors of houses is a _____

IV. Match the following.

16. White light composed   Translucent

17. Wax paper   Real image

19. Convex mirror   Thinner in the middle

20. Concave lens   Seven colours

21. Image obtained on screen   Reflecting surface is bulged out

V. Choose the correct answer.

22. A magnifying glass is a

    (a) concave mirror   (b) convex mirror

    (c) concave lens   (d) convex lens

23. Newton's disc appears white when it is

    (a) kept in the dark   (b) seen in sunlight

    (c) rotated   (d) shaken very fast

24. The path of the light is

    (a) always a straight line   (b) a curved line

    (c) a zig-zag line   (d) depends on the medium

25. Image formed by a plane mirror is

    (a) virtual and erect   (b) real and erect

    (c) virtual and inverted   (d) real and inverted

VI. Draw and Label.

26. Draw a neat labelled diagram of a convex and concave mirror

27. Draw a neat labelled diagram of concave and convex lens

VII. Short Answer.

28. Briefly state the characteristics of image formed by a plane mirror.

29. Mention any two letters of English alphabet whose image formed in a plane mirror appears exactly similar to the letters.

30. Write the uses of convex mirror.

VIII. Long Answer

31. Write the uses of concave mirror.

32. State the differences between a convex and a concave lens.

History

Chapter 1

Medieval world

1. The period that lies between ancient and the modern periods.

2. In which century medieval period started in India?

3. Another name of India.

4. Name of the river nearby in which Indians live.

5. The founder of the Mughal Empire.

6. Who brought a new culture to India in 8th century?

7. Which dynasty brought about political stability in India?

8. The two Spiritual movements spread the message of devotion to God and kindness towards all human beings in the medieval period.

9. The title of the book on coins during the rule of Alauddin Khalji.

10. Written records engraved on rocks and clay tablets.

11. Written record of the rule of the kings and life at the court.

12. Story of a person's life written by somebody.

13. The author of Rajatharangini.

14. The work of Ziauddin Barani.

15. The author of Tarikhi Ferishta.

16. The chronicle about Delhi Sultans (ruler of Muslim countries) in Delhi from Qutbuddin Aibak to Firoz Shah Tughluq. [1206-1388]

17. The chronicle from Turks [Slave, Khalji, Tughluq, Sayyid, Lodi(1206) till seventeenth century (upto Jahangir 1605)

18. The author of Khazainul Futuh

19. The author of Tugluqnama.

20. The chronicle about rule of Khaljis.

21. The chronicle about reign of Tughluqs.

22. Which century marked the beginning of the medieval period why?

23. What do you understand by the 'Indian' culture that emerged in medieval India?

24. Why are coins and inscriptions important for the study of medieval India?

25. Who wrote Prithviraj Raso? What does it tell us about?

26. What did Hindustan stand for in medieval times?

27. What were the major historical developments during the medieval period?

28. How do the archaeological sources help us in our study of medieval India?

29. List some important chronicles availabe for the study of the medieval period?

30. How are travelogues an important literary source?

31. How did the word 'India' originate?

32. List three autobiographies and their authors during medieval period.

33. Our information about the medieval period is much more than the ancient period? Why?

34. Why do we get a lot of written records for the medieval period?

35. Write the names of three biographies and its authors.

36. Write any five European travellers who came to India in medieval period?

37. Which are four archaeological sources to know about medieval period of India?

Chapter 2

Regional Kingdoms - 1

1. 'Rajput' means

2. Which Rajput clan built Delhi?

3. The most powerful Chauhan ruler in early medieval period.

4. Name of the first battle between Prithviraj Chauhan and Muhammed Ghori in 1191.

5. In which battle Muhammad Ghori defeated Prithviraj Chauhan in 1192?

6. The author of Prithvirajraso.

7. The most powerful Solanki ruler.

8. The capital of Paramaras.

9. The most powerful Rajput ruler and Gahadavalas king.

10. In which battle Muhammad Ghori defeated Jaichandra in 1194.

11. The capital of Chandella clan.

12. The most powerful Chandella ruler.

13. The first invader raid india in 1000 CE. (Common Era)

14. How many times Mahmud of Ghazni invaded India from CE 1000 - CE 1026.

15. From which temple Mahmud of Ghazni has taken away the precious stones fixed on the temple walls in CE 1026?

16. Where in Tarain located?

17. The most important city in north India in early medieval period?

18. The most powerful Gurjara-Pratihara dynasty ruler.

19. The capital of Rashtrakutas.

20. Who founded Yadavas in Devagiri?

21. The greatest ruler of western Chalukyas

22. The most powerful Hoyasala ruler.

23. The capital of Pallava kingdom.

24. The capital of Pandya kingdom.

25. The capital of Chola kingdom.

26. In which battle Parantaka was defeated by Krishna III

27. Who is known as Gangai Konda Chola

28. The finest example of Chola temple architecture.

29. The tamil word 'Nataraja' means

30. Name of a Chola province.

31. General village assembly of Chola kingdom.

32. Male village gatherings of Chola kingdom.

33. The founder of Lingayat?

34. Who preached Advaita philosphy.

35. The word 'Bhakti' means

36. How did the Rajputs explain their origin?

37. How did Muhammad Ghori benefit from Mahmud of Ghazni's death?

38. Which ruling dynasties engaged in a tripartile (involving three parties) struggle to control Kanauj? Give reasons.

39. How do you know that the Rashtrakutas were patrons of art, architecture and literature?

40. What do you know about Chola sculpture?

41. How was the clash between Prithviraj Chauhan and Muhammad Ghori in 1192 different from the clash in 1191?

42. Describe the military achievements of Raja Raja Chola and Rajendra Chola.

43. What do you know about Chola administration?

44. What were the two developments in the Chola period that led to an increase in the area under cultivation?

45. Write a short note on the regional kingdoms of the Deccan.

46. "Muhammud Ghori's invasion changed the course of Indian history". Do you agree with the statement? Give reasons to support your argument.

47. A Chola period inscription, carved out of stone, declares that "destroyers of the tank will go to the deepest of hell and one who maintain it well will be rewarded with great riches and luxuries in his next birth". What possible conclusion can you draw from the above statement?

48. Which are the five important regional kingdoms in north India during medieval period?

49. Which are the two important developments in agriculture in Chola kingdom?

Chapter 3

The Sultanate Period

1. The name of the period from 1206 to 1526 [320 years] in the history of India.

2. The capital of the Sultan [a ruler in a muslim country].

3. Two names of Slave dynasty.

4. The arabic word 'mamluk' means

5. The first ruler of the Slave [Ilbari Tusks] dynasty.

6. The general who were given charge of India when Muhammad Ghori left India.

7. One word for 'series of rulers belongking to the same family.'

8. One word for 'person who is legally owned by and forced to work for another.'

9. Native (of the place of sby's birth) country of Slave, Khalji, Tughluq, and Sayyid dynasty Sultans.

10. Which Sultan is known 'Lakh Baksh' or 'giver of lakhs'

11. The real founder of the Delhi Sultanate.

12. The woman who sat on the throne of Delhi Sultanate in the thriteenth century.

13. The slave sultan who was a puppet in the hands of powerful nobles.

14. The most powerful ruler of the Slave (Ilbari Turks) dynasty.

15. The two persian customes introduced by Balban.

16. The first ruler of the Khalji dynasty.

17. The real name of Alauddin Khalji.

18. The most powerful ruler of the Khalji dyansty.

19. The trusted general of Alauddin Khalji who was sent to conquer south Indian kingdoms.

20. The most important source of revenue to Alauddin.

21. The fertle land between two rivers.

22. The last Khalji Sultan.

23. The first ruler of Tugluq dyansty.

24. The real name of Muhammad bin Tughluq.

25. The traveller who wrote about Muhammad bin Tughluq.

26. Where did Muhammad bin Tugluq shifted his capital from Delhi?

27. Scholars of Islamic learning.

28. The powerful regional kingdoms arose after Muhammad bin Tughluq's reign.

29. The land given to officers of the kingdom.

30. The central asian who conquered India after Firoz Tughluq.

31. Who was the deputy of Timur in India?

32. Who founded Firozabad?

33. The Supreme authority of muslims.

34. Two persian customs to acknowledge the supremacy of the Sultan.

35. The finance department of the Delhi Sultanate.

36. The Prime Minister of Delhi Sultanate.

37. The Chief Judge of the Delhi Sultanate.

38. The first ruler of the Sayyid dynasty.

39. The native country (of the place of somebody's birth) of the Sultans of Lodi dynasty.

40. The first Lodi ruler.

41. The most powerful Lodi ruler.

42. Who founded the city of Agra.

43. Who defeated Ibrahim Lodi in the first battle of Panipat in 1526.

44. Who was Raziya Sultan? Why did the nobles oppose Raziya?

45. Name the two Persian customs introduced by Balban. Why were people against these customs?

46. What were "dagh" and "chehra"? Who introduced them?

47. Write two reasons that prompted Muhammad bin Tughluq to shift the capital Daulatabad?

48. Give two reasons to show that the court of the Delhi Sultan was a "ceremonial" court.

49. Explain the importance of literary sources for the Sultanate Period. Which other sources tell us about this period?

50. Who succeeded Qutbuddin Aibak? Why is that person called the real founder of the Sultanate?

51. Why did Alauddin Khalji introduce the market control policy? How

did he enforce it?

52. "Muhammad bin Tugluq's schemes were well conceived but poorly executed." Discuss this statement with reference to his token currency statement.

53. According to Ziauddin Barani, "none of the officers could take bribes, and had been reduced to such a position by hardships, imprisonment for long periods or torture for small outstanding dues that people considered these posts to be worse than fever...."

a) What ruler of the Sulanate Period is being referred to in the above paragraph?

b) Why did this ruler introduce such measures?

c) Write the observation made by Barani in your own words.

54. How did issuing coins in the name of the Caliph help Muhammad bin Tughluq to rule?

55. Accounts of travellers and court chroniclers have been used to reconstruct the history of this period. Which of the two do you think would give a more accurate presentation and why?

56. Which are the market control policies of Alauddin Khalji?

57. Which are the reforms of Firoz Shah Tughluq?

Social and Political Life

Chapter 1

Democracy

1. Which country made the first code of law in BCE 1760?

2. First republican state in India.

3. First democracy in the western world.

4. Who first used the word 'democracy'?

5. The father of Athenian democracy.

6. Who do not have voting rights in Athens (Ancient Greece)

7. When was Rome founded?

8. An assembly of leading citizens in Rome?

9. The founder of Pala Dynasty.

10. The first elected king in Pala dynasty Bengal.

11. First liberal democracy in 1788.

12. The year of French Revolution.

13. When did Indian constitution came into effect?

14. The only country where direct democracy is in practice today.

15. An example of direct democracy in India.

16. The system where the government is elect, run and form directly by people.

17. The system where the government is elected, run and form by the representatives on hehalf of the people.

18. The democractic system where the head of the country is elected by the people.

19. The democratic system where both head of the state and head of the government is elected by the people.

20. The greek origin of the word 'democracy'.

21. The meaning of greek word 'demos'

22. The meaning of greek word 'kratos'

23. The first nation to grant voting right to all citizens in 1893?

24. Who told that democracy is a "government of the people, by the people and for the people."

25. Three elements/tools/features of democracy.

26. Three values of democracy.

27. Two principles of democracy.

28. What do you understand by absolute monarchy? Name one country which follows this form of government.

29. What is direct democracy? Is it practical to follow it in India?

30. Why is India called a democratic republic?

31. What are the two principles on which democracy is based?

32. What is the village panchayat?

33. How do citizens in a democratic country participate in the government?

34. Explain why democracy is much more than a form of government.

35. Write a note on elections.

36. What do you understand by rule of law?

37. What is a democratic democracy?

38. What is economic democracy?

39. Our constitution guarantees certain basic nights to all its people. What is the purpose behind this?

40. What is more important in a democracy - all citizens should have equal voting rights or all citizens should have food, clothing and shelter?

41. Write the eight Movements for democracy in different parts of the world.

42. What are the elements (features), values and principles of democracy?

43. Write nine Trail (series of marks left by somebody or something showing where they have been) of democracy (from Sumeria to India).

Chapter 4
State Government

1. House of people at the national level in India.

2. States Legislatures that have both Legislative Assembly and Legislative council.

3. State Legislatures that have only Legislative Assembly.

4. Another name for Legislative Assembly.

5. The most populous state in India.

6. Total number of constituencies [area that sends a representative to Parliament or State Assembly] in Uttar Pradesh.

7. Total number of constituencies in Sikkim.

8. The term of a Legislative Assembly.

9. Expansion of M.L.A.

10. Two other names of Legislative council.

11. Legislative house of Karnataka.

12. In which election in a state, legislators are elected by marking their preferences against the names of candidates instead of using election symbols.

13. Expansion of M.L.C.

14. The term of a M.L.C (member of Legislative Council)

15. A territorial area which elects and sends one representative either to the state assembly or to the Parliament.

16. The process of making and passing laws.

17. The House where the process of making laws takes place.

18. The representatives involved in the law making process.

19. The nominal head of a state.

20. The real head of the state.

21. The head of state legislature and council of ministers.

22. Expansion of IAS

23. Expansion of IPS

24. Expansion of PSC

25. Who is the head of civil service in a state?

26. What is known as administrative unit of a state?

27. Who is in charge of a division in a district?

28. The civil servant in charge of a district.

29. The District collector of Thrissur in 2022.

30. The experiment to ensure common people's participation in governance of Kerala State government in 1996.

31. The official who gives advice to the executive on legal matters assigned by Governor in a state.

32. Advocate General of Kerala from 20th May 2021.

33. Why is the Legislative Council called a permanent body?

34. How are representatives to the Vidhan sabha elected? How have the territorial constituencies for Legislative Assembly seats been set ups?

35. What do you understand by "the governor can hold office during the pleasure of the president"? What qualification are needed to become the governor of a state?

36. Name the civil servants who carry out the administrative work in a state.

38. What are the steps involved in the process of a Bill becoming an Act?

39. What are the discretionary [freedom to decide what should be done] powers of a governor?

40. What are the functions of Chief Minister?

41. Write short notes on i) Council of Ministers ii) Advocate General

42. Which candidtate will have more power - elected or nominated? Why?

43. Why is it that at the state level the chief minister is the "Head of the government" and the governor is the "Head of the State"?

44. Write seven powers of Governor of a state.

45. Write the name and capitals of 28 states and 8 union territories from the Map Practice Book.[Ratna Sagar]

46. What is meant by People's Plan Movement or Kerala Development Plan of 1996?

Geography

Lesson 1 - OUR ENVIRONMENT

I. Fill ups.

1. Geographical elements are divided into .... and ....

2. .... in a biosphere are independent on one another.

3. .... is the greatest danger to the environment.

4. Biosphere provides .... and ....

5. Natural environment includes .... and ....

II. Give another name.

6. Biosphere   7. Lithosphere   8. Non living components

9. Living components   10. Envelope of air

III. Explain terms.

11. Environment   12. Ecosystem   13. Biosphere

14. Urbanization   15. Pollution

IV. Short answers.

16. Why do we call the earth our home?

17. What are the major domains of the earth?

18. Why is the atmosphere held close to the earth?

19. What is human made environment.

20. What is the imporatance of lithosphere?

21. Write the importance of atmosphere.

22. What are the problems faced by the world today?

23. Why human beings are an important part of the environment.

24. What can be done to overcome environmental problems?

Lesson 2

INSIDE OUR EARTH

I.   Fill in the blanks

1. Detailed study of interior of the earth is done by ....

2. Temperature at the centre of the earth is ....

3. Solid outermost layer is called ....

4. Continental crust is made up of ...... and ....

5. .... is found in the mantle.

6. .... are made up of minerals.

7. Igneous rocks are .... and ....

8. .... rocks are formed due to deposition of broken rock fragments in layers.

9. Change of one rock into another is ....

10. Rocks formed by excessive heat and pressure.

II. Name the following

11. Solid outermost layer   12. lower crust

13. Another name for core   14. First rock to be formed.

15. Rocks which cool inside earth   16. changed rocks

III. Explain terms

17. Rock cycle   18. rocks   19. core

20. fossils   21.volcanic rocks

IV. Short answers

13. What are uses of rocks and minerals?

14. Distinguish between rock and minerals.

15. Write the features of sedimentary and metamorphic.

16. Write a short note on core.

17. Distinguish between oceanic and continental crust.

V.   Long answers

18. Explain rock cycle.

19. Write a note on igneous rocks.

20. Write the features of mantle and core.

21. Explain the structure of the earth.

Lesson 3

CHANGING EARTH

I.   Fill in the blanks

1. Landmasses were joined together into a ....

2. Forces causing changes on the earth are .... and ....

3. Circular opening through which hot molten materials erupt ....

4. Funnel shaped hollow at top is ....

5. Volcanoes which have not erupted for a long time is ....

6. Volcanoes which erupts frequently are ....

7. ..... is the world's most beautiful volcanic mountain.

8. Shaking of the earth's surface is ....

9. Instrument used for recording earthquake tremors.

10. Intensity of earthquake waves is measured by ....

II.   One word for

11. sleeping volcano.

12. living volcano.

13. dead volcano

14. Origin of an earthquake

15. sea floor spreading

16. forces which starts from the earth

17. forces which originate on surface

III. Explain terms

18. vent   19. fissure   20. crater

21. epi centre   22. geologist

IV. Short answers

23. Name the forces which causes changes on the earth.

24. Name the types of volcanoes with examples.

25. What is earthquake?

26. Explain Wegener's theory of continental draft.

27. Name the tectonic activities.

V. Long answers

28. Explain the theory of plate tectonics.

29. Write a short note on distribution of volcanoes.

30. Explain the types of earthquake moves.

31. Explain the different forces on the earth.

Mathematics
Lesson - 1
INTEGERS

I.   Fill in the blanks.

1. $(-20) \times (-5) = $ ....

2. $(-10) \times 0 \times (-5) = $ ....

3.   The integer whose product with (-1) is O is ....

4. $10 \div (-5) = $ ....

5. $(-6) \div (-3) = $ ....

6. $(-50) \div $ .... $= 1$

7. $(-17) \times $ .... $= 17$

8. $(-8) + $ .... $= (-10)$

9.   .... $- (-6) = 0$

10.   The product of 7 negative integers is a ....

11.   The product of 3 positive integers and 4 negative integers is a ....

12.   5 more than -3 is ....

13.   The successor of -9 is ....

14.   The value of -6 - (-3) is ....

15.   .... $\div -12 = 1$

16. $-59 \div $ .... $= -59$

17.   .... $\div 1 = -25$

18. $(-13) + $ .... $= 27$

II.   Do as directed.

1.   Find $(-1) \times (-2) \times (-3) \times (-4) \times (-5)$

2.   Find the value of p, if $p \times (-9) = 135$

3. The sum of two integers is (-657) if one of the integer is 352, find the other integer.

4. The sum of two integers is 1258, one of the integer is (-934). Find the other number.

5. What integer should be multiplied by (-12) to get 96?

6. Find the following

a) (-358) + 171 - 458

b) 48 - (73) + (-29)

c) (45 ÷ (-3)) + ((-50) ÷ (-10))

d) (10 × 3) - ((-20) ×2)

e) 27 + (-13) - (-83) - 34

f) (-59) - 87 + 74 + (-48)

g) (-108) + 93 - 59 + 14

h) (214) - 136 - (-79)

7. Use appropriate property and solve

a) -5 × 47 × -20

b) 104 × -83

c) (-103) × 57

d) 249 × -99

e) 76 × 103 - 76 × 3

f) (-37) × 97 + 37 × (-3)

g) 73 × 99 + 73

h) 64 × 101 - 64

i) -117 × 101 + 117

j) 49 × - 99 - 49

8. In a test (+5) marks are given for every correct answer and (-2) marks are given for every incorrect answer.

i) Neha answered all questions and scored 30 marks though she got 10 correct answers. How many incorrect answers had she attempted?

ii) Ajay also answered all questions and scored (-12) marks though he got 4 correct answers. How many incorrect answers had he attempted?

iii) How many questions are there in all?

9. In a class test (+4) marks are given for every correct answer and (-2) marks are given for every incorrect answer. These are 25 questions in

the question paper.

i) Arun attempted all questions and got 18 questions correct. What is his total score?

ii) Pooja attempted 20 questions and got 6 answers incorrect. What will be here total score if zero marks are given for non-attempting questions.

10. In a test (+3) marks are given for every correct answer and (-1) mark for every incorrect answers. Anurag attempted all questions and he got 6 answers incorrect. If his total score is 51, how many answers does he get correct? How many questions are there in total?

Lesson - 2
FRACTIONS AND DECIMALS

1. Classify the following as proper, improper, mixed fraction and whole number.

$$\frac{73}{10}, \frac{2}{7}, \frac{16}{4}, \frac{23}{3}, \frac{15}{5}, \frac{21}{4}, \frac{7}{10}, \frac{14}{5}, \frac{3}{9}, \frac{17}{4}, \frac{32}{8}, \frac{5}{9}, \frac{13}{17}, \frac{39}{13}, \frac{8}{4}, \frac{11}{20}$$

2. Mixed fraction of $\frac{33}{4}$ is ....

3. The equivalent fraction of $\frac{2}{3}$ is ....

$$\left(\frac{4}{9}, \frac{6}{13}, \frac{8}{11}, \frac{10}{15} \right)$$

4. Which is not an equivalent fraction of $\frac{3}{5}$

$$\left(\frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \frac{15}{24} \right)$$

5. $1 - \frac{1}{5} = ...$ $\left(\frac{2}{5}, \frac{3}{5}, \frac{4}{5}, \frac{1}{5} \right)$

6. $2 + \dfrac{1}{4} = \text{.........}$ $\left(\dfrac{7}{4}, \dfrac{11}{4}, \dfrac{9}{4}, \dfrac{5}{4} \right)$

7. $\dfrac{1}{2} + \dfrac{1}{3} = \text{.........}$

8. $\dfrac{1}{2} - \dfrac{1}{4} = \text{.......}$

9. The side of an equilateral triangle is $\dfrac{3}{4}$ cm. Find the perimeter.

10. The side of a square is $\dfrac{5}{8}$ cm, find perimeter.

11. Which is greater (a) $\dfrac{3}{7}$ or $\dfrac{5}{6}$ (b) $\dfrac{4}{9}$ or $\dfrac{6}{9}$

    (c) $\dfrac{7}{5}$ or $\dfrac{7}{3}$ (d) $\dfrac{13}{15}$ or $\dfrac{6}{5}$ (e) $\dfrac{3}{4}$ or $\dfrac{5}{7}$

12. Find

    (a) $2 \times \dfrac{3}{5}$ (b) $\dfrac{7}{4} \times 4$ (c) $\dfrac{1}{2}$ of 8

    (d) $\dfrac{1}{4}$ of $\dfrac{1}{2}$ (e) $\dfrac{1}{4}$ or $\dfrac{1}{2}$ (f) $\dfrac{3}{5}$ of 25

    (g) $\dfrac{1}{2}$ of $\dfrac{10}{7}$ (h) $\dfrac{1}{4}$ of $5\dfrac{1}{3}$ (i) $5 \div \dfrac{5}{2}$

    (j) $14 \div \dfrac{7}{2}$ (k) $\dfrac{1}{3} \div \dfrac{5}{3}$ (l) $\dfrac{1}{2} \div 4$

    (m) $3\dfrac{1}{3} \div 10$ (n) $2\dfrac{1}{3} \div 3\dfrac{1}{2}$ (o) $\dfrac{7}{10} \times \dfrac{5}{14}$

    (p) $3\dfrac{4}{5} \times \dfrac{10}{19}$ (q) $\dfrac{12}{20} \times 6\dfrac{1}{4}$ (r) $2\dfrac{1}{4} + \dfrac{3}{5} + 1\dfrac{3}{4}$

    (s) $\dfrac{3}{8} + \dfrac{2}{6} + 2\dfrac{1}{3}$ (t) $8 - \dfrac{4}{5}$ (u) $\dfrac{3}{4} - \dfrac{4}{7}$

    (v) $3\dfrac{5}{6} - 1\dfrac{2}{3}$

13. a) 5 cm = ...m   b) 150 g = ... kg

    c) 5 paise = ... Rs.   d) 7 mm = ... m

    e) 270 cm = ... km   f) 375 ml = ...l

    g) 50 g = ...kg   h) 4l 25 ml = ... l

    i) 65 m = ... km   j) 5 Rs. 75 paise = ... Rs.

14. Write the place value of underlined digit

    a) 5$\underline{3}$7.0$\underline{8}$9   b) 3.$\underline{82}$4   (c) 23$\underline{9}$.$\underline{3}$65

15. Find

    a) 47.21 + 8.592 + 11.096   b) 18.089 + 4.7 + 347.892

    c) 17.3 × 4   d) 1.2 × 1.2

    e) 5.7 × 1.25   f) 3.7 × 10

    g) 0.79 × 100   h) 1.2 × 100

    i) 0.6 × 1000   j) 0.6 ÷ 3

    k) 2.5 ÷ 100   l) 0.32 ÷ 10

    m) 5.8 ÷ 1000   n) 1.44 ÷ 12

    o) 2.7 ÷ 0.3   p) 1.75 ÷ 0.25

    q) 2.8 ÷ 7   r) 3.81 ÷ .019

    s) 0.625 ÷ 12.5

16. The reciprocal of $1\frac{2}{3}$ is ....

17. The least form of $1\frac{8}{36}$

18. Divide $\frac{15}{24}$ by $\frac{3}{4}$

19. How long is 88.6 km than 48 km?

20. How many pieces of length $2\frac{2}{5}$ m can be cut from $6\frac{1}{5}$ m of cloth?

21. A car covers a distance of 89.1 km in 2.2 hours. What is the distance covered in 1 hour?

22. Arrange the following fractions in descending order.

a) $\dfrac{2}{3}, \dfrac{3}{4}, \dfrac{1}{2}, \dfrac{5}{6}$ b) $\dfrac{6}{7}, \dfrac{7}{8}, \dfrac{4}{5}, \dfrac{3}{4}$

23. Mary bought $3\dfrac{1}{2}$ m of lace. She used $1\dfrac{3}{4}$ m of lace for her new dress. How much lace is left with her?

24. Ramesh solved $\dfrac{2}{7}$ part of an exercise while Seema solved $\dfrac{4}{5}$ of it. Who solved less part?

25. Each side of a regular polygon is 2.5 cm in length. The perimeter of polygon is 15 cm. How many sides does the polygon have?

Lesson - 9
RATIONAL NUMBERS

1. .... is the multiplicative identity for rational numbers.

2. The numbers .... and .... have their own reciprocals.

3. The reciprocal of -5 is ....

4. The additive inverse of $\dfrac{7}{5}$ is ....

5. What should be added to $\dfrac{7}{12}$ to get $\dfrac{4}{15}$?

6. What should be subtracted from $\left(\dfrac{-3}{5}\right)$ to get (-2).

7. Which of the rational numbers $\dfrac{-11}{28}, \dfrac{-5}{7}, \dfrac{9}{-14}, \dfrac{29}{-42}$ is the greatest?

8. Which is the rational number lies between $\dfrac{3}{5}$ and $\dfrac{4}{5}$

$\left(\dfrac{7}{5}, \dfrac{7}{10}, \dfrac{3}{10}, \dfrac{4}{10}\right)$

9. Find x in the following

   a) $\dfrac{-1}{5} = \dfrac{8}{x}$ b) $\dfrac{7}{-3} = \dfrac{x}{6}$ c) $\dfrac{13}{6} = \dfrac{-65}{x}$

   d) $\dfrac{16}{x} = 4$ e) $\dfrac{-48}{x} = 2$

10. The product of a rational number and its multiplication inverse is ......

11. The equivalent rational number of $\dfrac{-6}{5}$ is

   $(\dfrac{-3}{5}, \dfrac{12}{10}, \dfrac{-12}{10}$, none of these)

12. Write the simplest form of

   a) $\dfrac{-18}{48}$ b) $\dfrac{24}{-72}$ c) $\dfrac{44}{-72}$ d) $\dfrac{39}{-91}$ e) $\dfrac{-42}{56}$

13. Fill in the blanks.

   a) $\dfrac{5}{4} = \dfrac{.....}{-16} = \dfrac{25}{.....} = \dfrac{-15}{.....}$ b) $\dfrac{-3}{7} = \dfrac{.....}{14} = \dfrac{9}{.....} = \dfrac{-6}{.....}$

   c) $\dfrac{9}{-94} = \dfrac{.....}{16} = \dfrac{-15}{.....} = \dfrac{.....}{-32}$

14. Write the additive inverse of

   a) $\dfrac{-3}{9}$ b) $\dfrac{-9}{11}$ c) $\dfrac{5}{7}$ d) $\dfrac{2}{3} + \left(\dfrac{-4}{9}\right)$

15. Write the reciprocal of

   a) $\dfrac{-6}{11}$ b) $\dfrac{8}{-5}$ c) $\dfrac{4}{9} \times \dfrac{-18}{25}$ d) $\dfrac{-3}{8} + \dfrac{7}{10}$

16. Find the following.

   a) $\dfrac{5}{4} + \dfrac{-11}{7}$ b) $\dfrac{-8}{19} + \dfrac{-2}{57}$ c) $-2\dfrac{1}{3} + 4\dfrac{3}{5}$ d) $\dfrac{-9}{10} + \dfrac{22}{15}$

   e) $\dfrac{7}{24} - \dfrac{17}{36}$ f) $\dfrac{5}{63} - \left(\dfrac{-6}{21}\right)$ g) $\dfrac{-6}{13} - \left(\dfrac{-7}{39}\right)$ h) $\dfrac{16}{28} \times \dfrac{-7}{4}$

   i) $\dfrac{-66}{45} + \dfrac{9}{11}$ j) $\dfrac{3}{7} \times \dfrac{-2}{5}$ k) $\dfrac{-3}{5} \div 2$ l) $\left(\dfrac{-4}{5}\right) \div (-3)$

   m) $\dfrac{-1}{8} \div \dfrac{3}{4}$ n) $\dfrac{-2}{13} \div \dfrac{-1}{26}$ o) $\dfrac{-7}{12} \div \dfrac{14}{-24}$

17. Multiply $\dfrac{6}{13}$ by the reciprocal of $\dfrac{-7}{16}$

18. What number should be added to $\dfrac{7}{12}$ to get $\dfrac{-4}{15}$

19. What number should be subtracted from $\dfrac{-3}{5}$ to get $\dfrac{4}{10}$?

20. Represent the following on the number line.

    a) $\dfrac{-3}{4}, \dfrac{-1}{4}, \dfrac{2}{4}, \dfrac{5}{4}$ b) $\dfrac{-6}{7}, \dfrac{-3}{7}, \dfrac{0}{7}, \dfrac{1}{7}, \dfrac{4}{7}$

21. A rational number $\dfrac{6}{7}$ is subtracted from $\dfrac{13}{21}$. Then the result added to additive inverse of $\dfrac{-11}{14}$, what is the reciprocal of the final sum?

22. The product of two rational numers is $\dfrac{-4}{5}$. If one of them is $\dfrac{8}{35}$, find the other.

23. Find additive inverse and reciprocal of $\left[\dfrac{-7}{26} + \dfrac{-11}{39}\right]$

24. Which is greater $-3\dfrac{2}{7}$ or $-3\dfrac{4}{5}$

25. Arrange $\dfrac{-7}{8}, \dfrac{-5}{6}, \dfrac{-3}{4}$ in descending order.

26. If $\dfrac{x}{2} + \dfrac{1}{3} = 1$, find x .

27. Divide the sum of $\dfrac{-13}{5}$ and $\dfrac{12}{7}$ by the product of $\dfrac{-31}{7}$ and $\dfrac{-1}{2}$

28. Divide the sum of $\dfrac{65}{12}$ and $\dfrac{8}{3}$ by their difference.

29. By what number should we multiply $\dfrac{-1}{6}$. So that the product may be $\dfrac{-23}{9}$.

30. By what number should $\dfrac{-33}{16}$ be divided to get $\dfrac{-11}{4}$

Lesson - 4

DATA HANDLING

1. The mean of first 7 whole numbers is ....

2. The mean of first 6 nuatural numbers is ....

3. The median of first 8 prime numbers is ....

4. What will be the range of the following data.

   32, 41, 28, 54, 35, 26, 33, 23, 38, 40

5. The mode of the data 2, 3, 2, 2, 3, 4, 5, 5, 6, 2, 3, 8, 2 is ....

6. Find the mode and median of the following data

   13, 16, 12, 14, 19, 12, 14, 13, 14 is ....

7. Find the median of 9, 25, 18 15, 6, 16, 8, 22, 21, 17, 18

8. The weight (in kg) of 16 students of a class are

   38, 42, 35, 37, 45, 50, 32, 43, 43, 40, 36, 38, 43, 38, 47, 44

   Find the mode and median of the data.

9. The enrolment of a school during six consecutive years was as follows:-

   1555, 1670, 1750, 2019, 2540, 2820

   Find the mean enrolment during this period.

10. The result of passing percentage of class X and XII examination for 5 years are given. Represent the data by double bar graph.

Year	1994-95	1995-96	1996-97	1997-98	1998-99
X	90	95	90	80	98
XII	95	80	85	90	95

Lesson - 13
EXPONENTS AND POWERS

1. The value of 3^0 is ....

2. $a^m \div a^n = a^{..}$

3. $(3^0+4^0+5^0)^0 = ...$

4. $(7^0+2^0) \times 3^0 = ...$

5. $(-3)^4 \times (-3)^3 = ...$

6. The standard form of 2156000 is ....

7. The value of $(-1)^{19}$ is ....

8. $(-1)^{25} \times (-1)^{12} = ...$

9. $(-1)^{37} + (-1)^{26} = ...$

10. The exponential form of 64 with base 2 is ....

11. What power of 2 is 128?

12. Express 729 as a power of 3.

13. Express as the product of powers of prime factors
    a) 12800   b) 432   c) 648   d) 540

14. The standard form of 14500000 is ....

15. Write the standard numeral for
    a) $3 \times 10^7 + 9 \times 10^4 + 7 \times 10^3 + 4 \times 10^2 + 9 \times 10^1 + 6 \times 10^0$
    b) $8 \times 10^5 + 2 \times 10^2 + 5 \times 10^1$
    c) $8 \times 10^6 + 3 \times 10^5 + 7 \times 10^2 + 4 \times 10^1$

16. Write the expanded form of
    a) 89205   b) 3400853   c) 150094780

17. Express the following in exponential form.
    a) 432   b) 10125   c) 2401   d) 10584
    e) 1600   f) 2916   g) 36504   h) 30375

18. Simplify and express in exponential form.

a) $(3^4 \times 3^2) \div 3^3$

b) $(4^2 \times 2^3) \div 2^4$

c) $(5^8 \times 5^4) \div (5^5 \times 5^7)$

d) $(10^3 \times 4^4) \div (2^3 \times 5^2)$

e) $\dfrac{36 \times 4^2 \times 5^3}{216 \times 25 \times 8}$

f) $\dfrac{10^2 \times 625 \times 3^3}{6^2 \times 3125}$

g) $\dfrac{4^3 \times 343 \times 18^2}{(28)^2 \times (36)^2}$

h) $\dfrac{(49)^2 \times 5^3 \times 18}{(10)^3 \times 343 \times 3^2}$

i) $\dfrac{3^2 \times 7^8 \times 13^6}{21^2 \times 91^3}$

j) $\dfrac{144 \times 5^2 \times 10^2}{256 \times 125}$

k) $\dfrac{16^7 \times 25^5 \times 81^3}{15^7 \times 24^5 \times 80^3}$

l) $\dfrac{25^2 \times x^{10}\, y^5}{5^4 \times x^7\, y^4}$

m) $\dfrac{9^8\,(x^2)^5\, y^3}{27^3\,(x^3)^2\, y^2}$

n) $\dfrac{4^6 \times (a^8)^2 \times (b^3)^3}{2^{10} \times (a^6)^2 (b^4)^2}$

o) $\dfrac{(3a)^5 \times (4b)^3}{81\,a^4 \times 32\,b^2}$

p) $\dfrac{3^5 \times 10^5 \times 25}{5^7 \times 6^5}$

19. Using exponents, simplify and write the answer in exponential form:

a) $(2^5 \times 2^3) \times 4^2$

b) $16 \times 4^3 \times 2^2$

c) $(2^{20} \div 2^{15}) \times 2^3$

d) $[(7^2)^3 \div 7^3)] \times 7^2$

e) $[(5^2)^3 \times 5^4] \div 5^7$

f) $\left(\dfrac{3^7}{3^8}\right) \times \left[3^5 \times (3^2)^2\right]$

g) $(8^2)^3 \div (2^3)^4$

h) $(2^{55} \times 2^{60}) - (2^{97} \times 2^{18})$

i) $[(2^3)^4 \times 2^8] \div 2^{12}$

j) $[(3^{17})^3 \times (3^3)^3] - [(3^3)^5 \times (3^{15})^3]$

20. Write the following in standard form.

a) 270659   b) 427500000   c) 6830000000

21. Write the following in usual form.

a) 6.28×10^6 b) 8.235×10^{11}

c) 9.2×10^8 d) 7.023×10^9

Lesson - 12
ALGEBRAIC EXPRESSIONS

1. Identify the monomials, binomials, trinomials from the following.

   a) $x^2 - 1$ b) $4x^2$ c) $x^2 - y^2$ d) $3x^2 + 4y^2 - 5z$

   e) $ax^2 + bx + c$ f) $a^2 + b^2 - c^2$ g) $3ab^2$ h) $-x + 2y$

   i) $3a^2bc$ j) $4x - 3x$ k) $3x - 2$ l) $-xyz$

2. Write all the terms and numerical coefficient of each term of the following.

   a) $3x^5 + 5y^4 - 7x^2y + 7$ b) $9y^3 - 2x^3 + 7x^2yz - 3xyz$

   c) $a^5 - 3ab - b^2 + 6$ d) $x^2 - x + 1$

   e) $x^2 - 7x^2y + 5xy^2 - 2$

3. Identify like terms in the following

   a) x^2, y^2x^2, $-3x^2$, z^2x b) $2xy$, yz, $3x$, $\frac{yz}{2}$

   c) $-2x^2y$, x^2z, $-yx^2$, x^2y^2 d) $4xy$, $-5x^2y$, $-3yx$, $2xy^2$

   e) $7a^2bc$, $-3ca^2b$, $-\frac{5}{2}abc^2$, $\frac{3}{2}c^2ab$, $-\frac{4}{3}cba^2$

4. Add the following.

   a) $4xy$, $12xy$, $3xy$ b) $3a^2b$, $2a^2b$, $13a^2b$, a^2b

   c) $-7xy$, $-3xy$, $-9xy$,   d) $4x^2y$, $8x^2y$, $-2x^2y$

   e) $4ab$, $-7ab$, $-10ab$, $3ab$ f) $3x+2y$, $x+y$, $x+y+3$, $3x+2y+5$

   g) $2x+3y-z$, $2x-y-z$, $2y-3z$, $4x-3y$

   h) $5x^2+7y-6z^2$, $4y+3x^2$, $9x^2+2z^2-9y$, $2y-2x^2$

   i) $5x^3+7+6x-5x^2$, $2x^2-8-9x$, $4x-2x^2+3x^3$, $3x^3-9x-x^2$ and $x-x^2-x^3-4$

   j) a^3+b^3-3, $2a^3-3b^3-3ab+7$, $-a^3+b^3+3ab-9$

5. Subtract

   a) 5x from 9x   b) -7x from 6x   c) -8a from -3a

   d) a^2-3ab from $2a^2$-7ab   e) -2x from -5y   f) $7a^2b$ from $3a^2b$

g) $x^2-3xy+7y^2-2$ from $6xy-4x^2-y^2+5$

h) $6x^3-7x^2+5x-3$ from $4-5x+6x^2+8x^3$

i) $x^3+2x^2y+6xy^2-y^3$ from $y^3-3xy^2-4x^2y$

j) $x^2-2xy+3y^2$ from $2x^2-3y^2+xy$

6. Add $x^2+2xy+y^2$ to the sum of x^2-3y^2 and $2x^2-y^2+9$.

7. Add a^3+b^3-3 to the sum of $2a^3-3b^3-3ab+7$ and $-a^3+b^3+3ab-9$.

8. From the sum of $-3x^3+6x^2$, $4x^3+4x-3$ and $-5x^2+2x$ subtract $-7x^3-3x+4$

9. From the sum of $3x^2-5x+2$ and $-5x^2-8x+9$ subtract $4x^2-7x+9$.

10. Subtract the sum of $13x-4y+7z$ and $-6z+6x+3y$ from the sum of $6x-4y-4z$ and $2x+4y-7$

11. From the sum of x^2+3y^2-6xy, $2x^2-y^2+8xy$ and y^2+8 subtract the sum of $3xy-x^2$ and $-3x^2+4y^2-xy+x-y+3$

12. What should be added to $a^2+2ab+b^2$ to obtain $4ab+b^2$.

13. How much is x^3-2x^2+x+4 greater than $2x^3+7x^2-5x+6$?

14. How much is $2a^2-7a+5$ less than $-3a^2+2a-3$?

15. What should be subtracted from a^3-4a^2+5a-6 to obtain a^2-2a+1?

16. How much does $2a2-5a+4$ exceed $3a^3-5a^2+7a-9$?

17. Find the value of the following expressions when $x = 1$, $y = -2$

a) $2x+3$ b) $3x-5y$ c) $-y^2+3-x$

d) $3x + 2y-7$ e) $4x^3 +2y^3-9$

18. Simplify and then find the value.

a) $-6a^2b + 7ab - 3a + 3ab + 5ba^2-4ab$ when $a = -1$, $b = 2$

b) $x^2y - 4x + 3y - 8x - 4y + 2yx^2 - 8y$ when $x = 1$, $y = -2$

Lesson - 5
LINES AND ANGLES

1. Find the complement of each of the following

   a) $60°$ b) $72°$ c) $25°$ d) $45°$

2. Find the supplement of each of the following.

   a) $38°$ b) $127°$ c) $64°$ d) $90°$

3. Find the angle which is double of its supplement.

4. Find the angle which is half of its complement.
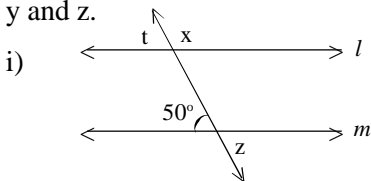
5. Answer the following from the adjoining figure.

   a) a pair of vertically opposite angle.

   b) a pair of adjacent angles.

   c) adjacent obtuse angle of $\angle AOE$.

   d) a pair of adjacent supplementary angle.
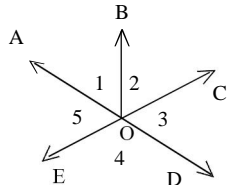
6. Find x, y in the following.

   a)

   b)

   c)

   d)
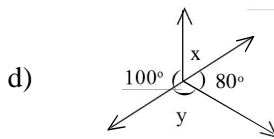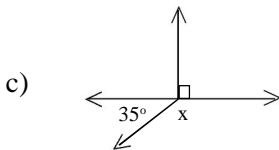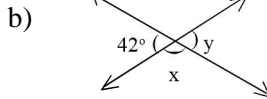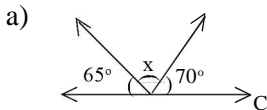
7. In the following figures $l \parallel m$ and t be a transversal. Find the value of x, y and z.

   i)
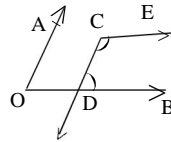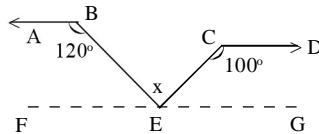
   ii) Find x,y,z and a,b,c if t and s are transversal.

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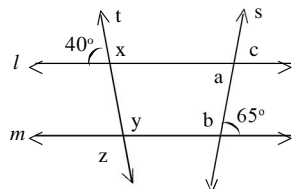
8. In the following figure line *l* through the vertex A of ΔABC is parallel to side BC, if ∠ABC = 65° and ∠ACB = 45° find x and y.
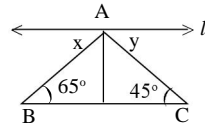
9. In the following figure AO||CD and OB||CE and ∠AOB = 50° find ∠BDC and ∠DCE = ?

10. In the given figure AB||CD and ∠ABE = 120°, ∠ECD = 100° find ∠BEC?

    [Hint: Draw FG parallel to AB and CD]

11. In the following figure AB||CD.

    ∠BAE = 125° and ∠BAC = ∠ABD = x°. Find x,y,z.
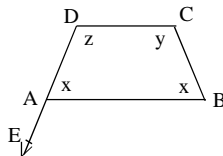
12. In each of the following figures, two lines *l* and m are cut by a traversal t. Find whether *l* || m.

    a)

    b)

    c)

    d)

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