Appendices

Appendix 1: Test Instrument

Instrumen Penelitian

Saat ini saya sedang melakukan penelitian dalam rangka penyusunan skripsi yang berjudul "An Error Analysis on the Use of Derivation at English Education Department of Universitas Muhammadiyah Yogyakarta Batch 2012". Dengan ini saya mohon bantuan saudara/saudari untuk mengerjakan tes di bawah ini. Di bawah ini adalah tes tentang *derivation* (perubahan kata). Jawablah pertanyaan di bawah ini sesuai dengan pengetahuan Anda tentang *derivation* dan kata yang dicetak dengan huruf kapital adalah kata dasar sebagai kata kunci. Identitas responden:

| Nama | : <u> </u> |
|----------|---|
| NIM | : <u></u> |
| Kelas | : <u></u> _ |
| Petunju | k: Pilihlah jawaban A, B, C, atau D sesuai dengan bentuk <i>derivation</i> |
| (perubah | an kata) yang benar. |
| Contoh: | |
| An (EXI | PLODE) device was found at one of London's busiest stations this |

a. explode

morning.

- b. explosion
- c. explosive
- d. explosively

Jawaban yang benar adalah C.

- 1. You should care about your (APPEAR) ... when you go to the interview.
 - a. appear
 - b. appearance
 - c. reappearance
 - d. appearment
- 2. You have to go in there and (ENERGY) . . . them! Without your encouragement and enthusiasm, I don't know what we would do.
 - a. energetic
 - b. energize
 - c. energity
 - d. energify

- 3. Why not (WIDE) . . . the discussion to include the Muslim and Jewish points of view?
 - a. widely
 - b. width
 - c. widen
 - d. widest
- 4. When you buy new clothes, it is a good idea to make sure that they are (WASH) Otherwise you will have to have them dry-cleaned.
 - a. washable
 - b. wash
 - c. washer
 - d. washout

- 5. We decided to buy the house because the price was very (REASON)....
 - a. reasonless
 - b. reasonable
 - c. reasonably
 - d. reason
- 6. Walking is an (EFFECT) . . . way of keeping fit and it's free!
 - a. effectively
 - b. effectable
 - c effectual
 - d. effective
- 7. Walk quietly, (NOISELESS) . . . ! The kitten is frightened.
 - a. noiselessly
 - b. noisiness
 - c. noisily
 - d. noisy
- 8. Three weeks after winning the lottery, Daniel Perkins had the (FORTUNE) . . . to lose a court case in which he was being sued for nearly \$2million.
 - a. unfortunness
 - b. unfortunate
 - c. unfortune
 - d. unfortunately
- 9. This queue hasn't moved in five minutes. I'm getting a bit (PATIENT) . . . !
 - a. impatient
 - b. impatiently
 - c. impatience
 - d. impatiencely
- 10. This part of the country is made up of a landscape of great (BEAUTIFUL)
 - a. beautician
 - b. beauteous
 - c. beauty

- d. beautification
- 11. It is (LEGAL) . . . to drive a car that is not taxed and insured.
 - a. illegal
 - b. ilegally
 - c. ilegality
 - d. ilegalize
- 12. They were offering a very (ATTRACT) . . . salary so of course I was interested.
 - a. attractive
 - b. attraction
 - c. attractively
 - d. attractiveness
- 13. Their (FRIEND) . . . goes back to when they were at school together.
 - a. friends
 - b. friendly
 - c. friendless
 - d. friendship
- 14. The workers protested (LOUD).
 - . . against the new measures.
 - a. aloud
 - b. loudness
 - c. loudly
 - d. loudless
- 15. The whole dispute began after a small (AGREEMENT) . . . over the money needed to finance the new company.
 - a. disagree
 - b. disagreebly
 - c. disagreeable
 - d. disagreement

- 16. The survey showed that 32% of respondents approve, 54%(APPROVE) . . . and the rest are undecided.
 - a. unapprove
 - b. disapprove
 - c. disapproval
 - d. disapproveness
- 17. The sauce looked (RUN) . . . so I added some more flour.
 - a. run
 - b. rerun
 - c. runny
 - d. runless
- 18. Microbes (COMPOSE) . . . organic waste into a mixture of methane and carbon dioxide.
 - a. decompose
 - b. composition
 - c. composer
 - d. composite
- 19. The police are looking into the . . . (MYSTERY) disappearance of the old man.
 - a. mystic
 - b. mysterious
 - c. mysteriously
 - d. mysteriousness
- 20. The picture quality is bad because the TV signal isn't (POWER) . . . enough.
 - a. powerless
 - b. empower
 - c. powerful
 - d. powerly
- 21. The massacre was a crime against (HUMAN)
 - a. humanism
 - b. humanity
 - c. humane
 - d humanness

- 22. The height of Mt. Everest is increasing by a few centimeters every year due to (GEOLOGY).
 - . . changes.
 - a. geological
 - b. geologic
 - c. geologically
 - d. geology
- 23. Researchers tried many times to (REPLICA) . . . the original experiment.
 - a. replicate
 - b. replication
 - c. replisize
 - d. replicative
- 24. The apple mixture can be (SWEET) . . . with honey.
 - a. sweetener
 - b. sweetness
 - c. sweeten
 - d. sweet
- 25. The (EXPAND) . . . of the company is said to be dangerous to small firms.
 - a. expanse
 - b. expansion
 - c. expandable
 - d. expansionism
- 26. The new teacher had failed to (FORCE) . . . any sort of discipline.
 - a. force
 - b. enforce
 - c. forcible
 - d. forceful

- 27. Please enclose your signed cheque and payment slip (ATTACH) . . . and unfolded.
 - a. unattached
 - b. unattachable
 - c. unattachment
 - d. unattach
- 28. My brother chose that university because it does a very well recommended (JOURNAL) . . . course and that's what he has always wanted to do.
 - a. journalism
 - b. journalistic
 - c. journalese
 - d. journalist
- 29. Megan was told by her dietician that she was becoming (DANGEROUS) . . . thin and should eat more.
 - a. dangerously
 - b. endanger
 - c. dangerly
 - d. dangeree
- 30. Mary suddenly felt sick, so we needed a (REPLACE) . . . for her part in the play.
 - a. replaceable
 - b. placement
 - c. replacement
 - d. replace
- 31. These factors (DETERMINE) . . . to a large extent the outcome.
 - a. predetermine
 - b. predeterminate
 - c. predeterminant
 - d. predetermination

- 32. It was only later in life that she found (HAPPY) . . . and peace of mind.
 - a. happily
 - b. happy
 - c. happiness
 - d. happinessly
- 33. I'm just going to (BEAUTY) . . . myself. It should only take a few hours.
 - a. beautiful
 - b. beautician
 - c. beautify
 - d. beautize
- 34. If you wanted to make more money, you could always decide to hold the festival twice (ANNUAL) . . . instead of just the once.
 - a. annualized
 - b. annulment
 - c. annually
 - d. anuual
- 35. If they want to increase output from the factory, they'll have to (MODERN)....
 - a. modernize
 - b. modernism
 - c. modernistic
 - d. modernify
- 36. The organization's aim is to (STRENGTH) . . . the cultural ties between Britain and Germany.
 - a. strong
 - b. strength
 - c. strengtly
 - d. strengthen

- 37. I told him I'd meet him here, but perhaps he (UNDERSTOOD) . . . and went straight to the pub.
 - a. misunderstandly
 - b. misunderstand
 - c. misunderstood
 - d. misunderstoodly
- 38. I think these sales forecasts are (REALISTIC) . . . , considering how slow sales are at present.
 - a. unrealistically
 - b. unrealistic
 - c. inrealistic
 - d. unreality
- 39. She tends not to (SOCIAL) . . . with my colleagues.
 - a. sociable
 - b. anti-social
 - c. socialize
 - d. asocial
- 40. I never knew you were such a good (DANCE)
 - a. dancer
 - b. danceless
 - c. dance
 - d. danceness
- 41. Common sense and creativity are some of the (TANGIBLES) . . . we're looking for in an employee.
 - a. intangibles
 - b. intangibly
 - c. intangiblement
 - d. intangibleness
- 42. I found the company by looking in the local trade (DIRECT)
 - a. directly
 - b. directory
 - c. direction
 - d. directness

- 43. The accident was (CLEAR) . . . the lorry driver's fault.
 - a. clearness
 - b. clearful
 - c. clearify
 - d. clearly
- 44. He's been (HONEST) . . . in his dealings with us about his past.
 - a. dishonesty
 - b. dishonestly
 - c. dishonest
 - d. honestless
- 45. Her performance was (ACCEPT)
 - ..., but not stunning.
 - a. unaccepted
 - b. acceptable
 - c. acceptably
 - d. accept
- 46. To keep the helmet in position, (FAST) . . . the strap beneath the chin.
 - a. fast
 - b. fasten
 - c. fastly
 - d. fastener
- 47. Anyone being rude and (ABUSE) . . . to our staff will be asked to leave the premises immediately.
 - a. abuser
 - b. abusive
 - c. abusively
 - d. abusement
- 48. Alan is someone who always needs the (APPROVE) . . . of other people.
 - a. approve
 - b. approval
 - c. approveness
 - d. approvement

- 49. "Where do you think Susan got to?" "Well, in all (PROBABLE).
 - \ldots , she is with her friends at the pool."
 - a. probably
 - b. probable
 - c. probability
 - d. probabliness
- 50. ... (ELECTRIC) is probably the most useful form of energy.
 - a. electric
 - b. electrical
 - c. electricity
 - d. electrician

Appendix 2: Test Items Distribution

| No | Kinds Of Derivation | The Sentence | Targeted Form | Source | Suffix/ Prefix | Number |
|----|---------------------|--|---------------|------------------------------|-------------------|--------|
| 1. | Noun to | Three weeks after winning the lottery, Daniel | UNFORTUNE | www.esl-lounge.com | un- | 8 |
| | Noun | Perkins had the (FORTUNE) to lose a court | | | | |
| | Derivation | case in which he was being sued for nearly | | | | |
| | | \$2million. | | | | |
| 2. | | The whole dispute began after a small | DISAGREEMENT | www.esl-lounge.com | dis- | 15 |
| | | (AGREEMENT) over the money needed to | | | | |
| | | finance the new company. | | | | |
| 3. | | Their (FRIEND) goes back to when they | FRIENDSHIP | Cambridge Advanced Learner's | -ship | 13 |
| | | were at school together. | | Dictionary, 3rd edition | | |
| 4. | | My brother chose that university because it does | JOURNALISM | www.esl-lounge.com | -ism | 28 |
| | | a very well recommended (JOURNAL)course | | | | |
| | | and that's what he has always wanted to do. | | | | |
| 5. | | The massacre was a crime against (HUMAN) | HUMANITY | Cambridge Advanced Learner's | -ity | 21 |
| | | | | Dictionary, 3rd edition | | |
| 6. | Verb to | I told him I'd meet him here, but perhaps he | MISUNDERSTOOD | Cambridge Advanced Learner's | mis- | 37 |
| | Verb | (UNDERSTOOD) and went straight to the | | Dictionary, 3rd edition | | |
| | Derivation | pub. | | | | |
| 7. | | Microbes (COMPOSE) organic waste into a | DECOMPOSE | Cambridge Advanced Learner's | de- | 18 |
| | | mixture of methane and carbon dioxide. | | Dictionary, 3rd edition | | |

| 8. | | The survey showed that 32% of respondents | DISAPPROVE | Cambridge Advanced Learner's | dis- | 16 |
|-----|--------------|--|--------------|------------------------------|------|----|
| | | approve, 54% (APPROVE) and the rest are | | Dictionary, 3rd edition | | |
| | | undecided. | | | | |
| 9. | | Please enclose your signed cheque and payment | UNATTACHED | Cambridge Advanced Learner's | un- | 27 |
| | | slip (ATTACH) and unfolded. | | Dictionary, 3rd edition | | |
| 10. | | These factors (DETERMINE) to a large | PREDETERMINE | Sentence.yourdictionary.com | pre- | 31 |
| | | extent the outcome. | | | | |
| 11. | Adjective to | This queue hasn't moved in five minutes. I'm | IMPATIENT | www.esl-lounge.com | im- | 9 |
| | Adjective | getting a bit (PATIENT)! | | | | |
| 12. | Derivation | I think these sales forecasts are (REALISTIC) | UNREALISTIC | Cambridge Advanced Learner's | un- | 38 |
| | | ., considering how slow sales are at present. | | Dictionary, 3rd edition | | |
| 13. | | He's been (HONEST) in his dealings with us | DISHONEST | Cambridge Advanced Learner's | dis- | 44 |
| | | about his past. | | Dictionary, 3rd edition | | |
| 14. | | Common sense and creativity are some of the | INTANGIBLES | Cambridge Advanced Learner's | in- | 41 |
| | | (TANGIBLES) we're looking for in an | | Dictionary, 3rd edition | | |
| | | employee. | | | | |
| 15. | | It is (LEGAL) to drive a car that is not taxed | ILLEGAL | Cambridge Advanced Learner's | il- | 11 |
| | | and insured. | | Dictionary, 3rd edition | | |
| 16. | Adjective to | (ELECTRIC) is probably the most useful | ELECTRICITY | www.english-grammar.at | -ity | 50 |
| | Noun | form of energy. | | | | |
| 17. | Derivation | This part of the country is made up of a | BEAUTY | www.english-grammar.at | | 10 |
| | | landscape of great (BEAUTIFUL) | | | | |
| 18. | | I found the company by looking in the local | DIRECTORY | www.tolearnenglish.com | -ory | 42 |
| | | trade (DIRECT) | | | | |

| 19. | | It was only later in life that she found (HAPPY). | HAPPINESS | Cambridge Advanced Learner's | -ness | 32 |
|-----|-------------|---|-------------|------------------------------|-------|----|
| | | and peace of mind. | | Dictionary, 3rd edition | | |
| 20. | | "Where do you think Susan got to?" "Well, in all | PROBABLITY | www.esl-lounge.com | -ity | 49 |
| | | (PROBABLE) , she is with her friends at the | | | | |
| | | pool." | | | | |
| 21. | Verb to | The (EXPAND) of the company is said to be | EXPANSION | www.english-grammar.at | -ion | 25 |
| | Noun | dangerous to small firms. | | | | |
| 22. | Derivation: | Alan is someone who always needs the | APPROVAL | Cambridge Advanced Learner's | -al | 48 |
| | | (APPROVE) of other people. | | Dictionary, 3rd edition | | |
| 23. | | I never knew you were such a good (DANCE) | DANCER | Cambridge Advanced Learner's | -er | 40 |
| | | | | Dictionary, 3rd edition | | |
| 24. | | Mary suddenly felt sick, so we needed a | REPLACEMENT | www.english-grammar.at | -ment | 30 |
| | | (REPLACE) for her part in the play. | | | | |
| 25. | | You should care about your (APPEAR) when | APPEARANCE | www.english-grammar.at | -ance | 1 |
| | | you go to the interview. | | | | |
| 26. | Noun to | Walking is an (EFFECT) way of keeping fit | EFFECTIVE | www.tolearnenglish.com | -ive | 6 |
| | Adjective | and it's free! | | | | |
| 27. | Derivation | The police are looking into the (MYSTERY) | MYSTERIOUS | www.english-grammar.at | -ous | 19 |
| | | disappearance of the old man. | | | | |
| 28. | | We decided to buy the house because the price | REASONABLE | www.english-grammar.at | -able | 5 |
| | | was very (REASON) | | | | |
| 29. | | The picture quality is bad because the TV signal | POWERFUL | Cambridge Advanced Learner's | -ful | 20 |
| | | isn't (POWER) enough. | | Dictionary, 3rd edition | | |
| 30. | | The height of Mt. Everest is increasing by a few | GEOLOGICAL | www.esl-lounge.com | -al | 22 |

| | | centimeters every year due to (GEOLOGY) | | | | |
|-----|--------------|--|-------------|------------------------------|------|----|
| | | changes. | | | | |
| 31. | Adjective to | The workers protested (LOUD) against the | LOUDLY | www.tolearnenglish.com | -ly | 14 |
| | Adverb | new measures. | | | | |
| 32. | Derivation | Walk quietly, (NOISELESS) ! The kitten is | NOISELESSLY | www.tolearnenglish.com | -ly | 7 |
| | | frightened. | | | | |
| 33. | | The accident was (CLEAR) the lorry driver's | CLEARLY | Cambridge Advanced Learner's | -ly | 43 |
| | | fault. | | Dictionary, 3rd edition | | |
| 34. | | If you wanted to make more money, you could | ANNUALLY | www.esl-lounge.com | -ly | 34 |
| | | always decide to hold the festival twice | | | | |
| | | (ANNUAL) instead of just the once. | | | | |
| 35. | | Megan was told by her dietician that she was | DANGEROUSLY | www.esl-lounge.com | -ly | 29 |
| | | becoming (DANGEROUS) thin and should | | | | |
| | | eat more. | | | | |
| 36. | Noun to | You have to go in there and (ENERGY) | ENERGIZE | www.esl-lounge.com | -ize | 2 |
| | Verb | them! Without your encouragement and | | | | |
| | Derivation | enthusiasm, I don't know what we would do. | | | | |
| 37. | | The new teacher had failed to (FORCE) any | ENFORCE | Cambridge Advanced Learner's | en- | 26 |
| | | sort of discipline. | | Dictionary, 3rd edition | | |
| 38. | | The organization's aim is to (STRENGTH) | STRENGTHEN | Cambridge Advanced Learner's | -en | 36 |
| | | the cultural ties between Britain and Germany. | | Dictionary, 3rd edition | | |
| 39. | | I'm just going to (BEAUTY) myself. It | BEAUTIFY | Cambridge Advanced Learner's | -ify | 33 |
| | | should only take a few hours. | | Dictionary, 3rd edition | | |
| 40. | | Researchers tried many times to (REPLICA) | REPLICATE | Cambridge Advanced Learner's | -ate | 23 |

| | | the original experiment. | | Dictionary, 3rd edition | | |
|-----|-------------------|--|------------|------------------------------|------------|----|
| 41. | Verb to Adjective | When you buy new clothes, it is a good idea to make sure that they are (WASH)Otherwise | WASHABLE | www.tolearnenglish.com | -able | 4 |
| | Derivation | you will have to have them dry-cleaned. | | | | |
| 42. | | They were offering a very (ATTRACT) | ATTRACTIVE | www.tolearnenglish.com | -ive | 12 |
| | | salary so of course I was interested. | | | | |
| 43. | | The sauce looked (RUN) so I added some | RUNNY | Cambridge Advanced Learner's | - y | 17 |
| | | more flour. | | Dictionary, 3rd edition | | |
| 44. | | Her performance was (ACCEPT) , but not | ACCEPTABLE | Cambridge Advanced Learner's | -able | 45 |
| | | stunning. | | Dictionary, 3rd edition | | |
| 45. | | Anyone being rude and (ABUSE) to our staff | ABUSIVE | www.esl-lounge.com | -ive | 47 |
| | | will be asked to leave the premises immediately. | | | | |
| 46. | Adjective to | To keep the helmet in position, (FAST) the | FASTEN | www.tolearnenglish.com | -en | 46 |
| | Verb | strap beneath the chin. | | | | |
| 47. | Derivation | If they want to increase output from the factory, | MODERNIZE | Cambridge Advanced Learner's | -ize | 35 |
| | | they'll have to (MODERN) | | Dictionary, 3rd edition | | |
| 48. | | Why not (WIDE) the discussion to include | WIDEN | Cambridge Advanced Learner's | -en | 3 |
| | | the Muslim and Jewish points of view? | | Dictionary, 3rd edition | | |
| 49. | 1 | She tends not to (SOCIAL) with my | SOCIALIZE | Cambridge Advanced Learner's | -ize | 39 |
| | | colleagues. | | Dictionary, 3rd edition | | |
| 50. | 1 | The apple mixture can be (SWEET) with | SWEETEN | Cambridge Advanced Learner's | -en | 24 |
| | | honey. | | Dictionary, 3rd edition | | |

Appendix 3: The Data Tabulation

| NAME | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 | Q19 | Q20 | Q21 | Q22 | Q23 | Q24 | Q25 | Q26 | Q27 | Q28 | Q29 |
|--------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| P1 | В | В | С | D | В | D | Α | С | Α | С | Α | Α | D | Α | D | В | D | Α | В | С | Α | Α | Α | С | В | В | A | Α | В |
| P2 | A | В | A | A | В | A | C | В | C | C | В | A | A | В | A | A | A | D | В | C | В | В | A | A | В | В | C | A | A |
| Р3 | В | В | В | A | В | D | D | D | A | C | A | A | D | В | Α | С | D | В | C | C | A | D | A | В | В | A | A | A | A |
| P4 | В | В | В | D | В | D | В | В | A | С | A | Α | D | С | D | В | С | D | В | С | В | A | A | В | В | В | С | Α | Α |
| P5 | В | Α | D | С | В | D | A | D | В | С | С | Α | Α | С | Α | В | D | В | В | В | В | A | Α | В | В | В | Α | В | С |
| P6 | В | В | C | С | В | D | A | Α | A | A | A | Α | D | С | Α | В | Α | Α | В | D | Α | D | A | С | В | В | A | Α | D |
| P7 | В | В | С | С | В | D | Α | Α | A | С | A | Α | A | С | D | В | С | Α | В | С | В | Α | Α | С | В | В | A | Α | Α |
| P8 | В | В | A | С | В | D | Α | Α | A | С | В | Α | D | С | D | В | D | В | В | С | В | Α | A | С | В | A | Α | A | Α |
| P9 | В | В | C | С | В | D | Α | В | Α | С | Α | Α | D | C | D | В | C | В | В | В | В | Α | Α | Α | A | В | Α | Α | C |
| P10 | В | В | В | D | В | D | Α | В | С | С | Α | Α | D | С | D | В | D | В | В | С | Α | Α | Α | С | В | В | С | В | Α |
| P11 | В | В | C | D | В | D | Α | В | Α | C | В | Α | D | C | D | В | C | Α | C | C | Α | Α | Α | C | В | В | Α | В | Α |
| P12 | В | В | C | D | В | D | D | В | Α | В | A | Α | D | C | D | C | D | В | В | C | В | Α | Α | В | В | В | A | В | Α |
| P13 | В | В | C | C | В | D | D | В | C | С | C | Α | D | C | Α | В | C | В | В | C | В | Α | D | Α | Α | В | Α | D | Α |
| P14 | В | В | A | C | В | В | В | D | C | D | Α | D | Α | Α | Α | В | Α | В | В | Α | В | Α | Α | D | D | В | D | D | Α |
| P15 | В | В | В | C | В | D | Α | В | Α | D | A | Α | D | Α | D | A | Α | C | В | C | Α | Α | Α | Α | В | Α | A | В | В |
| P16 | В | В | A | D | В | D | D | C | В | С | Α | Α | Α | C | Α | В | D | Α | В | C | В | Α | Α | Α | В | В | Α | Α | В |
| P17 | В | В | C | D | В | D | Α | В | Α | C | Α | Α | D | В | D | В | D | Α | В | C | В | Α | Α | C | В | В | Α | Α | В |
| P18 | В | В | C | D | В | D | Α | C | Α | В | A | Α | D | C | D | В | D | Α | В | C | В | Α | Α | Α | В | В | Α | В | Α |
| P19 | В | В | C | D | В | D | Α | C | Α | D | Α | Α | D | Α | D | В | C | Α | В | C | В | Α | Α | D | В | В | Α | Α | C |
| P20 | В | В | В | D | В | D | Α | D | С | С | Α | Α | Α | C | Α | Α | Α | В | В | Α | В | Α | Α | В | В | В | C | Α | Α |
| P21 | В | В | В | В | В | D | Α | В | В | D | Α | Α | Α | C | D | В | В | В | В | Α | В | Α | Α | D | В | В | Α | Α | Α |
| P22 | В | В | C | D | В | D | A | Α | С | С | A | Α | D | C | D | A | C | C | В | С | В | В | В | Α | В | В | Α | Α | В |
| P23 | В | В | C | A | В | D | Α | В | A | С | A | Α | D | C | D | В | C | D | В | C | Α | Α | A | A | C | В | A | A | Α |
| P24 | В | В | C | C | В | D | D | В | A | В | C | Α | D | С | Α | В | С | D | В | C | Α | Α | Α | В | C | В | A | A | Α |
| P25 | В | В | C | D | В | D | Α | С | Α | С | Α | Α | D | С | D | В | С | Α | В | С | В | Α | Α | Α | В | Α | В | В | Α |
| P26 | В | В | C | D | A | D | A | С | A | C | A | Α | D | С | D | В | С | Α | В | С | В | D | A | С | В | A | A | В | Α |
| P27 | В | В | C | D | Α | D | A | С | Α | С | A | Α | D | С | D | В | С | Α | В | С | В | D | Α | С | В | Α | A | В | Α |
| P28 | В | В | C | D | В | D | Α | C | C | C | Α | Α | D | C | D | В | C | Α | В | C | В | Α | Α | C | В | В | Α | Α | Α |
| P29 | В | В | В | Α | В | D | Α | В | С | С | Α | Α | Α | С | D | В | Α | С | В | В | В | В | D | Α | В | Α | С | D | D |
| P30 | В | Α | A | D | В | Α | C | В | В | В | Α | C | A | Α | D | В | В | D | C | D | В | Α | Α | D | Α | В | A | Α | Α |
| Answer | В | В | C | D | В | D | A | C | A | C | A | A | D | C | D | В | C | A | В | C | В | A | A | C | В | В | A | A | A |
| TRUE | 29 | 28 | 17 | 16 | 28 | 28 | 21 | 9 | 18 | 21 | 24 | 28 | 21 | 22 | 21 | 24 | 13 | 12 | 27 | 22 | 22 | 23 | 27 | 10 | 24 | 23 | 23 | 18 | 20 |
| FALSE | 1 | 2 | 13 | 14 | 2 | 2 | 9 | 21 | 12 | 9 | 6 | 2 | 9 | 8 | 9 | 6 | 17 | 18 | 3 | 8 | 8 | 7 | 3 | 20 | 6 | 7 | 7 | 12 | 10 |

| Q30 | Q31 | Q32 | Q33 | Q34 | Q35 | Q36 | Q37 | Q38 | Q39 | Q40 | Q41 | Q42 | Q43 | Q44 | Q45 | Q46 | Q47 | Q48 | Q49 | Q50 | Jum | lah | Total |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-------|
| Õ | 1 | 12 | 3 | 4 | 55 | 6 | 67 | 8 | 9 | 10 | 1 | 12 | 13 | 4 | 2 | 9 | 17 | 8 | 19 | 0 | T | F | tal |
| С | Α | Α | С | С | Α | D | С | В | Α | A | Α | С | D | С | В | В | C | В | С | С | 42 | 8 | 50 |
| В | C | C | Α | Α | C | В | В | В | C | A | В | Α | D | D | В | Α | Α | Α | A | В | 18 | 32 | 50 |
| D | В | В | Α | D | D | В | В | В | С | Α | В | C | D | D | В | Α | A | Α | A | В | 20 | 30 | 50 |
| С | C | C | Α | В | Α | D | C | В | C | A | Α | C | D | C | В | В | В | В | Α | C | 39 | 11 | 50 |
| С | C | Α | Α | C | C | В | В | В | Α | Α | Α | Α | D | В | В | C | A | В | A | В | 23 | 27 | 50 |
| С | Α | C | C | C | Α | D | C | В | Α | A | D | Α | D | C | В | В | В | В | Α | Α | 36 | 14 | 50 |
| С | Α | C | С | C | Α | D | C | В | С | Α | D | Α | D | C | В | В | В | В | C | C | 45 | 5 | 50 |
| С | Α | C | С | C | Α | D | C | С | С | Α | Α | С | D | D | В | C | В | D | C | C | 38 | 12 | 50 |
| С | В | C | С | Α | D | В | C | В | С | Α | С | С | D | D | A | C | Α | D | C | C | 32 | 18 | 50 |
| С | D | C | C | C | Α | D | C | В | В | A | A | A | С | C | A | В | В | D | C | C | 36 | 14 | 50 |
| С | A | В | C | C | A | D | C | В | С | A | С | A | С | В | В | В | В | В | A | C | 39 | 11 | 50 |
| С | В | C | С | C | D | D | Α | В | С | A | В | A | С | В | В | В | В | В | A | C | 34 | 16 | 50 |
| С | В | Α | Α | Α | D | D | D | C | С | A | A | A | С | Α | В | В | D | D | A | С | 26 | 24 | 50 |
| С | В | Α | С | Α | A | D | C | D | Α | A | D | A | С | В | В | В | C | D | A | C | 21 | 29 | 50 |
| С | В | Α | С | Α | Α | В | В | В | С | A | В | A | D | С | A | В | В | В | A | C | 28 | 22 | 50 |
| С | В | C | С | Α | В | D | В | В | С | Α | Α | Α | D | В | В | Α | D | В | Α | C | 33 | 17 | 50 |
| С | Α | В | С | С | Α | D | C | В | С | A | A | С | D | C | В | В | В | В | C | D | 43 | 7 | 50 |
| С | В | C | С | C | Α | D | C | C | Α | Α | С | Α | D | Α | В | В | В | D | С | С | 39 | 11 | 50 |
| С | Α | С | С | С | C | D | С | В | С | Α | Α | Α | D | D | В | В | В | D | Α | С | 41 | 9 | 50 |
| С | C | C | Α | C | Α | Α | C | В | Α | Α | Α | С | С | В | В | C | В | D | Α | С | 30 | 20 | 50 |
| D | В | В | В | В | В | В | В | В | Α | Α | В | В | В | В | В | В | В | В | В | В | 26 | 24 | 50 |
| С | В | С | С | С | В | D | С | В | С | Α | Α | Α | С | С | В | В | В | D | C | C | 37 | 13 | 50 |
| С | Α | В | C | C | D | D | Α | В | C | Α | В | Α | C | В | В | В | В | В | Α | C | 36 | 14 | 50 |
| C | A | В | C | C | D | D | A | В | C | A | В | A | A | C | В | В | В | В | A | C | 33 | 17 | 50 |
| С | В | Α | C | C | D | D | C | В | Α | Α | Α | С | C | C | В | В | В | D | C | C | 39 | 11 | 50 |
| C | C | C | C | C | A | D | C | В | C | A | A | A | D | В | В | В | В | В | Α | C | 42 | 8 | 50 |
| C | C | C | C | C | A | D | C | В | C | A | A | A | D | В | В | В | В | В | A | A | 41 | 9 | 50 |
| C | A | C | C | C | A | D | C | В | C | A | A | В | D | C | В | В | В | В | C | C | 49 | 1 | 50 |
| В | В | C | C | D | D | В | В | В | C | A | C | A | C | C | В | A | В | D | C | A | 23 | 27 | 50 |
| В | D | C | C | C | В | A | В | В | A | В | A | C | C | C | В | C | В | A | C | В | 22 | 28 | 50 |
| C | A | C | C | C | A | D | C | В | C | A | A | В | D | C | В | В | В | В | C | C | 1011 | 489 | 1500 |
| 25 | 10 | 18 | 23 | 20 | 15 | 21 | 18 | 26 | 20 | 29 | 16 | 2 | 17 | 13 | 27 | 21 | 22 | 16 | 12 | 21 | 10 | | 1500 |
| 5 | 20 | 12 | 7 | 10 | 15 | 9 | 12 | 4 | 10 | 1 | 14 | 28 | 13 | 17 | 3 | 9 | 8 | 14 | 18 | 9 | 48 | 9 | |

Appendix 4: Frequency Table

Q1

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 1 | 3.3 | 3.3 | 3.3 |
| | TRUE | 29 | 96.7 | 96.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q2

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 2 | 6.7 | 6.7 | 6.7 |
| | TRUE | 28 | 93.3 | 93.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q3

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 13 | 43.3 | 43.3 | 43.3 |
| | TRUE | 17 | 56.7 | 56.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q4

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 14 | 46.7 | 46.7 | 46.7 |
| | TRUE | 16 | 53.3 | 53.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 2 | 6.7 | 6.7 | 6.7 |
| | TRUE | 28 | 93.3 | 93.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 2 | 6.7 | 6.7 | 6.7 |
| | TRUE | 28 | 93.3 | 93.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q7

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q8

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 21 | 70.0 | 70.0 | 70.0 |
| | TRUE | 9 | 30.0 | 30.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q9

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 12 | 40.0 | 40.0 | 40.0 |
| | TRUE | 18 | 60.0 | 60.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 6 | 20.0 | 20.0 | 20.0 |
| | TRUE | 24 | 80.0 | 80.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q12

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 2 | 6.7 | 6.7 | 6.7 |
| | TRUE | 28 | 93.3 | 93.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q13

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q14

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 8 | 26.7 | 26.7 | 26.7 |
| | TRUE | 22 | 73.3 | 73.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 6 | 20.0 | 20.0 | 20.0 |
| | TRUE | 24 | 80.0 | 80.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 17 | 56.7 | 56.7 | 56.7 |
| | TRUE | 13 | 43.3 | 43.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q18

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 18 | 60.0 | 60.0 | 60.0 |
| | TRUE | 12 | 40.0 | 40.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q19

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 3 | 10.0 | 10.0 | 10.0 |
| | TRUE | 27 | 90.0 | 90.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 8 | 26.7 | 26.7 | 26.7 |
| | TRUE | 22 | 73.3 | 73.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 8 | 26.7 | 26.7 | 26.7 |
| | TRUE | 22 | 73.3 | 73.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q22

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 7 | 23.3 | 23.3 | 23.3 |
| | TRUE | 23 | 76.7 | 76.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q23

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 3 | 10.0 | 10.0 | 10.0 |
| | TRUE | 27 | 90.0 | 90.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q24

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 20 | 66.7 | 66.7 | 66.7 |
| | TRUE | 10 | 33.3 | 33.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 6 | 20.0 | 20.0 | 20.0 |
| | TRUE | 24 | 80.0 | 80.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | • | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 7 | 23.3 | 23.3 | 23.3 |
| | TRUE | 23 | 76.7 | 76.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q27

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 7 | 23.3 | 23.3 | 23.3 |
| | TRUE | 23 | 76.7 | 76.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q28

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 12 | 40.0 | 40.0 | 40.0 |
| | TRUE | 18 | 60.0 | 60.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q29

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 10 | 33.3 | 33.3 | 33.3 |
| | TRUE | 20 | 66.7 | 66.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 5 | 16.7 | 16.7 | 16.7 |
| | TRUE | 25 | 83.3 | 83.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | • | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 20 | 66.7 | 66.7 | 66.7 |
| | TRUE | 10 | 33.3 | 33.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q32

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 12 | 40.0 | 40.0 | 40.0 |
| | TRUE | 18 | 60.0 | 60.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q33

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 7 | 23.3 | 23.3 | 23.3 |
| | TRUE | 23 | 76.7 | 76.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q34

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 10 | 33.3 | 33.3 | 33.3 |
| | TRUE | 20 | 66.7 | 66.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 15 | 50.0 | 50.0 | 50.0 |
| | TRUE | 15 | 50.0 | 50.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | • | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q37

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 12 | 40.0 | 40.0 | 40.0 |
| | TRUE | 18 | 60.0 | 60.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q38

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 4 | 13.3 | 13.3 | 13.3 |
| | TRUE | 26 | 86.7 | 86.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q39

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 10 | 33.3 | 33.3 | 33.3 |
| | TRUE | 20 | 66.7 | 66.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 1 | 3.3 | 3.3 | 3.3 |
| | TRUE | 29 | 96.7 | 96.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 14 | 46.7 | 46.7 | 46.7 |
| | TRUE | 16 | 53.3 | 53.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q42

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 28 | 93.3 | 93.3 | 93.3 |
| | TRUE | 2 | 6.7 | 6.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q43

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 13 | 43.3 | 43.3 | 43.3 |
| | TRUE | 17 | 56.7 | 56.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q44

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 17 | 56.7 | 56.7 | 56.7 |
| | TRUE | 13 | 43.3 | 43.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 3 | 10.0 | 10.0 | 10.0 |
| | TRUE | 27 | 90.0 | 90.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q47

| | _ | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 8 | 26.7 | 26.7 | 26.7 |
| | TRUE | 22 | 73.3 | 73.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q48

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 14 | 46.7 | 46.7 | 46.7 |
| | TRUE | 16 | 53.3 | 53.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Q49

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 18 | 60.0 | 60.0 | 60.0 |
| | TRUE | 12 | 40.0 | 40.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

| | - | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|-----------------------|
| Valid | FALSE | 9 | 30.0 | 30.0 | 30.0 |
| | TRUE | 21 | 70.0 | 70.0 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

Appendix 5: Students' Score

| NI. | D4: -:4 | To | tal | T-4-1 |
|-----|--------------|----------------|--------------|--------------|
| No. | Participants | Correct Answer | Error Answer | Total |
| 1 | P1 | 42 | 8 | 50 |
| 2 | P2 | 18 | 32 | 50 |
| 3 | Р3 | 20 | 30 | 50 |
| 4 | P4 | 39 | 11 | 50 |
| 5 | P5 | 23 | 27 | 50 |
| 6 | P6 | 36 | 14 | 50 |
| 7 | P7 | 45 | 5 | 50 |
| 8 | P8 | 38 | 12 | 50 |
| 9 | Р9 | 32 | 18 | 50 |
| 10 | P10 | 36 | 14 | 50 |
| 11 | P11 | 39 | 11 | 50 |
| 12 | P12 | 34 | 16 | 50 |
| 13 | P13 | 26 | 24 | 50 |
| 14 | P14 | 21 | 29 | 50 |
| 15 | P15 | 28 | 22 | 50 |
| 16 | P16 | 33 | 17 | 50 |
| 17 | P17 | 43 | 7 | 50 |
| 18 | P18 | 39 | 11 | 50 |
| 19 | P19 | 41 | 9 | 50 |
| 20 | P20 | 30 | 20 | 50 |
| 21 | P21 | 26 | 24 | 50 |
| 22 | P22 | 37 | 13 | 50 |
| 23 | P23 | 36 | 14 | 50 |
| 24 | P24 | 33 | 17 | 50 |
| 25 | P25 | 39 | 11 | 50 |
| 26 | P26 | 42 | 8 | 50 |
| 27 | P27 | 41 | 9 | 50 |
| 28 | P28 | 49 | 1 | 50 |
| 29 | P29 | 23 | 27 | 50 |
| 30 | P30 | 22 | 28 | 50 |
| | Total | 1011 | 489 | 1500 |
| | Highest | score | 49 | |
| | Lowest | score | 18 | |

Appendix 6: Error Identification

ERROR IDENTIFICATION

| No · | Question | Expected Answer | Identifi cation | Classification | Correction |
|------|---|---|-----------------------------------|---|--|
| 1. | You should care about your (APPEAR) when you go to the interview. a. appear b. appearance c. reappearance d. appearment | B (Verb to Noun Derivation) | A = 1 B = 29 | Verb to Verb Derivation | It should be 'appearance'. The student might confused to differentiate between verb and noun |
| 2. | You have to go in there and (ENERGY) them! Without your encouragement and enthusiasm, I don't know what we would do. a. energetic b. energize c. energity d. energify | B (Noun to Verb Derivation) | A = 2 B = 28 | Noun to Adjective Derivation | The answer should be 'energize'. The students might still have difficulties in using derivation and recognize their feature. |
| 3. | Why not (WIDE) the discussion to include the Muslim and Jewish points of view? a. widely b. width c. widen d. widest | C (Adjective to Verb Derivation) | A = 5 B = 7 C = 17 D = 1 | A: Adjective to Adverb Derivation B: Adjective to Noun Derivation D: Inflection | The answer should be 'widen'. Many students have different opinions although many students answered correctly |
| 4. | When you buy new clothes, it is a good | | A = 4 | A: Verb to Verb | It should be 'washable ' |

| | idea to make sure that they are (WASH) | | B = 1 | Derivation | Students' errors mostly on |
|----|---|-------------|--------|------------------------|--------------------------------|
| | Otherwise you will have to have them | D | C = 9 | B: Verb to Noun | 'washout' means 'failure' |
| | dry-cleaned. | (Verb to | D = 16 | Derivation | |
| | a. wash | Adjective) | | C: Verb to Noun | |
| | b. washer | , | | Derivation | |
| | c. washout | | | | |
| | d. washable | | | | |
| 5. | We decided to buy the house because the | | A = 2 | Reasonless : Noun | The answer should be |
| | price was very (REASON) | В | B=28 | Adjective Derivation | 'reasonable' whereas |
| | a. reasonless | (Noun to | | | 'reasonless' is the opposite. |
| | b. reasonable | Adjective | | | |
| | c. reasonably | Derivation) | | | |
| | d. reason | | | | |
| 6. | Walking is an (EFFECT) way of | | A = 2 | Noun to Adverb | The correct answer to |
| | keeping fit and it's free! | D | D = 28 | Derivation | replace 'effectively' should |
| | a. effectively | (Noun to | | | be 'effective'. |
| | b. effectable | Adjective | | | |
| | c. effectual | Derivation) | | | |
| | d. effective | | | | |
| 7. | Walk quietly, (NOISELESS) ! The | | A=21 | B: Adjective to Noun | The answer 'noisiness', |
| | kitten is frightened. | A | B=2 | Derivation | 'noisily', and 'noisy' are not |
| | a. noiselessly | (Adjective | C=2 | C: Adjective to Adverb | appropriate and they should |
| | b. noisiness | to Adverb | D=5 | Derivation | be replaced |
| | c. noisily | Derivation) | | D: Adjective to Noun | with 'noiselessly'. |
| | d. noisy | | | Derivation | |
| 8. | Three weeks after winning the lottery, | C | A=4 | A: Noun to Noun | The correct answer to |
| | Daniel Perkins had the (FORTUNE) to | (Noun to | B=14 | derivation | replace 'unfortunness', |
| | lose a court case in which he was being | Noun | C-9 | B: Noun to Verb | 'unfortunate', and |

| | sued for nearly \$2million. a. unfortunness b. unfortunate c. unfortune d. unfortunately | Derivation) | D=3 | Derivation D: Noun to Adverb Derivation | 'unfortunately' is 'unfortune'. |
|-----|--|--|---------------------------|--|--|
| 9. | This queue hasn't moved in five minutes. I'm getting a bit (PATIENT) ! a. impatient b. impatiently c. impatience d. impatiencely | A (Adjective to Adjective) | A=18 B=4 C=8 | B: Adjective to Adverb Derivation C: Adjective to Noun Derivation | The answer B and C are not appropriate to complete the sentence then the answer should be 'impatient'. |
| 10. | This part of the country is made up of a landscape of great (BEAUTIFUL) a. beautician b. beauteous c. beauty d. beautification | C (Adjective to Noun Derivation) | A=1 B=4 C=21 D=4 | A: Adjective to Noun Derivation B: Adjective to adjective Derivation D: Adjective to Noun Derivation | The answer 'beautician', 'beauteous' and 'beautification' are not appropriate to complete the statement thus, the answer should be 'beauty'. |
| 11. | It is (LEGAL) to drive a car that is not taxed and insured. a. illegal b. illegally c. illegality d. illegalize | A (Adjective to Adjective Derivation) | A=24 B=3 C=3 | B: Adjective to Adverb Derivation C: Adjective to Noun Derivation | Both the answer B and C are not correct to complete the sentence then, the answer should be 'illegal'. |
| 12. | They were offering a very (ATTRACT) salary so of course I was interested. a. attractive b. attraction c. attractively | A (Verb to Adjective Derivation) | A=28 C=1 D=1 | C: Verb to Adverb Derivation D: Verb to Noun Derivation | The answer is 'attractive'. Most of students have understood it well. |

| | d. attractiveness | | | | |
|-----|---------------------------------------|---------------|------|-------------------------|-------------------------------|
| 13. | Their (FRIEND) goes back to when | | A=9 | Noun to Noun Derivation | The correct answer should be |
| | they were at school together. | D | D=21 | | 'friendship' to complete the |
| | a. friend | (Noun to | | | sentence. |
| | b. friendly | Noun | | | |
| | c. friendless | Derivation) | | | |
| | d. friendship | | | | |
| 14. | The workers protested (LOUD) against | | A=5 | A: Adjective to Adverb | The correct answer to change |
| | the new measures. | С | B=3 | Derivation | the wrong answer A and B is |
| | a. aloud | (Adjective | C=22 | B: Adjective to Noun | 'loudly'. |
| | b. loudness | to Adverb | | Derivation | |
| | c. loudly | Derivation) | | | |
| | d. loudless | | | | |
| 15. | The whole dispute began after a small | | A=9 | A: Noun to Verb | The answer disagree does |
| | (AGREEMENT) over the money | | D=21 | derivation | not match to complete the |
| | needed to finance the new company. | D | | | statement thus, the answer |
| | a. disagree | (Noun to | | | should be 'disagreement'. |
| | b. disagreebly | Noun | | | |
| | c. disagreeable | Derivation) | | | |
| | d. disagreement | | | | |
| | | | | | |
| 16. | The survey showed that 32% of | | A=4 | A: it does not exist in | The answer is 'disapprove'. |
| | respondents approve, 54% (APPROVE) | В | B=24 | English | Some students assumed that |
| | . and the rest are undecided. | (Verb to | C=2 | C: Verb to Noun | the opposite approve is |
| | a. unapprove | Verb | | Derivation | unapproved however it is not |
| | b. disapprove | Derivation) | | | started with prefix <i>un</i> |
| | c. disapproval | 2011, 401011) | | | |
| | d. disapproveness | | | | |

| 17. | The sauce looked (RUN) so I added some more flour. a. run b. rerun c. runny | C (Verb to Adjective Derivation) | A=6 B=2 C=13 D=9 | A: Verb to Verb Derivation B: Verb to Verb Derivation D: it does not exist in | The answer 'run', 'rerun', and 'runless' are not to complete the statement then, the correct answer is 'runny'. |
|-----|--|---|----------------------------|---|---|
| 18. | d. runless Microbes (COMPOSE) organic waste into a mixture of methane and carbon dioxide. a. decompose b. composition c. composer | A (Verb to Verb Derivation) | A=12 B=10 C=3 D=5 | English B: Verb to Noun Derivation C: Verb to Noun derivation D: Verb to Noun derivation | The best answer should be 'decompose'. Students might be confused by prefix <i>de-</i> . |
| 19. | d. composite The police are looking into the (MYSTERY) disappearance of the old man. a. mystic b. mysterious c. mysteriously d. mysteriousness | B (Noun to Adjective Derivation) | B=27 C=3 | C: Noun to Adverb Derivation | The answer 'mysteriously' is not correct to complete the statement then, the answer should be 'mysterious'. |
| 20. | The picture quality is bad because the TV signal isn't (POWER) enough. a. powerless b. empower c. powerful d. powerly | C (Noun to Adjective Derivation) | A=3 B=3 C=22 D=2 | A: Noun to Adjective Derivation B: Noun to Verb Derivation D: Noun to Adverb derivation | The correct answer is 'powerful'. Some students have various opinions on this question. |
| 21. | The massacre was a crime against (HUMAN) | B (Noun to | A=8 B=22 | A: Noun to Noun Derivation | The correct answer to replace 'humanism' is |

| | a. humanism | Noun | | | 'humanity'. |
|-----|--|-------------|------|---------------------------|------------------------------|
| | b. humanity | Derivation) | | | |
| | c. humane | | | | |
| | d. humanness | | | | |
| 22. | The height of Mt. Everest is increasing by | | A=23 | B: Noun to Adjective | The answer B and D cannot |
| | a few centimeters every year due to | | B=3 | derivation | complete the statement then |
| | (GEOLOGY) changes. | A | D=4 | D: Noun to Noun | the correct answer is |
| | a. geological | (Noun to | | Derivation | 'geological'. |
| | b. geologic | Adjective | | | |
| | c. geologically | derivation) | | | |
| | d. geology | | | | |
| 23. | Researchers tried many times to | | A=27 | B: Noun to Noun | The answer B and D are |
| | (REPLICA) the original experiment. | A | B=1 | Derivation | wrong then the correct |
| | a. replicate | (Noun to | D=2 | D: Noun to Adjective | answer is 'replicate'. |
| | b. replication | Verb | | Derivation | |
| | c. replisize | Derivation) | | | |
| | d. replicative | | | | |
| 24. | The apple mixture can be (SWEET) | | A=10 | A: Adjective to Noun | The correct answer to |
| | with honey. | C | B=6 | Derivation | replace the answer A, B, and |
| | a. sweetener | (Adjective | C=10 | B: Adjective to Noun | D is 'sweeten'. |
| | b. sweetness | to Verb | D=4 | Derivation | |
| | c. sweeten | Derivation) | | D: Adjective to Adjective | |
| | d. sweet | | | Derivation | |
| 25. | The (EXPAND) of the company is said | В | A=3 | A: Verb to Noun | The answer 'expanse', |
| | to be dangerous to small firms. | (Verb to | B=24 | Derivation | 'expandable', and |
| | a. expanse | Noun | C=2 | C: Verb to Adjective | 'expansionism' cannot |
| | b. expansion | Derivation) | D=1 | derivation | complete the statement |
| | c. expandable | Derivation | | D: Verb to Noun | correctly thus, the correct |

| | d. expansionism | | | Derivation | answer is 'expansion'. |
|-----|---|---|---------------------------|---|--|
| 26. | The new teacher had failed to (FORCE) | | A=7 | A: Noun to Noun | The correct answer is |
| | . any sort of discipline. | В | B=23 | derivation | ''enforce'. |
| | a. force | (Noun to | | | Students might think that |
| | b. enforce | Verb | | | 'force' is verb. |
| | c. forcible | Derivation) | | | |
| | d. forceful | | | | |
| 27. | Please enclose your signed cheque and | | A=23 | B: Verb to Adjective | The correct answer is |
| | payment slip (ATTACH) and unfolded. | A | B=1 | Derivation | 'unattached'. It is parallel |
| | a. unattached | (Verb to | C=5 | C: Verb to Noun | with the word after it. |
| | b. unattachable | Verb | D=1 | Derivation | |
| | c. unattachment | Derivation) | | D:Verb to Verb | |
| | d. unattach | | | Derivation | |
| 28. | My brother chose that university because it does a very well recommended (JOURNAL) course and that's what he has always wanted to do. a. journalism b. journalistic c. journalese d. journalist | A (Noun to Noun Derivation) | A=18 B=9 D=3 | B: Noun to Adjective Derivation D: Noun to Noun Derivation | The answer B and D are not appropriate to complete the statement thus, the correct answer is 'journalism'. |
| 29. | Megan was told by her dietician that she was becoming (DANGEROUS) thin and should eat more. a. dangerously b. endanger c. dangerly d. dangeree | A (Adjective to Adverb Derivation) | A=20 B=5 C=3 D=2 | B: Adjective to Verb Derivation C: it doesn't exist in English. D: it doesn't exist in English. | The correct answer to replace the answer B, C, and D is 'dangerously'. |

| 30. | Mary suddenly felt sick, so we needed a | | B=3 | B: Verb to Adjective | The answer B and D are |
|-----|--|-------------|------|-------------------------|-----------------------------|
| | (REPLACE) for her part in the play. | C | C=25 | Derivation | wrong then, the correct |
| | a. replaceable | (Verb to | D=2 | D: Verb to Verb | answer is 'replacement'. |
| | b. placement | Noun | | Derivation | _ |
| | c. replacement | Derivation) | | | |
| | d. replace | , | | | |
| 31. | These factors (DETERMINE) to a | | A=10 | B: it does not exist in | The correct answer is |
| | large extent the outcome. | A | B=12 | English | 'predetermine'. |
| | a. predetermine | (Verb to | C=6 | C: it does not exist in | Students might be confused |
| | b. predeterminate | Verb | D=2 | English | with the suffix -ate which |
| | c. predeterminant | Derivation) | | D: Verb to Noun | has the same categories. |
| | d. predetermination | | | Derivation | |
| 32. | It was only later in life that she found | | A=6 | A: Adjective to Adverb | The answer A and B are not |
| | (HAPPY) and peace of mind. | C | B=6 | Derivation | appropriate to complete the |
| | a. happily | (Adjective | C=18 | B: it does not change | sentence thus, the correct |
| | b. happy | to Noun | | | answer is 'happiness'. |
| | c. happiness | Derivation) | | | |
| | d. happinessly | | | | |
| 33. | I'm just going to (BEAUTY) myself. It | | A=6 | A: Noun to Adjective | The Answer 'beautiful' and |
| | should only take a few hours. | С | B=1 | Derivation | 'beautician' should be |
| | a. beautiful | (Noun to | C=23 | B: Noun to Noun | changed with 'beautify'. |
| | b. beautician | Verb | | Derivation | |
| | c. beautify | Derivation) | | | |
| | d. beautize | | | | |
| 34. | If you wanted to make more money, you | С | A=6 | A: Adjective to Verb | The answer 'annualized' and |
| | could always decide to hold the festival | (Adjective | B=2 | Derivation | 'annulment' should be |
| | twice (ANNUAL) instead of just the | to Adverb | C=20 | B: Adjective to Noun | change with 'annually'. |
| | once. | Derivation) | D=2 | Derivation | |

| | a. annualizedb. annulmentc. annuallyd. annual | | | D: it does not change | |
|-----|--|---|---------------------------|---|--|
| 35. | If they want to increase output from the factory, they'll have to (MODERN) a. modernize b. modernism c. modernistic d. modernify | A (Adjective to Verb Derivation) | A=15 B=4 C=3 D=8 | B: Adjective to Noun Derivation C: Adjective to Adjective Derivation D: it is wrong affixation/ it does not exist in English. | The answer 'modernism', 'modernistic' and 'modernify' should be replaced with modernize. |
| 36. | The organization's aim is to (STRENGTH) the cultural ties between Britain and Germany. a. strong b. strength c. strengtly d. strengthen | D (Noun to Verb Derivation) | A=2 B=7 D=21 | A: Noun to Adjective Derivation B: it does not change | The answer 'strong' and 'strength' should be replaced with 'strengthen'. |
| 37. | I told him I'd meet him here, but perhaps he (UNDERSTOOD) and went straight to the pub. a. misunderstandly b. misunderstand c. misunderstood d. misunderstoodly | C (Verb to Verb Derivation) | A=3 B=8 C=18 D=1 | A: it does not exist in English. B: Verb to Verb Derivation D: it does not exist in English | The correct answer is 'misunderstood'. |
| 38. | I think these sales forecasts are (REALISTIC) , considering how slow sales are at present. | B (Adjective to Adjective | B=26 C=3 D=1 | C: it does not exist in English. D: Adjective to Noun | The answer 'inrealistic' and 'unreality' should be changed with 'unrealistic'. |

| | a. unrealistically | Derivation) | | Derivation | |
|-----|---|--|---------------------------|---|--|
| | b. unrealistic | | | | |
| | c. inrealistic | | | | |
| | d. unreality | | | | |
| 39. | She tends not to (SOCIAL) with my colleagues. a. sociable b. anti-social c. socialize d. asocial | C (Adjective to Verb Derivation) | A=9 B=1 C=20 | A: Adjective to Adjective Derivation B: Adjective to Adjective Derivation | The answer 'socialize' is the best answer to replace the answer 'sociable' and 'antisocial'. |
| 40. | I never knew you were such a good (DANCE) a. dancer b. danceless c. dance d. danceness | A (Verb to Noun Derivation) | A=29 B=1 | B: Verb to Adjective Derivation | The answer 'danceless' is the wrong answer and it should be 'dancer'. |
| 41. | Common sense and creativity are some of the (TANGIBLES) we're looking for in an employee. a. intangibles b. intangibly c. intangiblement d. intangibleness | A (Adjective to adjective Derivation) | A=16 B=7 C=4 D=3 | B: Adjective to Adverb Derivation C: it is wrong affixation D: Adjective to Noun Derivation | The answer 'intangibly', 'intangiblement', and 'intangibleness' should be changed with intangibles. |
| 42. | I found the company by looking in the local trade (DIRECT) a. directly b. directory c. direction | B (Adjective to Noun Derivation) | A=19 B=2 C=9 | A: Adjective to Adverb Derivation C: Adjective to Noun Derivation | The answer 'directly' and 'direction' are not the proper answer and it should be changed with 'directory'. |

| | d. directness | | | | |
|-----|--|--------------|------|---------------------------|--------------------------------|
| 43. | The accident was (CLEAR) the lorry | | A=1 | A: Adjective to Noun | The answer 'clearness', |
| | driver's fault. | D | B=1 | Derivation | 'clearful', and 'clearify' |
| | a. clearness | (Adjective | C=11 | B: it is not the | should be replaced with |
| | b. clearful | to Adverb | D=17 | appropriate affixation | 'clearly'. |
| | c. clearify | Derivation) | | C: it is not the | |
| | d. clearly | | | appropriate affixation | |
| 44. | He's been (HONEST) in his dealings | | A=2 | A: Adjective to Noun | The answer 'dishonesty', |
| | with us about his pas | С | B=10 | Derivation | 'dishonestly', and honestless |
| | a. dishonesty | (Adjective | C=13 | B: Adjective to Adverb | are not the correct answer |
| | b. dishonestly | to Adjective | D=5 | Derivation | and they should be replaced |
| | c. dishonest | Derivation) | | D: Adjective to Adjective | with 'dishonest' |
| | d. honestless | | | Derivation | |
| 45. | Her performance was (ACCEPT) , but | | A=3 | A: Verb to Verb | The answer 'unaccepted' |
| | not stunning. | В | B=27 | Derivation | should be replaced with |
| | a. unaccepted | (Verb to | | | 'acceptable'. |
| | b. acceptable | Noun | | | |
| | c. acceptably | Derivation) | | | |
| | d. accept | | | | |
| 46. | To keep the helmet in position, (FAST) | | A=4 | A: it does not change. | The correct answer to |
| | . the strap beneath the chin. | В | B=21 | C: Adjective to Adverb | replace 'fast' and 'fastly' is |
| | a. fast | (Adjective | C=5 | Derivation | 'fasten'. |
| | b. fasten | to Verb | | | |
| | c. fastly | Derivation) | | | |
| | d. fastener | | | | |
| 47. | Anyone being rude and (ABUSE) to | В | A=4 | A: Verb to Noun | The answer 'abuser', |
| | our staff will be asked to leave the | (Verb to | B=22 | Derivation | 'abusively', and 'abusement' |
| | premises immediately. | Adjective | C=2 | C: Verb to adverb | are not the appropriate |

| | a. abuserb. abusivec. abusivelyd. abusement | Derivation) | D=2 | Derivation D: Verb to Noun Derivation | answer and they should be replaced with 'abusive'. |
|-----|---|---|---------------------------|--|---|
| 48. | Alan is someone who always needs the (APPROVE) of other people. a. approve b. approval c. approveness d. approvement | B (Verb to Noun Derivation) | A=3 B=16 D=11 | A: it does not change D: it is not the appropriate affixation | The answer 'approve' and 'approvement' should be replaced with 'approval'. |
| 49. | "Where do you think Susan got to?" "Well, in all (PROBABLE) , she is with her friends at the pool." a. probably b. probable c. probability d. probabliness | C (Adjective to Noun Derivation) | A=17 B=1 C=12 | A: Adjective to Adverb Derivation B: Adjective to adjective Derivation | The answer 'probably' and 'probable' should be replaced with 'probability'. |
| 50. | (ELECTRIC) is probably the most useful form of energy. a. electric b. electrical c. electricity d. electrician | C (Adjective to Noun Derivation) | A=3 B=5 C=21 D=1 | A: it does not change B: Adjective to Adjective Derivation D: Adjective to Noun Derivation | The correct answer to replace 'electric', 'electrical', and 'electrician' is 'electricity'. |