Brain and Human Behavior Midterm 2005

1. Benzodiazepines
   a. bind to a site on the GABA A receptor facilitating the opening of a chloride channel, when GABA is present.
   b. bind to a site on the GABA A receptor facilitating the closing of a chloride channel, when GABA is present.
   c. directly block the GABA A receptor
   d. directly block the NMDA glutamate receptor
   e. do none of the above

For questions 2 to 10:
Mrs. Smith is a 42-year-old woman who was in her previous state of good health until 1-month prior. At that time, she found out that her temporary position at work would not be continued. Since that time, she has mostly remained in bed. Despite being constantly tired, she reports that she sleeps little. She has eaten little, and has lost approximately 15 pounds. When asked about how she has been feeling, she says she can’t stop thinking about losing her job. She says that she blames herself, and that she was a terrible worker. When asked whether she has begun to look for other work, she begins to sob, saying, “what’s the point?” When asked about her feelings, she admits that she has had similar “episodes” similar to the current one at least 4 previous times in her life, but has never sought treatment. She explains that “I just hibernate in bed, and eventually it gets better).

2. Mrs. Smith’s most likely diagnosis is
   a. major depression
   b. bipolar disorder, depressed type
   c. psychotic depression
   d. dysphoria
   e. dysthymic disorder

3. The weight of evidence suggests that which of Mrs. Smith’s neurotransmitter systems are acting abnormally?
   a. Dopamine and GABA
   b. Serotonin and norepinephrine
   c. Histamine and noradrenalin
   d. Glutamate and acetylcholine
   e. Corticotrophin and somatostatin

4. Mrs. Smith expresses concern about the effect of her disease on her immune system. Which of the following statements is supported by the available evidence.
   a. Her immune functioning is likely hyperactive; this is a likely cause of her symptoms.
   b. Her cytokines system is likely dysfunctional; this is likely secondary to her disease.
   c. Though isolated reports exist, there is inadequate evidence to suggest any consistent immune effect will exist.
   d. Her immune function is most likely normal as she has a disease of the mind, not the body.
5. Mrs. Smith is thinking of suing her boss for causing her disease (by firing her). She asks whether you think her disorder was caused by the stress of being fired, or whether she just has "bad genes." Considering all available evidence that bears on this question, which would be the most likely answer to her question?

a. Though genes may have a role in some disorders such as this, in her case the stress of losing your job seems the most likely cause.

b. She likely has a genetic predisposition for this disorder, which was exacerbated by the current stress.

c. Though environmental stresses sometimes appear to cause this disorder, usually the reverse is true, and her disorder likely caused her to lose her job.

d. Though many theories exist about the relationship between genetics and the environment, in the case of this disorder little hard evidence exists to support any theory.

6. If left untreated, which, of the following, will be the likely course of Mrs. Smith’s disease?

a. Continued and worsening symptoms.

b. Exacerbations and remissions of symptoms throughout her life.

It is unpredictable based on the above information.

c. She is at high risk for developing manic symptoms.

d. She will slowly improve over time. 6-9 months.

7. Mrs. Smith asks about treatment for this disorder. Which of the following is a reasonable first-line treatment for her disorder?

a. Lamotrigine

b. Midazolam

c. Fluoxetine

d. Reserpine

e. Vagus nerve stimulation.

8. Mrs. Smith asks about the likelihood that she will respond to the medication you prescribe. Of the following, what is a reasonable response rate range for that is supported by available evidence?

a. 5-10%

b. 40-50%

c. 60-80%

d. 85-95%

e. 100%
9. Mrs. Smith is started on a therapeutic dose of a medication for her disorder. After 2 weeks of treatment, she complains that she is not any better. Considering the current evidence and available treatment guidelines, which would be the best course of action at this point?

a. Continue the same medication, at the same dose, for several more weeks.
b. Continue the same medication, but increase it to the maximum dose.
c. Discontinue the medication and begin an alternative medication.
d. Discontinue the medication and reevaluate before starting another medication.

10. After 12 weeks of treatment, Mrs. Smith reports that the medication has totally treated her symptoms. She would like to discontinue medication at this point, as “I don’t like having to take something just to feel normal.” What would you advice to her at this point?

a. She should be able to safely discontinue medication at this.
b. She can discontinue medication, but only after a 1-month taper.
c. She should remain on the medication for at least 4 months more.
d. She should remain on the medication for long-term therapy.

11. The primary cell bodies for dopamine innervating the putamen and caudate are located in

a. nucleus accumbens in the midbrain
b. substantia nigra pars compacta in the midbrain
c. ventral tegmental area of the midbrain
d. locus ceruleus in the dorsal pons

e. red nucleus in the midbrain

12. A 45 year old man sustains head trauma in a motor vehicle accident, including a fractured left orbit. Over the next few months the man develops several unusual behaviors, including shouting obscenities at strangers and taking off his clothes in public. This individual would be most likely to exhibit which of the following characteristics:

a. deficits in fine motor control of the right side of the body
b. ataxia
c. deficits in voluntary eye movement
d. anosmia
e. decreased drive and motivation

13. The most common abnormality seen on FDG PET in mild-moderate Alzheimer’s disease is

a. decreased metabolism in the frontal lobe
b. decreased metabolism in the temporal and parietal cortex
c. increased perfusion in the right temporal lobe
d. decreased metabolism in the occipital lobes
e. diffuse decrease in metabolic activity throughout the cortex
14. CT scan is the most appropriate imaging technique in which of the following:
   a. acute bleed into the posterior fossa
   c. multiple sclerosis plaques
   c. fracture of the temporal bone
   d. epileptic seizure focus
   e. cerebellar tumor

15. Ms. M, a 24-year-old female, recently began pharmacologic treatment for depression. She reports that she is now bothered by dry mouth, constipation, and blurry vision. What drug is she most likely to be taking?
   a. bupropion
   b. nortriptyline
   c. trazodone
   d. valproic acid
   e. fluoxetine

16. The hippocampus
   a. is the primary site for formation of episodic memory
   b. is the primary site for formation of emotional memory
   c. has hemispheric specialization with the right hippocampus more involved in spatial memory and the left hippocampus more involved in verbal memory in most people
   d. a and c
   e. a, b, and c

*For questions 17 to 26:*
Mr. Jones is a 19-year-old college student, who is brought to the college’s student health center because he is “acting strange.” The roommates report that at first he just seemed “like a quiet guy” who kept to himself. During prior semester he began talking too himself loudly, and at times he seemed to be talking to other persons as well. During the current semester he began to start missing class, and for the last week he hasn’t left his room. On interview, Mr. Jones appears to be in generally good health, but appears disheveled and has poor hygiene. He has poor eye contact, and tends to look straight ahead and speak in a monotone voice. He shows little expression throughout. His speech is clear though soft, coherent and logical. When asked why he is no longer going to class, he says that he does not need to: he says that God has been speaking to him, and that he has nothing to learn from mere human teachers. On further questioning, he begins to look fearful, and says that God doesn’t approve his being here, and that he will be punished if he reveals anything further.

17. On mental status examination, Mr. Jones can be said to have a disorder of thought
   a. process
   b. content
   c. attitude
   d. form
   e. centers
18. His belief that God is directing his actions is likely a
a. delusion - false fixed belief
b. hallucination -
c. illusion
d. neologism

19. His lack of expression and general inactivity is likely related to which of the following?
- negative SxS
a. Dopamine overactivity in the mesocortical pathway
b. Dopamine overactivity in the mesolimbic pathway
c. Dopamine underactivity in the mesocortical pathway
d. Dopamine underactivity in the mesolimbic pathway.

20. His belief that God is speaking with him is likely related to which of the following?
- positive symptom
a. Dopamine overactivity in the mesocortical pathway
b. Dopamine overactivity in the mesolimbic pathway
c. Dopamine underactivity in the mesocortical pathway
d. Dopamine underactivity in the mesolimbic pathway.

21. Mr Jones is started on the typical antipsychotic, haloperidol. What is the likely effect of this drug on his symptoms?
- decreased voices from God but increased apathy.
a. Decreased voices from God but increased apathy.
b. Decreased apathy, but increased voices from God.
c. Increased voices from God and increased apathy.
d. Decreased voices from God and decreased apathy.

22. The effect of haloperidol on the voices from God are likely due to the drug's action at which receptor site?
- D2
a. D2
b. M1
c. H1
d. Alpha-1
e. 5HT-2

23. After initiating haloperidol, Mr. Jones complains that he shuffles when he walks. This is likely due to the drug's blockade of dopamine at which pathway?
- mesolimbic
a. Mesolimbic
b. Mesocortical
c. Nigrostriatal
d. Tuberoinfundibular
24. After several months on haloperidol, Mr. Jones stars exhibiting choreiform movements of his fingers and extremities. This is likely due to
da. acute blockade of the nigrostriatal dopamine receptors
db. agonism of the mesocortical dopamine receptors
c. upregulation of dopamine receptors in the striatum
d. antagonism of dopamine in pituitary lactotrophic receptors

tardive dyskinesia

25. In order to decrease the side effects that Mr. Jones is having, which of the following drugs would be the most preferable substitute for haloperidol?
   a. Chlorpromazine
   b. Thioridazine
   c. Perphenazine
   d. Risperidone

26. Atypical neuroleptics differ from typical neuroleptics
   a. they block both dopamine and serotonin receptors
   b. they are less likely to inhibit prolactin
   c. they have lower potency for blocking the dopamine D2 receptor and are less likely to produce tardive dyskinesia
   d. a and c
   e. a, b, and c

For questions 27-29: Match up the numbered brain neurotransmitter with the single most appropriate lettered choice for the neurotransmitter category. Each lettered choice may be used once, more than once, or not at all.

A. 27. Acetylcholine
   C. 28. Endorphin
   B. 29. Glutamic acid
   a) biogenic amine
   b) amino acid
   c) peptide neurotransmitter

For questions 30 & 31:

30. What type of scan is this?
   a. Contrast-enhanced CT
   b. T1 MRI
   c. FLAIR MRI
   d. PET scan
   e. T2 MRI
31. The most prominent neurobehavioral symptoms in this 60 year old man with the scan would likely be
a. impairment of executive function and loss of motivation - dorsolateral cortex + SMA
b. impairment of episodic memory - medial temporal
c. delusions and paranoia
aphasia left temp/pa. Wernicke's area
dyscalculia

32. The primary cell bodies of the cortico-limbic dopaminergic circuit are found in the
a. nucleus accumbens in the basal forebrain
b. nucleus accumbens in the midbrain
c. substantia nigra pars compacta in the midbrain
f. locus ceruleus in the dorsal pons
g. ventral tegmental area of the midbrain

33. All of the following are true about acetylcholine except
a. nicotinic receptors are found at the neuromuscular junction but there are both muscarinic and nicotinic receptors in the brain
b. only muscarinic receptors are found in the brain
c. cholinesterase inhibitors are used in the treatment of both Alzheimer’s disease and myasthenia gravis
d. the primary enzyme catalyzing the formation of acetylcholine from AcetylCoA and choline is choline acetyltransferase
e. choline acetyltransferase levels decline significantly in Alzheimer’s disease

34. A 73 year old female is evaluated for neuropsychological testing due to concerns about her impaired ability to complete an array of activities associated with daily living. On testing she is found to exhibit difficulty in drawing from recall an image that is presented to her. She remembers certain aspects of the figure, but is unable to integrate it as a whole, as shown below:

All of the following are possible findings in a patient with dysfunction in the region of the brain most likely implicated here EXCEPT:
a. Perseverance in completing a figural fluency task
b. Impersistence in an alternating figures test
c. Disinhibition and intrusion during construction of figures
d. Poor “Executive” functioning
e. Difficulties in integration of sensory information from multiple inputs
35. The fornix
a. connects the amygdala to the hypothalamus.
b. connects the nucleus accumbens to the dorsomedial nucleus of the thalamus
c. connects the cingulate gyrus to the hippocampus
d. connects the hippocampus to the mammillary bodies
e. connects the hippocampus to the anterior nucleus of the thalamus

36. Mr. Q, a 53-year-old male, recently began pharmacologic treatment for depression. Earlier today, he went to a friend’s party, and consumed a lot of wine and cheese. He presents now to the ER with a pounding headache, heart palpitations, and very high blood pressure. What is the most likely explanation for this scenario?
a. The drug he’s taking is fluoxetine, and a hypertensive agent from the wine and cheese precipitated a hypertensive crisis
b. The drug he’s taking is paroxetine, and the inhibition of acetaldehyde dehydrogenase precipitated a hypertensive crisis
c. The drug he’s taking is carbamazepine, and he has developed agranulocytosis
d. The drug he’s taking is phenelzine, and the tyramine from the wine and cheese precipitated a hypertensive crisis
e. The drug he’s taking is amitriptyline, and his symptoms are examples of anticholinergic effects

37. Of the following examples of different types of memories, which represents the type most likely to be deficient after damage to the basal ganglia?
a. remembering where you parked your car this morning
b. remembering how to drive a car
c. remembering what a car is
d. remembering the license plate number of the car that was driving in front of you, until you can find a pen and paper to write it down
e. remembering what a red light at a stoplight means
For questions 38 to 43:

Mr. Berry, a 55-year-old man is brought by ambulance to the hospital’s emergency department saying that he fears he is having a heart attack. He reports a rapid pulse, palpitations; pain both his arms, and sweatiness. He says that this began approximately 15 minutes ago while he was watching television, and called 911. He notes that he has been to various hospitals at least 5 times this year with similar complaints, and that each time he has been reassured that there is nothing wrong. He is concerned, as it seems to be getting worse, and he worries that the doctors are missing something.

On physical examination, he has a rapid but regular pulse. His examination is otherwise normal, and his EKG shows no evidence of a myocardial infarction.

38. What sort of episode is Mr. Berry having?
a. depressive
b. mixed
c. panic
d. anxious
e. manic

39. Mr. Berry’s most likely diagnosis is
a. Bipolar disorder
b. Panic disorder
c. Anxiety disorder due to a medical condition
d. Generalized anxiety
e. Hypochondria

40. Which of the following would be most effective in acutely treating Mr. Berry’s current episode?
a. Fluoxetine (Prozac)
b. Lorazepam (Ativan)
c. Gabapentin (Neurontin)
d. Olanzapine (Zyprexa)
e. Buspirone (Buspar)

41. Which of the following, if used regularly, would be most effective in preventing further episodes of Mr. Berry’s disorder?
a. Fluoxetine (Prozac)
 b. Lorazepam (Ativan)
c. Gabapentin (Neurontin)
d. Olanzapine (Zyprexa)
e. Buspirone (Buspar)
42. Psychotherapy is also being considered. Which of the following is a proven psychotherapy for Mr. Berry’s disorder?
   a. Interpersonal Therapy
   b. Cognitive Behavioral Therapy
   c. Psychoanalysis
   d. Supportive Therapy
   e. Client Centered Therapy

43. Which of the following psychotherapeutic goals would be a most reasonable short-term goal for the treatment of Mr. Berry’s particular disorder.
   a. Identifying and avoiding likely triggers for the episodes.
   b. Understanding the childhood conflicts underlying this disorder.
   c. Learning not to pay attention to the attacks.
   d. Decrease catastrophizing around the attacks.
   e. Figuring out which parent to blame for his disease.

For question 44 to 45:

![CT scan image]

44. The best description for the abnormality seen on this contrast enhancing CT scan is
   a. circular area of low signal in the left frontal lobe
   b. circular area of high signal in the left frontal lobe
   c. circular area of high signal in the right frontal lobe
   d. area of mixed signal in the right frontal lobe with moderate to severe cortical atrophy
   e. circular area of low signal adjacent to the falx

45. Given the location of the lesion and the diffuse uptake of contrast the most likely diagnosis is
   a. low grade glioma
   b. acute cerebral hemorrhage
   c. hemorrhagic infarction
   d. meningioma
   e. cerebral abscess
46. Mr. E is a 18 year old male who was hospitalized yesterday for an acute psychotic episode. Upon interview of his parents, they state Mr. E was a normal teenager who always enjoyed social activities in high school. With further questioning, his parents admit that in the past month before his psychotic episode they noticed Mr. E has ceased all social activity, retreated to his room, stopped grooming himself and had multiple outbursts of anger. What is the diagnosis?

a. Brief psychotic disorder
b. Schizophreniform disorder
c. Schizophrenia
d. Bipolar II disorder
e. Cyclothymic disorder

For questions 47 to 50:
Mr. Weir is 58-year-old man who is brought to the hospital for “failure to thrive” at home. The patient’s wife reports that Mr. Weir began to seem “different” about a month ago. He began to look despondent, and would suddenly begin to cry for no reason. After several weeks of this, he began to stay in bed. For the past 2 days, he has been curled up in a ball, not moving, and in this context, the wife called an ambulance.

Mr. Weir has no previous psychiatric or medical history and takes no medications or substances. His family history is significant for alcoholism on his mother’s side. On examination, Mr. Weir is clearly awake, lying still in a fetal position on a stretcher. He does not respond to questioning. When the examiner attempts to move him, he resists and stays curled up in a fetal position.

47. On the mental status examination, his general appearance could be described as
a. depressed
b. catatonic
c. stuporous
d. agitated
e. psychotic

48. Of the following, which is the most likely cause of the patient’s current symptoms
a. Major depression
b. Schizophrenia
c. Bipolar Disorder
d. Panic disorder
e. Tardive Dyskinesia

49. Which endocrine abnormality is Mr. Weir most likely to have?

a. Resistance to cortisol suppression.
b. Decreased basal cortisol levels.
c. Decreased volume of the adrenal gland.
d. Decreased frequency of ACTH secretory episodes.
50. Of the following, which would be the safest and most effective treatment for these symptoms?
   b. Fluoxetine.
   c. Chlorpromazine. *thorazine*
   d. Electroconvulsive therapy.
   e. Lithium.

51. What symptom would you most likely expect in the 70 year old man with a gradual decline in function and the CT scan above?

-normal P
hydrocephalus?

   a. hemiparesis and aphasia
   b. magnetic gait
   c. urinary incontinence
   d. a and c
   e. b and c

52. Damage to the anterior cingulate cortex would be most likely to cause which of the following deficits?
   a. Apathy/mutism
   b. Increased drive and motivation
   c. Behavior disinhibition
   d. Deficiencies in executive functioning
   e. Deficits in voluntary eye movement
For questions 53 to 56:
Mr. B is a 22 year old medical student taking the Physical Diagnosis class. He has become fearful of getting dirty or contaminated by being in the hospital, and constantly worries about infectious particles floating around the hospital air. After he gets home, he washes his hands until they're raw and almost bleeding. Recently, his fear of infection and contamination has escalated to the point that he has stopped attending class, for fear of contamination. He tells you, “Doctor, I know my behavior is irrational, but I just can’t help it!”

53. Mr. B’s disorder is:
a. Panic disorder
d. Obsessive compulsive disorder
c. Generalized anxiety disorder
e. Schizophrenia

54. The epidemiology of Mr. B’s disorder is best described as:
a. begins in early childhood
c. bell curve distribution with peak in adulthood
d. positively skewed distribution
e. bimodal distribution

55. Which of the following drugs would be considered 1st line therapy for long-term treatment of Mr. B’s disorder?
a. Buspirone
b. Diazepam
c. Fluvoxamine
d. Valproic acid
e. Lamotrigine

56. Considering the regulation of complex behaviors such as Mr. B's, which of the following structures forms a circuit with the frontal cortex and thalamus?
a. Hypothalamus
b. Association Cortex
c. Periaqueductal gray
d. Hippocampus
e. Basal ganglia

57. The primary cell bodies for serotonin are located in the
a. nucleus accumbens in the midbrain
c. substantia nigra pars compacta in the midbrain
d. locus ceruleus in the dorsal pons
e. dorsal raphe in the midbrain
For questions 58 to 60:
Ms. Franken is a 60-year-old woman with a history of chronic obstructive pulmonary disease. Recently she reports feeling more short of breath. In addition, she reports periods of great anxiety associated with her shortness of breath. She finds herself gasping for air, and feeling like she is going to faint. She fears she will die, and notes that her chest seems to be pounding. In addition, she notices some numbness and tingling in her fingers. She reports that these episodes last anywhere from 10 to 20 minutes, although her shortness of breath seems is continuous.

On examination she has a mild fever. Chest x-ray shows pulmonary infiltrates, and she is diagnosed with pneumonia.

58. What sort of episode is Ms. Franken having?
a. depressive
b. mixed
○ panic
d. anxious
e. manic

59. Ms. Franken’s most likely diagnosis is
a. Bipolar disorder
b. Panic disorder
○ Anxiety disorder due to a medical condition
d. Generalized anxiety
○ Hypochondria

60. You initially decide to start diazepam for Ms. Franken’s symptoms. Which is a potential side effect of the drug that should make you reconsider your choice?
a. Sedation
○ Risk for falls.
c. Respiratory Depression
d. Seizures
○ Anxiety

61. A 76 year old man is diagnosed with Pick’s Disease. An MRI of his brain is shown below: All of the following are possible characteristics of patients with dysfunction in the brain region primarily affected by this disorder EXCEPT:
a. Deficiencies in spatial/feature working memory tasks
b. Appearance of “release signs” such as the snout reflex
c. Magnetic gait
d. Behavioral disinhibition
○ Deficits in somatic sensation
For questions 62 to 66:
Mr. James is 27-year-old man with a history of depression. He is brought in by his wife to the emergency department because, as she reports, “he’s not making any sense.” She reports that he has slept little for the past 3 days. She says that about 2 weeks ago he became involved in what he described as “an important project” involving purchasing large amounts of real estate in Florida. She had become concerned, as he has no experience in real estate, however he had insisted to her that this was “the beginning of a new life for us.” She became more concerned when he announced he had quit his job (as a waiter in a local restaurant) and that he needed to drive to Florida immediately.

On interview Mr. James is a somewhat heavyset man who is alert, awake, and appears to be in good health. His speech is clear, but very rapid, and it is difficult to interrupt him. Despite his rapid speech, he appears to be quite intelligent and even clever: for example, after noting the doctor’s name, he makes several funny puns based on the name. However, it is difficult to understand his train of thought as he quickly jumps from one subject to the next. When asked about the history given by the wife, the patient dismisses it, saying that she just isn’t supportive of him, and that if he isn’t released immediately from the Emergency Department, he will call the president of the hospital (who he reports is a personal friend of his) and have the doctor fired.

62. On mental status examination, Mr. James can be said to have a disorder of thought
a. process
b. belief
c. attitude
d. formation
e. centers

63. On mental status examination, Mr. James’ speech can be described as
a. blocked
b. neologistic
c. word salad
d. pressured
e. clanging

64. Mr. James likely is having what sort of episode?
a. manic
b. depressive
c. psychotic
d. panic
e. hysterical

65. Mr. James’ diagnosis is most likely
a. Major depression
b. Schizophrenia
C. Bipolar Disorder
d. Cyclothymia
e. Schizophreniform
66. Which of the following is the most effective treatment for Mr. James’ disorder?

a. Lithium
b. Ziprasidone (Geodon)
c. Lamotrigine (Lamictal)
d. Verapamil
e. Clonidine
<table>
<thead>
<tr>
<th>Objective</th>
<th>Points</th>
<th>%</th>
<th>Response [Correct Answer] / Student Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSWER_KEY</td>
<td>62.00</td>
<td>96.88</td>
<td></td>
</tr>
<tr>
<td>1. ANSWER_KEY 1</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>2. ANSWER_KEY 2</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>3. ANSWER_KEY 3</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>4. ANSWER_KEY 4</td>
<td>0.00 of 0.00</td>
<td>0.00</td>
<td>B</td>
</tr>
<tr>
<td>5. ANSWER_KEY 5</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>6. ANSWER_KEY 6</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>7. ANSWER_KEY 7</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>8. ANSWER_KEY 8</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>9. ANSWER_KEY 9</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>10. ANSWER_KEY 10</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>11. ANSWER_KEY 11</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>12. ANSWER_KEY 12</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
</tr>
<tr>
<td>13. ANSWER_KEY 13</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>14. ANSWER_KEY 14</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>15. ANSWER_KEY 15</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>16. ANSWER_KEY 16</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
</tr>
<tr>
<td>17. ANSWER_KEY 17</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>18. ANSWER_KEY 18</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>19. ANSWER_KEY 19</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>20. ANSWER_KEY 20</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>21. ANSWER_KEY 21</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>22. ANSWER_KEY 22</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>23. ANSWER_KEY 23</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>24. ANSWER_KEY 24</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>25. ANSWER_KEY 25</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
</tr>
<tr>
<td>26. ANSWER_KEY 26</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>E</td>
</tr>
<tr>
<td>27. ANSWER_KEY 27</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>28. ANSWER_KEY 28</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>29. ANSWER_KEY 29</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>30. ANSWER_KEY 30</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>31. ANSWER_KEY 31</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>32. ANSWER_KEY 32</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>E</td>
</tr>
<tr>
<td>33. ANSWER_KEY 33</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>34. ANSWER_KEY 34</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>35. ANSWER_KEY 35</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
</tr>
<tr>
<td>36. ANSWER_KEY 36</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
</tr>
<tr>
<td>37. ANSWER_KEY 37</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>38. ANSWER_KEY 38</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
<tr>
<td>39. ANSWER_KEY 39</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>40. ANSWER_KEY 40</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>41. ANSWER_KEY 41</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
</tr>
<tr>
<td>42. ANSWER_KEY 42</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
</tr>
<tr>
<td>43. ANSWER_KEY 43</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
</tr>
<tr>
<td>44. ANSWER_KEY 44</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
</tr>
</tbody>
</table>
## INDIVIDUAL SCORES REPORT

<table>
<thead>
<tr>
<th>Objective</th>
<th>Points</th>
<th>%</th>
<th>Response/Correct Answer</th>
<th>Student Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>45. ANSWER_KEY 45</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>46. ANSWER_KEY 46</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>47. ANSWER_KEY 47</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>48. ANSWER_KEY 48</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>49. ANSWER_KEY 49</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>50. ANSWER_KEY 50</td>
<td>0.00 of 0.00</td>
<td>0.00</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>51. ANSWER_KEY 51</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>52. ANSWER_KEY 52</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>53. ANSWER_KEY 53</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>54. ANSWER_KEY 54</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>55. ANSWER_KEY 55</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>56. ANSWER_KEY 56</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>57. ANSWER_KEY 57</td>
<td>0.00 of 1.00</td>
<td>0.00</td>
<td>C [E]</td>
<td></td>
</tr>
<tr>
<td>58. ANSWER_KEY 58</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>59. ANSWER_KEY 59</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>60. ANSWER_KEY 60</td>
<td>0.00 of 1.00</td>
<td>0.00</td>
<td>B [C]</td>
<td></td>
</tr>
<tr>
<td>61. ANSWER_KEY 61</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>62. ANSWER_KEY 62</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>63. ANSWER_KEY 63</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>64. ANSWER_KEY 64</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>65. ANSWER_KEY 65</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>66. ANSWER_KEY 66</td>
<td>1.00 of 1.00</td>
<td>100.00</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY:**

62.00 of 64.00 | 96.88 | -