Q 1

The most important points here are:

First you need to describe what is a variable as a *general concept*, of which DV and IV are two types.

An IV is a type of variable that is generally manipulated by the experimenter. An experimental design involves manipulating levels of an IV in order to see what effect occurs. The term “experimental” design or “experiment” should appear since this is the context in which IVs and DVs occur.

DV is a measure – an outcome of the manipulation or “control” by the experimenter.

*Providing an example of each will assist in explaining the meaning.*

Some students confused the two concepts – reversing the meaning of IV and DV.

Q 2

+ correlations are positive – but you need to explain what this means - *when values on one DV go increase, the values on the other DV also increase*.

Negative (-) correlations are the opposite - *when one variable increases, the other decreases*.

*It is especially important to state what I have stated here in italics as this information conveys the actual meaning of the concepts.*

You need to indicate the strength of the relationship .8 is “strong to very strong”, but .4 is “moderate to weak” (either description for the strength is ok).

If $r = 0$, there is no relationship between the two variables – it is not enough to say there is no correlation, as this statement misses the key point that the variable are *unrelated*. Obviously “zero” is no correlation, but you need to show that you understand this concept.
Q 3

You need to say where the cortex is located – the outer layer of the brain, and the largest overall structure.

It has two hemispheres - left and right.

It is responsible for a wide range of higher order cognitive functions. You can mention any of these functions, but a more sophisticated answer will refer to planning, interpretation, decision-making and so forth.

There are four parts (lobes) – you need to name them, and accurately say what they do – this point is critical to achieving a pass mark.

Q 4

Operant conditioning – refer to Skinner as the chief proponent of this concept.

It is a type of learning in which behavior is influenced by the consequences that follow the emission of an action.

Positive consequences, as “perceived by the person”, increase the likelihood of that behavior being emitted again, and is regarded as rewarding

Negative consequences decrease the likelihood of the occurrence of the preceding behavior, is referred to as “punishment”

Reward and punishment should be explicitly mentioned. This is an essential point, and so too is the idea expressed above that the type of behavior will either increase or decrease in frequency as a result of consequences that follow the emission of any behavior.

You could also mention that there are schedules of reinforcement that affect the strength and speed of the learning.

Q 5

You need to mention 4 stages, and describe each one in terms of EEG and other physiological activity such as EMG.

In particular, REM sleep is not in itself a stage but may occur within one of these 4 stages, usually mostly in Stage 4.

The initial cycle through these stages takes about 90 minutes, but may quicken after that when the stages are repeated, usually about 4 times during the whole sleep period.

Dreams occur during REM sleep, which also increase in amount of time through the sleep cycle.
Q 6

The question involved the need to describe briefly a particular event (either positive or negative since this was intentionally not specified). You need to ensure that the event is truly an event, and not another thought about an implied event.

You then needed to describe, very clearly, one possible attribution that someone could make about the cause of this event.

Finally, you needed to categorize this attribution on each of the three factors: internal-external; stable-unstable, and global-specific, making it very clear how the attribution could be described in these terms.

Q 7

This question was meant to be fairly straightforward (hence the 5 marks).

The key finding is that human behavior is heavily influenced by the nature of the role that the person is expected to play, and we tend to adopt a role irrespective of our “normal” behavioral patterns. This leads to a rather different view of human behavior from the earlier more “genetic” views. Importantly, when placed in a position of authority, people will tend to behave in ways that involve a high degree of control. The prisoners also displayed specific behaviors, although they ranged from acquiescence to rebellion. It is important to mention at last some behavior of both the guards and the prisoners. Some people mentioned only the guards.

A very important point to mention is that the participants were randomly allocated to be either prisoners or guards. Thus, there is every reason to believe that the prisoners would have behaved like the guards if they had been assigned to that role, and vice-versa. This fact reinforces the view that behavior is very much influenced by the environment, and challenges a more highly “genetic” view.

Q 8

Intelligence is a broad concept, but one that is generally recognized to consists of a number of components. Thus, one problem is to ensure that the coverage of the term intelligence truly reflects the breadth of cognitive variables. You need to mention at least the division between verbal and non-verbal aspects of intelligence. Some people also argue that the term should be expanded to include broader “social” intelligence, often called emotional intelligence, although some other researchers would argue that these aspects are already built into the normal definition. Intelligence also needs to be viewed within a cultural context. What is regarded as “intelligent” behavior in one society may not be highly regarded in another society.
You could mention that intelligence may be influenced by both genetic and environmental aspects, although this point is not necessarily related to its definition—more an explanation of its actual level within any given definitional context.

Q 9

The main symptoms of a specific phobia are (1) anxiety and (2) avoidance/escape behavior.

Since the major symptoms experienced by people with a phobia are physiological, you need to describe anxiety in terms of these symptoms, with a few examples such as increased heart rate, respiratory difficulties, increased perspiration, upset stomach, and muscular tension.

Most phobic people also display certain cognitive symptoms, and one or two examples of these symptoms could be described. They also may have heightened perceptions of aspects of the phobic situation—e.g., seeing something that may be a small spider immediately upon entering a room.

You need to describe the fact that people with phobias engage in avoidance and/or escape behavior.

“Features” can be regarded as separate from symptoms, and include such aspects as gender ratios, age of onset, periodicity (typical length of problem).

You need to use an example to illustrate the above points. Any specific phobia is acceptable.

Q 10

Beck’s Cognitive Theory asserts that people become depressed because of the negative and illogical (irrational) way in which they perceive events or situations that occur. This is a key point that really must be mentioned to gain significant marks. The cognitive triad is not, by itself, the cognitive theory, but it is what the theory is trying to explain—i.e., it is the experience of depression, expressed in a particular way by Beck. The triad refers to the cluster of cognitive symptoms of depression. If you only mention the triad, this is incomplete.

An important point to stress is that Beck says that depression is not caused by the events that occur, but by way the person perceives the event. The term “perception” or “misperception” should appear in the answer.

The co-called A-B->C (Event -> Perception-> Mood) model is a simple way to explain Beck’s view, and should be included, or stated in a way that conveys the meaning.
Q 11

Twin studies are important because they provide a natural “laboratory” to distinguish between genetic and non-genetic (largely environmental) influences.

The most critical point to mention is that there are two types of twins – MZ (identical) and DZ (non-identical). Only MZ twins share a common genetic make-up. They are therefore identical. Non-identical, or MZ twins, share the same genetic make-up as any pair of siblings. The expressions in italic are important in conveying the significance of the use of twin methodology.

Researchers examine the differences between MZ and DZ twins the correspondence between the members of the pairs (actually called concordance) in some quality (e.g., intelligence, personality, diagnosis of schizophrenia).

If the research reveals that a high proportion of MZ twins share the same attribute (e.g., similar level of intelligence, or a diagnosis of schizophrenia), and that this degree of concordance is much higher than DZ twins, it is reasonable to conclude that genetic factors probably play a significant role in determining that attribute. If there is little difference between MZ and DZ twins in the concordance for a particular attribute, it is not likely that genetic factors play a significant role, and more likely that environmental factors are important.

In a few studies, with understandably small sample sizes, MZ (identical) twins have been reared apart, enabling researchers to examine the contribution of genetic and environmental factors using a different methodology.

Q 12

The main symptoms of schizophrenia are hallucinations, delusions (often of the paranoid type, although some other types are also possible) and thought disorder, plus a set of behavioral symptoms which can involves gross disorganization, catatonia or agitation. There can also be a flat affect, or especially, inappropriate affect.

An important point to mention is that the thinking is illogical and incoherent, and that the delusions and hallucinations reveal a very substantial break from perception of reality.

Q 13

The most commonly used treatment that I expected to be named is systematic desensitization, or at least graded exposure therapy. These are specific types of therapy used to treat people with phobias. You need not only to name the therapy, but also describe the essential features of a therapy.
The essential feature of almost any of these therapies is the exposure of people to the feared stimulus in a gradual fashion, usually following a hierarchy from the least anxiety-provoking to the most anxiety-provoking scenario. Exposure may be in imagination or in real-life (in-vivo), depending upon the ease with which the exposure can be arranged.

A further aspect is the concurrent use of anxiety-reduction methods such as relaxation training during the exposure. The idea is to assist the person to be in contact with the feared object while also relaxing, or engaging in some other response that is incompatible with anxiety, setting up a new conditioning opportunity for the person to learn an alternative response to replace the anxiety. This point is quite important in a more sophisticated answer to this question.

Another component is often the identification and modification of unhelpful negative and catastrophic thoughts associated with encountering the feared object. The person is prompted to use the cognitive techniques during in-vivo exposure.

Q 14

Encoding, storage and retrieval refer to three separate processes in regard to memory. Each one needs to be specifically defined, and a clear separation needs to be made between them. Leaving out any one of them is a serious problem because it leaves a major gap in the conceptualization of memory.

Encoding involves attentional processes which enable the person to move from short-term memory to long-term memory (storage). There may also be an encoding process simply to recall information within short-term memory (e.g., for a few minutes,), although the material may never go into long-term memory.

Storage involves processes, thought to operate through neural networks, through which encoded material is retained. Retrieval is the act of accessing already stored information, generally in long-term memory.

You should mention that memory is considered to involve processes, rather than one site (resembling a storage bin) in the brain, although and that memory processes seem to occur across a large number of areas, working together. Some areas of the brain may indeed be more important for memory than others, but the key concept is that memory functions are relatively dispersed.

Q 15

You need to define how stress differs from a stressor - it is essentially a distinction between the reaction (stress) and the situation or event that triggers it (the stressor). This point is a key to a good answer. Whether a person reacts negatively to a stressor may also depend on cognitive evaluations and perceptions of the stressor – there would be several different potential ways to describe this aspect, and any of them would be suitable here (e.g., internal-
external locus of control, optimism-pessimism). These ideas are part of the explanation of “stress” as a concept. I am expecting you to go beyond a simple definition, as the answer calls for an “explanation”, implying that you need to explain some of the processes involved in stress.

You also need to mention that there are several different types of stressors – daily hassles, major life events, and chronic life circumstances (e.g., financial problems, unemployment). All three categories may be interrelated, one being a cause of the other, and leading to a severe and prolonger stress reaction.

A person’s coping ability also plays an important role, and possibly the ability to use different coping strategies to deal with different kinds of problems is important in interpreting and managing stress.

Overall

I have described the kind of answers that would attract full marks, and many of you did achieve that result on specific questions. In general, I deducted the most marks for a failure to convey the most important ideas, followed by more marks being deducted for the other points mentioned here. I marked each question separately in order to avoid cross-contamination of potential bias from one answer to another.