

www.ptindia.com
MEMBERS AREA

'RC DAILY DOSE'
Volume 29

Instructions : The **RC Daily Dose** is a set of 20 excellent RC practice questions, with detailed solutions. Normally every day, one such set will be uploaded into the MEMBERS AREA. These are PDF files and can be saved on your computer. Enjoy!

PASSAGE – 1

Instrumental conditioning is more than just a game played between experimental psychologists and rats or pigeons. Animal experiments have demonstrated some principles that can be extended to human life. Some of our beliefs, customs, and goals may be learned through the mechanisms of instrumental conditioning. Such learning is most evident when young children are being taught the ways of their group- that is, when they are being socialized. B. F. Skinner pointed out, the importance of instrumental conditioning (operant conditioning, as he called it) in the socialization process in a book entitled ' Science and Human Behaviour'. Skinner also described some of the ways in which agencies of human society-for example, government and the schools-use reinforcement to shape behavior. Parents and other agents of society usually do not deliberately shape behavior, but society is arranged so that reinforcements are contingent upon behaviour.

Besides being ever present in human situations, instrumental, or operant, conditioning is sometimes used deliberately to shape desired behaviors. Programmed learning, the personalized system of instruction, applications of reinforcement principles to business operations, and certain types of therapy for psychological disorders are examples. Such uses of reinforcement principles might be called "applied instrumental or operant conditioning."

In programmed learning, the material to be learned is broken up into small, easy steps. Since each step is easy, the learner makes few errors and has a sense of accomplishment; this minimizes the frustration that can lower motivation and result in a dislike for learning. Also, programmed learning allows learners to proceed at their own pace and to receive immediate feedback on the correctness of their responses a form of reinforcement. Programmed learning thus has these characteristics of the shaping used in animal learning experiments the final complex task is broken up into small steps, reinforcement is contingent upon the performance of each step, and the learner makes responses at his or her own pace. Programmed learning is thought to be an effective way of learning facts, rules, formulas and the like. It has the further advantage of giving teachers who use it more time to devote to enriching the learning experience with other types of material.

The personalized system of instruction (PSI) is another educational application of instrumental, or operant, conditioning principles. Many forms of PSI exist, but an essential idea is that the material in the course is divided into small units, each of which must be mastered at a high level of proficiency before the next unit is attempted. For instance, students might be required to pass an examination at the end of each unit with a score of 90 percent or better; if they do not, they must study the material again until they can pass at this level. Students set their own pace because they can take the examination on a unit whenever they feel ready. Being allowed to go on to the next unit of material after mastery of the previous one serves as positive reinforcement in this system. In addition, students who have mastered a certain number of units are sometimes given the opportunity to participate in special activities, such as field trips; and this can be positively reinforcing.

In business operations, applications of reinforcement principles can often increase employee productivity and company profits. The use of contingent positive reinforcement in the form of praise by supervisors can mold the behavior of employees so that they become more effective in their jobs-they make more sales calls, fill orders more quickly and accurately, use the right packing materials, or whatever else they do in their jobs that can be measured and positively reinforced. All this can be done at practically no cost and can be managed in such a way that employees feel more satisfied with what they are doing. The supervisors are reinforced by the increased productivity of their units; the bosses are reinforced, hopefully, by greater profits.

Instrumental, or operant, conditioning is also applied in some forms of behavior therapy, or behavior modification. The instrumental-conditioning forms of behavior therapy treat psychological disorders by contingently reinforcing socially adaptive behaviors and by extinguishing maladaptive ones. Instrumental conditioning also has an applied role in changing the behavior of well-adjusted people. For instance, it may help people eliminate bad habits, such as smoking or eating too much; it may help mild-mannered individuals become more assertive. In general, we might say that instrumental, or operant, conditioning- often combined with other learning techniques-can help people reach goals they have set for themselves. In other words, applied instrumental conditioning can be important in changing behavior in the direction of greater self-control.

1. Which of the following best goes along with the contents of the passage ?
- (1) Instrumental conditioning induces a change in behaviour leading to greater self control.
 - (2) Employee productivity cannot be increased by applying principles of reinforcement.
 - (3) Operant conditioning has nothing to do with human behaviour.
 - (4) The technique of programmed learning is riddled with limitations.

2. *According to the passage, personalised system of instruction :*
- (1) is impractical and does not cover all situations.
 - (2) is time consuming and requires well-defined pre-requisites.
 - (3) is based on the principle of positive reinforcement.
 - (4) is demotivational to learners.
3. *Which of the following goes against the contents of the passage ?*
- (1) Instrumental conditioning is a mechanism to reinforce one's beliefs, customs and goals.
 - (2) Programmed learning is an ineffective way of learning facts, rules and formulae.
 - (3) Operant conditioning shapes desired human behaviour.
 - (4) In business operations, application of reinforcement principles increase employee productivity and company profits.
4. *As per the passage, instrumental conditioning :*
- (1) helps people achieve their self-set goals.
 - (2) by using socially behaviour and rejecting maladaptive ones, treats psychological disorders.
 - (3) enables people to relinquish their bad habits.
 - (4) All of the above.
5. *All of the following are false with respect to the passage, except that :*
- (1) programmed learning is disadvantageous for teachers.
 - (2) a timely praise by superiors can bring about employee satisfaction and enhance their productivity.
 - (3) the talk of shaping of human behaviour is illogical.
 - (4) operant conditioning makes a person ill mannered.
6. *The central idea of the passage is that :*
- (1) human behaviour is dependent on certain characteristics that are congenital.
 - (2) learning methods cannot be universalised and varies from person to person.
 - (3) modification in human behaviour is possible through operant conditioning.
 - (4) human behaviour is governed by the dictates of the situation.
7. *All of the following are true with respect to the passage except that :*
- (1) frustration and demotivation can be removed through operant conditioning.
 - (2) reinforcement is used to shape behaviour.
 - (3) teachers find the technique of programmed learning very useful.
 - (4) None of the above.
8. *A suitable title for the passage could be :*
- (1) Human Behaviour Is Congenital.
 - (2) Applications of Operant Conditioning.
 - (3) Gearing To Face The Stiff Competition.
 - (4) Personalised System Of Instruction.
9. *The author has handled the passage :*
- (1) sentimentally.
 - (2) logically.
 - (3) philosophically.
 - (4) informatively.
10. *The passage is at best an extract from :*
- (1) an article on the practical aspects of behavioural science.
 - (2) an analysis of ways of improving corporate productivity.
 - (3) a report of deteriorating industrial relations.
 - (4) a forecast on the type of work culture in the near future.

PASSAGE – 2

Is intelligence determined by heredity or by environment ? The most appropriate answer is both-the two actors interact. There can be little doubt that genetic factors play some role in determining intelligence, but the precise nature of that role is hard to establish. One of the difficulties is that many different genes probably play a role; this means that genetic mystery cannot be unraveled merely by carefully studying the action of one or two genes. Another limitation is that we obviously cannot conduct with humans the kinds of controlled-breeding studies we might use in genetic research with plants or animals. Instead, we must rely on analyses of intelligence as it shows up naturally over the course of people's development.

For these analyses to be of value, they must involve comparisons of the IQs of people who differ in their degrees of genetic relatedness. For example, a researcher might compare the IQ similarity of fraternal twins to the IQ similarity of identical twins. Fraternal-twin pairs, on the average, are identical in 50 percent of their genes; identical twin pairs are identical in 100 percent