

MIZORAM PUBLIC SERVICE COMMISSION

COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POSTS OF COMPUTER OPERATOR, LABORATORY TECHNICIAN, RECEPTIONIST, STAFF NURSE, X-RAY TECHNICIAN UNDER HEALTH & FAMILY WELFARE DEPARTMENT, GOVERNMENT OF MIZORAM. AUGUST, 2014.

GENERAL ENGLISH

Time Allowed : 3 hours

Full Marks : 100

Marks for each question is indicated against it.

Attempt all questions.

1. Write an essay in about 1000 words on any one of the following topics: (20)
 - (a) IT in Healthcare and Education
 - (b) Environmental Concerns: Domestic and Global
 - (c) World Cup 2014
 - (d) Climatic Change

2. Write a précis of the given passage in your own words stating clearly the line of thought: (10)

The dust sources may be classified as natural, industrial and domestic. Natural dust comes from deserts, volcanoes, the soil, and even from forests and seas. Domestic and industrial dust comes from the combustion of fuels, open fireplaces, etc. Dust of various kinds is formed by handling of materials, eg. loading and unloading, mixing, crushing, grinding, sawing and cutting. It is formed in cement and pencil factories, casting mills, metal working industries, quarries, etc. Much dust is also whirled up from bad roads by motor vehicles. Dust is a general name for finely divided solid matter, which can be moved by air of normal wind velocity.

Atmospheric dust in indoor air may come from the outside by ventilation or it may originate within the house. Even without any ventilation, air circulates in a room because of thermal convection. Convection currents alone are often sufficiently active to diffuse dust particles in an enclosed space. Within a building, the temperatures of the air may be less changeable than outside, and this may lead to characteristic air movement patterns. Warmer walls generate an up draught, colder walls a down draught-each being balanced by the opposite currents in the centre of the room and often moving fast enough to counteract sedimentation under the influence of gravity. Circulation of air within a house is complex but there is evidence of a fairly rapid exchange of air and its suspended dust particles throughout a house.

Dust particles inside a house are generally found on mattresses, carpets, upholstered furniture, old shoes, books and stacked magazines. It can also form on basement walls, in closets, room crevices, on wall paper glues, etc. The concentration changes greatly with mechanical and human activities. In bedrooms, activities such as making of beds, brushing of carpets and building repairs have been found to increase the dust content of the air several times higher. But it rapidly returns to normal when the activity is stopped. Tests have shown that air-borne dust in inhabited rooms is commonly dominated by fragments of human skin in the form of minute, flattened scales from the stratum corneum of the

epidermis, concentration of several thousands to these potential bacterial rafts per cubic metre are common indoors. These epidermal scales probably carry a large proportion of air borne bacteria of indoor air.

Coughing and sneezing also contribute to the contamination of house dust. Large numbers of 'droplet nuclei' of mucus and saliva are propelled into the atmosphere during sneezing and coughing. An estimated 20,000 to 40,000 droplets enter the atmospheric air from a single sneeze. Droplet nuclei are the particles formed from the smallest droplets, which evaporate before falling to the ground and so remain suspended in air.

3. Write a letter to the Director of Health and Family Welfare, asking him/her to put more emphasis on public awareness concerning tobacco related diseases. **(10)**
4. Read the following carefully and answer the questions that follow.

Most people can remember a phone number for up to thirty seconds. When this short amount of time elapses, however, the numbers are erased from the memory. How did the information get there in the first place? Information that makes its way to the short term memory (STM) does so via the sensory storage area. The brain has a filter which only allows stimuli that is of immediate interest to pass on to the STM, also known as the working memory.

There is much debate about the capacity and duration of the short term memory. The most accepted theory comes from George A. Miller, a cognitive psychologist who suggested that humans can remember approximately seven chunks of information. A chunk is defined as a meaningful unit of information, such as a word or name rather than just a letter or number. Modern theorists suggest that one can increase the capacity of the short term memory by chunking, or classifying similar information together. By organizing information, one can optimize the STM, and improve the chances of a memory being passed on to long term storage.

When making a conscious effort to memorize something, such as information for an exam, many people engage in "rote rehearsal". By repeating something over and over again, one is able to keep a memory alive. Unfortunately, this type of memory maintenance only succeeds if there are no interruptions. As soon as a person stops rehearsing the information, it has the tendency to disappear. When a pen and paper are not handy, people often attempt to remember a phone number by repeating it aloud. If the doorbell rings or the dog barks to come in before a person has the opportunity to make a phone call, he will likely forget the number instantly. Therefore, rote rehearsal is not an efficient way to pass information from the short term to long term memory. A better way is to practice "elaborate rehearsal". This involves assigning semantic meaning to a piece of information so that it can be filed along with other pre-existing long term memories.

Encoding information semantically also makes it more retrievable. Retrieving information can be done by recognition or recall. Humans can easily recall memories that are stored in the long term memory and used often; however, if a memory seems to be forgotten, it may eventually be retrieved by prompting. The more cues a person is given (such as pictures), the more likely a memory can be retrieved. This is why multiple choice tests are often used for subjects that require a lot of memorization.

- (a) According to the passage, how do memories get transferred to the STM? **(2)**
 - (i) They revert from the long term memory.
 - (ii) They are filtered from the sensory storage area.
 - (iii) They get chunked when they enter the brain.
 - (iv) They enter via the nervous system.
- (b) The word 'elapses' in paragraph 1 is closest in meaning to: **(2)**
 - (i) passes (ii) adds up
 - (iii) appears (iv) continues

- (c) All of the following are mentioned as places in which memories are stored EXCEPT the: (2)
- | | |
|----------------------------|-----------------------|
| (i) STM | (ii) long term memory |
| (iii) sensory storage area | (iv) maintenance area |
- (d) Why does the author mention a dog's bark? (2)
- | |
|--|
| (i) To give an example of a type of memory |
| (ii) To provide a type of interruption |
| (iii) To prove that dogs have better memories than humans |
| (iv) To compare another sound that is loud like a doorbell |
- (e) How do theorists believe a person can remember more information in a short time? (2)
- | | |
|---------------------------|----------------------|
| (i) By organizing it | (ii) By repeating it |
| (iii) By giving it a name | (iv) By drawing it |

5. Expand the idea contained in the following passage. (10)

No Pain, No Gain

Nothing is achieved without making efforts- A person who does not take pains about his work does not gain anything - On the other hand, he loses -A student works hard - He is rewarded in the end-The peasant toils hard and reaps a rich harvest - If a businessman does not put in his best, he fails-Honest work is rewards -The labour that we do bears fruit.

6. Choose the alternative which best expresses the meaning of the **idiom/phrase** in italics: (8×2=16)
- (a) Discipline is *on the wane* in educational institutions these days.
- | | |
|-----------------|-----------------|
| (i) declining | (ii) increasing |
| (iii) spreading | (iv) spiraling |
- (b) I felt *a fish out of water* among the lawyers.
- | | |
|---------------------|------------|
| (i) special | (ii) happy |
| (iii) uncomfortable | (iv) proud |
- (c) Believe me, I am *all at sea*.
- | | |
|----------------|-------------------|
| (i) puzzled | (ii) out of reach |
| (iii) drowning | (iv) very glad |
- (d) Her house is *at a stone's throw* from mine.
- | | |
|---------------|-----------------|
| (i) very far | (ii) very close |
| (iii) distant | (iv) part of |
- (e) The manger *died in harness*.
- | | |
|-------------------|-------------------------|
| (i) died bound up | (ii) died while working |
| (iii) died on bed | (iv) died of sickness |
- (f) *Red tapism* is a bane of Indian bureaucracy.
- | | |
|-----------------------|---------------------|
| (i) false alarm | (ii) foul dealing |
| (iii) gain prominence | (iv) official delay |
- (g) His voice *gets on my nerves*.
- | | |
|------------------|--------------------|
| (i) sickens me | (ii) irritates me |
| (iii) pleases me | (iv) encourages me |
- (h) My promotion is *on the cards*.
- | | |
|----------------|--------------|
| (i) due | (ii) certain |
| (iii) probable | (iv) evident |

7. Correct the following sentences. (4×1=4)
- (a) I have bought this book last year.
 - (b) She has come yesterday.
 - (c) I am working in the school for five years.
 - (d) The patient died before the doctor arrived.
8. Fill in the blanks with suitable conjunctions. (6×1=6)
- (a) He is slow _____ he is sure.
 - (b) Make hay _____ the sun shines.
 - (c) She works hard _____ she may pass.
 - (d) Do _____ you are advised.
 - (e) I would rather die _____ beg.
 - (f) Stay here _____ you like.
9. Convert the following sentences into passive voice. (4×1=4)
- (a) She writes a letter.
 - (b) He does not help me.
 - (c) Usha sings a song.
 - (d) Children are flying kites.
10. Make sentences to show distinction between the following pair of words. (5×2=10)
- (a) Story : Storey
 - (b) Site : sight
 - (c) Attention : intention
 - (d) Lose : loose
 - (e) Due : dew

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