

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY**

School of Health Care and Paramedics Skills

Session: 2021-22 Summer

B. Voc. Program, 1st Semester2nd In-Sem. Examination

Course Code: SHP1103

Time: 1 Hour

Course Name: Body Mechanics and Positioning

Max. Marks: 20

Instructions:

1. **SECTION-A:**05 objective type questions, each question carries 01 mark
2. **SECTION-B:**03 short answer type questions, each question carries 02 marks
3. **SECTION-C:**03 essay type questions, each question carries 03 marks

SECTION-A**[5x1=5 Marks]**1. **Decubitus ulcer is:**

- | | |
|-------------|------------------|
| a) Fracture | b) Spasm |
| c) Cramps | d) Pressure sore |

2. **What do you mean by paralysis?**

- | | |
|--------------------------------|--------------------|
| a) Severe pain in body | b) Freely movement |
| c) Loss of the ability to move | d) Tiredness |

3. **Comminuted fracture is known as:**

- | | |
|--|-------------------------------|
| a) When the bone breaks into several parts | b) No complete break the bone |
| c) Broken bone with penetrate the skin | d) None of the above |

4. **Cramps take the form of:**

- | | |
|-------------------------------------|----------------------|
| a) Involuntary clenching of muscles | b) fracture of bone |
| c) Paralysis | d) None of the above |

5. **What do you mean "ergonomics"?**

- | | |
|-----------------------|-------------------------|
| a) Work with low | b) Work with efficiency |
| c) Work with reflects | d) All of above |

SECTION-B**[3x2=6 Marks]**

- 1) Define fall prevention. How would you estimate risk of falls?
- 2) Define gout and write down the diagnostic test & risk factors of gout.
- 3) Write down the nursing measures for extremities in plaster.

SECTION-C**[3x3= 9 Marks]**

- 1) Define kinaesthetics. Write down the rules for dealing with people in a wheelchair.
- 2) Define fracture. Write down the types of fracture along with diagrams.
- 3) Describe the influencing factors of movement.

K. Kover



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SECTION-A

[5x1=5 Marks]

1. Decubitus ulcer is:

- a) Fracture
- c) Cramps

b) Spasm

d) Pressure sore

2. What do you mean by paralysis?

- a) Severe pain in body
- c) Loss of the ability to move

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5. What do you mean "ergonomics"?

- a) Work with low
- c) Work with reflects

b) Work with efficiency

d) All of above**SECTION-B**

[3x2=6 Marks]

1) Define fall prevention. How would you estimate risk of falls?

Fall Prevention

A fall is an unforeseen and unintended occurrence in which the person affected hits the floor or some object with their head, trunk or limbs from a lying, sitting or elevated position.

One way of estimating the risk of falls might be as follows

The risk factors listed above are applied to the patient in question to determine whether they are at risk of falls. If they are, measures will need to be planned and implemented with a view to preventing falls. These measures must be documented and assessed.

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- 2) Define gout and write down the diagnostic test & risk factors of gout.

Gout

Gout is a form of acute arthritis that causes severe pain and swelling in the joints. A typical sign is an increase in the level of uric acid in the blood. This increased level of uric acid causes uric acid crystals to form, which are then deposited in the joints where they cause inflammatory reactions.

Diagnosis

- Anamnesis
- Laboratory tests: increase in the level of uric acid, inflammatory signs (during an acute episode)
- X-rays of affected joints .
- Possibly arthrocentesis to provide evidence of urate crystals

Causes/risk factors

- Genetic predisposition
- Environmental factors such as an excessive intake of high-purine foods like meat, pulses etc., high alcohol intake, stress
- Excess weight, hypertension
- High doses of diuretic-based treatments
- Kidney diseases where elimination of uric acid is reduced (eg. diabetic nephropathy)

- 3) Write down the nursing measures for extremities in plaster.

Nursing measures for extremities in Plaster

After applying a plaster cast, it is critical to position the affected extremity with great care so the plaster can dry and does not break. The bed needs protection from any water that might leak out. Plaster left to dry in the air can make the wherever feel cold. The patient should be provided with heat as required. The extremity in plaster is regularly checked for the following warning signs:

an increasing level of pain

pins and needles, numbness, reduced mobility in fingers and toes

pale or blue skin

increased swelling of fingers, hand, toes, foot

weakening or imperceptible pulse.

SECTION-C

[3x3= 9 Marks]

- 1) Define kinaesthetics. Write down the rules for dealing with people in a wheelchair.

Kinaesthetics

Kinaesthetics — what is it? The concept of kinaesthetics was established by Americans Lenny Marietta and Frank Hatch. The term is derived from the Greek kinesis (= movement) and aesthesis (= sensitivity). Kinaes- thetics refers to the study of the perception of movement. It is concerned with contact and perception. Kinaes- thetics favors natural, original and harmonious sequences of movements and promotes health and independ- ence.

Basic rules for dealing with people in a wheelchair

- The general idea is to provide the patient with a sense of security.
- Push the wheelchair in front of you (do not drag it backwards). This helps the person in

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the wheelchair to keep their bearings and provides you with a clearer view

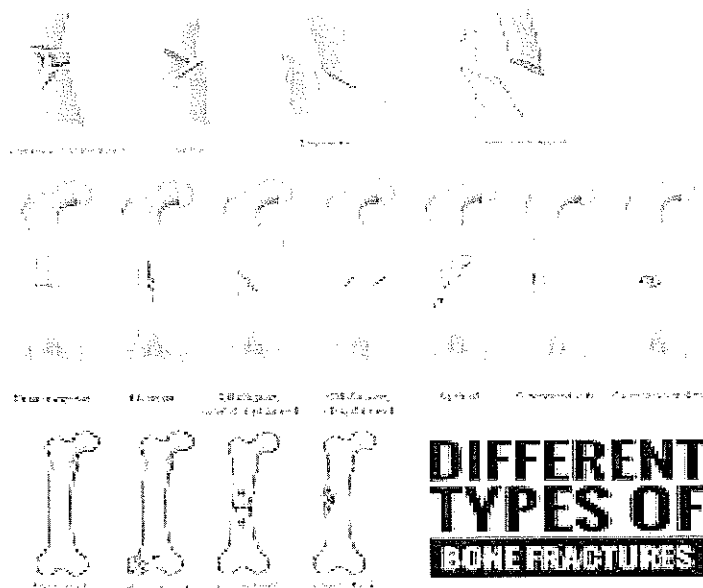
- A person sitting in a wheelchair has a different eye line from a person standing upright. In view of this, make sure you are level with their eyes when talking to them. A wheelchair can only move efficiently if its tyres are fully inflated. With this in mind, check the tyres on a regular basis
- Carry out regular maintenance on the wheelchair or have this done by the technical services area
- If the wheelchair is at rest, put the brake on for safety reasons
- Place an anti-decubitus cushion on the seat as required for those with a significant degree of immobility
- Transfer with support: fold the footrest away and/or remove it. You may also need to remove the armrests. Caution: risk of falls!
- Adjust your speed to the relevant conditions.

2) Define fracture. Write down the types of fracture along with diagrams.

Fractures

A fracture is when a bone breaks.: A bone fracture is a medical condition in which there is a partial or complete break in the continuity of the bone. Bone fragments may be displaced or not. Fractures are classified as:

Direct or indirect fracture	The bone breaks where the force was applied (direct fracture) or not directly where the force was applied (indirect fracture)
Open or closed fracture	If there is no injury to the skin above the fracture, this is a closed fracture. If there is same injury to the skin and other soft tissue (muscles, nerves, tendons, blood vessels), this is referred to as an open fracture
Complete or incomplete fracture	With a complete fracture, 2 fragments are separated by a fracture gap. With an incomplete fracture, there is no complete break in the bone (fissure, infraction)
Simple fractures or multiple fractures	E.g. comminuted fracture



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3) Describe the influencing factors of movement.

Biological factors	The age or stage of development of a person will influence their mobility. As children practice their motor skills, they become familiar with their environment, which is an important prerequisite site for developing their mental faculties. In addition, the body 's ability to move depends on a person 's general condition, muscle strength and state of health. The sick or those suffering with pain or disability, as a result, for example, of malnutrition, impaired cardiovascular performance or immobility, will be restricted in their mobility.
Psychological factors	A person 's mood and emotions may be reflected in their posture and movement. For example, happiness and self-confidence may be expressed in an upright gait. Depressive feelings, stress or anxiety influence the normal pattern of movement and can be detected in people 's expressions. Some people are naturally more active, while other's appetite for movement may be less pronounced.
Sociocultural factors	An individual 's family and social life can influence their decision to undertake specific movement-related activities, with, for example, children of sporty parents being encouraged to prefer sporting activities. A person 's occupation is another important factor. Those who sit down at work will have limited opportunities for movement, while those working in the great outdoors will find themselves moving quite a lot. Today 's multicultural age provides us with a chance to experience the peculiarities of individual cultures via the media, from our neighbors or on our holidays. Different forms of movement are expressed in things like dance.
Environmental factors	A person 's environment and living conditions will influence their behavior in terms of movement. Children living in cramped conditions with no real opportunity to spend time outside will not have much opportunity to indulge their natural appetite for movement. Those with restricted mobility are dependent on aids like a lift in an apartment block in order to leave their home. Climate and weather can also play a major role in people 's movement.

K. Koul

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Session: 2021-22 Summer

B. Voc. Program, 1st Semester2nd In-Sem. Examination

Course Code: SHP1104

Time: 1 Hour

Course Name: Nutrition & Elimination I

Max. Marks: 20

Instructions:

1. **SECTION-A:** 05 objective type questions, each question carries 01 mark
2. **SECTION-B:** 03 short answer type questions, each question carries 02 marks
3. **SECTION-C:** 03 essay type questions, each question carries 03 marks

SECTION-A**[5x1=Marks]**

1. The most abundant nutrient present in the body is:
 - a. Carbohydrate
 - b. Protein
 - c. Water
 - d. Lipid
2. A bland diet consist of:
 - a. High carbohydrate and high fat
 - b. Plenty of roughage
 - c. Non irritating foods
 - d. Both a and c
3. An adult is declared to be obese, if the body mass index (BMI) calculated:
 - a. 35
 - b. 30
 - c. 20
 - d. 25
4. The most common problem associated with the tube feeding is:
 - a. Diarrhoea
 - b. Infection
 - c. Hyperglycaemia
 - d. Fever
5. Normal specific gravity of urine is:
 - a. 1,910 – 2,025 mg/ml
 - b. 1,210 – 1,525 mg/ml
 - c. 1,010 – 1,600 mg/ml
 - d. 1,010 – 1,025 mg/ml

SECTION-B**[3x2=6 Marks]**

- 1) Define nutrition. Draw the chart of food pyramid.
- 2) Weight of men is 75 kg and height are 168 cm. calculate his BMI using the formula and indicate the patient status.
- 3) Write down the four differences between the balance diet and light balance diet



Registration No.:

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SECTION-C

[3x3= 9 Marks]

- 1) Describe the three general principles for supporting nutritional intake.
- 2) Describe the three causes of loss of appetite.
- 3) What do you mean by trans nasal tube and PEG tube?

K. Kover

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SECTION-A

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SECTION-B

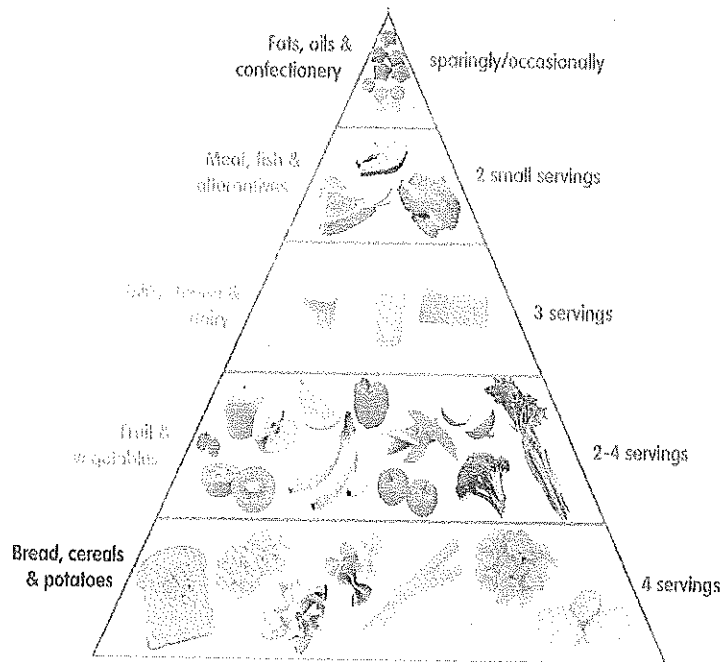
[3x2=6 Marks]

- 1) Define nutrition. Draw the chart of food pyramid.

Nutrition

Nutrition is the science or practice of consuming and utilizing foods. Nutrition is the science that interprets the interaction of nutrients and other substances in food in relation to maintenance, growth, reproduction, health.

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- 2) Weight of men is 75 kg and height are 168 cm. calculate his BMI using the formula and indicate the patient status.

$$\text{BMI} = \frac{\text{Weight in kg}}{(\text{Height in m})^2}$$

$$\text{BMI} = 75/2.82 = 26.59$$

The condition is normal

- 3) Write down the four differences between the balance diet and light balance diet.

Balance Diet	Light balanced diet
Mixed salad	Salad of green Leaves
Breaded escalope stuffed with ham and cheese	Poached Chicken Escalope
Fried Potatoes	Steamed potatoes
Paperonata (Peppers, tomatoes and onions)	carrots
Chocolate mousse	Apple compote



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SECTION-C

[3x3= 9 Marks]

1) Describe the three general principles for supporting nutritional intake.

General principles for supporting nutritional intake

Helping patients to be active	Many patients in long-term care are able to help with preparation, cooking, serving, setting the table and clearing away. All of these activities stimulate the appetite.
Atmosphere	As a Medical Nursing Assistance, you not only have a great deal of responsibility with regard to eating and drinking. A plate of food from the kitchen can be made to look even more attractive, e.g. through the addition of fresh herbs or a thoughtful decoration. It is very important that the daily assistance you provide does not become a simple matter of routine.
Documentation	Information about eating and drinking is collected from everybody. This information includes wishes and habits, nutritional state, behaviour and difficulties in relation to eating and drinking, the need for assistance, changes due to disease and any physical aids required. All of these are recorded in the nursing documentation and as a Medical Nursing assistance, you need to first consult this documentation.
Communication	This requires empathy, patience and the willingness both to deal with ethical issues and to reflect on your own conduct. A professional approach is also reflected in the language you use.

2) Describe the three causes of loss of appetite.

Loss of appetite

A lack of appetite or lack of interest in eating can have various causes, e.g.:

Physical Causes	Emotional Causes	Other Causes
<ul style="list-style-type: none"> • Fever, Pain • Digestive Disorders • Reduced Sense of smell or taste • Dysphagia • Dislike of food due to specific disease • Nausea or Vomiting • Restricted Mobility 	<ul style="list-style-type: none"> • Psychological Disorders • Emotional Stress • Conflict Worry • Eating Disorders (Anorexia) • Boredom 	<ul style="list-style-type: none"> • Gastric Tube • Medication (Cytostatic) • Atmosphere (Unpleasant company, Indoor Climate)

3) What do you mean by trans nasal tube and PEG tube?

Trans nasal Tube

If this tube is several days, there is a risk of pressure ulcers on the nose. In addition, the tube means a permanent irritation for the nasal mucosa and the pharynx. The fixation of the tube



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must be carried out in such a way that no pressure is exerted on the nasal septum or the lobes. Because of mucous membrane irritation, increased secretion can occur in the nose. A regular nose care with removal of secretions possibly application of nasal ointment is therefore essential. In order to prevent the patient from swallowing, the tube must be checked for the correct position before each administration of the food:

- A Check the fixation and the external marking
- Aspirate a gastric juice, if possible, inject air into the tube and auscultate with the stethoscope over the stomach, a slight bubbling should be heard.

PEG

The position of the PEG tube in the stomach is secured by an inner holding plate, which must not be too tightly attached to the stomach wall, as otherwise pressure lesions may occur. From the outside, a holding plate is attached, which fixes the PEG tube in the correct position above the exit point on the abdominal wall. The care and disinfection of the outlet site is particularly important for the prophylaxis of infections and skin lesions. After the PEG tube has been attached, the change of dressing is necessary daily for about one week. Thereafter, a change from 1 to 2 times a week is sufficient, provided the injection site is free of irritation. The change of dressings is performed according to the principles of asepsis. If inflammatory signs occur, these should be treated according to a doctor's prescription. If, however, the wound conditions are completely unattractive, there are no restrictions on the use of percutaneous tubes in personal care, and also showering or bathing is allowed two weeks after new plant. The dressing should be removed beforehand and re-applied after personal care.

K. Kowen