

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of Health Care and Paramedics Skills****Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1101****Time: 1 Hour****Course Name: Anatomy Physiology & Professional behaviour****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. Normal blood level in human body is...
 - a. 3.5 to 6 litres
 - b. 2.5 to 6 litres
 - c. 4.5 to 6 litres
 - d. 5 to 6 litres
2. Platelets are also known as...
 - a. Granulocytes
 - b. Monocytes
 - c. Thrombocytes
 - d. Globulins
3. Inner most layer of the skin...
 - a. Dermis
 - b. Hypodermis
 - c. Subcutaneous
 - d. Epidermis
4. Which blood group is a universal donor:
 - a. O^{-ve}
 - b. A^{+ve}
 - c. AB^{+ve}
 - d. O^{+ve}
5. Right ventricle is receiving the blood which valve?
 - a. Tricuspid valve
 - b. Mitral valve
 - c. Left atrium
 - d. pulmonary vein

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

- 1) Explain the four cranial nerve with function.
- 2) Draw the diagram of cell with label.
- 3) Write down the two difference between the diffusion and osmosis.

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

- 1) Describe the cardiac valves.
- 2) Define liver and explain the function of liver.
- 3) Define joints. Explain the types and properties of joints with examples.

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School of Health Care and Paramedics Skills**Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1101****Time: 1 Hour****Course Name: Anatomy Physiology & Professional behaviour****Max. Marks: 20****Instructions:**

1. SECTION-A:05 objective type questions, each question carries 01 mark
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SECTION-A**[5x1=Marks]**

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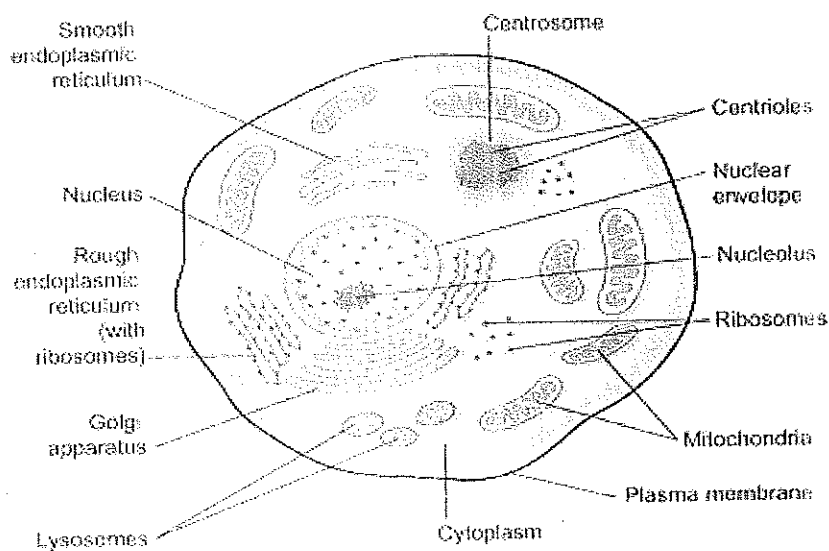
SECTION-B**[3x2=6 Marks]**

- 1) Explain the four cranial nerve with function.
 - There are 12 pairs of cranial nerves originating from nuclei in the inferior surface of the brain, some sensory, some motor and some mixed. Their names generally suggest their distribution or function and they are numbered using Roman numerals according to the order they connect to the brain, starting anteriorly. They are:

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s.no.	Name of Nerves	Types of nerves	Function
I.	Olfactory	sensory	These are the nerve sense of smell
II	Optic	sensory	These are the nerve of the sense of light
III	Oculomotor	motor	These nerves arise from nuclei near the cerebral aqueduct. They supply: Four of the six extrinsic muscles, which move the eyeball
IV	Trochlear	motor	Eye movement
V	Trigeminal	mixed	These nerves contain motor and sensory fibres and are among the largest of the cranial nerves Receiving Impulses of pain and chewing
VI	Abducent	motor	the eyeballs causing abduction
VII	Facial	mixed	These nerves are composed of both motor and sensory nerve fibres Facial expression and teste
VIII	Vestibulocochlear (auditory)	sensory	Balance and hearing
IX	Glossopharyngeal	mixed	Both sensory and motor Secretion of the saliva, swallowing and teste
X	Vagus: mixed		Secretion of the gland and sensory fibres convey impulses from the membranes.
XI	Accessory: motor		Turning the hand lifting the shoulder
XII	Hypoglossal: motor.		Contribute to swallowing and speech

2) Draw the diagram of cell with label.



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- 3) Write down the two difference between the diffusion and osmosis.

Diffusion

Diffusion refers to the movement of a chemical substance from an area of high concentration to an area of low concentration. Diffusion can also occur across a semipermeable membrane, such as the plasma membrane or the capillary wall.

Osmosis

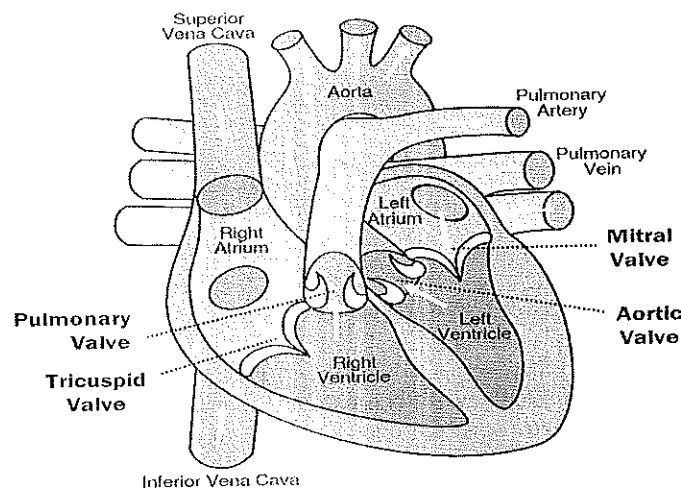
A process by which molecules of a solvent tend to pass through a semipermeable membrane from a less concentrated solution into a more concentrated one.

SECTION-C

[3x3= 9 Marks]

- 1) Describe the cardiac valves.

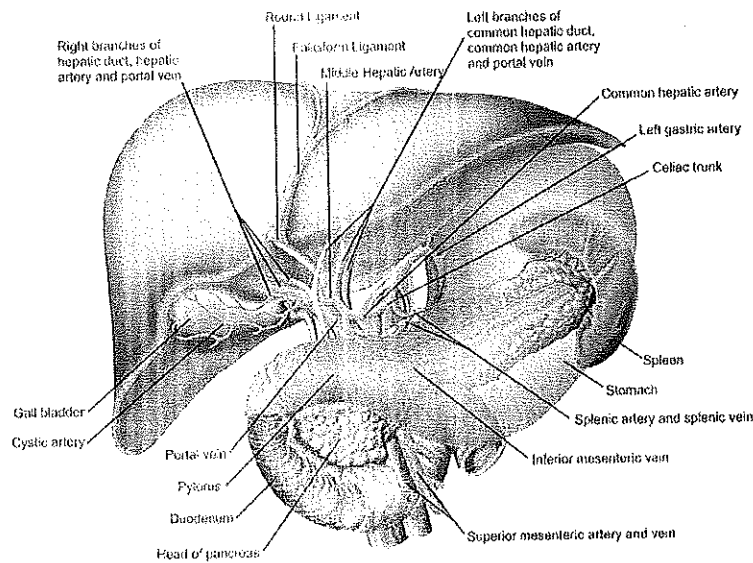
The atrioventricular valves are located between the atria and the ventricles (with the tricuspid valve on the right and the mitral valve on the left). Between the ventricles and the large vessels which leave the heart, there are semilunar valves (with the pulmonary valve on the right and the aortic valves on the left). The cardiac valves ensure that the blood flows in one direction only. They work in a similar way to general valves and prevent the blood from flowing backward. When the ventricles contract, the atrioventricular valves are closed and the semilunar valves are open.



- 2) Define liver and explain the function of liver.

The liver is the largest gland in the body, weighing between 1 and 2.3 kg. It is situated in the upper part of the abdominal cavity occupying the greater part of the right hypochondriac region, part of the epigastric region and extending into the left hypochondriac region.

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Function:

The liver function are extraordinarily varied. Substances are taken out of the blood and stored or convert in the liver. The products are then released into the blood or excreted as bile. A large proportion of the glucose which is absorbed into in the intestine is in turn absorbed by the liver cells and converted into glycogen. The liver also constructs and break down fats and convert carbohydrates into fats. Old red blood cells are broken down in the liver as well as in the spleen. Finally, liver stores iron and fat-soluble vitamins such as vitamin k, vitamin B₁₂ and vitamin A.

3) Define joints. Explain the types and properties of joints with examples.

Joints

A joint is a connection between bones. The joint cavity, which is filled with synovial fluid, lies between the cartilage covered articular surfaces.

Joint type	Properties	Examples
Ball and socket joint	3 planes of motion, including rotation	Hip joint, shoulder joint
Condylloid joint	2 planes of motion	Wrist
Hinge joint	1 plane of motion	Elbow joint, knee joint, finger joints
Saddle joint	2 plane of motion	Carpometacarpal joint of the thumb
Planar joint, pivot joint	1 plane of motion	Metatarsal joint, joint atlas and axis joint

etc
carpometacarpal

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A

School of Health Care and Paramedics Skills**Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1102****Time: 1 Hour****Course Name: Hygiene and Safety & support in personal hygiene****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. **What is the mean of skin turgor?**
 - a. Skin folds
 - b. Skin swelling
 - c. Skin tension
 - d. Skin oedema
2. **Where would you put a needle after use?**
 - a. Blue waste bin
 - b. Yellow waste bin
 - c. Red waste bin
 - d. White waste bin
3. **What is the mean of hand hygiene?**
 - a. Hand washing
 - b. Hand care
 - c. Hand disinfection
 - d. All of above
4. **Which is not symptom of inflammation?**
 - a. Calor
 - b. Rubor
 - c. Stupor
 - d. Dolor
5. **Isolation means:**
 - a. Break the chain of infection
 - b. Infection
 - c. Protective measure
 - d. All of above

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

- 1) Define Sterilization. Explain the methods of sterilization.
- 2) Define disinfection. Explain the various ways of disinfection.
- 3) Draw the flow chart of chain of infections.

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

- 1) Define hygiene. Explain the six principles of personal hygiene.
- 2) Define security. Explain the four sign of security and insecurity.
- 3) Explain the various areas of hygiene.

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School of Health Care and Paramedics Skills**Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1102****Time: 1 Hour****Course Name: Hygiene and Safety & support in personal hygiene****Max. Marks: 20****Instructions:**

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

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 - d. **Dolor**
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SECTION-B**[3x2=6 Marks]**

- 1) Define Sterilization. Explain the methods of sterilization.
Sterilization is intended to achieve complete eradication of germs. This means all microorganisms are killed and rendered harmless. Heat-resistant materials and the immediate surroundings are sterilized. A sterile environment must be created for all invasive interventions. This means the surgical environment and any utensils such as bandages and instruments must be sterile. Sterility is invariably an absolute state: either something is sterile or it is not.

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Various methods of sterilization

Various sterilization processes can be used to achieve an aseptic state:

Sterilisation method	Application	Effect
Steam sterilisation Used as the most reliable method	Instruments, laundry, bandages, glass-based materials, heat-sensitive plastics, rubber	Steam in the autoclave (high-pressure sterilisation unit) penetrates the sterile material for 18 minutes at 134° C and 2-3 bar.
Plasma sterilisation	Thermolabile material	Process involving hydrogen peroxide and low temperatures
Gas sterilisation (used only rarely, because of toxicity, no further new approvals)	Optical instruments (ophthalmology), endoscopes, plastics	Formaldehyde gas at around 60°C, also peracetic acid
"Primary sterile" radiation sterilisation	Used for the manufacture of single-use items (catheters, plastic items etc.) in an industrial setting, comparatively expensive	e.g. X-rays, gamma rays. Sterilisation is performed at low temperature and is also suitable for temperature-sensitive substances.

2) Define disinfection. Explain the various ways of disinfection.

Disinfection reduces levels of germs and pathogens as far as possible by killing and thereby preventing them from causing any further disease. There are patient-focused measures (eg. disinfection of hands or disinfection of the skin prior to interventions), as well as cleaning/disinfection of devices and utensils.

There are various ways to disinfect an object:

Physical measures

These are thermal processes (= using heat), filtration and radiation.

Thermal processes

Boiling in hot water at 93°C for 3 minutes or in special rinsing machines at 90°C for 5 minutes, e.g. drinking bottles for infants, various instruments such as tweezers

Filtration

Special fine filters (HEPA filters) for filtration of air in operating theatres and intensive care wards

Radiation

Ultraviolet light for the preparation of drinking water (in developing countries)

3) Draw the flow chart of chain of infections.

Reservoir

Transmission

Exposure

Infection

Incubation

Prodromal

Illness

Recovery

Convalescence

Resolution

Death



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SECTION-C

[3x3= 9 Marks]

- 1) Define hygiene. Explain the six principles of personal hygiene.

The word hygiene comes from Greek and is derived from „Hygeia“, the name for the goddess of good health. It is essentially synonymous with health. Hygiene is the science of keeping people and the environment health and covers the measures used to achieve this. Just over 100 years ago, general refuse and waste water from toilets and bathrooms were still being diverted into rivers and streams. This favored the spread of epidemics such as cholera and typhoid. These diseases tended to be fatal. Drainage channels were also home to rats and other disease-carrying animals, with rats, for example, carrying the plague. Hygiene levels were so bad that these water courses were often referred to as cloacal in towns and cities. Infant mortality was high and life expectancy much lower than today. In addition to medical advances (eg. the discovery of antibiotics in the 1940s), the improvements in hygiene levels associated with infrastructure measures such as the introduction of sewage pipes in towns and villages and hygiene monitoring for drinking water and food led to sustainable progress in health conditions. Of every 1,000 live births, some 130 infants were still dying around the year 1900 compared with just 3 or 4 today. Life expectancy has also increased over the past century from around 47 years to today 's figure of about 80.

Principles

- Inform the patient about each care measure involved, even if they cannot respond due to linguistic or medical reasons. Pay more attention to nonverbal signs.
- If possible, make sure the patient has their hearing aid or dental prosthesis before starting personal hygiene so they can hear you better and talk to you.
- Ask about their habits and needs, and read any documentation relating to their care.
- Anything the patient can do, they should be left to do themselves.
- Never perform washing together (for example, the patient washing their arms while you wash their legs to speed things up).
- Think about people 's intimate sphere: only uncover/undress patients to the extent necessary and draw the curtain or provide a sight screen.
- Always ask before touching a person in intimate areas. You might say something like 'Do you mind if I see whether the skin under your breast is red? '
- Only use bath towels for drying after bathing/showering; when washing someone, only use them to cover the person up.
- Dispose of any strong-smelling material immediately in the waste bin, which should be emptied once personal hygiene is complete.
- Make sure you apply hygiene principles consistently.
- Try and minimize any strain on your back as you work.



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2) Define security. Explain the four sign of security and insecurity.

The term security comes from the Latin word 'securus' and means carefree, unconcerned, secure. It is important for all of us to feel secure and achieve security so we can go about our day-to-day business. For the most part, creating a sense of security also means ensuring protection against things like accidents, fires and infection. Security also means taking care of oneself, other people and the environment.

Signs of security

- Patient expresses their desires and aims;
- Patient knows their own rights;
- Patient feels well informed;
- Patient is ready to accept responsibility;
- Patient's speech is appropriate, audible and clear;
- Patient has an upright, open posture and stands firmly on both feet;
- Patient does not keep making sudden changes of position, but keeps reasonably still (eg. sitting);
- Patient has an open gaze, they can look the other person in the eye, their facial expressions are relaxed;
- Actions are performed in a calm and relaxed manner.

Signs of insecurity

- Patient rarely expresses insecurity directly;
- Repeated questions such as: 'What would you do in my position?'
- Patient reacts in an irritated or aggressive manner;
- Patient withdraws into their shell and only gives monosyllabic responses;
- Patient sticks rigidly to nursing routines;
- Speech is quiet, uneven and indistinct,
- Posture is closed, i.e., stooped and self-protective;
- Patient often looks harassed, wanders about in an agitated manner and keeps changing position; their gaze is timid, restless or absent; patient often avoids eye contact with others;
- Facial expressions are tense, patient blushes or smiles at inappropriate times;
- Actions are performed in a nervous, jittery or agitated manner.

3) Explain the various areas of hygiene.

Hygiene covers various areas

Environmental Hygiene

Environmental hygiene is a field within environmental medicine. This is concerned with environmental influences on human health. These include things like water hygiene, air hygiene, waste hygiene and food hygiene.

Social Hygiene

Social hygiene is concerned with questions that arise when people live together. These include sanitation, health education and occupational health and safety.



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Individual Hygiene

Individual hygiene (personal hygiene) deals with hygiene from an individual person 's perspective. This includes physical hygiene, hygiene in terms of clothing and individual lifestyles; as a medical discipline, hygiene is concerned with health promotion, the effects of harmful environmental influences, nutrition and the prevention of disease. In health care institutions, hygiene is concerned with causes, transmission routes and prevention of infections inside inpatient facilities.

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**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****(A)****School of Health Care and Paramedics Skills****Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st 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. Kinaesthetic is known as:**

- | | |
|---------------------------------|------------------------|
| a) Emotional support | b) Reflection of light |
| c) Study of perception movement | d) Study fracture |

2. What do you mean by paralysis?

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

3. Open fracture is known as:

- | | |
|---|-------------------------------|
| a) Broken bone that does not penetrate the skin | b) No complete break the bone |
| c) Broken bone with penetrate the skin | d) Complete break the bone |

4. Which part of the body is affected when the level of uric acid increase?

- | | |
|-----------------|-------------------|
| a) Hip Joint | b) shoulder joint |
| c) Both a and b | d) Greater Toe |

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 ergonomics. Write down the aims of ergonomics.
- 2) Define gout and write down the treatment of gout.
- 3) Define the fall prevention and write down the risk factor of fall prevention.

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

- 1) Explain the rheumatoid arthritis.
- 2) Define arthroses and write down the symptoms and treatment of arthroses.
- 3) Describe the influencing factors of movement

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School of Health Care and Paramedics Skills

Session: 2020-21 Summer

B. Voc. Program, 1st Semester

1st In-Sem. Examination

(A)

A.K.

Course Code: SHP1103

Course Name: Body Mechanics and Positioning

Time: 1 Hour

Max. Marks: 20

Instructions:

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SECTION-A

[5x1=5 Marks]

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c) Work with reflects

b) Reflection of light

d) Study fracture

b) Freely movement

d) Tiredness

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d) Complete break the bone

b) shoulder joint

d) Greater Toe

b) Work with efficiency

d) All of above

SECTION-B

[3x2=6 Marks]

1) Define ergonomics. Write down the aims of ergonomics.

- The term 'ergonomics combines the Greek words ergon = work and nomos= law. Ergonomics is the science of improving working conditions, particularly in terms of avoiding damage to health.

Aims of ergonomics

- Avoid direct or long-term damage caused by work
- Ensure work can be done in a way that reflects an individual 's circumstances
- Ensure working conditions do not have a negative impact on people 's mental health or well-being.

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2) Define gout and write down the treatment of 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.

Treatment:

- Anti-inflammatories and analgesics are administered for an acute attack of gout.
- High doses of antirheumatics such as Voltarol® are used or sometimes even cortisone, which is injected directly into the joint. Colchicine, an old medicine obtained from the Colchicum plant family, has proven successful in refractory cases.
- During attack-free periods, attempts are made to reduce the uric acid level through medication and changes in diet.
- Both uricostatic and uricosuric drugs are used for this purpose. Uricostatics reduce the production of uric acid. They are few well tolerated and are associated with hardly any side effects. One example is Zyloric®. Diuretics should be avoided if at all possible.
- In terms of changes in diet, the aim is to keep uric acid levels low, which means eating little or no food that causes the uric acid in the blood to increase. Alcohol should be avoided too. At least 2 liters of fluids should be drunk a day. Efforts should be made to lose any excess weight.

3) Define the fall prevention and write down the risk factor of 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.

Biological factors	Play a major role, particularly age and gender. Women have more falls. The risk of falls increases significantly with age. It is 3 times as high for 90-year-olds than for those aged 65 to 69. Hypotension and memory problems present additional risks.
Personal factors	Are mainly mobility restrictions due to problems with walking or balance, muscle weakness, Parkinson's disease, multiple sclerosis and pain. The greater the mobility restriction, the higher the risk of falls such as for those with hemiplegia. Other factors include impaired vision or hearing, perception disorders and psychiatric disorders such as depression. The risk also increases if people use alcohol or medicines such as sleeping pills.
Environmental risk factors	Tend to be situation-specific, such as an unfamiliar environment, night time or poor light. 50% of falls occur within a week of a patient being transferred to an unfamiliar environment. Living surroundings and furnishings such as steep stairs, carpets, missing bed rails and handles can lead to falls.



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SECTION-C

[3x3= 9 Marks]

1) Define fracture. Explain the four types of fracture.

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

2) Define arthroses and write down the four causes symptoms and treatment of arthroses.

Arthroses are chronically degenerative joint changes that lead to destruction of the surfaces of joints (articular cartilage and bone). In most cases, the joints that bear the weight of the body tend to be affected (hip, knee and vertebral joints).

Causes/risk factors

- Unknown
- Unphysiological burden (i.e. an incorrect or excessive load) on a joint
- Excess weight
- Excessive strain during sport
- Skeletal malformations, e.g. knock knees, congenital hip dysplasia
- Badly healed fractures
- Loads endured at work (e.g. builders)

Symptom

- Feeling stiff around the affected joint, particularly in the morning, joints feeling a bit 'rusty'
- Pain: onset-type pain at first (pain when stress begins), followed by stress-related pain proper pain as stress continues) and later pain at rest (background pain)
- Mobility restrictions
- Muscular tension and muscular contraction
- Rubbing noises
- Active arthrosis may be associated with acute inflammation, significant swelling and overheating of the joint and also considerable pain following, for example, some form of excessive strain.



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Treatment:

Arthrosis-related changes cannot be reversed. The aims of treatment are therefore pain relief, improved mobility and slowing the pace of joint destruction.

The following measures are used for these purposes:

- Weight loss for obese patients
- Local applications of heat or cold depending on the patient 's condition
- Medication to build up cartilage, e.g. glucosamine and chondroitin sulphate
- Pain - relief medication.
- Physiotherapy to build up muscles and preserve mobility
- Remedying of posture-related damage by, for example, adjusting orthopaedic inserts, surgery Therapeutic radiation to relieve pain
- Surgery: emplacement of joints with artificial prostheses such as a total prosthesis for the hip. These Operations are among the most common surgical interventions and affected patients find them beneficial from a pain relief and mobility perspective.

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.

J/c *Gambhir*

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of Health Care and Paramedics Skills****Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1104****Course Name: Nutrition & Elimination I****Time: 1 Hour****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. Full form of BMI:**

- | | |
|----------------------|------------------------|
| a) Body mass index | b) Body mass injection |
| c) Body muscle index | d) Body manual index |

2. Dysphagia is known as:

- | | |
|--------------------------------|-------------------------------|
| a) Difficulties of urine pass | b) Difficulties of swallowing |
| c) Difficulties of respiration | d) Different of urine |

3. Nausea Means:

- | | |
|----------------------------------|------------------------------------|
| a) Sensation of urge to vomiting | b) Forcefully discharge of stomach |
| c) Sensation of urge to urine | d) Both a and b |

4. Inflammation of urinary bladder is known as:

- | | |
|------------------|--------------|
| a) Cholecystitis | b) Carcinoma |
| c) Endosystitis | d) Cystitis |

5. How much required of water of per day in adult?

- | | |
|------------|-----------------|
| a) 1000 ml | b) 1500-2000 ml |
| c) 800 ml | d) 2500-3000 ml |

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

- 1) Weight of men is 65 kg and height is 172 cm. calculate his BMI using the formula and indicate the condition.
- 2) Draw the flow chart of food pyramid.
- 3) What do you mean bland diet.

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

- 1) Define excretion. Explain the influencing factors of excretion.
- 2) Define cystitis. Write down the four causes and nursing measures of cystitis.
- 3) What do you mean disgust? Describe the two using aids for excretion.

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BHARTIYA SKILL DEVELOPMENT UNIVERSITY

School of Health Care and Paramedics Skills

Session: 2020-21 Summer

B. Voc. Program, 1st Semester

1st In-Sem. Examination

Course Code: SHP1104

Set. A

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=5 Marks]

1. Full form of BMI:

- | | |
|----------------------|------------------------|
| a) Body mass index | b) Body mass injection |
| c) Body muscle index | d) Body manual index |

2. Dysphagia is known as:

- | | |
|--------------------------------|-------------------------------|
| a) Difficulties of urine pass | b) Difficulties of swallowing |
| c) Difficulties of respiration | d) Different of urine |

3. Nausea Means:

- | | |
|----------------------------------|------------------------------------|
| a) Sensation of urge to vomiting | b) Forcefully discharge of stomach |
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|------------------|--------------|
| a) Cholecystitis | b) Carcinoma |
| c) Endosystitis | d) Cystitis |

5. How much required of water of per day in adult?

- | | |
|------------|-----------------|
| a) 1000 ml | b) 1500-2000 ml |
| c) 800 ml | d) 2500-3000 ml |

SECTION-B

[3x2=6 Marks]

- 1) Weight of men is 65 kg and height is 172 cm. calculate his BMI using the formula and indicate the condition.

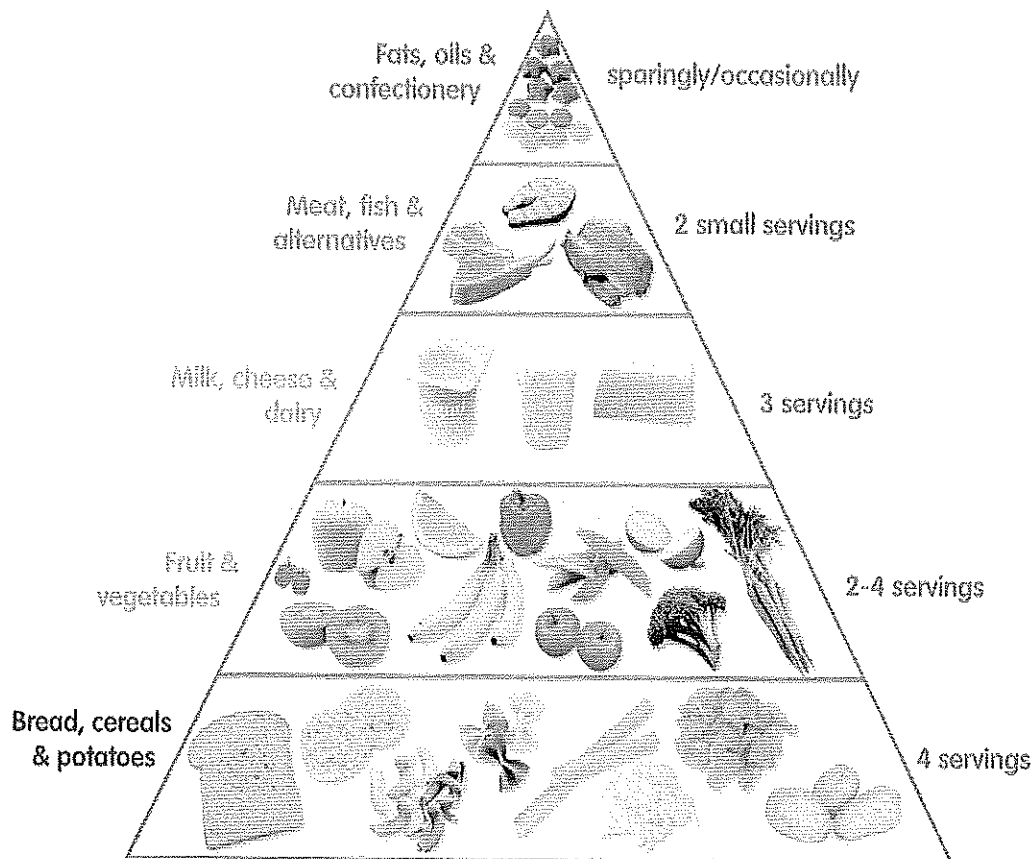


$$\text{BMI} = 65 / 2.95 = 22.03$$

The condition is normal

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- 2) Draw the flow chart of food pyramid.



- 3) What do you mean bland diet?

Light balanced diet (bland diet)

A light balanced diet is designed to help take the strain off individual digestive organs or the entire metabolism. The difference between a light balanced diet and a standard balanced diet lies in the selection and preparation of foods. The light balanced diet must contain sufficient quantities of all nutrients. In order to relieve strain on the digestive organs and the metabolism.

SECTION-C

[3x3= 9 Marks]

- 1) Define excretion. Explain the influencing factors of excretion.

Excretion

The process of eliminating or expelling of waste material from body.

Biological factors	Stage of development and age, quality and quantity of food and fluid intake, physical activity, function of the autonomic nervous system, state of the urinary and digestive system.
Psychological factors	Feelings and sensitivities, mental faculties, attitude to life and outlook.
Environmental factors	Living conditions, state of hygiene of toilet facilities.



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Sociocultural factors	Social taboos and feelings of shame, upbringing and socialization, precepts of various religions as regards, for example, wiping one 's posterior.
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2) Define cystitis. Write down the four causes and nursing measures of cystitis.

Cystitis

Cystitis is an infectious inflammation of the urinary bladder

Causes

It is estimated that 1 woman in 3 will suffer with cystitis at least once in her life. The reasons are as follows:

- The fact women have a short urethra means germs are better able to reach the urinary bladder.
- In women, the opening of the urethra is closer to the anal area, which means intestinal germs may enter the urethra via a smear infection. This is why it is important always to work from the front back-wards when cleaning the anal area following a bowel movement.
- Sexual intercourse is one of the more common causes of cystitis (honeymoon cystitis). Bacteria may also reach the bladder when someone inserts a tampon.
- Pregnancy and childbirth facilitate access for germs.
- Estrogen deficiency during and after the menopause favors the proliferation of germs.

Nursing Measures

For cystitis, the following points should be observed:

Sufficient liquid	<ul style="list-style-type: none"> • The bacteria are rinsed with the increased urine by a high amount of drinking (at least 3-4 liters per day). In the case of patients with heart problems, it is absolutely necessary to discuss with the doctor beforehand how much the amount of drinking should be, since a high amount of drinking may aggravate heart disease.
Local warmth, e.g. by a heat bottle can relieve discomfort.	<ul style="list-style-type: none"> • If possible, the client should always go to the toilet when she feels urination, so that the bacteria can be washed out. Otherwise there is a risk of an ascending infection. For elder or not mobile patients, a toilet chair can be helpful. The pool is unfavorable as it is more difficult to empty the bladder on the pool.

3) What do you mean disgust? Describe the two using aids for excretion.

Disgust

Those employed in a nursing role on a day-to-day basis may feel some disgust when dealing with excretory products. The main thing to realise is that disgust is a natural feeling and an important and even healthy reaction. Feelings of disgust at a form of protection. Extreme physical proximity and dealing frequently with bodily fluids in a nursing role can trigger adverse reactions such as disgust. Physiologically speaking, disgust triggers increased secretions from the salivary glands and blood supply to the head also increases slightly. The resulting gag or vomiting reflex is also, among other things, a physical protective function against poisoning.



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Toilet attachment

A toilet attachment effectively raises the toilet bowl. This may be necessary or helpful for those who have undergone certain Operations (e.g. hip operation, spinal column operation) or older people whose hips are less mobile than before. The idea is to make it easier to sit down or stand up.

Commode (night commode)

A commode can be used for patients who are not very mobile because they are not able or allowed to walk very far. Some older patients may also find it easier to get up from a commode than a toilet (which is lower). In order to protect the person 's intimate sphere, a commode can be placed on a normal toilet or in the corner of the room where washing is performed. There are different versions of commodes. Some models have foot- rests. With this type, the client should be told not to stand up on their own or the commode may tip over and cause them to fall. As far using a commode is concerned, the same principles apply as when accompanying a patient to the toilet. Apart from respecting the individual 's intimate sphere and any hygiene provisions, the following points must also be considered:

- The bowl must be slid in before using the commode (risk of injury, particularly for men, if this is slid in later or the bowl is removed).
- Apply the brakes before any transfer.
- Help the patient during the transfer depending on their mobility, resources and general condition.

Bedpan

Bedpans are sometimes also referred to as pots. Patients who are confined to bed use a bedpan for urinary and stool excretion. Please consider the following points when using a bedpan:

- Observe the principles of respecting the individual 's intimate sphere and any hygiene provisions.
- Metal bedpans are cold, which may be unpleasant for the patient. To avoid this problem, you can rinse out the bedpan with warm water before use and leave it to dry.
- Given that bedpans can make beds dirty, it is a good idea to use some kind of covering as protection.
- When sliding a bedpan underneath a man, give him a urine bottle at the same time.
- The odours and noises associated with excretion in the presence of other patients or nurses may lead to feelings of shame. Ask visitors and, where possible, other patients to leave the room. Make sure the bell is in easy reach and tell the patient they can call you back in. You may then leave the room out of respect for any feelings of shame.

Urine bottle

Urine bottles are used for men. Urine bottles have a closable cover and a scale showing how much



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urine they contain. Please consider the following points when using a urine bottle:

- Observe any hygiene provisions and the principles of respecting the individual 's intimate sphere.
- Be sure not to leave the urine bottle wedged in place for too long to avoid pressure damage to the penis and testicles.
- If a urine bottle is left wedged in place for too long, the kind of moist heat that favours infections may develop. Give the patient the opportunity to wash their hands.
- Then bring the patient a clean, disinfected urine bottle, leaving it somewhere discreet but within easy reach of the patient.

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**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of Health Care and Paramedics Skills****Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1105***Set - A***Time: 1 Hour****Course Name: Clinical Picture 1st****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. **It is not necessary to wash hands after removing gloves because your hands were protected by the gloves?**
 - a. True
 - b. False
2. **The most common means of spreading infection are?**
 - a. Soiled instruments
 - b. Human hands
 - c. Infected patients
 - d. Domestic animals
3. **Urinary tract infection is caused by...**
 - a. Escherichia coli
 - b. Salmonella
 - c. HIV
 - d. Mycobacterium tuberculosis
4. **Dysphagia means...**
 - a. Difficulty in breathing
 - b. Difficulty in Eating
 - c. Difficulty in swallowing
 - d. Both b and c
5. **House dust which type of allergy?**
 - a. Food allergy
 - b. Inhaled allergy
 - c. Injected allergy
 - d. Contact allergy

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

- 1) Describe the four symptoms of candidiasis.
- 2) Define psoriasis. Write down the four causes of psoriasis.
- 3) Write down the four nursing measures of eating disorders.



Registration No.:

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

SECTION-C

[3x3= 9 Marks]

- 1) Define nosocomial infection. Describe the source of infection and prevention of nosocomial infection.
- 2) Define allergies. Difference between the immediate and delayed allergy.
- 3) Define obesity. Write down the four causes and prevention of obesity.

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School of Health Care and Paramedics Skills

Session: 2020-21 Summer

B. Voc. Program, 1st Semester

1st In-Sem. Examination

Course Code: SHP1105

Sol - A

Time: 1 Hour

Course Name: Clinical Picture 1st

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=5Marks]

1. It is not necessary to wash hands after removing gloves because your hands were protected by the gloves?
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 - a. Food allergy
 - b. Inhaled allergy
 - c. Injected allergy
 - d. Contact allergy

SECTION-B

[3x2=6 Marks]

- 1) Describe the four symptoms of candidiasis.

Symptoms

Oral thrush	whitish deposits, most of which can be wiped away, on reddened mucosa, possibly bleeding or ulcerated mucosa, pain during eating or swallowing
Oesophageal thrush	pain during swallowing ^[SEP]
Vaginal thrush	reddened and swollen vaginal mucosa, whitish deposits that can be wiped away, considerable itchiness, burning, lots of whitish crumbly discharge

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Thrush affecting the urethra or bladder	symptoms like those associated with cystitis, namely a burning during urination, itchiness, more frequent desire to urinate
Thrush affecting the respiratory tracts	coughing, sputum

- 2) Define psoriasis. Write down the four causes of psoriasis.

Psoriasis

Psoriasis vulgaris is a chronic inflammatory skin disease associated with an immunological response. It tends to follow an episodic course. Some 1—3% of the population suffer from psoriasis. Psoriasis vulgaris is not infectious.

Causes

The immune System of those with psoriasis, attacks the keratinocytes (cells in the outer skin). The skin responds with an inflammatory reaction. This causes the skin to thicken. Even now, the reasons why psoriasis occurs have still to be fully explained. There would appear to be some kind of genetic predisposition, although the disease only tends to break out when various factors coincide. These can be:

- emotional stress
- excess weight
- infectious diseases (e.g. tonsillitis, viral infections)
- medication (e.g. lithium, beta blockers, ACE inhibitors, malaria drugs)
- metabolic disorders (e.g. diabetes)
- excessive consumption of alcohol and nicotine
- hormonal factors (e.g. pregnancy, menarche, menopause)
- external injuries (e.g. prolonged friction, sunburn)
- climatic influences (e.g. cold, damp weather)
- certain foods (varies greatly between individuals, each psoriatic must find out for themselves which foods can trigger an episode)
- first outbreak of psoriasis often as early as childhood or adolescence or only from age 40 onwards

- 3) Write down the four nursing measures of eating disorders.

Nursing measures for people with eating disorders

The following measures are important:

- Make sure that you comply with the agreed rules and do not allow the patient to 'haggle' with you.
- Try not to moralise.
- Check the patient 's weight regularly. (The frequency of weight checks will depend on the patient 's general state of health and the concept at the individual institution.)
- If the patient is severely underweight, make sure that the rules of treatment are complied with, such as prescribed bed rest etc.



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- Observe the patient 's behaviour in relation to eating and drinking. Document may be that special nutrition is needed.
- Practise a constructive approach to food with the patient, e.g. putting together a balanced menu in a cookery group, or shopping and cooking together.
- Supervise the taking of medication if applicable.
- Make sure that there is no 'smuggling 'of food. To do this, check the room regularly together with the patient or lock the ward kitchen.
- Make sure that the patient does not go to the toilet for one hour after meals (risk of vomiting).
- Encourage and support the patient to keep a therapy diary about self-control over eating and vomiting.
- Take note of any suicidal statements and report these.

SECTION-C

[3x3= 9 Marks]

- 1) Define nosocomial infection. Describe the source of infection and prevention of nosocomial infection.

Nosocomial Infection

A hospital-acquired infection (HAI), also known as a nosocomial infection, is an infection that is acquired in a hospital or other health care facility. To emphasize both hospital and nonhospital settings, it is sometimes instead called a health care-associated infection.

Source of Infection

Endogenous	Exogenous
<ul style="list-style-type: none">• patient own flora may invade patients tissue during some surgical operations	<ul style="list-style-type: none">• From another patient, staff member and environment in the hospital• Environment source: air, water and food

Prevention of Nosocomial Infection

- Source patient to destroy the pathogenic agents
- Proper sterilization & disinfection of inanimate object. This helps to control the source of infection.
- Transmission can be controlled by regular washing of hands
- Disinfection of equipment & change of working cloths
- Use of sterile dressing, surgical gloves & face mask further contributes in control of nosocomial infection
- Pre-operative disinfection of patient



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- 2) Define allergies. Difference between the immediate and delayed allergy.

Allergies

So far, the various forms of medication have mainly been used to treat plaques. Medication was applied locally (directly to the skin: ointments, creams or Lotions) for mild cases or systemically (ingested) for more severe cases. Meticulous skin care should form part of any psoriasis treatment

Immediate-type allergy

- With the immediate-type allergy, the immune system response occurs within seconds or minutes of contact with the allergen.

Examples of immediate-type allergies

- respiratory organs: grass or tree pollen (hay fever), fungal spores, flour, house dust mites or animal hair (pet allergy)
- digestive tract: food such as proteins, fruit, vegetables, meat, fish
- reaction to drugs, mainly antibiotics, analgesics
- insect bites, bee or wasp venom

Symptoms associated with immediate-type allergies

- Facial swelling (oedema of the eyelids)
- Obstruction of the respiratory tracts (asthma, shortness of breath)
- Stomach cramps
- Nausea
- Runny nose and skin rashes (severe itchiness, burning sensations)

Fall in blood pressure.

Delayed-type allergy or contact allergy

Here, reactions occur hours or days after contact with allergens. Contact allergens are generally substances that come into contact with the skin, e.g. nickel (jewelry or coins), scents, preservatives in cosmetics, or depilatory agents.

Symptoms associated with delayed-type or contact Allergies

- Burning,
- Itchiness,
- Redness,
- Inflammation (eczema)



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3) Define obesity. Write down the four causes and prevention of obesity.

Obesity

Obesity is a state of excess adipose tissue mass.

Causes of Obesity

- excessive food intake,
- having a sedentary (inactive) lifestyle
- not sleeping enough, which can lead to hormonal changes that make you feel hungrier and crave certain high-calorie foods
- genetics, which can affect how your body processes food into energy and how fat is stored
- growing older, which can lead to less muscle mass and a slower metabolic rate, making it easier to gain weight
- pregnancy (weight gained during pregnancy can be difficult to lose and may eventually lead to obesity).

Prevention

- Social changes and personal choices
- Diet:
 - the primary focus of diet therapy is to reduce overall calorie
 - low carbohydrate, high protein diets appear to be more effective in lowering BMI
- Increase physical activity
- Behaviour modification:
 - Self-monitoring of weight
 - Stress management
 - Social support
- Exercise

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**BHARTIYA SKILL DEVELOPMENT UNIVERSITY****School of Health Care and Paramedics Skills****Session: 2020-21 Summer****B. Voc. Program, 1st Semester****1st In-Sem. Examination****Course Code: SHP1106***Set - A***Time: 1 Hour****Course Name: First Aid, CPR and Palliative Care****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. **How should you open the airway of an unconscious casualty?**
 - a) Head tilt and chin lift
 - b) Jaw thrust
 - c) Head tilt and jaw thrust
 - d) Lift the chin
2. **Which is the correct ratio of chest compression to rescue breaths for use in CPR of adult casualty?**
 - a) 2 Compressions : 30 Rescue breath
 - b) 5 Compressions : 1 Rescue breath
 - c) 15 Compressions : 2 Rescue breath
 - d) 30 Compressions : 2 Rescue breath
3. **Which medical condition will develop from severe blood loss?**
 - a) Hypoglycaemia
 - b) Anaphylaxis
 - c) Shock
 - d) Hypothermia
4. **What is the number of back blows given to a choking child?**
 - a) 3
 - b) 5
 - c) 8
 - d) 10
5. **What step would you take to control bleeding from a nosebleed?**
 - a) Sit casualty down, lean forward and pinch soft part of nose
 - b) Sit casualty down, lean forward and pinch soft part of nose
 - c) Lie casualty down and pinch soft part of nose
 - d) Lie casualty down and pinch top of nose

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

- 1) Define wound. Write down the types of wounds.
- 2) Draw the overview flow chart of "FIRST AID".
- 3) Define fracture. Write down the difference between the open and close fracture.



Registration No.:

BHARTIYA SKILL DEVELOPMENT UNIVERSITY

SECTION-C

[3x3= 9 Marks]

- 1) How to perform CPR in adult?
- 2) Define choking. What do you do after choking victim?
- 3) Define dyspnea. Write down the grades of the dyspnea.

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School of Health Care and Paramedics Skills

Session: 2020-21 Summer

B. Voc. Program, 1st Semester

1st In-Sem. Examination

Set - A

Course Code: SHP1106

Time: 1 Hour

Course Name: First Aid, CPR and Palliative Care

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
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SECTION-A

[5x1=5 Marks]

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 - d) Lie casualty down and pinch top of nose

SECTION-B

[3x2=6 Marks]

- 1) Define wound. Write down the types of wounds.
 A wound is an injury in which the skin or another surrounding surface is torn, pierced, cut or otherwise broken. Wounds can be external or internal in the body. Each type of wound carries specific risks associated with the surrounding tissue damage and infection.



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Abrasions

These wounds are superficial wounds in which the top most layers of the skin are scraped off, leaving a raw, tender area. These wounds appear often when experiencing a sliding fall (e.g. of a bike). The wounds often contain embedded foreign particles which may result in infections. Abrasions do not bleed much, but are usually very painful.

Incisions

Incised

Wounds are caused by sharp instruments such as a knife, razor, etc. The blood vessels show a straight cut and bleeding may be profuse. Other structures such as tendons and nerves may be damaged too.

Contusions (bruises)

Contused wounds are caused by blows, by blunt instruments or by punching. The capillaries are ruptured by the punch and blood leaks into the tissues. Severe contusion might be an indication of a deeper damage, like a fracture or internal injury.

Lacerations

Lacerated wounds are caused by crushing, ripping forces by machinery, or clawing of animals resulting in tears or lacerations. The edges are mostly irregular in shape. There is usually more underlying tissue damage. These wounds are often contaminated with germs; the risk of infection is high. This type of wound sometimes has less bleeding, but is usually very painful.

Puncture wounds

Puncture wounds are caused by stabs or sharp instruments like knives, daggers or nails. These wounds typically have a smaller opening, but may reach deep into the tissue. These may not be very painful.

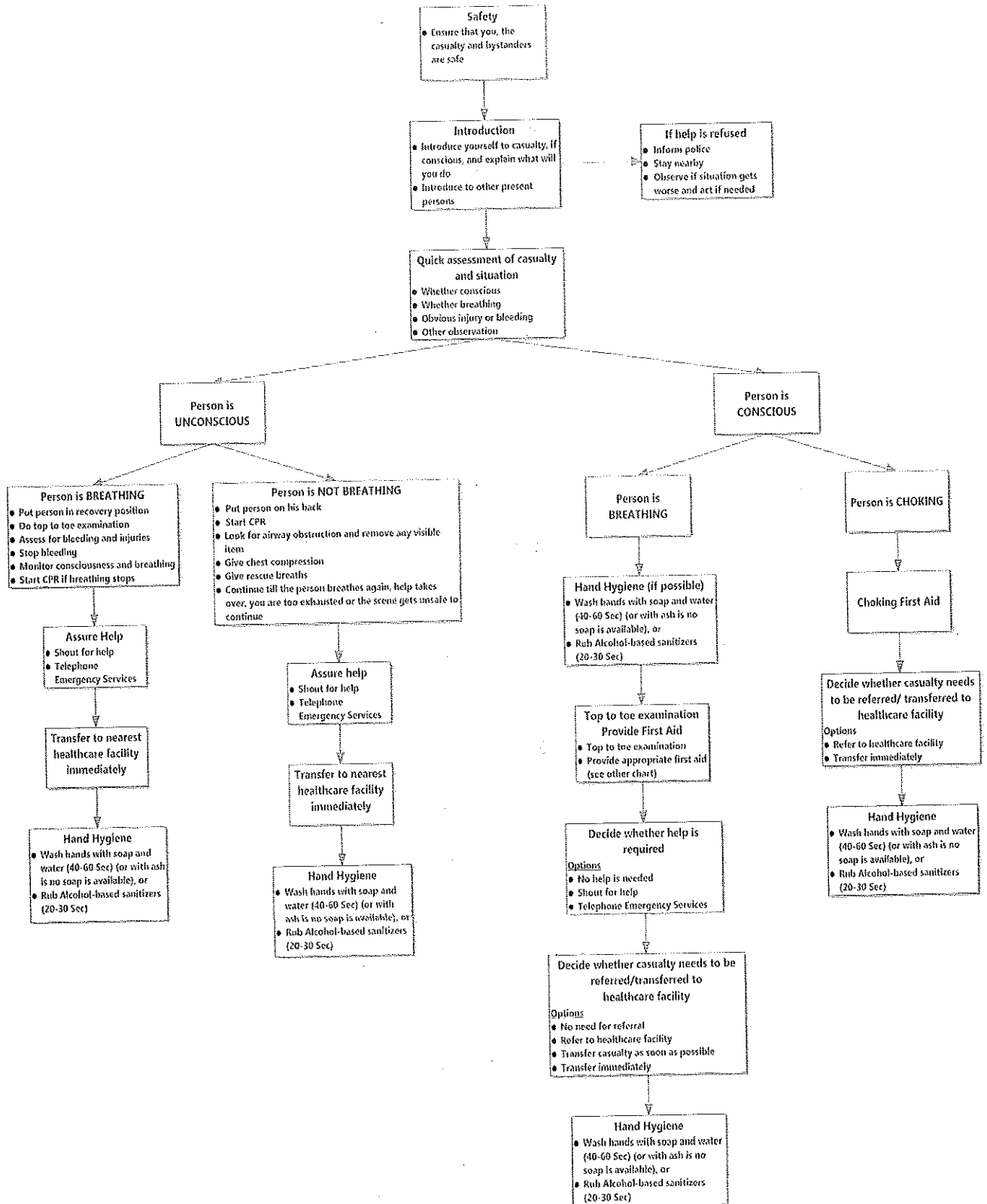
A *stab wound* is a puncture wound by a knife or sharp blade. A *gunshot wound* is the wound caused by a bullet or missile driven into the body. The entry wounds of gunshot wounds are mostly small and neat. If the projectile also exits the body, the exit wound may be large and ragged.

Amputations

Amputation is the removal of a limb by trauma. Re-attachment of amputated limbs, fingers or toes might be possible if the injured and the amputated part(s) arrive at the hospital as soon as possible.

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1) Draw the overview flow chart of "FIRST AID".



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- 2) Define fracture. Write down the difference between the open and close fracture.

A fracture is a break/bend or crack in a bone. Generally, a considerable force is needed to break a bone, unless it is disease drooled. The bones tha tare still growing are supple and may split, bend, or crack.

Open and Closed Fractures

Closed Fractures

The skin above the fracture is intact, although the bone ends may have damaged nearby tissues and blood vessels.

Open Fractures (Compound Fractures)

The skin above the fracture is not intact. The reis bleeding. The bone is exposed to the outside air at the surface; dirt, dust and germs can enter the wound. The reis a high risk of infection.

SECTION-C

[3x3= 9 Marks]

- 1) How to perform CPR in adult?

Reviving someone who is unconscious and/or not breathing or not breathing normally is called resuscitation. Chest compressions with or without rescue breathings are performed by an individual during cardio pulmonary resuscitation (CPR) in an attempt to restore spontaneous circulation.

WHAT DO I SEE AND ENQUIRE?

In case of a cardiac arrest (heart stops functioning) you might notice the following signs:

sudden collapse,

loss of consciousness,

no breathing,

no pulse (however this is not always easy for laypeople to confirm).

HOW TO OBSERVE RESPONSIVENESS AND CONSCIOUSNESS?

Unconsciousness occurs when a person is suddenly unable to respond to stimuli like sound or pain, and appears to be asleep. A person may be unconscious for a few seconds (as is the case with fainting) or for longer periods of time.

People who become unconscious do not respond to loud sounds or shaking. They may even stop breathing or their pulse may become faint. This calls for immediate emergency attention. The sooner the person receives emergency first aid, the better it is.

The AVPU scale (an acronym from "alert, voice, pain, unresponsiveness") is a system by which a first aider can measure and record a patient's responsiveness, indicating the level of consciousness. It is based on the casualty's eye opening, verbal and movement (motor) responses.



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The AVPU scale has only four possible outcomes:

A – Alert. The person is fully awake (although not necessarily oriented). The person will spontaneously open eyes, will respond to voice (although may be confused) and will have bodily motor function.

V – Responding to voice. The person makes some kind of response when you talk to him. It could be opening his eyes, responding to your questions or initiating a move. These responses could be as little as a grunt, moan, or slight movement of a limb when prompted by the voice of the rescuer.

P – Responding to pain. The patient makes a response of any kind on the application of pain stimulus, such as a central pain stimulus like a rub on his breastbone or a peripheral stimulus such as squeezing his fingers. Patients with some level of consciousness (a fully conscious patient would not require any pain stimulus) may respond by using their voice, moving their eyes, or moving part of their body (including abnormal posturing).

U - Unresponsiveness also noted as 'Unconsciousness'. This outcome is recorded if the patient does not give any eye, voice or motor response to voice or pain.

HOW TO OBSERVE THE BREATHING?

The airway may be narrowed or blocked making breathing noisy or impossible. Reasons for blockage may be:

- Loss of muscular control in the throat may allow the tongue to sag back and block the air passage.
- When the reflexes are impaired, saliva may lie in the back of the throat, blocking the airway.
- Any foreign body in the throat may block the air passage e.g. vomit, blood, dentures etc.

To observe the breathing do following:

- If the person is unconscious and is not on his back, turn him on to his back.
- Kneel beside the casualty.
- Lift the chin forwards with the index and middle fingers of one hand while pressing the forehead backwards with the palm of the other hand. This manoeuvre will lift the tongue forward and clear the airways.
- Observe breathing by listening, feeling and looking
- After opening the victim's airway, check to see if the victim is breathing.
- If the casualty's chest still fails to rise, first assume that the airway is not fully open. Once the airway is cleared the casualty may begin breathing spontaneously.

HOW TO OBSERVE THE PULSE?

Feeling the pulse is not always easy. Feeling the pulse during an emergency at the wrist is often unreliable.



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The pulse can be felt by placing the finger tips gently on the voice box and sliding them down into the hollow between the voice box and the adjoining muscle.

Do not lose time trying to locate and feel the pulse. The current resuscitation guidelines for laypeople direct that resuscitation (CPR) is to be started when the person is not breathing or not breathing normally and does not require to check the pulse.

RESUSCITATION OF A PERSON WHO IS NOT BREATHING OR NOT BREATHING NORMALLY

SAFETY FIRST AND CALL FOR HELP

- Make sure there is no danger to you, the person who needs help and bystanders before giving help.
- The person urgently needs help. Shout or call for help if you are alone but do not leave the person unattended. Ask a bystander to seek help or to arrange urgent transport to the nearest healthcare facility. Tell him to come back to you to confirm if help has been secured.

SECURE AN OPEN AIRWAY

- If the person is not on his back, turn him on to his back
- Kneel beside the casualty.
- Lift the chin forwards with the index and middle fingers of one hand while pressing the forehead backwards with the palm of the other hand. This manoeuvre will lift the tongue forward and clear the airways.
- Check for breathing.
- If the casualty's chest still fails to rise, first assume that the airway is not fully open. Once the airway is cleared the casualty may begin breathing spontaneously.
- Else, clear the airway by removing any visible item that is blocking the airway: Hook your first two fingers covered with clean cloth/gloves and sweep round inside the mouth/ throat.
- If the breathing restarts, place the patient in the recovery position (see recovery position).

CPR: HOW TO GIVE CHEST COMPRESSIONS?

- Turn the casualty on his back on a hard surface, if not already.
- Kneel next to the casualty, beside his upper arm.
- Place the heel of one hand in the center of the person's chest.
- Place the heel of the other hand on top of your first hand.
- Lock your fingers of both hands together.
- Make sure your shoulders are directly above the person's chest.
- With outstretched arms, push five to maximum six centimetres downwards.
- Release the pressure and avoid leaning on the chest between compressions to allow full chest recoil. The compression and release should be of equal duration.
- Do not allow your hands to shift or come away from the breastbone.
- Give 30 chest compressions in this way at a rate of 100 compressions a minute (you may go faster, but not more than 120 compressions a minute). This equates to just fewer than two compressions a second.

CPR: HOW TO GIVE RESCUE BREATHS?

- Put one hand on the person's forehead and tilt back his head.



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- Put your other hand on the bony part of the chin and lift the chin
- Then pinch the person's nose with one hand that is on his forehead.
- Take a normal breath and then put your mouth completely over the person's mouth and seal with your lips. Calmly blow your air into the mouth of the person's for one second. Check if the person's chest rises.
- If the chest does not rise, take the following steps:
- Check if anything is in the person's mouth.
- Check that the head is well tilted and the chin is lifted properly.
- Start another series of 30 chest compressions prior to trying to blow air into the person's mouth again.
- The first rescuer gives 30 chest compressions followed by two ventilations and another set of 30 chest compressions and two ventilations.
- Then another rescuer takes over and repeats the above steps and switch again.
- Do not interrupt the resuscitation until:

2) Define choking. What do you do after choking victim?

When a person is having severe difficulty in breathing because of an obstructed airway or lack of air, he is choking. Coughing is the natural way of clearing the airway when the person experiences mild choking. It is also a sign that he still gets air through the windpipe. Severe choking happens when the foreign object or a local swelling blocks the airway. This is a life-threatening emergency. Infants and children often choke after swallowing non-edible objects such as coins, marbles, seeds, buttons or small toys. Most adult cases of choking occur while eating. Since choking often occurs while eating, there are usually people present near the casualty. This means there is a good chance that someone will be able to give help quickly.

WHAT DO I SEE AND ENQUIRE?

When a person is choking, you may observe the following

- The person has difficulty in breathing
- He tries to cough something out but it does not help
- He cannot speak or make any sound,
- He puts his hands on his throat,
- The lips and tongue turn blue
- The veins in the face and neck stick out,
- The person becomes dizzy and might lose consciousness.

WHAT DO I DO IN CASE A PERSON IS CHOKING?

APPROACH AND HELP THE CHOKING PERSON

Ask the person 'Are you choking?' (Only if the person can understand and answer the question).

WHAT DO I DO IF THE PERSON CAN ANSWER THE QUESTION, CAN COUGH OR BREATHE?



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Ask the person to keep coughing. Do not do anything else, but stay with the person until he breathes normally again.

WHAT DO I DO IF THE PERSON CANNOT SPEAK, COUGH OR BREATHE?

Stand to the side and a little behind the choking person or child (aged older than one year).

Support the person's chest with one hand and bend him forward.

Give five firm blows between the person's shoulder blades. To do so, use the heel of your free hand. Verify if the object has come out and the person can breathe again

WHAT DO I DO IF THE OBJECT DID NOT COME OUT AND THE PERSON IS STILL CHOKING?

Stand behind the choking person and put both hands around him, so your hands meet in front of the person.

Make a fist and place it between the navel and lower tip of the breastbone of the person. Hold onto this fist with your other hand.

Bend the choking person forward and pull your fist firmly towards you and upwards.

Give five abdominal thrusts. This method of abdominal thrusts can only be used on people older than one year.

If the passage of air is free, stop giving further abdominal thrusts. But always stop after five abdominal thrusts.

If the object does not come out and the person is still choking, give another five blows on the back followed by five abdominal thrusts.

Repeat this until the object is released or until the choking person loses consciousness.

WHAT DO I DO IF THE PERSON LOSES CONSCIOUSNESS?

Carefully place the unconscious person on the floor.

The person urgently needs help. Shout or call for help if you are alone but do not leave the person unattended.

Ask a bystander to seek help or to arrange urgent transport to the nearest healthcare facility. Tell him to come back to you to confirm if help has been secured.

Kneel down by the side of the person.

If the person is not on his back, turn him on his back.

Start CPR.

Do not interrupt the resuscitation until:

the victim starts to wake up, moves, opens his eyes and breathes normally;

help (trained in CPR) arrives and takes over;



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you are too exhausted to continue; or

the scene becomes unsafe for you to continue.

If there is no response, pinch the person and check if he opens his eyes or moves.

- 3) Define dyspnea. Write down the grades of the dyspnea.

Dyspnoea

Difficulty in breathing; shortness of breath

Grade of Dyspnea

Dyspnoea is divided into four different severity levels:

Grade I: The shortness of breath arises with a greater physical exertion, e.g. when climbing the stairs.

Grade II: The shortness of breath arises already with moderate physical strain, e.g. go straight.

Grade III: This is where the breathing is already at the smallest physical load, e.g. during trouser pulling and pulling out.

Grade IV: Dyspnoea at rest: dyspnoea also in rest, without physical activity

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