

**ROYAL CIVIL SERVICE COMMISSION  
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2021  
EXAMINATION CATEGORY: TECHNICAL**

**PAPER III: SUBJECT SPECIALISATION PAPER FOR OCCUPATIONAL THERAPY**

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<b>Date</b>	: October 31, 2021
<b>Total Marks</b>	: 100
<b>Writing Time</b>	: 150 minutes (2.5 hours)
<b>Reading Time</b>	: 15 minutes (prior to writing time)

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**GENERAL INSTRUCTIONS:**

1. Write your Registration Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
3. This paper consists of **TWO SECTIONS**, namely SECTION A & SECTION B:
  - **SECTION A** has two parts: Part I - 30 Multiple Choice Questions  
Part II - 4 Short Answer Questions  
All questions under SECTION A are **COMPULSORY**.
  - **SECTION B** consists of two Case Studies. Choose only **ONE** case study and answer the questions of your choice.
4. All answers should be written on the Answer Booklet provided to you. Candidates are not allowed to write anything on the question paper. If required, ask for additional Answer Booklet.
5. All answers should be written with correct numbering of Section, Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating the Section, Part and Question Number will NOT be evaluated and no marks will be awarded.
6. Begin each Section and Part on a fresh page of the Answer Booklet.
7. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
8. Use of any other paper including paper for rough work is not permitted.
9. **You must hand over the Answer Booklet to the Invigilator before leaving the examination hall.**
10. This paper has **8 printed pages**, including this instruction page.

**GOOD LUCK**

**SECTION A**

**PART I: Multiple Choice Questions [30 marks]**

**Choose the correct answer and write down the letter of your chosen answer in the Answer Booklet against the question number e.g. 31 (d). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.**

1. With the patient's eyes closed, you place your patient's arm with shoulder abducted, elbow flexed at 90 degrees, and palm facing out. The patient is asked to indicate if the elbow is flexed or extended and found extended. What sensory deficit is your patient experiencing?
  - a) Tactile Localization
  - b) Kinesthesia
  - c) Proprioception
  - d) Stereognosis
  
2. At what level of spinal cord injury is the important skill of tenodesis grasp maintained?
  - a) C6
  - b) C4
  - c) C5
  - d) T2
  
3. How can a therapist differentiate between visual field cuts and unilateral neglect?
  - a) Patterns during scanning tests
  - b) Peripheral vision tests
  - c) Convergence
  - d) Both a) and c)
  
4. Which nerve innervates the opponens digiti minimi?
  - a) Median nerve
  - b) Ulnar nerve
  - c) Radial nerve
  - d) Axillary nerve
  
5. When functioning at Rancho Level VI, you would expect a patient to require which of the following levels of assistance for daily life skills?
  - a) Moderate Assistance
  - b) Maximal Assistance
  - c) Minimal Assistance
  - d) Stand-by Assistance
  
6. A person experiencing contralateral hemiplegia, homonymous hemianopsia, and aphasia would most likely have a CVA affecting the
  - a) Posterior cerebral artery
  - b) Basilar artery
  - c) Middle cerebral artery
  - d) Anterior cerebral artery

7. All of the following would be appropriate screens when screening for impairments of cranial nerve 5, EXCEPT
  - a) Detect light touch, sharp touch, and hot and cold touch to the patient's forehead, cheek, jaw and chin.
  - b) Touch the patient's cornea with a cotton swab to check for a corneal reflex or blink.
  - c) Place your index and middle fingers over the patient's Adam's apple or laryngeal muscles to see if the larynx rises and falls normally as the patient swallows.
  - d) Ask the patient to move his or her jaw from side to side looking for asymmetry of jaw movement.
  
8. Which of the following evaluation methods cannot be used to test manual dexterity/motor function?
  - a) Purdue Pegboard
  - b) Bay Area Functional Performance Evaluation
  - c) Minnesota Rate of Manipulation Test
  - d) 9-hole Peg Test
  
9. Froment's sign is seen in
  - a) Ulnar nerve injury
  - b) Radial nerve injury
  - c) Median nerve injury
  - d) Posterior interosseous nerve injury
  
10. A student is observed during a writing assignment in class. When looking down at her paper she is not able to sit properly in her chair, sliding out of her chair or standing. This observation is a sign of
  - a) Symmetric tonic neck reflex
  - b) Hyperactivity
  - c) Asymmetric tonic neck reflex
  - d) Low tone
  
11. A middle-aged woman comes into the hospital with auditory and visual hallucinations, delusions, disorganized speech and grossly disorganized behavior. She has a history of schizophrenia. What is known about these particular presenting behaviors?
  - a) They are negative symptoms which cannot be reduced with medications.
  - b) They are negative symptoms which can be reduced with medications.
  - c) They are positive symptoms which cannot be reduced with medications.
  - d) They are positive symptoms which can be reduced with medications.
  
12. What type of developmental pre-writing grasp would you expect to see in a 2-3 year old?
  - a) Digital Pronate Grasp
  - b) Palmar Supinate Grasp
  - c) Dynamic Tripod Posture
  - d) Static Tripod Posture

13. A patient believes that he is much greater or more influential than he really is. He states that he has an exceptional talent, extravagant riches or a special relationship with a prominent person. He is suffering from
- Delusion of persecution
  - Delusions of grandiosity
  - Nihilistic delusion
  - Erotomaniac delusion
14. Dorji has suffered from stroke a month ago and she can now hold a key with lateral prehension only with an abducted shoulder along with flexed and supinated forearm but cannot fully release the key. What stage of Brunnstrom recovery is she in?
- Stage III of arm recovery and Stage IV of hand recovery
  - Stage IV of arm recovery and stage III of hand recovery
  - Stage V of arm recovery and stage V of hand recovery
  - Stage III of arm recover and Stage VI of hand recovery
15. What is the correct sequence for the Development of Play?
- Creative play, symbolic play, exploratory play, games.
  - Symbolic play, exploratory play, creative play, games.
  - Exploratory play, creative play, symbolic play, games.
  - Exploratory play, symbolic play, creative play, games.
16. You observe a client who has sustained a CVA don a shirt, and notice that the client is having trouble buttoning the shirt when the gaze is directed away from the task. What possible behavioral deficit would you suspect from this observation?
- Spatial-relation difficulties
  - Ideational apraxia
  - Ideomotor apraxia
  - Astereognosis
17. Autonomic dysreflexia is a dangerous complication that can occur in individuals who have sustained a spinal cord injury. Above what level of injury is this phenomenon MOST likely to be a concern?
- C4-C6
  - T4-T6
  - T10-T12
  - C7-T2
18. At this stage a child asks "Can I do things myself or am I reliant on the help of others". Gaining a sense of personal control over the world is important at this stage of development. According to Erickson's stage of psychosocial development, the child is experiencing
- Trust vs Mistrust
  - Autonomy vs Shame/doubt
  - Initiative vs guilt
  - Identity vs confusion

19. Providing 'logical' explanations for irrational behaviour motivated by unacceptable unconscious wishes is
- Intellectualization
  - Displacement
  - Rationalization
  - Acting out
20. What is the average head circumference of a normal term newborn?
- 33-38 cm
  - 33-40 cm
  - 30-38 cm
  - 30-36 cm
21. What is the stimulus for righting reaction?
- Weight shifting
  - Stroking
  - Joint compression
  - Slow rhythmic movement
22. A description of the type, amount and direction of motion; does not include the forces producing the motion is called
- Kinetics
  - Kinematics
  - Speed
  - Dynamics
23. Which of the following tendons are inflamed or involved in the De Quervains tenosynovitis?
- ECRL and APB
  - APL and EPB
  - FPL and EPB
  - FPL and APL
24. The failure to release acetylcholine at the neuromuscular junction is the causes of
- Myasthenia Gravis
  - Guillain- Barre syndrome
  - Lambert-Eaton syndrome
  - Locked-in syndrome
25. One of the benefits of keeping an infant in side-lying position in the early stages of life is
- Improves head control
  - Better view of the surrounding
  - Shapes the head
  - Encourages hands to be brought together in midline

26. World Occupational Therapy Day is observed on
- 8<sup>th</sup> September
  - 27<sup>th</sup> October
  - 1<sup>st</sup> December
  - 3<sup>rd</sup> December
27. Slow pain which is a burning sensation that has a slow onset, greater persistence and a less clear location results from the activation of fibres:
- C
  - A- alpha
  - B
  - A- delta
28. Which of the following is an intrinsic muscle of the hand?
- Flexor carpi ulnaris
  - Extensor digiti minimi
  - Adductor pollicis
  - Pronator teres
29. 'Night stick fracture is a fracture of
- Shaft of radius
  - Shaft of tibia
  - Shaft of fibula
  - Shaft of ulna
30. After working for several hours as a mechanic, a patient describes sharp elbow pain over the origin point of the common extensor tendon of the wrist extensors. The pain is alleviated with rest. Which of the following disorders is MOST likely present?
- Medial epicondylitis
  - Lateral epicondylitis
  - Anconeus tendonitis
  - Olecranon bursitis

**PART II – Short Answer Questions [20 marks]**

**This part has 4 Short Answer Questions. Answer ALL the questions. Each question carries 5 marks.**

Write short note on the following. Illustrate wherever necessary:

1. Define primitive reflex and describe any four primitive reflexes.
2. Describe stages of development of oro-motor functions.
3. Describe Brunnstrom's stages of arm recovery.
4. Describe briefly the types of spinal cord injury.

**SECTION B: Case Study [50 marks]**

**Choose either CASE I OR CASE II from this section. Each case study carries 50 marks. Mark for each sub-question is indicated in the brackets.**

**CASE I**

Drolkar is 35 years old woman who was diagnosed with schizophrenia when she was 29. Drolkar had completed her degree prior to her diagnosis. During her days in the university, she was convinced that someone was poisoning her. She made frequent trips to student health. While she did not have a large circle of friends, as she became increasingly delusional, she isolated herself from her friends. Drolkar's parents informed that they are admitting her to a hospital. She was relieved that someone saw what was really going on. However, on admission, she realized she was on the psychiatric floor and was convinced that someone was plotting against her.

After 6 months in a psychiatric facility, she felt better and was discharged. She took her medication and was able to settle in an apartment. She worked as receptionist in a saw mill but continued to feel that her co-workers in the office were plotting against her. Soon after, Drolkar was fired from her job, and with no money, she was evicted from her apartment and she lived on streets. She gave up her medications after experiencing strong side effects. After discontinuing her medicines, she became increasingly distraught. Thinking that aliens were going to infiltrate her body, she tried to jump from an overpass. Her shirt got caught on the fence and the police took her back to the hospital.

1. List the problems and goals of your Interventions for Drolkar. (10 marks)
2. What approaches can be used for Drolkar's Interventions. (5 marks)
3. What is Group? Describe different types of Group. (5 marks)
4. Describe different Types of Schizophrenia? (5 marks)
5. Explain the types of Delusion Drolkar went through. (5 marks)
6. What are negative symptoms of schizophrenia? (5 marks)
7. Describe 4 A's of Bleuler. (5 marks)
8. What challenges would make intervening or assessing a client like Drolkar difficult? (5 marks)
9. Describe ego defence mechanism. (5 marks)

**CASE II**

Tashi is a 5 years old boy with athetoid quadriplegic cerebral palsy (CP) who is planning to join school in 2 months. Tashi is non-verbal, however, he responds appropriately when confronted with verbal requests from his mother and family members. Tashi was assessed by a speech language pathologist (SLP) and the results of the assessment suggested that he has very good receptive language skills. He was therefore recommended AlphaTalker augmentative communication (AAC) device to augment his lack of speech. He has begun training with AAC device, however, his ability to control his fine and gross motor movements are poor. He experiences trouble with isolating finger movements and finds it difficult to target the keys on the AAC device. Similarly, ADLs requiring fine motor coordination have been a great challenge for Tashi and he relies on his mother for most of the activities.

Tashi's mother is worried that if he cannot communicate in school, he will not be able to keep up with his classmates academically, be not included in the classroom setting because of his disabilities and at the same time worried about his accessibility to his school and classroom.

1. List the possible problems and identify the goals for Tashi. (10 marks)
2. Plan Intervention programs for Tashi. (5 marks)
3. Describe Hand Functions. (5 marks)
4. Describe the types of Cerebral palsy. (5 marks)
5. What are the risk factors for cerebral palsy? (5 marks)
6. List 5 standardized assessment tools that can be used for Tashi. (2.5 marks)
7. Advise modifications to facilitate Tashi's inclusion in the school/classroom. (5 marks)
8. What are early signs of cerebral palsy? (2.5 marks)
9. Discuss the importance of seating for a child like Tashi. How is postural control related to his ability to exercise control over his environment? (5 marks)
10. Define athetosis and which part of the brain is involved in Athetoid Cerebral palsy? (3 marks)
11. What is augmentative and alternative communication? (2 marks)

**TASHI DELEK**