

Exam Code: 509701

Paper Code: 1196

Programme: Bachelor of Science (Medical Laboratory Technology)

Semester- I

Course Title: Basics of Human Physiology-I

Course code: BMLL-1483

Time Allowed: 3 Hours

Max marks: 70

Note: Attempt five questions, selecting one question from each section. The fifth question may be attempted from any section. All questions carry 14 marks. Draw neat and well labelled diagrams wherever required.

Section A

1. Explain in detail principal parts of brain and its functions.
2. a) What is brain stem. State its functions.
b) Differentiate action potential from resting membrane potential.

Section B

3. Explain in detail sympathetic nervous system and its functions.
4. Discuss divisions of autonomic nervous system in detail.

Section C

5. Discuss in detail electrical and biochemical events in muscle contraction.
6. a) Explain role of biomolecules in muscle contraction.
b) Discuss Cori's cycle in detail.

Section D

7. a) Describe role of hemoglobin in regulation of respiration.
b) Discuss in detail blood clotting and bleeding time.
8. Discuss in detail pulmonary and systemic circulation. Give functions of blood.

Exam Code: 509701

Paper Code: 1197

Programme: Bachelor of Science (Medical Laboratory Technology)

Semester- I

Course Title: Basics of Human Anatomy-I

Course code: BMLL-1484

Time Allowed: 3 Hours

Max marks: 70

Note: Attempt five questions, selecting atleast one question from each section. The fifth question may be attempted from any section. All questions carry 14 marks. Draw diagrams wherever necessary.

Section-A

1. Describe in detail the histology of bone tissue. 14
2. a) What is joint? Explain various types of joints along with diagrams. 10
b) Explain the process of fracture repair. 4

Section-B

3. Explain in detail the microscopic anatomy of skeletal muscle fibers. 14
4. a) What is neuromuscular junction? 7
b) Describe the anatomy of cardiac muscles using well labelled diagram. 7

Section-C

5. Explain human arterial system. 14
6. Describe the internal structure of heart with the help of diagram. 14

Section-D

7. Explain the anatomy of Human respiratory System. 14
8. a) Discuss the structural components of Alveolus. 7
b) What are olfactory receptors? Explain in detail. 7

Exam Code: 509701

Paper Code: 1198

Programme: Bachelor of Science (Medical Laboratory Technology)

Semester: I

Course Title: Principles of Biochemistry

Course Code: BMLL-1485

Time Allowed: 3 Hours

Max Marks: 70

Note: Attempt five questions in all, selecting at least one question from each section. Fifth question can be attempted from any section. Each question carries 14 marks. Draw diagrams wherever necessary.

Section: A

1. A. Draw the structures of Glucose, Galactose and Sucrose. (7)
B. What are Disaccharides? Explain briefly. (7)
2. Write a detailed note on polysaccharides with examples and their functions. (14)

Section B

3. A. Describe the Watson and Crick model of DNA. (10)
B. Differentiate between Purine and pyrimidine. (4)
4. A. Write a note on phospholipids. (7)
B. What are fats? Explain how they are formed? (7)

Section C

5. What are amino acids? Classify them. (14)
6. Give a detailed note on protein structure at various levels. (14)

Section D

7. Write a detailed note on vitamins, its types and functions. (14)
8. What is enzyme inhibition? Discuss its various types. (14)

Paper Code: 1105

Programme	Exam Code	Course Code
Bachelor of Arts	121201	BARL-1031
Bachelor of Science (Medical)	121301	BSML-1031
Bachelor of Science (Non-Medical)		BSNL-1031
Bachelor of Science (Computer Science)		BCSL-1031
Bachelor of Science (Economics)		BECL-1031
Bachelor of Science (Medical Laboratory Technology)	509701	BMLL-1031
Bachelor of Commerce	121101	BCRL-1031
Bachelor of Business Administration	121701	BBRL-1031
Bachelor of Business Administration (Airlines and Airport Management)	509501	BBML-1031
Bachelor of Arts (Journalism and Mass Communications)	116401	BJML-1031
Bachelor of Science (Fashion Designing)	119601	BFDL-1031
Bachelor of Science (Home Science)	119701	BHSL-1031
Bachelor of Computer Applications	117901	BCAL-1031
Bachelor of Science (Information Technology)	118001	BITL-1031
Bachelor of Science (Bio-Technology)	120601	BBTL-1031

Semester-I

Course Title: Basic Punjabi

(50)

Time Allowed: 3 Hours

Max Marks: 70

ਨੋਟ:- ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹਨ। ਹਰੇਕ ਭਾਗ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਅੰਕ 14 ਹਨ।

ਸੈਕਸ਼ਨ 1

1. ਲਗਾਂ ਮਾਤਰਾਵਾਂ ਤੋਂ ਕੀ ਭਾਵ ਹੈ ਸੰਖੇਪ ਜਾਣਕਾਰੀ ਦਿਓ।
2. ਲਗਾਖਰ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿੰਦੇ ਹੋਏ ਉਦਾਹਰਨਾਂ ਸਹਿਤ ਜਾਣਕਾਰੀ ਦਿਓ।

ਸੈਕਸ਼ਨ 2

3. ਸੰਯੁਕਤ ਸ਼ਬਦ ਤੋਂ ਕੀ ਭਾਵ ਹੈ ਉਦਾਹਰਣ ਸਹਿਤ ਬਿਆਨ ਕਰੋ।
4. ਪਿਛੇਤਰ ਦੀ ਪਰਿਭਾਸ਼ਾ ਦਿੰਦੇ ਹੋਏ ਕੋਈ ਪੰਜ ਪਿਛੇਤਰ ਬਣਾਓ।

ਸੈਕਸ਼ਨ 3

5. ਵਪਾਰ ਨਾਲ ਸੰਬੰਧਿਤ ਕੋਈ 10 ਸ਼ਬਦ ਲਿਖੋ।
6. ਕੋਈ ਦਸ ਰਿਸ਼ਤਿਆਂ ਦੇ ਨਾਮ ਲਿਖੋ।

ਸੈਕਸ਼ਨ 4

7. ਹਫ਼ਤੇ ਦੇ ਸੱਤ ਦਿਨਾਂ ਦੇ ਨਾਮ ਲਿਖੋ।
8. ਰੁੱਤਾਂ ਦੇ ਨਾਮ ਲਿਖੋ।

Paper Code: 1108

Programme	Exam Code	Course Code
Bachelor of Arts	121201	BARL-1431
Bachelor of Science (Non-Medical)	121301	BSNL-1431
Bachelor of Science (Medical)		BSML-1431
Bachelor of Science (Economics)		BECL-1431
Bachelor of Science (Computer Science)		BCSL-1431
Bachelor of Science (Medical Laboratory Technology)	509701	BMLL-1431
Bachelor of Commerce	121101	BCRL-1431
Bachelor of Business Administration	121701	BBRL-1431
Bachelor of Business Administration (Airlines and Airport Management)	509501	BBML-1431
Bachelor of Arts (Journalism and Mass Communication)	116401	BJML-1431
Bachelor of Science (Fashion Designing)	119601	BFDL-1431
Bachelor of Science (Home Science)	119701	BHSL-1431
Bachelor of Computer Applications	117901	BCAL-1431
Bachelor of Science (Information Technology)	118001	BITL-1431
Bachelor of Science (Bio-Technology)	120601	BBTL-1431

Semester-I

**Course Title: Punjab History and Culture
(50)**

Time Allowed: 3 Hours

Max Marks: 70

Candidates shall attempt 5 questions in 800 words each by selecting atleast one question from each section and the 5th question may be attempted from any of the four Sections. Each question carries 14 marks.

Section-A

1. Discuss the physical features of the Punjab. What were social, economic and religious effects of those features?
2. Describe the literary and Archaeological sources of the ancient history of Punjab.

Section-B

3. Study the Social and economic life of people of Indus Valley People.
4. Discuss the various theories regarding original home of Aryans in Punjab.

Section-C

5. Briefly describe the religious life of people of Rig Vedic Age?
6. Briefly describe the economic life of people of Later Vedic Age?

Section-D

7. What is the contribution of Mahatma Buddha.
8. Discuss the contribution of Mahavir Swami.

Hindi Version

भाग-1

1. पंजाब की भौतिक विशेषताओं पर चर्चा करें। उन विशेषताओं के सामाजिक, आर्थिक और धार्मिक प्रभाव क्या थे?
2. पंजाब के प्राचीन इतिहास की साक्षरता एवं पुरातात्विक स्त्रोतों का वर्णन करें।

भाग-2

3. सिंधु घाटी के लोगों के सामाजिक और आर्थिक जीवन का अध्ययन करें।
4. पंजाब में आर्यों के मूल निवास स्थान के संबंध में विभिन्न सिद्धांतों पर चर्चा करें।

भाग-3

5. ऋग्वैदिक युग के लोगों के धार्मिक जीवन का संक्षेप में वर्णन करें?
6. उत्तर वैदिक युग के लोगों के आर्थिक जीवन का संक्षेप में वर्णन करें?

भाग-4

7. महात्मा बुद्ध का योगदान क्या है?
8. महावीर स्वामी के योगदान की चर्चा करें।

Programme	Exam Code	Course Code
Bachelor of Arts (Journalism and Mass Communications)	116401	BJML-1421
Bachelor of Science (Fashion Designing)	119601	BFDL-1421
Bachelor of Science (Home Science)	119701	BHSL-1421
Bachelor of Computer Applications	117901	BCAL-1421
Bachelor of Science (Information Technology)	118001	BITL-1421
Bachelor of Science (Bio-Technology)	120601	BBTL-1421
Bachelor of Science (Medical Laboratory Technology)	509701	BMLL-1421

Semester-I

**Course Title Punjabi (Compulsory)
(180)**

Time Allowed: 3 Hours

Max Marks: 70

ਨੋਟ :- ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰੋ। ਹਰ ਸੈਕਸ਼ਨ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿੱਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਸਾਰੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਅੰਕ ਬਰਾਬਰ ਹਨ।

ਸੈਕਸ਼ਨ-ਏ

1. ਹੇਠ ਲਿਖੀਆਂ ਕਾਵਿ ਸਤਰਾਂ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰੋ:-

(ੳ) ਮਾਂ ਵਰਗਾਂ ਘਣ-ਛਾਵਾਂ ਬੂਟਾ, ਮੈਨੂੰ ਨਜ਼ਰ ਨਾ ਆਏ।

ਲੈ ਕੇ ਜਿਸ ਤੋਂ ਛਾਂ ਉਧਾਰੀ, ਰੱਬ ਨੇ ਸੁਰਗ ਬਣਾਏ।

ਬਾਕੀ ਕੁੱਲ ਦੁਨੀਆਂ ਦੇ ਬੂਟੇ, ਜੜ੍ਹ ਸੁੱਕਿਆਂ ਮੁਰਝਾਂਦੇ,

ਐਧਰ ਫੁੱਲਾਂ ਦੇ ਮੁਰਝਾਇਆਂ, ਇਹ ਬੂਟਾ ਸੁੱਕ ਜਾਏ।

(ਅ) ਮੈਲੀ ਜਿਹੀ ਸਿਆਲ ਦੀ ਉਹ ਪੁੰਦਲੀ ਸਵੇਰ ਸੀ

ਸੂਰਜ ਦੇ ਚੜ੍ਹਤ 'ਚ ਹਾਲੇ ਬੜੀ ਦੇਰ ਸੀ

ਪਿਤਾ ਪਰਦੇਸ਼ ਗਿਆ ਜਦੋਂ ਪਹਿਲੀ ਵੇਰ ਸੀ

ਮੇਰੀ ਮਾਂ ਦੇ ਨੈਣਾਂ ਵਿੱਚ ਹੰਝੂ ਤੇ ਹਨੇਰ ਸੀ

2. 'ਆਖਾਂ ਵਾਰਸ ਸ਼ਾਹ ਨੂੰ' ਕਵਿਤਾ ਦਾ ਵਿਸ਼ਾ ਵਸਤੂ ਸਪਸ਼ਟ ਕਰੋ।

ਸੈਕਸ਼ਨ ਬੀ

3. 'ਬੇਬੇ ਰਾਮ ਭਜਨੀ' ਇਕਾਂਗੀ ਦਾ ਵਿਸ਼ਾ ਵਸਤੂ ਸਪਸ਼ਟ ਕਰੋ।

4. 'ਮਨ ਦੀਆਂ ਮਨ ਵਿੱਚ' ਇਕਾਂਗੀ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।

ਸੈਕਸ਼ਨ ਸੀ

5. ਹੇਠ ਲਿਖੀਆਂ ਵਿੱਚੋਂ ਕਿਸੇ ਇੱਕ ਵਿਸ਼ੇ 'ਤੇ ਧੋਰਾਂ ਰਚਨਾ ਕਰੋ:

(ੳ) ਵਾਤਾਵਰਨੀ ਪ੍ਰਦੂਸ਼ਣ

(ਅ) ਔਰਤਾਂ ਵਿਰੁੱਧ ਅਪਰਾਧ

(ੲ) ਨੈਤਿਕ ਸਿੱਖਿਆਂ ਦੀ ਲੋੜ

6. ਕਿਸਾਨਾਂ ਦਾ ਪ੍ਰਮੁੱਖ ਕਿੱਤਾ ਭਾਵੇਂ ਖੇਤੀਬਾੜੀ ਕਰਨਾ ਹੈ, ਫਿਰ ਵੀ ਉਹ ਆਪਣੀ ਲੋੜ ਲਈ ਵਿਹਲੇ ਸਮੇਂ ਅਜਿਹੇ ਕਾਰਜ ਵੀ ਕਰਦੇ ਹਨ ਜਿਨ੍ਹਾਂ ਵਿੱਚ ਕਮਾਲ ਦੀ ਕਲਾਕਾਰੀ ਸਮਾਈ ਹੁੰਦੀ ਹੈ। ਜਿਵੇਂ ਸੁਣ ਅਤੇ ਸੁਤ ਦੀਆਂ ਰੱਸੀਆਂ-ਰੱਸੇ ਵੱਟਣੇ, ਮੰਜੇ-ਪੀੜ੍ਹੀਆਂ ਬੁਣਨੀਆਂ, ਤੰਗੜ-ਤੰਗੜੀਆਂ ਅਤੇ ਟੋਕਰੇ-ਟੋਕਰੀਆਂ ਬਣਾਉਣਾ ਆਦਿ। ਇਸੇ ਤਰ੍ਹਾਂ ਸੁਆਣੀਆਂ ਦੁਆਰਾ ਵਿਹਲੇ ਸਮੇਂ ਵਿੱਚ ਦਰੀਆਂ, ਖੇਸ ਬਣਾਉਣੇ, ਚਾਦਰਾਂ-ਸਰਾਹਣੇ ਕੱਢਣੇ ਆਦਿ ਵੀ ਇੱਕ ਹਿਸਾਬ ਨਾਲ ਲੋਕ-ਕਿੱਤਾ ਹੀ ਹੈ ਭਾਵੇਂ ਇਸ ਨੂੰ ਸੰਪੂਰਨ ਕਿੱਤੇ ਦਾ ਦਰਜਾ ਨਹੀਂ ਦਿੱਤਾ ਜਾ ਸਕਦਾ ਅਤੇ ਨਾ ਹੀ ਇਹ ਵਸਤਾਂ ਵੇਚਣ ਲਈ ਬਣਾਈਆਂ ਜਾਂਦੀਆਂ ਹਨ। ਇਨ੍ਹਾਂ ਕਿੱਤਿਆਂ ਦਾ ਸੰਬੰਧ ਆਪਣੀਆਂ ਘਰੇਲੂ ਲੋੜਾਂ ਦੀ ਪੂਰਤੀ ਨਾਲ ਹੁੰਦਾ ਹੈ।

ਉਪਰੋਕਤ ਧੋਰੇ ਨੂੰ ਪੜ੍ਹ ਕੇ ਹੇਠ ਲਿਖੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਦਿਓ:

(ੳ) ਕਿਸਾਨ ਵਿਰਲੇ ਸਮੇਂ ਵਿੱਚ ਕਿਹੜੇ-ਕਿਹੜੇ ਕਾਰਜ ਕਰਦੇ ਹਨ?

(ਅ) ਸੁਆਣੀਆਂ ਕਿਹੜੇ ਕੰਮ ਕਰਦੀਆਂ ਹਨ?

(ੲ) ਲੋਕ ਕਿੱਤਿਆਂ ਤੋਂ ਕੀ ਭਾਵ ਹੈ?

(ਸ) ਲਕੀਰੇ ਸ਼ਬਦਾਂ ਦੇ ਅਰਥ ਲਿਖੋ।

(ਹ) ਪੈਰੂ ਦਾ ਦੁੱਕਵਾਂ ਸਿਰਲੇਖ ਲਿਖੋ।

ਸੈਕਸ਼ਨ ਡੀ

7. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਟਕਸਾਲੀ ਰੂਪ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੰਦੇ ਹੋਏ ਭਾਸ਼ਾ ਅਤੇ ਉਪਭਾਸ਼ਾ ਵਿਚਲਾ ਅੰਤਰ ਸਪਸ਼ਟ ਕਰੋ।
8. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੇ ਵਿਕਾਸ ਪੜਾਵਾਂ ਉੱਪਰ ਨੋਟ ਲਿਖੋ,

Paper Code: 1114

Programme	Exam Code	Course Code
Bachelor of Arts (Journalism and Mass Communication)	116401	BJMM-1102
Bachelor of Science (Fashion Designing)	119601	BFDM-1102 ✓
Bachelor of Science (Home Science)	119701	BHSM-1102
Bachelor of Computer Applications	117901	BCAM-1102 ✓
Bachelor of Science (Information Technology)	118001	BITM-1102 ✓
Bachelor of Science (Bio-Technology)	120601	BBTM-1102
Bachelor of Science (Medical Laboratory Technology)	509701	BMLM-1102
Bachelor of Vocation (Retail Management)	122001	BVRM-1102 ✓
Bachelor of Vocation (Animation)	112801	BVAM-1102 ✓
Bachelor of Vocation (Nutrition and Dietetics)	510011	BVNM-1102 ✓
Bachelor of Vocation (Beauty and Wellness)	112601	BVBM-1102 ✓
Bachelor of Vocation (Artificial Intelligence and Data Science)	112901	BVIM-1102 ✓
Bachelor of Vocation (Hospitality and Tourism)	113001	BVHM-1102 ✓

Semester I

**Course Title: Communication Skills in English
(400)**

Time Allowed: 3 Hours

Total Marks: 50

Note: The candidates will have to attempt five questions in all selecting one from each section and the fifth question from any of the four sections. Each question will carry 10 marks.

Section – A

1. Describe the PSQ5R model of reading.
2. Describe the three different kinds of purposes of reading.

Section – B

3. Read the following passage and answer the questions in multiple choice form mark (Tick) in front of the right answer:

In the workplace, the relationship between a mentor and a mentee is much like that between a teacher and a student. Mentors play a crucial role not just by sharing knowledge, but also by guiding mentees through their

career paths, much like teachers guide students through their education. A good mentor helps a mentee develop professionally and personally, offering support and advice based on their own experiences. This support is critical, as it can determine the success or failure of the mentee in their professional life. Like good teachers, successful mentors need to have strong personal qualities—they need to be understanding, patient, and empathetic. These traits allow them to be not just instructors, but also role models.

1. Mentors are important to mentees because they:

- A. Provide only technical knowledge.
- B. Focus solely on professional growth.
- C. Support both personal and professional development.
- D. Function as administrative figures.

2. The central idea of the passage is that:

- A. Mentorship and knowledge sharing are unrelated.
- B. A mentor's personal qualities significantly impact their effectiveness.
- C. Professional development does not require personal support.
- D. Mentors are similar to corporate leaders.

3. Why does the passage emphasize the mentor's personal qualities?

- A. Because it ensures a higher salary.
- B. Because it makes the mentor more authoritative.
- C. Because it affects the mentor's ability to guide effectively.

D. Because it is less important than professional knowledge.

4. According to the passage, what role does a mentor fulfill that is similar to a teacher's?

A. Giving lectures and presentations.

B. Guiding and shaping the mentee's career and character.

C. Evaluating performance strictly.

D. Setting professional standards.

5. Give a suitable title.

4. Read the following passage carefully and answer the question the follow:

A woman entered a bustling coffee shop dressed in a business suit and was immediately greeted warmly by a server who assumed she was a high-profile business

executive. She was promptly shown to the best seat in the house and given the special menu reserved for VIP guests. She browsed the menu but ordered only a coffee. As she sat sipping her drink, she observed the staff bustling about, largely ignoring other customers who were dressed more casually.

After some time, she called over the manager and asked why there was a difference in how customers were treated based on their attire. She explained that she had visited the same coffee shop a few days earlier wearing casual clothes and had received quite indifferent service. Her purpose today was to see if her dressing would influence the service she received. Upon making her point clear, she left a generous tip for the server but chose not to purchase more than a coffee.

1. Why did the server immediately greet the woman warmly?

2. Why was she given the special menu?
3. Why did the woman question the manager about the service?
4. What was the woman's reason for visiting the coffee shop again in a business suit?
5. What is the moral of the story?

Section – C

5. Write a letter to a store manager complaining about a pair of shoes you recently bought. Ask for a refund on the purchase.
6. Write a letter to thank your aunt for the thoughtful birthday gift she sent you. Express how much you liked the gift and how you plan to use it.

Section – D

7. Compose a notice to inform students about a guest lecture on Interview Skills.

8. Draft the minutes for a meeting where teachers discussed an upcoming college event and assigned tasks to different students.