

Paper Code: 4102

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4031 ✓
Bachelor of Science (Non-Medical)	121304	BSNL-4031 ✓
Bachelor of Science (Medical)		BSML-4031 ✓
Bachelor of Science (Economics)		BECL-4031
Bachelor of Science (Computer Science)		BCSL-4031 ✓
Bachelor of Commerce	121104	BCRL-4031
Bachelor of Business Administration	121704	BBRL-4031

Semester- IV

Course Title: Basic Punjabi

(40)

Time Allowed: 3 Hours

Max Marks: 80

ਨੋਟ: ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹਨ। ਵਿਦਿਆਰਥੀ ਨੇ ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ, ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ (16) ਅੰਕ ਹਨ।

ਭਾਗ-ਪਹਿਲਾ

- ਹੇਠ ਲਿਖੀਆਂ ਕਾਵਿ-ਸਤਰਾਂ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰੋ।
ਕਮਦਿਲਾਂ ਨੂੰ ਦਿਲ, ਨਪਰਿਆਂ ਪਰ ਦਈਂ।

ਯਾ ਖੁਦਾ ਸਭ ਬੇ-ਘਰਾਂ ਨੂੰ ਘਰ ਦਈਂ।
 ਹਰ ਸੁਹਾਗਣ ਦਾ ਰਹੇ ਜ਼ਿੰਦਾ ਸੁਹਾਗ
 ਉਮਰ ਲੰਘਦੀ ਜਾ ਰਹੀ ਨੂੰ ਵਰ ਦਈਂ
 ਤੋਤਲੇ ਬੋਲਾਂ ਦਾ ਰਾਖਾ ਖੁਦ ਬਣੀ,
 ਖੌਫ਼ ਹਰ ਕਾਤਿਲ ਤੇ ਸੀਨੇ ਭਰ ਦਈਂ।

2. ਹੇਠ ਲਿਖੀਆਂ ਕਾਵਿ-ਸਤਰਾਂ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰੋ।
 ਹੁਣ ਘਰਾਂ ਨੂੰ ਪਰਤਣਾ ਮੁਸ਼ਕਿਲ ਬੜਾ ਹੈ
 ਕੌਣ ਪਹਿਚਾਣੇਗਾ ਸਾਨੂੰ
 ਮੱਥੇ ਉੱਤੇ ਮੌਤ ਦਸਖਤ ਕਰ ਗਈ ਹੈ
 ਚਿਹਰੇ ਉੱਤੇ ਯਾਰ ਪੈੜਾਂ ਛੱਡ ਗਏ ਨੇ
 ਸ਼ੀਸ਼ੇ ਵਿਚੋਂ ਹੋਰ ਕੋਈ ਝਕਦਾ ਹੈ
 ਅੱਖਾਂ ਵਿਚ ਕੋਰੀ ਲਿਸ਼ਕ ਹੈ।

ਭਾਗ-ਦੂਸਰਾ

3. ਡਾ. ਜਗਤਰ ਦੀ ਕਵਿਤਾ 'ਰੋਸ਼ਨੀ ਦਾ ਦੌਰ' ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ।
4. ਮੋਹਨ ਸਿੰਘ ਦੀ ਕਵਿਤਾ 'ਸੈਦਾ ਤੇ ਸਬਜ਼ਾਂ' ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ।

ਭਾਗ-ਤੀਜਾ

5. ਕਵੀ ਪਾਸ਼ ਦੇ ਜੀਵਨ ਅਤੇ ਰਚਨਾਵਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।
6. ਕਵੀ ਮੋਹਨ ਸਿੰਘ ਦੇ ਜੀਵਨ ਰਚਨਾਵਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ।

ਭਾਗ-ਚੌਥਾ

7. ਹੇਠ ਲਿਖੇ ਅਸ਼ੁੱਧ ਸ਼ਬਦਾਂ ਨੂੰ ਸੁੱਧ ਕਰਕੇ ਲਿਖੋ।
ਸਬਦ, ਨੋਕਰੀ, ਔਖੀ, ਨਿਪੁਨਸਕ ਬੰਦਾ, ਕਿੱਕਰਾ ਦੇ ਫੁੱਲ,
ਸੈਕਰੇਟਰੀ, ਗੁਰੂ ਆਮਰਦਾਸ ਜੀ, ਆਮਾਨਤ, ਗੋਰਵ।
8. ਹੇਠ ਲਿਖੇ ਅਸ਼ੁੱਧ ਸ਼ਬਦਾਂ ਨੂੰ ਸੁੱਧ ਕਰਕੇ ਲਿਖੋ।
ਅਸਕੇ, ਪੋੜੀ ਚੜ, ਕੋਲੀ ਫੜ, ਚੋਲ ਖਾ, ਗੋਲੀ, ਚਮਣ ਕੱਦੂ,
ਕਾਲਿਜ, ਬੱਸਾ ਚੱਲੀਆਂ, ਹਰਮੰਦਰ ਸਾਹਿਬ, ਸੀਸਾ।

Paper Code: 4101

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4421
Bachelor of Science (Non-Medical)	121304	BSNL-4421
Bachelor of Science (Medical)		BSML-4421
Bachelor of Science (Economics)		BECL-4421 ✓
Bachelor of Science (Computer Science)		BCSL-4421
Bachelor of Commerce	121104	BCRL-4421 ✓
Bachelor of Business Administration	121704	BBRL-4421 ✓

Semester- IV**Course Title: Punjabi (Compulsory)**

(160)

Time Allowed: 3 Hours**Max Marks: 80**

ਨੋਟ: ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ। ਹਰੇਕ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ (16) ਅੰਕ ਹਨ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

ਭਾਗ-ਓ

- 1) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਲਿਖੋ।

- 2) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਸਾਰ ਸੰਖੇਪ ਵਿੱਚ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ। (16 ਅੰਕ)

ਭਾਗ-ਅ

- 3) “ਫ਼ਾਸਲੇ” ਨਾਟਕ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਕੀ ਹੈ? ਸਪੱਸ਼ਟ ਕਰੋ।
4) “ਫ਼ਾਸਲੇ” ਨਾਟਕ ਦੀਆਂ ਨਾਟਕੀ ਜੁਗਤਾਂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ। (16 ਅੰਕ)

ਭਾਗ-ਬ

- 5) ਪੰਜਾਬ ਸਰਕਾਰ ਦੇ ਮੁੱਖ ਚੋਣ ਅਫ਼ਸਰ ਨੂੰ ਇੱਕ ਚਿੱਠੀ ਰਾਹੀਂ ਆਪਣੇ ਪਿੰਡ ਵਿੱਚ ਚੋਣਾਂ ਦਰਾਨ ਹੋਈਆਂ ਬੇਨਿਯਮੀਆਂ ਤੋਂ ਜਾਣੂ ਕਰਵਾਓ।
6) “ਗੁਆਚੇ ਦੀ ਭਾਲ” ਸੰਬੰਧੀ ਇਸ਼ਤਿਹਾਰ ਲਿਖੋ। (16 ਅੰਕ)

ਭਾਗ-ਸ

- 7) ਸ਼ਬਦ ਜੋੜਾਂ ਦੇ ਨਿਯਮਾਂ ਦਾ ਉਲੇਖ ਕਰੋ।
8) ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਸਪੱਸ਼ਟ ਕਰੋ। (16 ਅੰਕ)

FOR GAP YEAR STUDENTS (2023-24).

Paper Code: 9426.

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4421
Bachelor of Science (Non-Medical)	121304	BSNL-4421
Bachelor of Science (Medical)		BSML-4421
Bachelor of Science (Economics)		BECL-4421
Bachelor of Science (Computer Science)		BCSL-4421
Bachelor of Commerce	121104	BCRE-4421
Bachelor of Business Administration	121704	BBRL-4421

Semester- IV

Course Title: Punjabi (Compulsory)
(160)

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ। ਹਰੇਕ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ (8) ਅੰਕ ਹਨ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

ਭਾਗ-ੳ

- 1) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਲਿਖੋ।

- 2) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਸਾਰ ਸੰਖੇਪ ਵਿੱਚ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।

ਭਾਗ-ਅ

- 3) “ਫ਼ਾਸਲੇ” ਨਾਟਕ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਕੀ ਹੈ? ਸਪੱਸ਼ਟ ਕਰੋ।
4) “ਫ਼ਾਸਲੇ” ਨਾਟਕ ਦੀਆਂ ਨਾਟਕੀ ਜੁਗਤਾਂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ।

ਭਾਗ-ਬ

- 5) ਪੰਜਾਬ ਸਰਕਾਰ ਦੇ ਮੁੱਖ ਚੋਣ ਅਫ਼ਸਰ ਨੂੰ ਇੱਕ ਚਿੱਠੀ ਰਾਹੀਂ ਆਪਣੇ ਪਿੰਡ ਵਿੱਚ ਚੋਣਾਂ ਦਰਾਨ ਹੋਈਆਂ ਬੇਨਿਯਮੀਆਂ ਤੋਂ ਜਾਣੂ ਕਰਵਾਓ।
6) “ਗੁਆਚੇ ਦੀ ਭਾਲ” ਸੰਬੰਧੀ ਇਸ਼ਤਿਹਾਰ ਲਿਖੋ।

ਭਾਗ-ਸ

- 7) ਸ਼ਬਦ ਜੋੜਾਂ ਦੇ ਨਿਯਮਾਂ ਦਾ ਉਲੇਖ ਕਰੋ।
8) ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਸਪੱਸ਼ਟ ਕਰੋ।

Paper Code: 4103

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4431 ✓
Bachelor of Science (Non-Medical)	121304	BSNL-4431 ✓
Bachelor of Science (Medical)		BSML-4431 ✓
Bachelor of Science (Economics)		BECL-4431
Bachelor of Science (Computer Science)		BCSL-4431 ✓
Bachelor of Commerce	121104	BCCL-4431
Bachelor of Business Administration	121704	BBRL-4431

Semester- IV**Course Title: Punjab History and Culture****(30)****Time Allowed: 3 Hours****Max Marks: 80**

Note: Attempt five question, selecting at least one question from each section in 1000 words and the fifth question may be selected from any of the four section. Each question carries 16 marks.

Section-I

1. What contribution was made by Guru Har Gobind ji in the transformation of Sikhism?

2. What were the causes of martyrdom of Guru Teg Bahadur Ji?

Section-II

3. Discuss the main principles and significance of Khalsa Panth.
4. Discuss the circumstances which led to the creation of Khalsa in 1699.

Section-III

5. Explain the achievements of Banda Singh Bahadur.
6. Write a detailed note on Ahluwalia Misl and Ramgarhia Misl.

Section-IV

7. Write a note on Baisakhi and Diwali.
8. Discuss the military administration under Maharaja Ranjit Singh.

Hindi Version

सैक्शन-1

1. सिख धर्म के परिवर्तन में गुरु हर गोबिंद जी का क्या योगदान था?
2. गुरु तेग बहादुर जी की शहादत के क्या कारण थे?

सैक्शन-2

3. खालसा पंथ के प्रमुख सिद्धांतों और महत्व की चर्चा कीजिए।
4. उन परिस्थितियों की चर्चा कीजिए जिनके कारण 1699 में खालसा का निर्माण हुआ।

सैक्शन-3

5. बंदा सिंह बहादुर की उपलब्धियों का वर्णन कीजिए।
6. अहलूवालिया मिसल और रामगढ़िया मिसल पर एक विस्तृत टिप्पणी लिखिए।

सैक्शन-4

7. बैसाखी और दीवाली पर एक नोट लिखिए।
8. महाराजा रणजीत सिंह के अधीन सैन्य प्रशासन की चर्चा कीजिए।

Paper Code: 4104

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL -4212
Bachelor of Science (Medical)	121304	BSML -4212
Bachelor of Science (Non-Medical)		BSNL -4212
Bachelor of Science (Computer Science)		BCSL -4212
Bachelor of Science (Economics)		BECL -4212
Bachelor of Commerce	121104	BCRL -4212
Bachelor of Business Administration	121704	BBRL -4212

Semester - IV**Course Title: English (Compulsory)****Time Allowed: 3 Hours****Max Marks: 80****SECTION-A****Q1) Attempt any TEN questions. Each question carries 2 marks****(10X2= 20)**a) Put in *at, on or in*.

I've been invited to a wedding _____ 14 February.

b) Read the situation and make sentence using just *in time*.

A child ran into the road in front of your car. You saw the child at the last moment. (manage / stop)

c) Use *in, at or on*.

Where's the label? _____

d) Complete the sentences. Use *in, at or on + the following*:

The Plane	Prison
-----------	--------

Some people are _____ for crimes that they did not commit.

e) Put in *to/at/in/into* where necessary. If no preposition is necessary, leave the space empty.

I'm tired. Let's go _____ home now.

f) Write sentences about places you have been to. Use *I've been to* / *I've never been to* + *the words in bracket*.

(never) _____

g) Write sentences using *got + into / out of / on / off*.

You were walking home. A friend passed you in her car. She saw you, stopped and offered you a lift. She opened the door.

What did you do? _____

h) Complete the sentences using *by*.

Carl won the race. He was five metres in front of the other runners.

Carl _____

i) Complete the sentences with the correct *preposition*.

There are some differences _____ British and American English.

j) Complete the sentences using an *adjective + preposition*. Choose from:

Excited	Nervous
---------	---------

Are you _____ the exam?

k) Complete the second sentence so that it means the same as the first.
There were lots of tourists in the streets. The streets were crowded _____

l) Which is correct?

i. Can you explain this word to me?

ii. Can you explain me this word?

m) Put in the correct preposition after *care*. If no preposition is necessary, leave the space empty.

Who's going to take care _____ you when you are old?

n) Complete the sentence with *look for* or *look after*. Use the correct form of look (*looks/ looked/looking*).

I _____ for my keys, but I couldn't find them anywhere.

o) Complete the sentences using *hear or heard + a preposition* (*about/of/from*).

I'm surprised you haven't _____ her. She's quite famous.

SECTION – B

Q2) Attempt any one essay in about 400 words.

(1x10=10)

a) Does fashion industry needs to change?

OR

b) Is hunting an immoral act?

Q3) Give a single word for the phrases given below (any 5) (5x2=10)

- a) Government of the people, for the people, and by the people
- b) The right of self-government
- c) A man whose wife is dead
- d) To run away with lover in order to get married secretly
- e) Able to read
- f) Fit for food
- g) That which cannot be conquered
- h) Unable to die

SECTION – C

Q4) Give words that are similar in meaning:

(5x2=10)

- a) To become smaller
- b) The process of bringing water to agricultural land
- c) Regions or areas
- d) To use up something completely
- e) Needing many years to develop

Q5) Fill in the blanks by choosing the appropriate word: (5x2=10)

Fertile	Collapsed	Disrupt	Roots	Deteriorated	Arid
---------	-----------	---------	-------	--------------	------

- a) Irrigation can change _____ land into protective farmland.
- b) Mayan history shows how the pressure of human populations can _____ the natural ecology of a region and make it unlivable.
- c) Even though the earthquake was not very strong, some older buildings _____ and many others were badly damaged.
- d) The _____ of this plant do not reach deep into the soil. That's why it will not grow in regions with little rainfall.
- e) Weather forecasters are advising motorists not to drive today because conditions on the roads have _____ rapidly in the last two hours.

SECTION – D

Q6) Attempt any three questions in about 200 words each. (3x5=15)

- a) Explore the theme of control and power. Who seems to have control at different points in the poem *Porphyria's Lover*.
- b) Explore the symbolism of the "School," "Grain," and "Setting Sun." What might each represent in the poem *Because I Could Not Stop For Death*.
- c) Why does Frost repeat the line "And miles to go before I sleep"? What effect does this repetition have on the poem's ending and its meaning in the poem *Stopping by Woods on A Snowy Evening*?
- d) What does the poem reveal about human expectations after death in the poem *Ah! Are You Digging on my Grave*?
- e) Analyse the meaning of the final line: "The only emperor is the emperor of ice-cream." in the poem *Emperor of Ice-Cream*.

Q7) Explain any one the following with reference to the context in about 250 words. (1x5=5)

*"Because I could not stop for Death –
He kindly stopped for me –
The Carriage held but just Ourselves –
And Immortality"*

OR

*"Mistress, I dug upon your grave
To bury a bone, in case
I should be hungry near this spot
When passing on my daily trot.
I am sorry, but i quite forgot
It was your resting-place."*

Exam Code: 121704
(50)

Paper Code: 4238

Programme: Bachelor of Business Administration
Semester-IV

Course Title: Financial Management

Course Code: BBRL-4323 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note: Candidates are required to attempt five questions selecting one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section- A

1. 'Maximization of profits is regarded as the proper objective of investment decision, but is not as exclusive as maximizing shareholders wealth'. Comment.
2. Explain the meaning of term Capital Structure and mention the factors affecting the capital structure.

Section- B

3. The following is the capital structure of a company:

Source of capital	Book value	Market value
Equity shares @ Rs.100 each	8,00,000	16,00,000
9% Cumulative Preference shares @ Rs.100 each	2,00,000	2,40,000
11% Debentures	6,00,000	6,60,000
Retained earnings	4,00,000	-
	20,00,000	25,00,000

The current market price of company's equity shares is Rs.200. For the last year the company had paid equity dividend at 25% and its dividend policy is likely to grow 5% every year. The corporate tax rate is 30% and shareholders' personal income tax rate is 20%.

You are required to calculate:

- (i) Cost of each source of capital
 - (ii) Weighted average cost of capital on the basis of book value Weights
 - (iii) Weighted average cost of capital on the basis of market value weights
4. As a Finance manager of newly started joint stock company of large size, what various sources would you tap to raise funds required for its smooth running? Explain.

Section- C

5. What do you understand by capital budgeting process? Enumerate briefly major steps involved in capital budgeting.
6. Explain various factors which influence the dividend decision of a firm.

Section- D

7. What do you understand by working capital? Describe the need and determinants of working capital in a business.
8. What is operating leverage? Illustrate various formulas of operating leverage and explain in detail.

Exam Code: 121704
(50)

Paper Code: 4239

Programme: Bachelor of Business Administration
Semester-IV

Course Title: Production and Operations Management

Course Code: BBRL-4324 ✓

Time Allowed: 3 Hours

Max Marks: 80

Important Note: Attempt 5 questions each carry 16 marks. Attempt one question from each section. The fifth question may be attempted from any section.

Section-A

1. Discuss the production scheduling techniques in detail.
2. Discuss various factors affecting plant location decision.

Section- B

3. Discuss various factors affecting productivity of a firm in detail.
4. Discuss the concepts in detail:
 - a) Work study
 - b) Value Analysis.

Section -C

5. What do you mean by inventory management? Discuss classification of inventory.
6. Explain the concepts:
 - a) safety stock
 - b) Reorder level
 - c) Inventory control models

Section-D

7. Explain concept and components of supply chain management in detail.
8. Explain the concepts:
 - a) Total Quality Management
 - b) Just in Time Manufacturing Systems.

Exam Code: 121704
(50)

Paper Code: 4240

Programme: Bachelor of Business Administration
Semester-IV

Course Title: Business Environment

Course Code: BBRL-4325

Time Allowed: 3 Hours

Max Marks: 80

NOTE

- (i) The paper has four sections A, B, C and D.
- (ii) Attempt Five questions in all, selecting at least One question from each Section. The Fifth question may be attempted from any Section.
- (iii) All questions carry equal (16) marks.

SECTION - A

1. Outline and explain the different environmental factors that create a profound impact on business. Why should the business policy of a firm be dynamic?
2. Discuss techniques of environmental analysis. Explain the role of business manager in analysis and diagnosis of environment.

SECTION - B

3. Write short notes on:
 - a. SWOT Analysis
 - b. Environmental Threats and Opportunity Profile (ETOP)
4. What do you mean by Environmental Scanning? Explain the need, importance and process of Environmental Scanning.

SECTION - C

5. Explain objectives and strategies of Economic Planning of India.
6. Discuss Social Responsibilities of a business organisation.

SECTION - D

7. Write a short notes on:
 - a. Fiscal Policy of India
 - b. Salient features of FEMA
8. Explain the rationale, objectives and implications of disinvestment of Public Enterprises in India.

Exam Code: 121704
(50)

Paper Code: 4241

Programme: Bachler of Business Administration
Semester-IV

Course Title: Operations Research

Course Code: BBRL-4326

Time Allowed: 3 Hours

Max Marks: 80

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

SECTION-A

1. What is Operations Research? Briefly explain its Methodology and Techniques.
2. Solve the following LPP:
Minimise $Z = 6X_1 + 14X_2$
Sub. to $5X_1 + 4X_2 \geq 60$
 $3X_1 + 7X_2 \leq 84$
 $X_1 + 2X_2 \geq 18$
Where X_1 and $X_2 \geq 0$

SECTION-B

3. Solve the following Transportation problem and test its optimality:

W \ D	D1	D2	D3	D4	D5	Availability
W1	3	4	6	8	8	20
W2	2	10	0	5	8	30
W3	7	11	20	40	3	15
W4	1	0	9	14	16	13
Requirements	40	6	8	18	6	78

4. Five jobs are to be processed and five machines are available. Any machine can process any job with resulting profit (in rupees) as follows.

Job \ Machines	A	B	C	D	E
1	32	38	40	28	40
2	40	24	28	21	36
3	41	27	33	30	37
4	22	38	41	36	36
5	29	33	40	35	39

Find the assignment pattern that maximises the profits

SECTION-C

5. Write Short notes on :
- Meaning and Significance of Network Analysis
 - Probability of Completing the Project by Scheduled Date Date
6. The time estimates (in Weeks) for the activities of a PERT network are given below

Activity	Optimistic Time	Most Likely Time	Pessimistic Time
1-2	1	1	7
1-3	1	4	7
1-4	2	2	8
2-5	1	1	1
3-5	2	5	14
4-6	2	5	8
5-6	3	6	15

- Draw the project network and identify all paths.
- Determine the Slacks and Floats.
- What is the probability that the project will be completed
 - At least 4 weeks earlier than expected time.
 - No more than 4 weeks later than expected time.

SECTION-D

7. Solve the following game using sub-game method:

A \ B	1	2	3	4	5
1	-5	5	0	-1	8
2	8	-4	-1	6	-5

8. a) What is game theory? Explain its basic features and assumptions.

b) What is Inventory Control? Explain the EOQ model.

**Exam Code: 121704
(50)**

Paper Code: 4242

**Programme: Bachelor of Business Administration
Semester-IV**

Course Title: Fundamentals of Insurance

Course Code: BBRL-4327

Time Allowed: 3 Hours

Max Marks: 80

Note: Candidates are required to attempt five questions selecting one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section- A

1. "Insurance gives both social security and investment"
Discuss.
2. Write notes on:-
 - a. Principle of Utmost Good Faith.
 - b. Principle of Subrogation.
 - c. Principle of Indemnity.
 - d. Principle of Insurable Interest

Section- B

3. Explain the salient features of IRDA, 1999?

4. What is Marine Insurance? Discuss its importance and various types of marine insurance policies.

Section- C

5. Discuss in detail the process of Underwriting.
6. What is Re-insurance? Discuss the various essentials of reinsurance programs as per IRDA.

Section- D

7. Explain in detail agency regulations?
8. "Insurance specialist act as a bridge between clients and insurance companies". In light of above statement discuss the various types of insurance specialists.