

End Semester Examination, Dec 2018
B.A. (Applied Psychology) — First Semester
PSYCHOLOGY OF EVERYDAY LIFE-I (BAAP-101)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 How will you define psychology? Discuss in detail the various research methods used in psychology. **10**
- Q.2 Critically examine the theory of operant conditioning. **10**
- Q.3 What is the definition of memory? Explain the four ways through which forgetting happens. **10**
- Q.4 With special reference to Pavlov's experiment, examine the theory of classical conditioning. **10**
- Q.5 Explain the structure and function of the eye. **10**

PART-B

- Q.6 Write short notes on **(any two)** of the following:
- a) Theories of hearing.
 - b) Working memory.
 - c) Three grand issues of psychology.
- 5×2**

End Semester Examination, Dec. 2018
B. Sc. / B.A. (Applied Psychology)—First Semester
DEVELOPMENT OF PSYCHOLOGICAL THOUGHTS (BAAP-102)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-A is compulsory**. Attempt any **FOUR** questions from **PART-B**. Marks are indicated against each question.

PART-A

- Q.1 a) What do you mean by defence mechanism?
b) What is behaviorism?
c) Dream analysis was initially explored by _____
d) What was Carl Rogers contribution to psychology?
e) What are the different stages of Maslow's Need Hierarchy Model? **2×5**

PART-B

- Q.2 What are the different facets of psychoanalysis? Critically evaluate the concept of psychoanalysis. **10**
- Q.3 What are the different theories of learning? **10**
- Q.4 Describe the different concepts of client centered approach. **10**
- Q.5 What is psychophysics? What are the different methods of psychophysics? **10**
- Q.6 What is positive psychology? What are different areas of positive psychology? **10**

End Semester Examination, May 2018
B.A. (Applied Psychology)—First Semester
PHYSIOLOGICAL PSYCHOLOGY (BAAP-103)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANYFOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Illustrate and describe in detail the process of action potential. **10**
- Q.2 Name and describe in detail any two major divisions of the brain along with their respective structures. **10**
- Q.3 Discuss the structure and function of the visual sense organ. **10**
- Q.4 Discuss the physiological basis of memory. **10**
- Q.5 Discuss the process and theories of hearing. **10**
- Q.6 Trace the history of development of physiological psychology. **10**

PART-B

- Q.7 Write short notes on **any two** of the following:
- a) Any two brain imaging techniques.
 - b) Physiological basis of emotions.
 - c) Limbic system.
 - d) Theories of vision.
 - e) Sympathetic nervous systems.
- 5×2**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — First Semester
PHYSIOLOGICAL PSYCHOLOGY (BAAP-103)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- | | | |
|-----|--|-----------|
| Q.1 | Describe central nervous system. | 10 |
| Q.2 | Explain neuron and how does it functions. | 10 |
| Q.3 | Discuss the structure and function of auditory organs. | 10 |
| Q.4 | Trace the history of philosophical origin of physiological psychology. | 10 |
| Q.5 | Explain five neuroimaging techniques. | 10 |
| Q.6 | Explain different stages of sleep. | 10 |

PART-B

- Q.7 Write short notes on (**any two**) of the following:
- a) Hippocampus.
 - b) Hypothalamus.
 - c) Autonomic nervous system.
 - d) Draw and label structure of eye.
- 5×4**

End Semester Examination, Dec. 2018
B. Sc. / B.A. (Applied Psychology) — First Semester
ENVIRONMENTAL SCIENCE (BAAP-111)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Answer (**any four**) of the following:
- a) Why food chain is important for sustainability of ecological pyramid?
 - b) Define "Ecosystem" and list the various functions of ecosystem.
 - c) Why is there a need for public awareness related to environmental studies?
 - d) Discuss your role as a citizen of the nation to prevent water pollution
 - e) Discuss with an example, how climate change affects human health. **2½×4**
- Q.2
- a) What is deforestation? **5**
 - b) Discuss its causes and environmental impact in detail. **5**
- Q.3
- a) Define "Biodiversity" along with its types and what are the major threats to biodiversity? **5**
 - b) Differentiate between "In-Situ" and "Ex-Situ" conservation of biodiversity? **5**
- Q.4
- a) Discuss the effects of air pollution on living organism. **5**
 - b) What are some of the steps that you as an individual can take to prevent pollution? **5**
- Q.5
- a) What is sustainable development? **5**
 - b) With the help of examples for each, explain the 3Rs principle of waste management. **5**
- Q.6
- a) How can you implement the knowledge of environmental studies to your daily life for the conservation of natural resources? **5**
 - b) What is acid rain? Discuss its causes and effects in detail. **5**

PART-B

- Q.7 Answer the following questions:
- a) Define "Ecology".
 - b) What is meant by endangered animals?
 - c) Expand the term "HIV-AIDS".
 - d) What is green-house effect?
 - e) On which date "International ozone day" is celebrated? **2×5**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — First Semester
BASICS OF INFORMATION TECHNOLOGY (BAAP-117)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 What is the importance of information technology? **10**
- Q.2 List and explain the different components of computer hardware. **10**
- Q.3 In a table, explain the difference between system software and application software. **10**
- Q.4 Explain the different services that are provided by an operating system. **10**
- Q.5 What are the advantages of DBMS? Explain. **10**

PART-B

- Q.6 Write short notes on **(any two)** of the following:
- a) Internet, WWW and Search Engines.
 - b) Views of an operating system.
 - c) LAN, MAN and WAN.
 - d) Cortana in windows 10.
- 5×2**

End Semester Examination, Dec. 2018
 B. Sc. / B.A. (Applied Psychology) – First Semester
BASICS OF STATISTICS (BAAP-118)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

Q.1 What is statistics? What are the different utilities of statistics? **10**

Q.2 Calculate the Mean and SD from the following:

Sr. No	Class Interval	Frequencies
1	11-15	6
2	16-20	8
3	21-25	10
4	26-30	6
5	31-35	5

10

Q.3 Calculate the appropriate statistics from the following data and write the interpretation of the findings:

Group	
Population Mean	124
Sample Mean	100
SD	12
CR	At 0.05 – 2.36 At 0.01 – 1.66

10

Q.4 What is normal distribution curve and what are its characteristics? **10**

Q.5 What is data? What are the different methods of data presentation? **10**

Q.6 Calculate the Mean and SD from the following data: **10**

55	70	57	73	55	59	64	72
60	48	58	54	69	51	63	78
75	64	65	57	71	78	76	62
49	66	62	76	61	63	63	76
52	76	71	61	53	56	67	71

PART-B

Q.7 Answer of the following questions:

- a) Define statistics.
- b) What are the types of kurtosis?
- c) Who gave the concept of Normal Distribution?
- d) The t Test was given by _____
- e) Mode is _____

2×5

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — Second Semester
PSYCHOLOGY OF EVERYDAY LIFE-II (BAAP-201)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 What is intelligence? Explain in detail the various theories of intelligence. **10**
- Q.2 What is the nature of language? Explain the components of language development. **10**
- Q.3 How do stage theories and contextual theories account for adult development? **10**
- Q.4 Explain "Achievement Motivation" in detail. How is achievement motivation related to development of a country? **10**
- Q.5 Write short notes on the following:
a) Personality and job performance.
b) Personality and workplace. **5×2**
- Q.6 Delineate the biological basis of emotional experience and expression. **10**

PART-B

- Q.7 Critically analyze psychodynamic theories of development of personality. **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — Second Semester
STATISTICS (BAAP-202)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

Q.1 What are the advantages of diagrammatic and graphic presentation of data? **10**

Q.2 The following table shows the result of B.Com. students of a college for the last three years. Present the data by a suitable diagram.

2012	20	30	40	10
2013	30	50	20	20
2014	35	60	40	25

10

Q.3 State the formula of median for grouped data with class intervals. Calculate median for the following data:

X:	0-10	10-20	20-30	30-40	40-50
F:	12	18	20	25	23

10

Q.4 Two ladies were asked to rank 7 different types of hair colours. The ranks given by them are as follows:

Hair colours	A	B	C	D	E	F	G
Neelu	2	1	4	3	5	7	6
Neena	1	3	2	4	5	6	7

10

Q.5 Compute Spearman's rank correlation for the following observation:

Candidate	1	2	3	4	5	6	7	8
Judge X	20	22	28	23	30	30	23	24
Judge Y	28	24	24	25	26	27	32	30

10

Q.6 100 students appeared for an examination. The result of those who failed is given below:

Marks	5	10	15	20	25	30
No. of Students	4	6	8	7	3	2

If the average marks of all students were 68.6, find out average marks of those who passed.

10

PART-B

Q.7 Consider the following distribution:

X:	0-10	10-20	20-30	30-40	40-50
Y:	5	15	20	25	20

Compute mean and mode.

10

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — Second Semester
SOCIAL PSYCHOLOGY AND ITS APPLICATIONS (BAAP-203)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Describe the nature of social psychology and explain its relevance for budding psychologists. **10**
- Q.2 How we evaluate the social world around us? Describe the process of social perception. **10**
- Q.3 Describe the process of impression formation. **10**
- Q.4 Elucidate the process of attitude formation. What are the factors that affect attitude? **10**
- Q.5 How could we influence other's behavior? Describe the importance of symbolic social influence. **10**
- Q.6 Describe the nature and sources of prejudice. What are the ways to reduce it? **10**

PART-B

- Q.7 Caring teachers have been identified as a critical component of successful interventions with at-risk students, however just what constitutes a caring teacher is less well understood. Specifically, what are the behaviors, characteristics, and beliefs of caring teachers, and how are they impacted by the contexts within which they work? The purpose of this multiple case study was to understand more about caring teachers who work with at-risk students in secondary schools located in a city and thereby to add complexity to the literature. Two middle school teachers and two high school teachers were recruited to participate. They were observed on multiple occasions and interviewed twice. The data from these observations and interviews were initially analyzed case by case; the cross case analysis based on the results from the individual case resulted in 6 themes that were present across the four cases. The following themes were identified: the role of relationships, perspective on at-risk students, providing opportunities for students to develop a positive sense of themselves, the value of a positive classroom experience for students and teacher, negotiating power, and flexibility.

Answer the following questions related to above note:

- a) What are the issues in this research study relates to the area of social psychology? **4**
- b) Rank the themes identified in the research in order of their importance and explain your reasons for the same. **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — Second Semester
PERSONAL STRENGTH, VALUES AND ETHICS (BAAP-211)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **2**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

Q.1 In a male dominated department, Ramani is the only woman. In staff meetings of that department, everybody is profusely complimenting her. They compliment her dress, the way she speaks and her style and she feels uncomfortable. She reports this matter to you. Discuss the ethical issues in this case. What will be your solution? **10**

Q.2 A supplier promises to secure admission for the daughter of a manager in a prestigious school in a city. The supplier does not want any favor for this. Discuss the ethical issues in this case. **10**

Q.3 Metal Box Company Limited has been losing ground to its competitors in recent years. Concerned that substance abuse (primarily alcohol consumption) may be responsible for much of the company's decline; the company has just adopted a new policy that imposes very strict disciplinary action on those employees found to be working under the influence of alcohol or drugs.

Amit and Rahul have worked together in one of the engineering divisions of Metal Box Co. Ltd. for several years. Frequently Amit has detected alcohol on Rahul's breath when they were beginning work in the morning and after work breaks during the day. But, until the new policy was announced it never occurred to Amit that he should say anything to Rahul about it, let alone tell anyone else about it. Rahul's work has always been first rate, and Amit is not the kind of person who feels comfortable discussing such matters with others.

Two days before the announcement of the new alcohol and drug policy, Rahul tells Amit that he is being considered for the position of head of quality control. Although pleased at the prospect of Rahul's promotion, Amit wonders if Rahul's drinking will get in the way of meeting his responsibilities. Amit worries that, with additional job pressures, Rahul's drinking problem will worsen. What are the possible ethical dilemmas that Amit is facing? If you were Amit, what would you do in this situation? **10**

Q.4 A manufacturer of Aspirin (medicine for colds) had its marketing research department conduct a national survey among doctors to investigate what common remedies doctors would most likely recommend when treating a patient with a cold. The question asked doctors to pick the one product they would most likely prescribe for their patients from among the choices of Medicine A, Medicine B, Aspirin or none of the above. The distribution of responses was as follows:

Medicine A	100
Medicine B	100
Aspirin	200
None of the above	600
Total	1,000

The firm used the results of the survey as a basis for an extensive ad campaign that claimed: "In a national survey, doctors recommended Aspirin two to one over Medicine

A and Medicine B as the medicine they would most likely recommend to their patients suffering from colds.”

Discuss the ethical dilemmas and possible choices related to the case above. **10**

Q.5 Discuss the five principles of Ethical leadership. **10**

PART-B

Q.6 Describe in detail the trolley problem and explain your choice of decision for various scenarios. **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — Fourth Semester
LIFE SPAN DEVELOPMENT (BAAP-401)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Explain the key issues of life span development with relevant examples. **10**
- Q.2 Explain the various facets of moral development during childhood and adolescence. **10**
- Q.3 Explain perceptual development in areas of touch, taste and smell. **10**
- Q.4 Explain the various physical and social changes which occur during old age. **10**
- Q.5 Explain the developments in cognitive functioning in concrete operational stage with relevant research examples. **10**
- Q.6 Elucidate the behavioral perspective of development. **10**

PART-B

- Q.7 Explain the differences between psychodynamic perspectives and cognitive perspectives of human behavior and development. **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) – Fourth Semester
RESEARCH METHODOLOGY (BAAP-402)

Time: 3 Hours

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all. **Part-B is compulsory**. Attempt any **Four** questions from **Part-A**. Each question carries equal marks.

PART-A

- Q.1 "All the researches are based on a strong rational philosophical background" please explain the statement based on different philosophies of research. **10**
- Q.2 What is a research design? Describe pre experimental research designs. **10**
- Q.3 Define sampling what are the types of sampling? **10**
- Q.4 What are the different ways of data collection? **10**
- Q.5 Describe the process of determining sample size. What are the criteria of sample size determination? **10**
- Q.6 Describe the nature and process of content analysis. **10**

PART-B

- Q.7 Write short notes on (**any two**) of the following:
a) Scale of measurement.
b) Descriptive and inferential statistics.
c) Types of research. **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) — Fourth Semester
POSITIVE PSYCHOLOGY AND ITS APPLICATION (BAAP-403)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Explain the relevance of positive psychology. **10**
- Q.2 What is the importance of family and peer groups in one's life? **10**
- Q.3 What coping strategies or defences to develop to cope up with stress? **10**
- Q.4 What factors contribute to happiness? **10**
- Q.5 Write short notes on:
a) Resilience.
b) Subjective wellbeing. **10**
- Q.6 Explain neurobiology optimistic goal directed behavior. **10**

PART-B

- Q.7 How could you change your daily or weekly schedule so that you engaged in more intrinsically motivated activities that involve using Ryan and Deci's self-determination model? **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) – Fourth Semester
STRESS MANAGEMENT (BA-AP-421)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all; **Part-B is compulsory**. Attempt any **FOUR** questions from **Part-A**. Marks are indicated against each question.

PART-A

- | | | |
|-----|---|-----------|
| Q.1 | What is stress? What are the different sources of stress? | 10 |
| Q.2 | Describe the process of stress building by the environment and site a suitable example. | 10 |
| Q.3 | What are the different physiological responses to stress? | 10 |
| Q.4 | What is stress management? What are the processes of managing stress? | 10 |
| Q.5 | How Indian organizations manage stress at their workplace? | 10 |
| Q.6 | What is organizational role stress? What are the types of role stress? | 10 |

PART-B

- | | | |
|-----|---|------------|
| Q.7 | Write short notes on the following:
a) Flight of Fight response.
b) GAS Syndrome. | 5×2 |
|-----|---|------------|

End Semester Examination, Dec. 2018

B.A. (Applied Psychology) – Sixth Semester

SPORT PSYCHOLOGY (BAAP-601)

Time: 3 Hours

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all. **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. All questions carry equal marks.

PART-A

- Q.1 Explain with examples arousal-performance relationship within the framework of Inverted – U theory. **10**
- Q.2 Explain the ethical principles that a Psychologist should be aware of while dealing with elite athletes. **10**
- Q.3 Explain psychological skill training with reference to muscle to mind strategies. **10**
- Q.4 Explain the importance of leadership in psychological preparation of a team. **10**
- Q.5 Explain different types of motivation using the self-determination and autonomy continuum. **10**
- Q.6 Discuss stress process and explain (a) the importance of appraisal and (b) perceived ability to cope with the situation. **10**

PART-B

- Q.7 Write your analysis and propose a plan of psychological intervention based on the following grounds:

A coach approaches you stating that his junior badminton player wants to leave the training camp. The coach further explains to you that off late the athlete was missing his training sessions very often. The athlete is a promising badminton player and therefore the coach seeks your intervention so that the athlete continues to train in the camp. **10**

End Semester Examination, Dec. 2018

B.A. (Applied Psychology) – Sixth Semester ABNORMAL PSYCHOLOGY (BAAP-602)

Time: 3 Hours

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all. **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Each question carries equal marks.

PART-A

- Q.1 Define the approaches to abnormal behavior. **10**
- Q.2 Explain bipolar disorders and their symptoms. **10**
- Q.3 What is the etiology of anxiety disorders? **10**
- Q.4 Five short notes on:
a) Post-Partum Disorders.
b) Anorexia Nervosa. **5x5**
- Q.5 What is the etiology of Schizophrenia? **10**
- Q.6 What is Intellectual Disability? **10**

PART-B

- Q.7 Identify and explain which disorder is this?

Mark, a 22 year old, came to a clinic on court order. He was awaiting trial for car theft and robbery. He has a long history of arrest from the age of 9, when was picked from vandalism. Often he has run away from home for days or weeks at a time and returned in a run-down condition. He had been expelled from high school for truancy and disruptive behavior. To date has no job. He is described as a loner with few friends. Though initially charming, mark usually soon antagonized those he met with aggressive, self oriented behavior.

Mark was affable during his therapy session. He enthusiastically told the therapist, how much he'd benefitted from the counselling and looked forward to future sessions. Marks's first session was his last after. After it, he skipped bail and presumably left town to avoid his trial. **10**

End Semester Examination, Dec. 2018
B.A. (Applied Psychology) – Sixth Semester
EDUCATIONAL PSYCHOLOGY (BAAP-603)

Time: 3 Hours

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all. **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. All questions carry equal marks.

PART-A

- | | | |
|-----|--|-----------|
| Q.1 | What role do psychologists play in the field of education? | 10 |
| Q.2 | What is progressive education? | 10 |
| Q.3 | Discuss the importance of play for children. | 10 |
| Q.4 | What are the advantages and disadvantages of labeling? | 10 |
| Q.5 | Address the challenges of teaching diversity students. | 10 |

PART-B

- | | | |
|-----|---|-----------|
| Q.6 | Describe in detail your strategy for Classroom Management focusing on discipline and control. | 10 |
|-----|---|-----------|

End Semester Examination, Dec. 2018
 B.A. / B. Sc. (Hons.) Economics – First Semester
MATHEMATICS FOR ECONOMICS-I (BAECO-103 / BHE-102)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

- Q.1 a) If $s = [5 \ 2 \ 9]$, find out ss^f .
- b) Suppose $x = a^y$. Find out $\frac{dx}{dy}$ if $y = 3$ and $a = 4$.
- c) Given $s = f(u, v) = (u+3)(2u+4v)$, find out $f_u(5, 1)$.
- d) Find out $\int (p^{15} + 5p^9 + 3) dp$.
- e) Suppose $P = \{5, 6\}$, $Q = \{4, 7, 8\}$ and $R = \{3, 4\}$. Find out $P \cup (Q \cap R)$.
- f) Suppose a function $z = f(t) = t^2 + 3t + 9$, what will be the value of $\frac{dz}{dt}$ to reach its extremum.
- g) If $z = \sum_{k=0}^m b_k y^k$, express it in general form of a polynomial function.
- h) If $d = f(p_1, p_2) = 4p_1^2 + 3p_1p_2 + 6p_2^2$, find out f_{p_2} .
- i) If $C = \{2, 5, 6, 8, 9\}$ and $D = \{5, 9\}$ then find out whether $D \subset C$ or $C \subset D$.
- j) For any two sets: S and T, show $S \cap T$, using Venn diagram. **2×10**

PART-B

- Q.2 Answer (**any four**) of the following:
- a) If average product, $AP = 51 - Q$ and $MP = 17$, find out Q .
- b) Suppose q_s is linearly related to p. Express this relationship in exact functional form with an arbitrary slope coefficient b_1 and constant terms b_0 . Define which is/are variable(s) and parameter(s) in this function.
- c) Find out $\frac{\partial p}{\partial s_1}$ and $\frac{\partial p}{\partial s_2}$ for $p = 4s_1^3 - 6s_1^2s_2 + 8s_2^2$.
- d) Find out the value of integral $\int_1^3 6\sqrt{u} du$.
- e) Find out P , if $P = Q \times R$ and $Q = \begin{bmatrix} 1 & 0 & 3 \\ 2 & 1 & 5 \end{bmatrix}$, $R = \begin{bmatrix} 1 & 3 \\ 2 & 5 \\ 6 & 2 \end{bmatrix}$. **5x4**

PART-C

- Q.3 a) Suppose $X = \begin{bmatrix} 2 & 0 \\ 0 & 3 \end{bmatrix}$, $Y = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$, show that $XY \neq YX$. **4**
- b) Given that $U = \begin{bmatrix} 2 & 1 \\ 1 & 0 \end{bmatrix}$, $V = \begin{bmatrix} 1 & -1 \\ 2 & 3 \end{bmatrix}$, $W = \begin{bmatrix} 2 & 2 \\ 1 & 1 \end{bmatrix}$, prove distributive law. **5**
- c) Verify the associative law for matrices:

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}, B = \begin{bmatrix} 2 & -1 & 1 & 0 \\ 3 & -1 & 2 & 1 \end{bmatrix}, C = \begin{bmatrix} -1 & 1 & 1 & 2 \\ -2 & 2 & 0 & -1 \end{bmatrix}. \quad \mathbf{8}$$

d) Find out the determinant $P = \begin{vmatrix} 2 & 1 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix}$. **3**

Q.4 a) Find all partial derivatives up to second order of the function $f(p, q) = p^3q^3 - p^5q^5$. **6**

b) If $y = 6x^4 - 2x^3 + 3x^2 + 5x - 3$, find out $f''(3)$. **5**

c) Prove the Euler's Theorem for function $f(u, v) = 3u^2v + 7uv^2$. **5**

d) Find out whether the function $z = t^3 - 3t^2 + 2$ has a maximum or minimum point by checking necessary and sufficient conditions of optimization. **4**

Q.5 a) Find the integral by substitution for $\int 4e^{2x+3} dx$.

b) Find the integration by parts for $\int pe^p dp$.

c) Evaluate the value of integral $\int_1^3 5y^4 dy$.

d) Find out $\int \frac{dx}{(x+1)(x+2)}$ by partial fraction method. **5×4**

Q.6 Suppose an agro-based firm produces two goods: x and y using raw-materials corn, wheat and barley. To produce one unit of x , 5 kg of corn, 4 kg of wheat and 35 kg of barley are required. To produce y , 15 kg of corn, 4 kg of wheat and 20 kg of barley are required. Suppose that only 480 kg of corn, 160 kg of wheat and 1190 kg of barley are available. The firm makes a profit of ₹13 per kg of x and ₹23 per kg of y .

a) Using the above information, formulate a standard problem of LPP. **6**

b) How many x and y should the firm produce in order to maximize profit? **14**

Q.7 a) If $P = \{3, 5\}$ and $Q = \{up, down\}$, then explain how do you find out $P \times Q$. **3**

b) For the sets: $X = \{5, 6, 7, 8\}$, $Y = \{4, 5, 7, 8\}$ and $Z = \{3, 4, 7, 8\}$, prove the distributive property. For these sets, also show union with Venn diagram. **6**

c) Find out the elements of set:

i) Whole number,

ii) Single digit odd numbers,

iii) Prime numbers,

iv) Number-line and

v) Natural seasons. **5**

d) Using suitable example/diagram, explain:

i) Disjoint set,

ii) Complementary set,

iii) Proper subset and

iv) Null set. **6**

End Semester Examination, Dec. 2018

B.A. / B. Sc. (Hons.) – First Semester MICRO ECONOMICS-I (BAECO-104)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **2**

Note: Attempt **FIVE** questions in total from **Part-A, Part-B** and **Part-C. Q.1 (Part-A) and Q.2 (Part-B) is compulsory.** Attempt any three questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer the following questions:

- What is meant by normative economics?
- Explain any two factors on which the demand for a commodity depends.
- Discuss arc method of measuring price elasticity of demand.
- What does a concave indifference curve signify?
- Explain the concept of isoquants.
- What is a production function?
- Define "Fixed cost".
- Enlist the key features of perfectly competitive market.
- Write any two examples of monopoly.
- What are the forms of market?

2×10

PART-B

Q.2 Answer (**any four**) of the following questions:

- Information with respect to quantity of video tape recorders demanded per year and per capita annual group income is given in the following table:

Quantity of video tape recorders per year	Per capital annual group income
1000	₹1,50,000
2000	₹2,00,000

Calculate income elasticity of demand.

- What are the exceptions to the law of demand?
- Distinguish between cardinal and ordinal measurement of utility.
- What does the slope of an isoquant signify? Graphically show the equilibrium using isocost line and isoquant when isoquant is:
 - Concave to origin
 - Convex to the origin.
 - a straight line.
- Explain the concept of product differentiation.

5×4

PART-C

- What are the key features of monopolistic competition? Explain the process of price determination under monopolistic competition in short run. **10**
 - Discuss the various forms of price discrimination. Use appropriate diagram to support your answer. **10**
- Q.4
- Explain how average cost is related to average variable cost and marginal cost. Complement your answer with suitable diagram. **10**
 - State the law of diminishing marginal returns. Does this law apply in the case of technological progress? **10**

- Q.5 a) Define cross elasticity of demand. **5**
b) Find out if the cross elasticity of demand is positive, negative or zero for the following pairs of products:
i) Kelvinator and Godrej refrigerators.
ii) Table and Chairs. **5**
c) Explain the concept of elastic demand and inelastic demand with the help of diagrams? When is the price elasticity of demand unity? **10**
- Q.6 a) Define and illustrate the following effects with the help of indifference curves:
i) Income effect ii) Substitution effect iii) Price effect **10**
b) Show the nature of the income consumption curve in the case of normal and inferior goods. **10**
- Q.7 a) Explain the revealed preference theory of demand. **10**
b) Derive the law of demand using the axioms of revealed preference. **10**

End Semester Examination, Dec. 2018

BA / B. Sc. (Hons.) Economics – First Semester

MACROECONOMICS-I (BAECO-105)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer all the questions in not more than 50 words each:

- a) Enlist any two assumptions of classical thought.
- b) Differentiate between stock and flow variable.
- c) What do you understand by disposable income?
- d) Define investment multiplier.
- e) What is a full employment level of output?
- f) Define inflation.
- g) What is marginal propensity to consume?
- h) Define fiscal policy.
- i) Explain why money demand is downward sloping?
- j) Differentiate between fiat money and commodity money.

2×10

PART-B

Q.2 Answer (**any four**) of the following:

- a) Explain the difference between macroeconomics and microeconomics? How are these two fields related?
- b) Enlist the four components of GDP. Give an example of each.
- c) Elaborate on the relation between investment and interest rate. Use diagrams to support your answer.
- d) Briefly discuss the concept of inflationary gap.
- e) What are the three conjectures about consumption function given by Keynes? Complement your answer with a diagram.

5×4

PART-C

- Q.3
- a) Show the circular flow of national income of a closed economy with government sector. **14**
 - b) Place each of the following transactions in one of the following four components of expenditure: consumption, investment, government purchases and net exports
 - i) Jet airways sell an airplane to Indian Airforce
 - ii) Jet airways sell an airplane to Indigo airlines
 - iii) Jet airways sell an airplane to Bangladesh
 - iv) Jet airways build an airplane to be sold next year. **6**

Q.4 Consider the economy as:

$$Y = C + I + G$$

$$Y = 8000$$

$$G = 2500$$

$$T = 2000$$

$$C = 1000 + \frac{2}{3}(Y - T)$$

$$I = 1200 - 100r$$

- a) Compute private savings.
- b) Find equilibrium interest rate.
- c) Suppose government expenditure declines by 500. Compute private saving.
- d) Find new equilibrium interest rate. **5×4**

- Q.5 a) Assuming full employment level of output, using aggregate supply and aggregate demand framework, show the impact of expansionary fiscal policy on output and prices. **10**
- b) Is fiscal policy effective in improving output levels of the economy? Why or why not? **10**
- Q.6 a) Elaborate on Permanent income hypothesis. **10**
- b) Is marginal propensity to consume out of permanent income changes smaller than marginal propensity of consume out of temporary income changes? Substantiate. **10**
- Q.7 a) What are the three functions of money? **10**
- b) Which of the functions do the following items satisfy? Which do they not satisfy?
- i) A credit card
 - ii) A painting by an artist
 - iii) A metro token **10**

End Semester Examination, Dec. 2018
 B.A. (Hons.) Economics – Second Semester
MICRO ECONOMICS-II (BA-ECO-203 / BHE-203)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **2**

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 Answer the following questions:

- a) Why oligopolistic market differs from monopolistic competitive market?
- b) Briefly explain the elasticity associated with lower part of kinked point of the demand curve in oligopoly market.
- c) If there are k number of firms in an oligopolistic industry, how much the output each firm would produce at the equilibrium?
- d) What is saddle point of a payoff matrix?
- e) What do you mean by full costs pricing?
- f) Briefly explain the criticism on neoclassical theory of firm for "only goal of profit maximization".
- g) Explain factor share of capital in total output of a firm.
- h) How do you define the economic rent of a factor?
- i) What is Pareto efficiency?
- j) What is production possibility frontier? **2×10**

PART-A

- Q.2 a) Briefly explain the cournot model with reaction curve approach. **14**
 b) Cartel is helped to maximize the joint-profit of duopolists. Explain it. **6**
- Q.3 a) Why the existing firms in an industry may set limit price? **2**
 b) Using a suitable diagram, explain the representative model of average costs pricing. **10**
 c) Briefly explain the sales maximization goal of modern firm with a suitable diagram. **8**
- Q.4 a) What is maximin principle? Solve the following payoff matrix of game using maximin strategy.

		PLAYER-B	
		Left	Right
PLAYER-A	Up	3, 9	1, 8
	Down	0, 0	2, 1

- b) What is Nash equilibrium? Solve the payoff matrix of game using iterative elimination of dominated strategies. **6**

		PLAYER-II	
		False	True
PLAYER-I	False	1500, 2000	50, 4000
	True	2000, 100	60, 101

- c) Solve the following game and explain if any dilemma in the solution. **8**

		PLAYER-II	
		False	True
PLAYER-I	False	1, 1	10, 0
	True	0, 10	5, 5

PART-B

- Q.5 a) Construct demand curve of a firm using the concepts of substitution effect, output effect and profit is maximizing effect. **8**
b) Briefly explain the product exhaustion theorem using Euler rule. **5**
c) Explain why the concept of marginal revenue product is useful to construct demand curve of labour for a monopolist operating in short run. **7**
- Q.6 a) What are the basic assumptions of simple $2 \times 2 \times 2$ framework of general equilibrium? **4**
b) Using general equilibrium framework, prove and interpret the first welfare theorem. **16**
- Q.7 a) What is social welfare function? Explain how the concept of social welfare function can define sustainable development of an economy involving intertemporal choices. **6**
b) Systematically explain the bliss point of a society using Grand Utility Possibility Frontier. **14**

End Semester Examination, Dec. 2018

B.A. (Hons.) Economics – Second Semester ECONOMIC STATISTICS-I (BA-ECO-204)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **2**

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 Answer the following questions:

- Define primary and secondary data.
- Explain the purpose of tabular presentation of statistical data.
- The mean marks of 100 students were found to be 40. Later on it was discovered that a score of 53 was misread as 83. Find the correct mean corresponding to the correct score.
- What do you understand by "Dispersion"?
- Define "Probability".
- Explain the term "Mutually exclusive".
- One card is drawn from a standard pack of 52. What is the probability that it is either a king or a queen?
- What is a random variable?
- What does covariance show?
- Give an example of discrete random variable.

2×10

PART-A

Q.2 The following data gives the pattern of electricity consumption:

Year	Industry	Agriculture	Total
2002-03	33.9	24.9	58.8
2003-04	34.5	24.1	58.6
2004-05	35.6	22.9	58.5
2005-06	36.8	21.9	58.7
2006-07	37.6	21.7	59.3
2007-08	37.5	20.6	58.1
2008-09	37.1	20.4	57.5
2009-10	36.7	21.0	57.7
2010-11	36.5	20.5	57.0

Represent the data by a suitable diagram.

20

Q.3 From the data given below find the missing frequency. If the arithmetic mean is 34, find the median:

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	5	15	20	---	20	10

20

Q.4 a) What is quartile deviation?

5

b) Find out the value of quartile deviation and its coefficient from the following data:

Marks	10	20	30	40	50	60
No. of Students	4	7	15	8	7	2

15

PART-B

- Q.5 a) A university has to select an examiner from a list of 50 persons, 20 of them women and 30 men, 10 of them knowing Hindi and 40 not, 15 of them being teachers and the remaining 35 not. What is the probability of the university selecting a Hindi knowing woman teacher? **15**
- b) Define the terms 'sample space' and 'event'. **5**

- Q.6 The following data show the number of seeds germinating out of 10 on damp filter for 80 set of seeds. Fit a Binomial distribution to this data:

X:	0	1	2	3	4	5	6	7	8	9	10
Y:	6	20	28	12	8	6	0	0	0	0	0

20

- Q.7 a) State and explain Baye's theorem of probability. **5**
- b) Explain dependent and independent events with the help of an example. **5**

End Semester Examination, Dec. 2018
B.A. (Hons.) Economics – Second Semester
ECONOMIC HISTORY OF INDIA (BA-ECO-205)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt **ANY TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 Answer the following questions:

- a) What do you understand by "Welter of Rights"?
- b) Explain the concept of "reserved forests" under British Rule.
- c) What were the economic reasons behind extensive clearance of forest lands under British Rule?
- d) Explain the process of commercialization.
- e) In what aspect was the government at loss with the implementation of permanent settlement?
- f) Differentiate between 'hundis' and the 'credit system' that developed under British Rule.
- g) Explain the role played by pre colonial rulers in conducting international trade.
- h) Discuss reasons behind rise in population growth after 1920s.
- i) Explain the reasons behind the emergence of tribal groups as laborer class under British Rule.
- j) Explain "Jajmani System". **2×10**

PART-A

- Q.2
- a) Describe the features of Zamindari system in detail. **6**
 - b) How was it different from other land revenue systems introduced by British? **7**
 - c) Discuss the impact of this system on peasant class. **7**
- Q.3
- a) What do you understand by commons? **5**
 - b) Discuss the impact of British policies on commons as a resource in India. **7**
 - c) How was tribal society affected by such changes? **8**
- Q.4
- a) "Technological advancement in Indian economy was solely a British contribution". Comment on it. **10**
 - b) Discuss the emergence of credit markets under British Rule and its impact on Indian economy. **10**

PART-B

- Q.5
- a) What do you understand by deindustrialization process? **5**
 - b) Explain the key arguments in deindustrialization debate in Indian context. **15**
- Q.6
- a) In what ways did the railways affect the growth of Indian economy? **10**
 - b) "Railways were deployed in India primarily to serve colonial objectives and thus failed to play a transformative role". Comment on it. **10**
- Q.7
- a) Explain the theory of 'drain of wealth' in Indian context. **10**
 - b) Discuss the state of economy of India at the eve of independence. **10**

End Semester Examination, Dec. 2018
B.A. (Hons.) Economics – Second Semester
WORKSHOP ON PRESENTATION SKILLS (BA-ECO-GE-03)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 a) **Fill in the blanks:**

i) Making your slides attractive and easy to understand helps to _____.

ii) Eye contact and movement on stage is _____.

iii) Body language is all about _____.

iv) Practicing the delivery beforehand helps to _____.

v) Some effective icebreakers for a successful presentation are _____. **2×5**

b) **State whether the following statements are TRUE OR FALSE:**

i) A presentation is a speech based means of communication.

ii) A proper presentation is a mixture of both verbal and non-verbal communication.

iii) You can conquer nervousness by reading from the board/prompter.

iv) Failure to motivate the audience is a common cause of ineffective presentation.

v) To connect with the audience we should use humor. **2×5**

PART-A

Q.2 Write about the do's and don'ts of group discussion. **20**

Q.3 What can you do to overcome nervousness? Discuss. **20**

Q.4 What are the common causes of ineffective presentations and what are the steps needed to improve them? **20**

PART-B

Q.5 What is the meaning of presentation? What role does body language play while making presentations? **20**

Q.6 Discuss the proper way of structuring a presentation. **20**

Q.7 Write in brief about how to make a presentation fun, engaging and enjoyable. **20**

End Semester Examination, Dec. 2018
B.A. / B. Sc. (Hons.) Economics – Third Semester
ECONOMIC STATISTICS-II (BAEH-C-302)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) is compulsory.** Attempt any three questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer the following questions:

- a) What is skewness? Explain the main types of skewed curves.
- b) Interpret the value of 0 and +1 for the product moment correlation coefficient.
- c) What is sampling?
- d) Explain Type-I and Type-II errors.
- e) What are the uses of index numbers?
- f) Given that $\sum P_1q_1 = 250$, $\sum P_0q_0 = 150$, Paasche's Index number = 150 and Dorbish – Bowley's Index number = 145. Find out Fisher's ideal Index number.
- g) Explain the concept of standard error.
- h) What is x^2 distribution?
- i) What are regression coefficients?
- j) What is difference between Z test and t test? **2×10**

PART-B

Q.2 Attempt (**any four**) of the following:

- a) For a distribution, mean is 10, standard deviation is 4, $\sqrt{\beta_1} = 1$ and $\beta_2 = 4$. Obtain first four moments about the origin.
- b) Find the coefficient of correlation for the following data:
 $N = 10$, $\sum x = 50$, $\sum y = -30$, $\sum x^2 = 290$, $\sum y^2 = 300$, $\sum xy = -15$
- c) Distinguish between "seasonal" and 'cyclical" fluctuations with suitable examples. Give any one method of measuring seasonal fluctuations.
- d) Show that the Fisher's 'Ideal Index' number satisfies both time reversal and factor reversal test.
- e) State the procedure followed in testing a hypothesis. **5x4**

PART-C

Q.3 Construct index numbers of price from the following data by applying.

- a) Laspeyre's method. **10**
- b) Paasche's method.

Commodity	2010		2011	
	Price	Quantity	Price	Quantity
A	20	8	40	6
B	50	10	60	5
C	40	15	50	15
D	20	20	20	25

10

Q.4 The sale of a commodity in million tonnes varies from year 2007 to the year 2014 in the following manner:

Year	Sales	Year	Sales
2007	412	2011	470
2008	438	2012	482
2009	444	2013	490
2010	454	2014	500

- a) Fit a trend line by the method of semi-averages. **15**
 b) Draw the trend. **5**

Q.5 Write short notes on the following:

- a) Random sampling.
 b) Stratified sampling.
 c) Multistage sampling.
 d) Cluster sampling. **5×4**

Q.6 a) In an antibacterial campaign in a certain area, quinine was administered to 1,624 persons out of a total population of 6,496. The number of fever cases is shown below:

Treatment	Fever	No Fever	Total
Quinine	40	1584	1624
No quinine	440	4432	4872
Total	480	6016	6496

Discuss the usefulness of quinine in checking malaria. (For $\nu = 1$, chi-square at 5% = 3.84). **10**

- b) i) What is chi-square test? **2**
 ii) What are its various applications? **2**
 iii) What are the basic conditions for application of chi-square test? **3**
 iv) What are Yate's correction? **3**

Q.7 a) Two ladies were asked to rank 7 different types of soaps. The ranks given by them are as follows:

Soaps :	A	B	C	D	E	F	G
Neelu :	2	1	4	3	5	7	6
Neena :	1	3	2	4	5	6	7

Calculate spearman's rank correlation coefficient. **10**

b) In a correlation study the following values are obtained:

	x	y
Mean	65	67
Standard deviation	2.5	3.5
Coefficient of correlation	0.8	

Find the two regression equations that are associated with the above values. **10**

End Semester Examination, Dec. 2018
B.A. / B. Sc. (Hons.) Economics – Third Semester
MICROECONOMIC EXTENSIONS AND APPLICATIONS (BAEH-C-303)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Solve all:

- a) A consumer spends whole of his income on the two goods X and Y when his income is ₹100, the price of good X is ₹5 per unit of it and that of Y is ₹10 per unit of it. What can you infer about MRS_{XY} at the optimum?
- b) State the significance of the assumption of monotonic preference in the revealed preference theory.
- c) Distinguish between the net demand and the gross demand.
- d) Define the Roy's identity utility function, with the help of equation.
- e) As the interest rate rises, does the intertemporal budget constraint become steeper or flatter? Explain.
- f) Explain when to provide a public good.
- g) Define the concept of asymmetric information.
- h) What is the definition of numeraire good?
- i) Suppose that a budget equation is given by $P_1x_1 + P_2x_2 = m$. The government decides to impose a lump sum tax of 'v', a quantity tax on good 1 of 't' and a quantity subsidy on good 2 of 's'. What is the equation of the new budget line?
- j) Explain the utility function, that is separability additive, with the help of an equation. **2×10**

PART-B

Q.2 Attempt (**any four**) of the following:

- a) Suppose a consumer's demand for good is given as

$$x = 10 + \left[\bar{M} / 10P_x \right]$$

where, x = quantity of good x

\bar{M} = income

P_x = Price of X

Given his income at ₹120 per day and price of good X as ₹4 per unit, measure the substitution and income effects of a fall in price from ₹4 per unit to ₹3 per unit.

- b) Explain how buyer's willingness to pay, consumer surplus and the demand curve are related with the help of a diagram and schedule?
- c) Define homothetic preferences. Explain the common characteristics of such preferences with the help of necessary diagrams.
- d) A consumer, who is initially a lender, remains a lender even after a decline in interest rates. Is this consumer better off or worse off after the change in interest rates? If the consumer becomes a borrower after the change, is he better off or worse off?
- e) Explain in detail the hidden action problem and the hidden information problem, with the help of a situational example. **5×4**

PART-C

- Q.3 a) Explain the first order derivative of the maximum utility function. **6**
b) Assume a specific mathematical lagrangian objective function associated with a constrained utility maximization problem is given $L = x^{\frac{1}{2}}y^{\frac{1}{2}} + \lambda(10.00 - 0.50X - 2.00Y)$. Derive the three first order conditions that would have to hold in order for L to be maximized. **8**
c) Assume that given a consumer's utility function and price for $X =$ hamburgers and $Y =$ french-fries, the optimal quantities of burgers and fries are such that $X=2Y$. If the consumer's income constraint is ₹10, $P_X = ₹2$, $P_Y = ₹1$, what is the utility maximizing consumption level of X and Y ? **6**
- Q.4 a) Explain in detail all the three axioms of rational choice of a consumer behaviour theory. **8**
b) What do you understand by well behaved indifference curves, explain with suitable diagrams? **12**
- Q.5 a) Define public goods. Explain the concept using appropriate example. **10**
b) Explain what is the ideal amount of public good that should be offered, with the help of budget constraint? **10**
- Q.6 a) Explain the constant real income hypothesis. Using the hypothesis split the price effect into substitution and income effect for a normal good and a giffen good. **12**
b) Compare and derive the demand curve of Hicks, slutskey and Marshallian price effect. **8**
- Q.7 a) i) A risk averse individual is offered a choice between gamble that pays ₹1000 with a probability of 25% and ₹100 with a probability of 75% or a payment of ₹325. Which would he choose?
ii) Which would he choose if payment was Rs. 320? **5×2**
b) Draw a utility function that exhibits risk-loving behaviour for small gambles and risk assess behaviour for long gambles. **10**

End Semester Examination, Dec. 2018

BA (Hons.) ECONOMICS – Third Semester MACRO ECONOMICS-II (BAEH-C-304)

Time: 3 hrs

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Each question carries equal marks.

Q.1 Answer the following questions:

- a) Graphically show the effect of increase in money supply in IS-LM framework.
- b) Enumerate the key assumptions of classical thought.
- c) Enlist the components of aggregate demand under Keynesian framework.
- d) Explain government multiplier.
- e) Discuss cost push inflation.
- f) Give reasons for a vertical Phillips curve in the long run.
- g) Graphically represent J curve.
- h) What do you understand by purchasing power parity?
- i) Enumerate the costs of inflation.
- j) Using BP curve, represent perfect capital mobility.

2x10

PART-A

Q.2 Answer (**any four**) of the following:

- a) Suppose, there is a rise in tax rate for every level of income, How will this affect the IS and AD curve, if at all? Explain.
- b) With the help of a diagram, explain the golden rule level of capital per worker under Solow mode.
- c) Explain full and partial crowding out effect. Complement your answer with suitable diagrams.
- d) Critically analyze the quantity theory of money.
- e) Would each of the following groups be happy or unhappy if the Indian rupee appreciated? Explain.
 - i) American resident holding Indian government bonds.
 - ii) Indian manufacturing industries.
 - iii) Indian importers.

5x4

Q.3 a) What is the significance of steady state capital per worker? How is the golden rule level of capital defined? **8**

b) Explain the transition paths of output, consumption and investment per worker when saving rate is decreased to achieve golden rule level. **12**

Q.4 a) Derive the short run aggregate supply curve from wage setting and price setting relations. **10**

- b) Explain how this curve is affected by a decline in each of the following:
- i) Oil price.
 - ii) Unemployment benefits.
 - iii) Expected price level. **10**

PART-B

Q.5 The following equations describe an economy. (Think of C, I, G, etc., as being measured in billions and i as a percentage; a 5 percent interest rate implies $i = 5$.)

$$C=0.8(1-t)Y$$

$$t=0.25$$

$$I=900-50i$$

$$G=800$$

$$M_d=0.25Y-62.5i$$

$$\frac{M_s}{P}=500$$

Where C is consumption, t is tax rate, I is investment, G is government expenditure, M_d is money demand, M_s is money supply and P is price level.

- What is the value of simple government multiplier, in the absence of money market?
- By how much does an increase in government spending of G increase the level of income in this model, which includes the money market?
- By how much does a change in government spending of G affect the equilibrium interest rate?
- Explain the difference between your answer to parts (a) and (b), Use graphs to complement your answer. **5x4**

Q.6 a) What do you understand by J curve effect? Explain the reasons behind this effect. **8**

- Within the Mundell-Fleming model assuming perfect capital mobility, analyze the effect of a lump-sum tax increase for the case of a flexible exchange rate. Will the tax cut be effective? Explain. **12**

Q.7 a) How is the equilibrium level of national income determined in a small open economy? What is the value of the foreign trade multiplier? **10**

- What is meant by automatic monetary adjustments? How do they help to adjust balance-of-payments disequilibria? **10**

End Semester Examination, Dec. 2018

B.A. (Hons.) Economics – Third Semester MACRO ECONOMICS-II (BAEH-C-304)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer the following questions:

- a) What do you understand by liquidity trap?
- b) Define fiscal and monetary policy.
- c) Enumerate the assumptions underlying classical aggregate supply curve.
- d) Enlist the factors determining the slope of aggregate demand curve.
- e) What do you understand by natural rate of unemployment?
- f) Define "Phillips Curve".
- g) Explain purchasing power parity.
- h) Graphically show the determination of exchange rate.
- i) Explain balance of payments deficit.
- j) Using BP curve, represent imperfect capital mobility.

2×10

PART-B

Q.2 Answer any four of the following:

- a) Will the following parties benefit or lose with a depreciation of Indian rupee? Justify your answer:
 - i) An Indian firm trying to purchase property overseas.
 - ii) Indian exporters.
 - iii) Australian tourists planning a trip to India.
- b) With the help of a diagram, explain the steady state level of capital per worker under Solow model with depreciation and technological progress. Label the axes and curves properly.
- c) List and explain the three theories for why the short-run aggregate-supply curve is upward sloping.
- d) Explain how following factors affect the extent of crowding out effect:
 - i) Responsiveness of money demand to rate of interest
 - ii) Responsiveness of investment demand to rate of interest
- e) Distinguish between cost push and demand pull inflation.

5×4

PART-C

- Q.3 a) Describe how each of the following developments affect the steady state capital stock in Solow model with the help of appropriate diagram:
- i) An increase in rate of technological progress.
 - ii) Increase in savings rate.
- b) Explain how, according to the Solow model, technological progress is the source of sustained increase in output per worker?

5×2

10

- Q.4 a) At time t_0 , the level of money supply increases from M_0 to M_1 . Using AD-AS analysis, trace short run, medium run and long run impact on prices and output. Is money neutral in medium run?

10

- b) Draw a diagram with aggregate demand, short-run aggregate supply, and long-run aggregate supply. Label the axes and curves properly. Explain why the long-run aggregate-supply curve is vertical. **10**

Q.5 An economy is initially described by the following equations:

$$C_p = 500 + 0.75 Y_D$$

$$I = 1000 - 50r$$

$$M/P = Y - 200r$$

$$G = 1000$$

$$T = 1000$$

$$M = 6000$$

$$P = 2$$

- a) Using the information provided, derive the equations and graph the IS curve and the LM curve. Calculate the equilibrium interest rate and level of income. **4**
- b) Suppose that a government increase taxes by 20 percent. Assuming the money supply is held constant, what are the new equilibrium interest rate and level of income? **4**
- c) For part (b), now assume that the central bank adjusts the money supply to hold the interest rate constant. What is the new level of income? What must the new money supply be? **6**
- d) Now assume that the central bank adjusts the money supply to hold the level of income constant. What is the new equilibrium interest rate? What must the money supply be? **6**

- Q.6 a) Why are central banks unable to conduct an independent monetary policy under fixed exchange rate when there is perfect capital mobility? Elaborate. **10**
- b) Why is it that following a monetary expansion, exchange rate always overshoots its new long run equilibrium level? Explain and complement you answer with suitable diagrams. **10**

- Q.7 How do all the automatic adjustment mechanisms operate together to correct a deficit in a nation's balance of payments under a fixed exchange rate system when the nation operates at less than full employment? **20**

End Semester Examination, Dec. 2018

B.A. / B. Sc. (Hons.) Economics – Fifth Semester

MONEY AND BANKING (BAEH-C-501)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer the following questions in not more than 50 words each.

- a) What is a barter?
- b) Define money.
- c) Explain the concept of money supply.
- d) What is deposit multiplier?
- e) You borrowed \$1000 on January 1 and must repay a total amount of \$1060 exactly a year later. What is the interest paid?
- f) Predict what will happen to interest rates if the public suddenly expects a large increase in stock price?
- g) What is money market?
- h) Define a bank.
- i) Write any two objectives of a monetary policy.
- j) What is the double coincidence of wants?

2×10

PART-B

Q.2 Attempt (**any four**) of the following:

- a) Discuss full employment and economic growth as objectives of monetary policy.
- b) Discuss the objectives and functions of the reserve bank of India.
- c) If the expectations of future short term interest rates suddenly fall what would happen to the slope of the yield curve?
- d) Suppose the country has the following monetary asset information as of April 2018.
Cash in the hand of public = ₹300 crores
Demand deposits = ₹400 crores
Other checkable deposits = ₹150 crores
Traveler's cheques = ₹50 crores
Savings type accounts = ₹ 2000 crores
Small time deposits = ₹500 crores
Large time deposits = ₹450 crores
Calculate M_1 and M_2 .
- e) Suppose that there is no medium of exchange in a place. The people of that place want to start using something as the medium of exchange. Somebody suggests that the seeds of the tamarind tree can be used for exchange. Somebody else suggests that coins of silver be used as the medium of exchange. What do you think should be chosen out of these two? Explain with reasons.

5×4

PART-C

- Q.3 Explain why you would be more or less willing to buy a house under the following circumstances?
- a) You just inherited \$100,000.
 - b) Real estate commissions fall from 6% of the sales price to 5% of the sales.
 - c) You expect Air India stock to double in value next year.
 - d) You expect housing prices to fall. **5×4**
- Q.4
- a) Explain the historical development of money from gold coins to the present system of paper currency. **10**
 - b) What are the different functions of money? How are they related to 'motives' to hold money? **10**
- Q.5
- a) What is high-powered money? Is it different from reserve money and monetary base? **8**
 - b) How is narrow money different from broad money? **5**
 - c) Define M_0 , M_1 , M_2 , M_3 and M_4 . **7**
- Q.6
- a) What are the main functions of commercial banks?
 - b) How does commercial banks create credit?
 - c) The central bank acts as lender of last resort. How?
 - d) Define open market operation. **5×4**
- Q.7
- a) What are the instruments of money market?
 - b) What is "Gilt-Edged" market?
 - c) Name the financial institutions that provide credit to various sectors of economy.
 - d) The NOP band has an 8% coupon rate (semi-annual interest), a maturity value of \$1000, matures in 5 years and a current price of \$1200. What is NOP's yield to maturity? **5×4**

End Semester Examination, Dec. 2018
B.A. / B. Sc. (Hons.) Economics – Fifth Semester
DEVELOPMENT ECONOMICS (BAEH-C-502)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer the following questions in not more than 50 words each.

- a) Distinguish between economic growth and economic development.
- b) Enumerate any four structural characteristics of developing nations.
- c) Distinguish between capability poverty and human poverty.
- d) State the stages of economic growth in Rostow's model.
- e) Enumerate the assumptions underlying Lewis model of development.
- f) What do you understand by steady state level of output?
- g) Differentiate between primary and secondary poverty.
- h) Define golden rule level of capital under Solow model.
- i) Mention any four sustainable development goals
- j) What do you understand by weak sustainability?

2×10

PART-B

Q.2 Attempt (**any four**) of the following:

- a) Do you believe that A.K. Sen's Capability approach adds new dimensions to the existing theories of economic development? Explain.
- b) Explain major tools of measuring inequality. Highlight the more apt method of measuring inequality.
- c) Briefly explain the Harris Todaro model.
- d) "There is one saving rate that is best in the sense of maximizing per capita consumption in steady state". Explain this statement and illustrate the idea graphically.
- e) Elaborate on the role of participation as one of the governing factors of sustainable development.

5×4

PART-C

Q.3 a) Explain the distinction between low levels of living and low per capita incomes. Can low levels of living exist simultaneously with high levels of per capita income? Explain and give some examples. **10**

b) What is Human Development Index? Give its limitations as a measure of economic development and suggest improvement. **10**

Q.4 There is an economy of 10 people. Three live in modern sector and earn ₹200/month. Rest live in traditional sector earning ₹100/month. One day, the two new modern sector jobs open up and two people from the traditional sector move to modern sector.

a) Show that the Lorenz curve of income distribution before and after the labour movement to modern sector.

b) Calculate coefficient of variation and Gini coefficient for two distributions. Do these measures agree about changes in inequality? Why? **10×2**

- Q.5 a) "Expansion of high productivity sector absorbs more and more labour from subsistence sector indicating that dualism is a powerful tool of development planning". Critically evaluate Lewis model of development in the light of above statement. **10**
- b) To counteract underdevelopment stagnation, discuss Leibenstein's critical minimum effort theory. **10**
- Q.6 a) It is said that a characteristic of Harrod-Domar model is that even for the long run the economy is at best balanced on a knife edge of equilibrium growth. Do you agree? Substantiate your answer. **10**
- b) "The assumption of fixed coefficient production function is at the root of Harrod's instability". Discuss and explain whether giving up the assumption really helps? **10**
- Q.7 a) Poverty and population growth are the two major factors obstructing sustainable development. Do you agree? Elaborate. **10**
- b) "In many ways, the world economy in the late 20th century and early 21st century resemble the world economy in the late 19th century". Evaluate this statement pointing out the similarities and differences between these two periods. **10**

End Semester Examination, Dec. 2018
B.A. (Hons.) Economics – Fifth Semester
INTRODUCTION TO ECONOMETRICS (BAEH-C-503)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **1**

Note: Attempt **FIVE** questions in total from **Part-A, Part-B and Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory.** Attempt any **THREE** questions from **Part-C.** Marks are indicated against each question.

PART-A

Q.1 Answer the following questions:

- a) What is Econometrics?
- b) Explain the difference between estimator and estimate with an example.
- c) If $Y_i = b_1 + b_2X_{2i} + b_3X_{3i} + \dots + b_kX_{ki} + u_i [i = 1, 2, 3, \dots, n]$, show that its equivalent expression in matrix notation is $y = Xb + u$.
- d) Why r^2 ranges between 0 to 1?
- e) If $Y_i = aX_i^b$ then prove that its elasticity coefficient is b for the log-log transformation of model.
- f) What is dummy variable trap?
- g) What is the relevance of linear probability model (LPM)?
- h) Why the presence of multicollinearity is a problem in estimating regression model?
- i) Write the functional form of first and second order autocorrelation?
- j) Heteroscedasticity is mainly a problem with cross-sectional data - justify it. **2×10**

PART-B

Q.2 Answer (**any four**) of the following:

- a) What are the reasons for introducing error term in a regression model?
- b) Prove that $\hat{a} \hat{x}_i = 0$ and $E[(\hat{b} - b)^2 \hat{a} \hat{x}_i^2] = s_u^2$ under the CLRM model $Y_i = a + bX_i + u_i$.
- c) Briefly explain the Gauss-Markov theorem.
- d) Suppose a qualitatively categorical variable such as car ownership (C) is function of individual's income (Y). Explain why simple OLS can't be used to estimate the model.
- e) Prove that $\hat{b} = (X'X)^{-1}X'y$ for a general matrix model $y = Xb + u$. **5×4**

PART-C

- Q.3 a) Explain and prove that r^2 is a measure of the goodness of fit in regression model. **14**
b) Define and justify the range of values for r^2 . **6**
- Q.4 a) For a model like $Y_i = a + bX_i + u_i$, derive the normal equations and solve them to determine \hat{a} and \hat{b} under OLS. **12**
b) Derive $\text{var}(\hat{b})$ of the above model. **8**
- Q.5 a) For a simple regression model, prove that $\text{var}(\hat{u}) = \hat{s} = \frac{\hat{a} \hat{u}_i^2}{n}$. **12**
b) Using a suitable model, show that $\text{var}(\hat{b})$ is minimum for OLS. **8**
- Q.6 a) What is distributed-lag model, and is there any problem with this model? **6**
b) Using dummy variable technique, construct and justify the regression model with one quantitative variable and one qualitative variable with two categories. **8**
c) Explain how dummy variable can be used to deal with slope change in the model. **6**

- Q.7
- a) Why the problem of heteroscedasticity found in regression model? How can it be detected? Which method can be used to estimate model with heteroscedastic variance? **12**
 - b) What are the main consequences of multicollinearity? **4**
 - c) Why autocorrelation appears in regression model? **4**

End Semester Examination, Dec. 2018
B.A. / B. Sc. (Hons.) Economics – Fifth Semester
FINANCIAL ECONOMICS (BAEH-D-505)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **Part-A** and **THREE** questions from **Part-B**. Marks are indicated against each question.

- Q.1 a) Differentiate between capital budgeting decision and capital structure decision.
b) What are annuities and why such values are calculated?
c) Differentiate between yield to maturity and yield to call.
d) What do you understand by intrinsic value?
e) What is the purpose of balance sheet?
f) Define capital budgeting and capital expenditure.
g) Explain possessory note.
h) Define bearer debentures and registered debentures.
i) Why payback period method is both: popular and unsound?
j) Explain financial issues of the project financing. **2×10**

PART-A

- Q.2 Explain in brief profit maximization decision criteria and wealth maximization decision criteria. **5**
- Q.3 Guro Technology Limited is a listed company whose shares are selling at ₹330 currently. The expectations of the market about the future price of the share is ₹380. If the current dividend is ₹7 per share, what dividend do you expect for the coming year? **5**
- Q.4 What are futures? How does futures contracts different from the forward contracts? **5**
- Q.5 Why might it be possible for a company to make large operating profits, yet still be unable to meet debt payments when due? What financial ratios might be employed to detect such a condition and how? **5**
- Q.6 A project costs ₹36,000 and expected to generate cash inflows of ₹11,200 annually for 5 years. Calculate the IRR of the project. **5**

PART-B

- Q.6 a) What do you understand by:
i) Future value.
ii) Present value of money. **10**
b) How much will recurring investment of ₹10,000 per annum accumulate to at the end of 30 years where the investment fetches an interest rate of 9.5% per annum if compounding is:
i) Annual
ii) Quarterly
iii) Monthly **10**
- Q.7 XX Enterprises engaged in the business of ship breaking. They have issued a bond whose current market price is ₹120. The bond issued has following features:

Face value — ₹100
 Coupon rate — 15%
 Periodicity of coupon — Annual
 Time remaining for maturity — 6 years
 Redemption value — ₹110
 Current market price — ₹124

- a) What is the current yield of the bond?
- b) If an investor buys the bond today and holds it till maturity what returns would be realize.
- c) Assuming that the yield in the market has fallor to 9% what impact on price of the fund you see? Work out the price of the bond after two years assuming that yield remains at 9%.
- d) Assume that an investor buys the bond today and sells at the price work out in above, what returns would be realize? **20**

Q.8 Kedzie Lord Company had the following balance sheet and income statements over the last three years (in thousands):

	19×1	19×2	19×3
Cash	561	387	202
Receivables	1963	2870	4051
Inventories	2031	2613	3287
Current assets	4555	5870	7540
Net fixed assets.	2581	4430	4364
	7136	10300	11904
Payables	1862	2944	3613
Accruals	301	516	587
Bank loan	250	900	1050
Current liabilities	2413	4360	5250
Long term debt	500	1000	950
Share holders equity	4223	4940	5704
Total liabilities and share holder equity	7136	10300	11904
Sales	11863	14952	16349
Cost of goods sold	8537	11124	12016
G. expense	2276	2471	2793
Interest	73	188	200
Profit before tax	977	1169	1340

Taxes are 390, 452, 576 for 19×1, 19×2, 19×3. Evaluate trends in the company's financial condition and performance by using.

- a) Common size analysis.
- b) Index analysis. **20**

Q.9

- a) Differentiate between money market and capital market. **6**
- b) Define shares and explain preferred shares and its types. **7**
- c) Define debentures and explain it various forms. **7**

Q.10

- a) Define the financial agreements. **5**
- b) Explain the model off PPP participants and PPP project financing. **7**
- c) How a private finance project is financed. **8**

End Semester Examination, Dec. 2018
B.A. (Hons.) Economics – Third Semester
MATHEMATICS FOR ECONOMICS-II (BAEH-G-305)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **2**

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 Attempt all questions:

- a) What will be equivalent Leibniz notation, D_x notation and y notation for f''' and $f^{(8)}$
- b) Given $u = a^v$. Find out $\frac{du}{dv}$ at $v=2$ and $a=5$.
- c) Given $z = f(x, y) = (x^2 + 4)(3x + 2y)$, find out $f_y(2,1)$
- d) If $f(x) = x^{32}$ find out $f^{(33)}$ and comments.
- e) Find out u'' for $u = v^5 e^v$
- f) If $y = f(x) = x^2 + 3x + 9$, what will be the value of $\frac{dy}{dx}$ to reach its extremum?
- g) If $f(y) = 5y^5 - 4y^4$ find out $f^{(4)}$
- h) If $u = f(v_1, v_2) = 2v_1^2 + v_1 v_2 + 9v_2^2$, find out f_{v_1}
- i) Let $U = u(X, Y)$ be the utility function when X units of commodity – 1 and Y unit of commodity-2 are consumed. How do you interpret $u'_x(35, 9) = 8$
- j) If prices of all commodities change along demand function: $D = D(p_1, p_2, p_3, \dots, p_n)$, how much quantity demand will be changed in total? **2×10**

PART-A

Q.2 Attempt any **four** questions:

- a) Find out the future value of ₹250 in 2 years if it is invested at compound interest rate 5% per month. How this estimated future value if discounted at same rate can give present value? **5**
- b) Solve equation $\frac{dy}{dt} + 4y = 0$ with initial condition $y(0) = 1.5$ **5**
- c) Find out $\partial z / \partial y_1, \partial z / \partial y_2$ and $\partial^2 z / \partial y_1 \partial y_2$ for $z = 5y_1^3 - 10y_1^2 y_2 + 15y_2^2$ **5**
- d) For a standard Lagrange function: $y = f(\lambda, x_1, x_2)$, construct and explain Hessian matrix and transform it into bordered Hessian term. **5**
- e) Suppose $u = f(v) = v^3$, explain that it has an inflection point. **5**

- Q.3
- a) Find out the extremum of $p = u^2 + v^2$ subject to $u + 4v = 2$ and prove that its extreme is minimum point. **5**
 - b) Suppose a function $u(x, y) = xy$ with intertemporal budget constrain $M = x + \frac{y}{1+r}$: find out the optimal x and y , and check it's second order condition. **8**
 - c) Comment on the extreme value(s) of function: $t = 2s^2 + rs + 4r^2 + sm + m^2 + 2$ **7**

- Q.4
- a) Find all partial derivatives up to second order of the function $f(x, y) = x^4 y^2 - x^2 y^6$ **7**
 - b) If $u = 5v^4 - 3v^3 + 7v^2 + 2v - 4$, find out $f''(2)$ **3**
 - c) Find out $f^{(5)}$ when $f(x) = 3x^{-1} + 6x^3 - x^6$ **6**

- d) Find out the extremum point of function $d = p^3 - 3p^2 + 2$ by checking necessary and sufficient conditions. **4**

PART-B

- Q.5 a) Find $f^{(3)}(4)$ and $f(s) = \sqrt{s}$ **5**
 b) Compute first four derivatives of : **5**
 (i) $y = x^{-1}$ and (ii) $u = 4v^4 + 5v^3 + 3v$
 c) Check whether $\frac{\partial^2 f}{\partial u \partial v} = \frac{\partial^2 f}{\partial v \partial u}$ for the functions:
 (i) $f(u, v) = u^3v + u^2v^2 + u + v$ (ii) $f(u, v) = u^4v^2 + u^2v^6$ **5**
 d) If $f(p, q) = p^3e^{q^2}$, find out first and second order derivatives at (1, 0) **5**
- Q.6 a) Explain with a diagram/example: first derivative test alone be helpful to find out the extremums (maximum/minimum/inflection). **8**
 b) Simply a second derivative test is sufficient to find out the convexity/concavity of function – justify and prove it with suitable example. **6**
 c) Suppose a firm minimizes cost given by $C(L, K) = 20L + K$ subject to constraint imposed by production function $Q(L, K) = L + \sqrt{K}$. Find out the optimal choices of L and K using Lagrange approach. **6**
- Q.7 a) Explain how the concept of intertemporal budget constrain is helpful to determine present value of an investment? **6**
 b) Banksh opened up a bank account with deposit of ₹675. He then planned with this account to deposit the same amount at end of each month for 10 years with compounded interest rate of 18 % p.a. Calculate how much will have to accumulate at end of the investment period. **6**
 c) A person invests ₹1050 each quarter into an annuity at interest 6% p.a. for five years. What will be future value at end of the agreed investment period? **4**
 d) Calculate and illustrate the future value of ₹1250 in 5 year-time with fixed inflation rate at 10% p.a. in economy. **4**

End Semester Examination, Dec. 2018
B. A. / B. Sc. (Hons.) Economics – Third Semester
FINANCIAL SYSTEM (BAEH-G-306)

Time: 3 hrs

Max Marks: **100**

No. of pages: **1**

Note: Attempt **FIVE** questions in total from **Part-A, Part-B** and **Part-C**. **Q.1 (Part-A)** and **Q.2 (Part-B)** are **compulsory**. Attempt any **THREE** questions from **Part-C**. Marks are indicated against each question.

PART-A

- Q.1
- a) State any two functions of financial markets.
 - b) Define the commercial bills with example.
 - c) Extract the relationship between financial system and economic development.
 - d) Differentiate between participating and non participating preference share.
 - e) State the characteristics of money market instruments.
 - f) What is universal banking?
 - g) Explain who is Merchant Banker?
 - h) What are offshore Funds?
 - i) Explain the call rate in the money market.
 - j) State the objectives of underwriting. **2×10**

PART-B

- Q.2 Answer the (**any four**) of the following:
- a) Discuss the key differences between Bonds and Debentures.
 - b) Explain in detail Indian Equity market.
 - c) What are the different products and services offered by EXIM bank?
 - d) Why is the general insurance market smaller than the life insurance market in India?
 - e) Define the foreign direct investment and its three types. **5x4**

PART-C

- Q.3
- a) Explain why there is a need of industrial finance? **6**
 - b) Give a brief profile of IFCI and SIDBI. **14**
- Q.4
- a) Briefly explain the structure of Indian money market. **5**
 - b) Explain in detail the Instruments of monetary policy. **10**
 - c) Write a brief note on different types of bonds. **5**
- Q.5
- a) Define Merchant Banking, and how it is different from commercial banking. **8**
 - b) Explain the Pre issue activities and Post issue activities of Merchant Banking. **12**
- Q.6
- a) Define the foreign Investment and explain different types of foreign Investment. **6**
 - b) Explain the registration Process for FII's. **7**
 - c) Explain the foreign entities who can register as FII's in India. **7**
- Q.7
- a) Define commercial banks. **4**
 - b) Explain the types of commercial banks. **4**
 - c) Give a detail on primary and secondary junctions of commercial bank. **12**

End Semester Examination, Dec. 2018
B.A. / B. Sc. (Hons.) – First Semester
INTRODUCTORY MICROECONOMICS (BECO-C-103)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **2**

Note: Attempt **FIVE** questions in total from **Part-A, Part-B** and **Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory. Attempt any THREE questions from Part-C. Marks are indicated against each question.**

PART-A

Q.1 Answer the following questions:

- a) State the main drawbacks of the Marshallian Cardinal approach to theory of demand.
- b) The total utility at different levels of consumption is given below:

Units Consumed	1	5	10
Total Utility	20	60	85

If the price is fixed at ₹5, determine the equilibrium level of demand.

- c) Define Lexicographic Preferences with the help of examples.
- d) Explain the concept of Giffen's Paradox.
- e) What does consumer surplus measure? How is it calculated?
- f) What is meant by scale in production?
- g) What are isoquants? Explain with help of an example.
- h) Define "Average Revenue" and "Marginal Revenue".
- i) Distinguish between capital deepening and labour deepening technical progress.
- J) If the price of good 1 doubles and price of good 2 triples, does the budget line become flatter or steeper? Explain. **2×10**

PART-B

Q.2 Answer (**any four**) of the following questions:

- a) Suppose you live in a world where only two goods are consumed, food and clothes. You have ₹100, food costs ₹5 per unit and cloth cost ₹25 per unit.
 - i) If you consume only food, how much can you purchase? If you consume only cloth, how much can you purchase?
 - ii) Draw a graph of your budget constraint and label the feasible set.
 - iii) Suppose the price of the cloths is reduced to ₹20 per unit. Draw your new budget constraint and label the new feasible set.
- b) Depict pollution on x axis and electricity on y axis what would the indifference curve look like if:
 - i) Pollution is a bad commodity and electricity is a good commodity.
 - ii) Pollution is a neutral commodity and electricity is a good commodity.
- c) Drive the demand curve from the Marshall, Hicks and slusky price effect.
- d) A firm's TFC is 500 and its MC schedules are given below:

Output	0	2	4	6	8	10	12	14	16	18	20	22	24
MC	–	340	300	200	150	120	120	130	150	175	215	300	340

Workout TC, TVC, AC, AVC, and AFC Schedules and sketch them on same graph.

- e) Given the output function: $Q = 1000 L^{1/3} K^{2/3}$ and the consumer budget; $3000 = 100L + 50K$ determine the equilibrium level of employment for the producer. **5×4**

PART-C

- Q.3 a) State the weak and strong axioms of the revealed preference theory with specific reference to their distinguishing feature. **10**

b) A consumer's buying behavior of good x and y in the price situation is observed as follow:

Observation	Price		Bundles	
	P_x	P_y	x	y
1	6	3	6	6
2	5	5	10	0

Which consumption bundle has revealed preference to other? Does this buying behavior reveal violation of the WARP? **10**

Q.4 a) Determine the total and the average products at each level of employment of labour units below:

L	0	1	2	3	4	5	6	7	8	9	10
MPL	0	80	70	60	50	40	30	20	10	0	-10

10

b) Which of three stages of production do the producers like to operate and why? **5**

c) With reference to above example, tell the range of optimum production, when producer is likely to operate? **5**

Q.5 a) A consumer faces prices of hot dogs and burgers of \$1 each. Consumption of the two commodities at various weekly incomes are shown as follow:

Income	Hot Dogs	Burgers
\$10	3	7
\$15	6	9
\$20	10	10

i) Use the information to sketch the income consumption curve.

ii) Define the Engel curve and draw the Engel curves for hot dogs and burgers. **7×2**

b) Define the Price consumption curve. Give suitable example. **6**

Q.6 a) Given the equation of demand $Q^d = 1000 - 4P$, Where Q^d is quantity demanded and P is price. Obtain expressions of TR, AR and MR. Depict TR, AR and MR in a diagram. Find the level of output at which:

i) $AR = 0$

ii) $MR = 0$

iii) TR is maximum.

iv) Is MR twice as steep as AR? **10**

b) Calculate the price elasticity of demand at $Q = 500$. Find the AR and MR at this point and show that $MR = AR[1 - (1/E_p^0)]$. **10**

Q.7 Given the following marginal utility schedule for good x and y and given that price of x and y both is \$1, and that individual spends all of his income of \$ 7 on X and Y:

Q	1	2	3	4	5	6	7
MU_x	15	11	9	6	4	3	1
MU_y	12	9	6	5	3	2	1

a) Indicate how much of x and y the individual should proceed to maximize utility.

b) Show the condition of constrained utility maximization when individual is at his optimum.

- c) Determine how much total utility the individual receives when he or she maximizes utility.
- d) How much utility would the individual get if he spent all income on x and y. **5×4**

End Semester Examination, Dec. 2018
BA (Hons.) ECONOMICS – First Semester
INTRODUCTORY MACRO ECONOMICS (BECO-C-104)

Time: 3 hrs

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Each question carries equal marks.

Q.1 Answer the following questions:

- a) What is the difference between fiat money and commodity money?
- b) Explain any one reason for prevalence of wage price rigidity in the economy.
- c) What do you understand by structural inflation?
- d) Why hyperinflation is considered harmful for the economy?
- e) Enumerate determinants of transactional demand for money.
- f) What do you understand by paradox of thrift?
- g) Discuss the present value criterion for investment.
- h) Contrast between the stock and flow concept.
- i) Briefly explain the idea behind relative income hypothesis.
- j) Graphically show the determination of exchange rate for the economy. **2x10**

PART-A

Q.2 Answer (**any four**) of the following:

- a) "Along the consumption function, income changes more than consumption." What does this imply for the *MPC* and *MPS*? **5**
- b) If a firm invests out of retained profits rather than borrowed funds, will its investment decisions still be affected by the changes in the interest rate? Explain. **5**
- c) What motives for holding money transactions, precautionary, or speculative do you think explain the following holdings? Explain.
 - i) Money to meet University's monthly payroll deposited in the local bank.
 - ii) A household tries to keep a buffer of Rs. 1000 in its savings account.
 - iii) You carry Rs. 20 in your pocket even though you have no planned expenditures. **5**
- d) Define inflation. Briefly explain various sources of inflation. **5**
- e) What is the labor-force status of each of the following?
 - i) A retired person who moved to Delhi and answers advertisements for Part-time positions.
 - ii) A parent who works part-time, wants a full-time job, but doesn't have time to look.
 - iii) A teacher who has a job but is too ill to work. **5**

- Q.3
- a) Why does the ratio of consumption to accumulated saving declines over time until retirement? Explain the underlying assumption to such behavior? What happens to this ratio after retirement? **10**
 - b) How do the life-cycle and permanent-income hypotheses resolve the seemingly contradictory pieces of evidence regarding consumption behavior? **10**

- Q.4
- a) Given the following information, calculate Tobin's *q* statistic: Let's suppose that a company has one lakh outstanding shares of stock, each valued at Rs. 25. Let us suppose also that the replacement cost of its physical capital stock is Rs. 18 lakhs.
 - i) Should this firm invest (net) in more physical capital?

- ii) Would your answer change if the replacement cost of its physical capital stock at this time was Rs. 25 lakh? Rs. 28 lakh? **10**
- b) The cash flows for an investment project are listed below. The firm will invest if the present value of the cash flows is positive.

Year 1	Year 2	Year 3
-1400	700	840

Should the firm undertake this project?

- i) If the interest rate is 5%.
 ii) If the interest rate 10%.

10

PART-B

- Q.5 a) Suppose a country has a money demand function: $\left(\frac{M}{P}\right)_d = kY$, where k is a constant parameter. The money supply grows by 12% per year, and real income grows by 4% per year.
- i) What is the average inflation rate?
 ii) How would inflation be different if real income growth were higher? Explain.
 iii) How do you interpret the parameter k ? What is its relationship to the velocity of money? **14**
- b) Suppose, instead of a constant money demand function, the velocity of money in this economy was growing steadily because of financial innovation. How would that affect the inflation rate? Explain. **6**
- Q.6 a) Consider the following impacts of inflation: tax distortions, income and wealth redistribution, shoe-leather costs, and menu costs. For each, define the cost and provide an example. **10**
- b) Explain how the overall supply of money in economy depends on the amount of high powered money. **10**
- Q.7 a) Suppose that a country experiences a reduction in productivity – is, an adverse shock to the production function.
- i) What happens to the labor demand curve?
 ii) How would this change in productivity affect the labor market – that is, employment, unemployment, and real wages – if the labor market is always in equilibrium?
 iii) How would this change in productivity affect the labor market if unions prevent real wages from falling? **10**
- b) Explain the concept of cyclical and frictional unemployment. Support your answer with a suitable example. **10**

End Semester Examination, Dec. 2018
 B.A. (Hons.) Economics – First Semester
INTRODUCTORY MACRO ECONOMICS (BECO-C-104)

Time: 3 hrs.

Max Marks: **100**

No. of pages: **2**

Note: Attempt **FIVE** questions in total from **Part-A, Part-B** and **Part-C. Q.1 (Part-A) and Q.2 (Part-B) are compulsory. Attempt any THREE questions from Part-C. Marks are indicated against each question.**

PART-A

Q.1 Answer the following questions:

- a) Explain why the money demand function is downward sloping.
- b) What do you understand by economic growth?
- c) Contrast between ex-ante and ex-post variables.
- d) Enumerate any two assumptions of classical thought.
- e) Give an example of supply shock.
- f) Explain the concept of marginal propensity to consume.
- g) What is marginal efficiency of capital?
- h) Briefly explain speculative demand for money.
- i) What is the full employment level of output?
- j) Enumerate factors leading to structural unemployment.

2×10

PART-B

Q.2 Answer (**any four**) of the following:

- a) What were three conjectures about the consumption function given by Keynes's? Complement your answer with a diagram.
- b) If a firm invests out of retained profits rather than borrowed funds, will its investment decisions still be affected by the changes in the interest rate? Explain
- c) Explain the concept of the opportunity cost of holding money.
- d) In each of the following scenarios, explain and categorize the cost of inflation:
 - i) Because inflation has risen, the Westside clothing company decides to issue a new catalog monthly rather than quarterly.
 - ii) Grandpa buys an annuity for ₹10,000 from an insurance company, which promises to pay him ₹1,000 a year for the rest of his life. After buying it, he is surprised that high inflation triples the price level over the next few years.
- e) What is the labor-force status of each of the following?
 - i) A teenager who sends out resumes in searching for a first job
 - ii) An autoworker who has been laid off and would like to work but has given up hope of finding work or being recalled

5×4

PART-C

Q.3 a) Albert and Franco both follow the life-cycle hypothesis: they smooth consumption as much as possible. They each live for five periods, the last two of which are retirement. Here are their incomes earned during each period:

Period	Albert	Franco
1	1.00.000	40.000
2	1,00.000	1.00.000
3	1,00.000	1.60.000
4	0	0
5	0	0

They both die at the beginning of period six.

- i) For each individual, compute consumption and saving in each period of life.
- ii) Compute their wealth (that is, their accumulated savings) at the beginning of each period, including period six
- iii) Graph consumption, income, and wealth for each of them, with the period on the horizontal axis. **14**

b) Explain why changes in consumption are unpredictable if consumers obey the permanent-income hypothesis and have rational expectations. **6**

Q.4 Use the neoclassical model of investment to explain the impact of each of the following on the rental price of capital, the cost of capital, and investment:

- a) Anti-inflationary monetary policy raises the real interest rate.
- b) An earthquake destroys part of the capital stock.
- c) Immigration of foreign workers increases the size of the labor force.
- d) Advances in computer technology make production more efficient. **5×4**

Q.5 a) Explain various functions of money. Which of the functions do the following items satisfy and which they don't? Why?

- i) A credit card
- ii) A painting by M.F. Hussain
- iii) A metro token **10**

b) In the country, the velocity of money is constant. Real GDP grows by 3 percent per year, the money stock grows by 8 percent per year, and the nominal interest rate is 9 percent then what is the growth rate of nominal GDP and the inflation rate? **10**

Q.6 a) "During periods of inflation, people use real resources to reduce their holdings of fiat money. Such activities produce a private benefit with no corresponding social gain, which illustrates the social cost of inflation." Explain this quotation and give an example. **10**

b) Enumerate and elaborate the significance of classical assumptions underlying quantity theory of money? **10**

Q.7 a) In a perfectly competitive labour market, with help of diagram, represent initial equilibrium wage by w^* and employment as L^* .

i) Suppose the demand for labour decreases leading to shift in labour demand curve. If wages are perfectly flexible, what is the effect on wages and employment? Show this in the diagram.

ii) Is there any involuntary unemployment in part (a) after the shock?

iii) Now suppose wages can only adjust half as much as in part (a) that is, wages are sticky. What is the effect on wages and employment in this case? Show this in the diagram.

iv) Is there any involuntary unemployment in part (c) after the shock? How much? **3×4**

b) Explain the concept of cyclical and frictional unemployment. Support your answer with a suitable example. **8**

End Semester Examination, Dec. 2018
 B.A./B.Sc. (Hons.) Economics – First Semester
MATHEMATICS FOR ECONOMICS (BECO-C-105)

Time: 3 hrs.

Max Marks: **100**

No. of pages: 2

Note: Attempt **FIVE** questions in all; **Q.1 is compulsory**. Attempt any **TWO** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 Attempt all questions:

- a) Using suitable examples, explain the simple, composite and inverse functions.
- b) Let $u = a^v$, find out du/dv when $v = 2$ and $a = 5$.
- c) Given $z = f(x, y) = 3x + 2y^2$, find out $f_y(2, 1)$
- d) Find out $\int (u^3 + 2u^2 + 1)du$
- e) Suppose $X = \{4, 5\}$, $Y = \{3, 6, 7\}$ and $Z = \{2, 3\}$. Find out $X \cup (Y \cap Z)$
- f) Explain identity matrix and scalar matrix with example.
- g) If $y = \sum_{i=0}^n b_i x^i$, express it in general form of polynomial function.
- h) If $u = f(v_1, v_2) = 2v_1^2 + v_1 v_2 + 9v_2^2$, find out f_{v_1}
- i) Find out the total derivative of utility function: $u = u(x, y) = x^\alpha y^\beta$
- j) Solve the equation $\frac{dy}{dt} + 4y = 0$ with initial condition $y(0) = 1$ **2×10**

PART-A

Attempt any **four** questions:

- Q.2 a) If average cost, $AC=24 - Q$ and $MC=8$, find out Q **5**
- b) Given the vectors: $u = (5 \ 2 \ 3), v = (3 \ 1 \ 9), w = (7 \ 5 \ 8)$, write down u', v' and w' and also compute $u'v$ and $u'w$. **5**
- c) Find out $\partial z / \partial y_1$ and $\partial z / \partial y_2$ and $z = 5y_1^3 - 10y_1^2 y_2 + 15y_2^2$. **5**
- d) Evaluate the value of integral $\int_2^4 3\sqrt{z} dz$. **5**
- e) Find out C , if $C = A \times B$ and $A = \begin{bmatrix} 1 & 0 & 3 \\ 2 & 1 & 5 \end{bmatrix}, B = \begin{bmatrix} 1 & 3 \\ 2 & 5 \\ 6 & 2 \end{bmatrix}$. **5**
- Q.3 a) Let $A = \begin{bmatrix} 2 & 0 \\ 0 & 3 \end{bmatrix}, B = \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$, show that whether $AB \neq BA$. **4**
- b) Prove that $\begin{vmatrix} (1+a) & 1 & 1 \\ 1 & (1+b) & 1 \\ 1 & 1 & (1+c) \end{vmatrix} = abc + ab + ca + bc$. **5**
- c) Verify the distributive law: $P(Q+R) = PQ + PR$ when $P = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$,
 $Q = \begin{bmatrix} 2 & -1 & 1 & 0 \\ 3 & -1 & 2 & 1 \end{bmatrix}, R = \begin{bmatrix} -1 & 1 & 1 & 2 \\ -2 & 2 & 0 & -1 \end{bmatrix}$ **5**

d) Show that $S = \begin{bmatrix} 5 & 6 \\ 5 & 10 \end{bmatrix}$ and $T = \begin{bmatrix} \frac{1}{2} & -\frac{3}{10} \\ -\frac{1}{4} & \frac{1}{4} \end{bmatrix}$ are inverse of each other. **6**

- Q.4 a) Find all partial derivatives up to second order of the function $f(x, y) = x^4y^2 - x^2y^6$ **6**
 b) If $u = 5v^5 - 3v^4 + 7v^2 + 2v - 4$ find out $f'''(2)$. **5**
 c) Find out first four derivatives of $D(p) = 3p^2 + 8p^{\frac{1}{2}} + e^p$ **5**
 d) If $f(u, v) = u^3e^{v^2}$ then prove that whether $f''_{12} = f''_{21}$ at $(u, v) = (1, 0)$ **4**

PART-B

- Q.5 a) Find the integral for $\int 3e^{2y+3} dy$ **4**
 b) Find the integral for $\int xe^x dx$ **4**
 c) Evaluate the value of integral $\int_0^2 4w^4 dw$ **4**
 d) Find out $\int \frac{dy}{(y+2)(y+1)}$ **4**
 e) Compute the value of $\int x^2 e^{-2x^3} dx$ **4**

- Q.6 Verify that following differential equations are exact and solve them in four step procedure:
 a) $2yt^3 dy + 3y^2t^2 dt = 0$ **10**
 b) $t(1+2y) dy + y(1+y) dt = 0$ **10**

- Q.7 a) Suppose a researcher estimated the price demand relationship for Rice, Wheat, Corn and Soybeans in Faridabad. It has been observed that:
 (i) Rice has a constant association,
 (ii) Wheat is linearly related
 (iii) Corn reveals quadratic relation and
 (iv) Soybeans observes as cubic one.
 Express these relationships in functional form and show their possible shapes. **5**
 b) Solve second order recurrence relation given $F_n = 3F_{n-1} + 10F_{n-2}$ where $F_0 = 2$ and $F_1 = 3$. **3**
 c) If $S = \{3, 4, 5, 7, 9\}$ and $T = \{3, 7\}$ then explain whether $T \subset S$ or $S \supset T$ **2**
 d) Write a short note using example or diagram on:
 (i) Equal set (say $A = B$) **4**
 (ii) Null set
 (iii) Set of real numbers and
 (iv) Disjoint and complement of set.
 e) Find the total cost function if it is found that marginal cost of output is $c^2 + 12c + 36$ and cost of zero output produced is ₹345. **6**

End Semester Examination, Dec. 2018
B.A. / B. Sc. (Hons.) Economics – First Semester
PRINCIPLES OF ECONOMICS (BECO-F-102)

Time: 2 hrs.

Max Marks: **50**

No. of pages: 2

Note: Attempt **FIVE** questions in total from **Part-A** and **Part-B**. **Q.1 (Part-A)** is **compulsory**. Attempt any **FOUR** questions from **Part-B**. Marks are indicated against each question.

PART-A

Q.1 Answer the following questions:

- a) How does the circular flow of income work?
- b) A firm charges \$800 for its unique word processor. If total revenue is \$56,000 in July, how many word processors were sold that month?
- c) What is the slope of the demand curve?
- d) What is the national income?
- e) What is economics? Discuss its nature and scope. **2×5**

PART-B

Q.2 a) Given the following data:

$$\text{WIDGETS } P - 80 - Q_d$$

$$P = 20 + 2 Q_s$$

Where Q_d is quantity demanded, Q_s is quantity supplied and P is price.

Given the above demand and supply equations for widgets, find the equilibrium price and quantity. **2**

- b) Explain why, for a linear demand curve, the price elasticity of demand is not represented by the slope of the demand curve. **3**
- c) Wheat supplies are sharply reduced because of drought in the wheat-raising states, and consumers turn to rice as a substitute for wheat. How would you illustrate this change in the wheat-market in supply-and-demand terms? **5**

Q.3 a) From the data shown in Table about supply of alarm clocks, calculate the price elasticity of supply from: point J to point K, point L to point M, and point N to point P. Classify the elasticity at each point as elastic, inelastic, or unit elastic.

Point	Price	Quantity Supplied
J	8	50
K	9	70
L	10	80
M	11	88
N	12	95
P	13	100

- b) Transatlantic air travel in business class has an estimated elasticity of demand of 0.40 less than transatlantic air travel in economy class, with an estimated price elasticity of 0.62. Why do you think this is the case? **5**

Q.4 a) Discuss Gross Domestic Product (GDP). Describe the components and methods of calculating GDP. **5**

- b) Calculate Net National Disposable Income and personal income from the following data.

S. No.	Contents	₹ (in crores)
i)	Personal Tax	212
ii)	Net National Product at Factor Cost	2500
iii)	Net Indirect Taxes	180
iv)	Domestic Product Accruing to Government	500
v)	Retained Earnings of Private Corporations	80
vi)	Net Factor Income From Abroad	23
vii)	National Debt Interest	100
viii)	Net Current Transfers From Abroad	20
ix)	Corporation Tax	70
x)	Current Transfers From Government	30

5

- Q.5 a) Discuss the importance of Opportunity cost in economics. **5**
b) What is the significance of studying economics? How is economics relevant for the society? **5**
- Q.6 a) What is circular flow of economic activities? Discuss the circular flow of income in a closed economic system. **5**
b) Discuss the importance of circular flow. **5**
- Q.7 a) Distinguish between stock and flow. Give two examples of each. **5**
b) What is the difference between static analysis and dynamic analysis? **5**

End Semester Examination, Dec. 2018

BA / B. Sc. (Hons.) – First Semester ENVIRONMENTAL STUDIES (CH-202B)

Time: 3 hrs

Max Marks: **100**

No. of pages: 1

Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **Part-A** and **THREE** questions from **Part-B**. Marks are indicated against each question.

- Q.1 Answer briefly:
- Define 'ecology'.
 - What is meant by endangered animals?
 - Name any two major air pollutants.
 - Describe a Hot spot.
 - Expand the term 'HIV-AIDS'
 - Define 'trophic level'
 - Define 'Mortality rate'
 - On which date "International Ozone Day" is celebrated.
 - What is green-house effect?
 - What do you mean by "Kyoto Protocol"?
- 2×10**

PART-A

- Q.2 Why food chain is important for sustainability of ecological pyramids? **5**
- Q.3 Define ecosystem and list the various functions of ecosystem. **5**
- Q.4 Why there is need for public awareness related to environmental studies? **5**
- Q.5 Discuss your role as a responsible citizen of the nation to prevent water pollution. **5**
- Q.6 Discuss with an example, how climate change affects human health. **5**

PART-B

- Q.7 a) What is deforestation? Discuss its causes and environmental impacts in detail. **10**
b) How can you implement the knowledge of environmental studies to your daily life for the conservation of natural resources? **10**
- Q.8 a) Define biodiversity along with its types. What are the major threats to biodiversity? **10**
b) Differentiate between "In-situ and Ex-situ" conservation of biodiversity mentioning suitable examples of each kind. **10**
- Q.9 a) What is Acid Rain? Discuss its causes and effects in detail. **10**
b) Discuss silent features of "Wild Life Protection Act". **10**
- Q.10 a) An improvement in health is central to sound environmental management. Discuss at least three strategies that will help strengthen this link. **10**
b) What are the major aspects of a sound watershed development setup? Technically, how can these aspects be achieved? **10**
- Q.11 a) Discuss the effects of air pollution on living organisms. **10**

b) What are some of the steps that you as an individual can take to Prevent Pollution?
Mention at least seven. **10**

End Semester Examination, Dec. 2018
M.A. (Applied Psychology) — Second Semester
SELF AND PERSONALITY (MAAP-201)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 How to make a theory? Explain with help of an example. **10**
- Q.2 Explain two life span Neo Freudians theories and give their comparison with Freudian theory. **10**
- Q.3 Differentiate between classical conditioning and operant conditioning. **10**
- Q.4 Write short notes on the following:
a) Learned helplessness.
b) Sensation seeking. **2×5**
- Q.5 Throw some light on trait theories. **10**
- Q.6 Explain "Maslow's Hierarchy" of needs model and its criticism. **10**

PART-B

- Q.7 Would Erikson explain the terrorists behavior in the same way as Freud? How Erickson use such constructs as identity, mastery mutually to explain the terrorist behavior? To what social trauma might Erickson attribute the terrorist behavior? **10**

End Semester Examination, Dec. 2018
M.A. (Applied Psychology) — Second Semester
RESEARCH METHODOLOGY-II (MAAP-202)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 What are the different scales of measurement and how they are applied in different situation? Explain the same with suitable examples. **10**
- Q.2 Why translation and adaptation is important for test construction and how a test is translated and adopted? **10**
- Q.3 Explain the process of calculating item difficulty and item discrimination? Why they are important for a test? **10**
- Q.4 What is reliability? Describe the different facets of reliability? **10**
- Q.5 What is validity? What are the types of validity? **10**
- Q.6 Describe three major psychological tests describing intelligence assessment? **10**

PART-B

- Q.7 The Classical Test Theory (CTT) assumes that every obtained score is a sum of the true score and the error of measurement. The earlier versions of the CTT, in their reliability conceptualization, ambitiously addressed the random errors of measurement. Accordingly, reliability can be conceptualized as a consistency between the true score and the obtained score. Reliability can be studied through various perspectives. In the test construction phase, internal consistency reliability is given heavy emphasis. Various reliability coefficients such as split-half reliability, Kuder-Richardson reliability, Cronbach alpha etc. have been developed for this purpose. One of the earlier developments in CTT is the Spearman-Brown formula. The other important types of reliabilities include test-retest reliability and interscorer reliability. In addition to reliability, psychologists emphasize test validity. Content validity, concurrent validity, predictive validity, construct validity are some of the important types of validities in psychometric studies. Factor analysis has also been employed in evaluating the test validity. Once the reliability and validity are well established, the test constructor attempts to establish the representative and comprehensive norms.

Answer the following questions related to above note:

- a) Describe the relevance of classical test theory in light of above note.
- b) Write a note on item response theory and how it is different from classical test theory? **2×5**

End Semester Examination, Dec. 2018
M.Sc. / M.A. (Applied Psychology) – Second Semester
LIFE SPAN DEVELOPMENT (MA-AP-203)

Time: 3 hrs.

Max Marks: **50**

No. of pages: *1*

Note: *Attempt **FIVE** questions in all; **Part B is compulsory**. Attempt any **FOUR** questions from **Part A**. Marks are indicated against each question.*

PART-A

- Q.1 Explain the various methods of data collection in life span development. **10**
- Q.2 Explain how social development takes place in individuals? **10**
- Q.3 What are the various psychological impact of pubertal events? Explain in detail. **10**
- Q.4 What are the various physical, cognitive and social changes are associated with old age? **10**
- Q.5 Delineate the process of motor development in infants. **10**

PART-B

- Q.6 What are the various factors that affect physical growth? **10**

End Semester Examination, Dec. 2018
M.Sc. / M.A. (Applied Psychology) – Second Semester
INDIC INFLUENCES ON PSYCHOLOGY (MA-AP-211)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **Part B is compulsory**. Attempt any **FOUR** questions from **Part A**. Marks are indicated against each question.

PART-A

- Q.1 What is the nature and scope of Indian Psychology? **10**
- Q.2 Describe the Chakra's Model of Indian Psychology. Explain the functions of the different chakras. **10**
- Q.3 Describe the content of Vedas and explain the relationship between Vedas and Psychology. **10**
- Q.4 Describe the nature and models of Yoga Psychology. **10**
- Q.5 How Bhagwat Geeta facilitate in acquiring self knowledge? What are the different psychological perspectives in Bhagwat Geeta? **10**
- Q.6 Describe the Jain Psychology in brief. **10**

PART-B

- Q.7 Write a short note on the following:
a) Triguna theory of personality.
b) Vipassana and self. **5×2**

End Semester Examination, Dec. 2018
M.Sc. / M.A. (Applied Psychology) – Second Semester
PERSONAL STRENGTH, VALUES AND ETHICS (MA-AP-232)

Time: 3 hrs.

Max Marks: **50**

No. of pages: *1*

Note: *Attempt **FIVE** questions in all; **Part B is compulsory**. Attempt any **FOUR** questions from **Part A**. Marks are indicated against each question.*

PART-A

- Q.1 Explain the importance of ethics in society. **10**
- Q.2 Explain the role of personal values in our life. **10**
- Q.3 Explain Kohlberg's theory with examples. **10**
- Q.4 Discuss the relevance of the ethics of the Vedas and Gita in today's world. **10**
- Q.5 Explain the importance of ethics in business. **10**

PART-B

- Q.6 Amrita is a loan officer in your bank. She has forged an approval signature on a customer loan, which requires signatures from two loan officers. When this case is reported, she profusely apologizes. She says her husband has been very ill and was going to surgery on the day she forged the signature. She did not have time to find another loan officer to sign. Amrita has a spotless record of 15 years in the bank.
- a) What are the ethical issues in the above case and how will you handle the situation? **10**

End Semester Examination, Dec. 2018
MA (Applied Psychology) – Third Semester
PSYCHOLOGY OF HEALTH AND WELLBEING (MA-AP-301)

Time: 3 hrs.

Max Marks: **50**

No. of pages: *1*

Note: *Attempt **ALL** questions. Marks are indicated against each question.*

- Q.1 Answer the questions in not more than two lines.
- a) Who conceptualized hope theory?
 - b) Depression is caused due to abnormal functioning of which part of the brain?
 - c) Define the term hedonic treadmill?
 - d) Define the term Reframing?
 - e) Define the term spirituality?
- 2×5**
- Q.2 Write short notes on the following. Attempt **(any four)** out of the following:
- a) Positive psychology and educational setting.
 - b) Character strength.
 - c) Circumplex model of emotions.
 - d) Broaden and build theory.
 - e) Mindfulness.
- 5×4**
- Q.3 Application based long answer question. Attempt **(any two)** out of the following:
- a) Discuss why and how people take a positive view of the world?
 - b) Explain the correlates of self-esteem?
 - c) Throw some light on the neurobiology of hope and optimism.
 - d) How will you help a client maintain a mood journal and suggest him/her strategies to manage his emotional upheaval?
- 10×2**

End Semester Examination, Dec. 2018
MA / M.Sc. (Applied Psychology) – Third Semester
PSYCHOLOGY AND MEDIA (MA-AP-321)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **Part-B is compulsory**. Attempt any **FOUR** questions from **Part-A**. Each question carries equal marks.

PART-A

- Q.1 Define 'media' and describe its major influences on people in detail. **10**
- Q.2 Describe how the developments of science have changed the interaction between people and media. **10**
- Q.3 What are the psychological tools that are applied in advertising? **10**
- Q.4 What is a promotional campaign? How it regulates the audience's behavior? **10**
- Q.5. What are the major psychological issues that are evoked by online gaming? Cite some relevant examples. **10**

PART-B

- Q.6 Write an elucidating report on how TV debates may form an opinion in public regarding issues of national importance. **10**

End Semester Examination, Dec. 2018
M.A. (Applied Psychology) — Fourth Semester
STRESS MANAGEMENT (MAAP-331)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all; **Part-B is compulsory**. Attempt any **FOUR** questions from **Part-A**. Marks are indicated against each question.

PART-A

- | | | |
|-----|---|-----------|
| Q.1 | According to you what is stress and what are its types? | 10 |
| Q.2 | How could yoga and meditation facilitate us in controlling our stress? | 10 |
| Q.3 | What are the different psychological reaction displayed by and individual under stress? | 10 |
| Q.4 | What are the different psychological concepts that are related to stress? | 10 |
| Q.5 | What are the different Indian philosophical concepts that facilitate handling stress? | 10 |
| Q.6 | What are the techniques to monitor and manage the stress? | 10 |

PART-B

- Q.7 Suppose you are a trainer and you have been asked by an organizational to conduct a stress management workshop for it employees.
- a) Describe the steps of conducting a stress management workshop.
 - b) Describe the activities performed by the trainer to conduct the stress management workshop. **5×2**

End Semester Examination, Dec. 2018
M. Sc. / M.A. (Applied Psychology) — Third Semester
PSYCHO DIAGNOSTICS (MAAP-341-2)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: *All **Parts** are **compulsory**. Attempt all questions from **Part-A**. Attempt any **FOUR** questions from **Part-B**. Attempt any **TWO** questions from **Part-C**. Marks are indicated against each question.*

PART-A

- Q.1 Short answer type questions:
- a) Define "Psycho-diagnostics"
 - b) Mention the sources of clinical assessment.
 - c) Define memory and mention any 2 tests that measure memory?
 - d) Define "MMSE".
 - e) What are projective techniques? **2×5**

PART-B

- Q.2 What are the ethical issues involved in clinical assessment? **5**
- Q.3 Elaborate on 'torrence test of creativity'. **5**
- Q.4 Elaborate on 'Bender Gestalt Test'. **5**
- Q.5 Discuss "MISIC" as a measure of intelligence test. **5**
- Q.6 What is the difference between verbal and performance test? **5**

PART-C

- Q.7 Answer (**any two**) of the following:
- a) Describe TAT with an example. What does TAT measure?
 - b) Describe "Rorschach". What does it measure?
 - c) Describe the format for psychological report through a case study of MSE. **10×2**

End Semester Examination, Dec. 2018
M. Sc./M.A. (Applied Psychology) — Third Semester
PSYCHO DIAGNOSTICS (MAAP-341-2)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Short answer type questions:
- a) Define "Psycho-diagnostics"
 - b) Mention the sources of clinical assessment.
 - c) Define memory and mention any 2 tests that measure memory?
 - d) Define "MMSE".
 - e) What are projective techniques? **5×2**
- Q.2 What are the ethical issues involved in clinical assessment? **4**
- Q.3 Elaborate on torrence test of creativity and bender gestalt test. **8**
- Q.4 Discuss "MISIC" as a measure of intelligence test. **4**
- Q.5 What is the difference between verbal and performance test? **4**

PART-B

- Q.7 Answer **any two** of the following long answer type questions:
- a) Describe TAT with an example. What does TAT measure?
 - b) Describe "Rorschach". What does it measure?
 - c) Describe the format for psychological report through a case study of MSE. **10×2**

End Semester Examination, Dec. 2018
MA (Applied Psychology) – Third Semester
PSYCHOTHERAPY (MA-AP-341-3)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all; **Part-B is compulsory**. Attempt any **FOUR** questions from **Part-A**. All question carries equal marks.

PART-A

Q.1 What do you understand by Psychotherapy? Explain the qualities of a good Psychotherapist/Counselor. **10**

OR

If you have a problem, what kind of a Psychotherapist/Counselor would you go to and why? **10**

Q.2 Discuss Freud's concept of id, ego, super ego and their role in the making of personality and the making of distortions in personality **10**

Q.3 What are defense mechanisms? Discuss any two in detail. **10**

Q.4 Discuss the basic tenets of Gestalt therapy. **10**

Q.5 Describe the Cognitive Behaviour therapy and its benefits. **10**

PART-B

Q.6 We all have Id impulses. But Id impulses cannot be fulfilled directly. Take any of your 'id' impulses and explain how you fulfilled it using a defense mechanism. **10**

End Semester Examination, Dec. 2018
M.A. (Applied Psychology) – Forth Semester
SOCIOCULTURAL CONTEXT OF MENTAL HEALTH (MAAP-341-4)

Time: 3 Hours

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all. **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. All questions carry equal marks.

PART-A

- Q.1 Discuss the influence of cultural on a diagnostic system like DSM 5. **10**
- Q.2 Is depression manifested as somatization in some cultures? Explain. **10**
- Q.3 Does Schizophrenia have a better prognosis in developing countries? Discuss. **10**
- Q.4 Describe the minority experience in India. **10**
- Q.5 Discuss the influence in culture on psychotherapy. **10**

PART-B

- Q.6 Keeping in view the Indian socio-cultural context in mind, what steps would you takes to reduce the suicide rate in our country? **10**

End Semester Examination, Dec. 2018
M.A. (Applied Psychology) – Fourth Semester
CASE DISCUSSION AND ANALYSIS (MA-AP-401)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 1

Note: Attempt **FIVE** questions in all; **Part-B is compulsory**. Attempt any **FOUR** questions from **Part-A**. Marks are indicated against each question.

PART-A

- Q.1 What is the relevance of rapport building in client- therapist interaction? How it can be improved? **10**
- Q.2 Describe the relevance of HM case? How it contributed to the field of neuropsychology? **10**
- Q.3 Describe the little Albert experiment and throw light on the process applied by the researcher in the experiment. Discuss the case from an ethical perspective. **10**
- Q.4 Describe bystander effect in light of Kitty Genovese case. **10**
- Q.5 Analyze the contemporary religious perspective of Indian citizen and critically evaluate the same. **10**
- Q.6 Describe the different steps involved in writing a model case analysis report? **10**

PART-B

Q.7 ***Case study:***

In May 1972, a boy aged about four was discovered in the forest of Musafirkhana, about 20 miles from Sultanpur. The boy was playing with wolf cubs. He had very dark skin, long hooked fingernails, matted hair and calluses on his palms, elbows and knees. He shared several characteristics with Kamala and Amala: sharpened teeth, craving for blood, earth-eating, chicken-hunting, love of darkness and friendship with dogs and jackals. He was named Shamdeo and taken to the village of Narayanpur. Although weaned off raw meat, he never talked, but learnt some sign language. In 1978 he was admitted to Mother Theresa's Home for the Destitute and Dying in Lucknow, where he was re-named Pascal and was visited by Bruce Chatwin in 1978. He died in February 1985.

Read the case study carefully given above and answer the following questions:

- a) Why Shamdeo could not learn language?
- b) Suggest what could have been done with Shamdeo to get better results?

5×2

End Semester Examination, Dec. 2018
M. Sc. / M.A. (Applied Psychology) — First Semester
COGNITION (MPSY-C-103)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **SEVEN** questions in all; **Q.1 is compulsory**. Attempt **ANY FOUR** questions from **PART-A** and **TWO** questions from **PART-B**. Marks are indicated against each question.

Q.1 Write short answers on the following questions:

- a) What do you mean by divided attention?
- b) Explain "Primacy Effect".
- c) Elaborate "Psychological Essentialism".
- d) Explain the significance of brain lesions as a cognitive neuroscience technique.
- e) Define "Semantics".

2×5

PART-A

Q.2 Explain the significance of Language. Elaborate Chomsky's views on language. **5**

Q.3 What do you mean by cognition? How did modern cognitive psychology emerge? **5**

Q.4 What do you mean by perception? Explain briefly the bottom up approaches to perception. **5**

Q.5 Write a short note on Creativity. **5**

Q.6 Explain in detail any one model of memory as well as the relevant research findings associated with it. **5**

PART-B

Q.7 What do you mean by problem solving? Elaborate on the various problem solving strategies. **10**

Q.8 Using examples from literature, elaborate on the relationship between mental workload and attention. **10**

Q.9 Elaborate on the various theories of concept formation. **10**

Q.10 Using relevant research evidence, elaborate on each of the components of the concept of working memory. **10**

End Semester Examination, Dec. 2018

M.A. (Applied Psychology) — First Semester

COGNITION (MPSY-C-103)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **SEVEN** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **PART-A** and **TWO** questions from **PART-B**. Marks are indicated against each question.

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- a) What do you mean by divided attention?
- b) Explain "Primacy Effect".
- c) Elaborate "Psychological Essentialism".
- d) Explain the significance of brain lesions as a cognitive neuroscience technique.
- e) Define "Semantics".

2×5

PART-A

Q.2 Explain the significance of language. Elaborate Chomsky's views on language. **5**

Q.3 What do you mean by cognition? How did modern cognitive psychology emerge? **5**

Q.4 What do you mean by perception? Explain briefly the bottom up approaches to perception. **5**

Q.5 Write a short note on 'creativity'. **5**

Q.6 Explain in detail any one model of memory as well as the relevant research findings associated with it. **5**

PART-B

Q.7 What do you mean by problem solving? Elaborate on the various problem solving strategies. **10**

Q.8 Using examples from literature, elaborate on the relationship between mental workload and attention. **10**

Q.9 Elaborate on the various theories of concept formation. **10**

Q.10 Using relevant research evidence, elaborate on each of the components of the concept of working memory. **10**

End Semester Examination, Dec. 2018

MA (Applied Psychology) – First Semester QUALITATIVE METHODS (MPSY-C-104)

Time: 3 hrs.

Max Marks: **50**

No. of pages: *1*

Note: Attempt **SEVEN** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

- Q.1 Write short answers for each of the following:
- a) Define Grounded Theory?
 - b) What are the elements of qualitative research? Write in brief.
 - c) Define: Epistemology
 - d) Explain the scientific process according to Logical Positivists? Write in brief.
 - e) What are the two forms of interpretations? **2×5**

PART-A

- Q.2 Explain the importance of ethics in qualitative research. **5**
- Q.3 Explain Grounded Theory. How is grounded theory carried out? **5**
- Q.4 What do you mean by Reflexivity? **5**
- Q.5 Write a short note on 'Observation'. **5**
- Q.6 Explain how Focus Group Discussions are carried out? **5**

PART-B

- Q.7 What do you mean by Ethnography? How to do an ethnographic study? **10**
- Q.8 Elaborate on the role of interpretation in qualitative research, with special emphasis on hermeneutics of empathy and suspicion. **10**
- Q.9 Elaborate on the relevance of thematic analysis. How to carry out the process of thematic analysis? **10**
- Q.10 How qualitative research should be evaluated? How to ensure validity in qualitative research? **10**

End Semester Examination, Dec. 2018
M. Sc. / MA (Applied Psychology) – First Semester
STATISTICS (MPSY-C-105)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 2

Note: Attempt **SEVEN** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

Q.1 Answer the following questions:

- a) Define 'statistics'.
- b) What are the different methods included in descriptive statistics?
- c) If you have to calculate the mean difference of among five means how many t Test will be applied.
- d) What are the two methods of calculating correlation coefficient?
- e) Rank order method of correlation was provided by _____.

2x5

PART-A

Q.2 What are the characteristics of a Normal Distribution?

5

Q.3 Calculate the mean from the following data :

5

Sr. No	Class Interval	Frequencies
1	16-20	12
2	21-25	16
3	26-30	20
4	31-35	12
5	36-40	10

Q.4 Calculate the SD from the following data :

5

Sr. No	Class Interval	Frequencies
1	16-20	12
2	21-25	16
3	26-30	20
4	31-35	12
5	36-40	10

Q.5 Calculate the rank order correlation from the following data:

5.

Sr. No	R ₁	R ₂
1	5	4
2	3	2
3	1	1
4	4	5
5	2	3

Q.6 If the performance of a class being compared on the basis of gender and following statistics is being preselected. Calculate the appropriate statistical measure to explain the findings.

Group	Male	Female
N	8	10
Mean	30	24
SD	5.70	
T Value	2.26	
CR	At 0.05 – 2.10	At 0.01 – 2.88

5

PART-B

Q.7 Describe the nature and meaning of statistics. Describe the different usage of statistics **10**

Q.8 A research study was conducted to examine the clinical efficacy of a new antidepressant. Depressed patients were randomly assigned to one of three groups; a placebo group, a group that received a low dose of the drug, and a group that received a moderate dose of the drug. After four weeks of treatment, the patients completed the Beck Depression Inventory. The higher the score, the more depressed the patient. The data are presented below. Compute the appropriate test.

	Placebo	Low Dose	Moderate Dose
	38	22	14
	47	19	26
	39	10	11
	28	23	15
	42	31	5

CR-6.93 at 0.01 level

10

Q.9 Following is the data for the age of husband and wife of a locality. Compute the correlation from the following data:

Husband (X)	40	775	37	36	54	50	47	50	36	41
Wife (Y)	35	67	33	35	50	46	47	42	36	41

10

End Semester Examination, Dec. 2018
M. Sc. / M.A. (Applied Psychology) — First Semester
BIOLOGICAL BASIS OF BEHAVIOUR (MPSY-C-106)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **SEVEN** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **PART-A** and **TWO** questions from **PART-B**. Marks are indicated against each question.

Q.1 Write short answers of the following questions:

- a) What is synaptic pruning?
- b) What are the full forms of EEG and MRI?
- c) Explain the different types of amnesia.
- d) What are the functions of cerebellum?
- e) Mention two theories of emotion.

2×5

PART-A

Q.2 Explain the function of the frontal lobe.

5

Q.3 What is neuro-plasticity of the brain?

5

Q.4 Illustrate and label the nerve cell.

5

Q.5 Describe and explain the brain stem.

5

Q.6 What is long term potentiating?

5

PART-B

Q.7 What is synaptic transmission? Explain its process with the help of a diagram in detail.

10

Q.8 Explain the biological basis of memory and learning.

10

Q.9 Elucidate the different kinds of neuro-imaging techniques.

10

Q.10 Describe the structure and functions of brain.

10

End Semester Examination, Dec. 2018
M. Sc. /MA (Applied Psychology) — First Semester
CLINICAL PSYCHOLOGY-I (MPSY-D-107)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt any **FOUR** questions from **PART-A**. Marks are indicated against each question.

Q.1 Short answer types questions:

- a) Define "Clinical psychology".
- b) Mention the activities of a clinical psychologist.
- c) What is the difference between anxiety and fear?
- d) According to DSM 5 what are the major dissociative disorders?
- e) Define SAD.

2×5

PART-A

Q.2 Discuss the profession of clinical psychology and list the ethical issues in this profession. **5**

Q.3 Define 'Panic and PTSD'. What are the possible causes of these disorders? **5**

Q.4 Discuss the biological, psychological and social factors that contribute to the mood disorders. **5**

Q.5 Discuss the causes, diagnosis and treatment of OCD and somatic symptom disorders. **5**

PART-B

Q.6 Answer (**any two**) of the following long answer type questions:

- a) "Niharika, a 27-year-old woman presents to your clinic stating that she is troubled by headaches and fatigue. She says that she always feels tired and can't sleep well, often waking up early. She describes her headaches as dull, aching and generalized. These symptoms began about three weeks ago and have been getting worse. She reports a lack of interest in her usual activities. She also reports that she is missing work due to fatigue and inability to concentrate. She is facing excessive guilt as she is not able to give time to her husband and is having frequent crying spells. She reports not sleeping well and a loss of appetite, with a weight loss of 5kgs in the last month". What diagnosis and treatment plan will you formulate for her?
- b) Present a case study on Phobia along with a treatment plan.
- c) Present a case study on DID along with possible causes.

10×2

End Semester Examination, Dec. 2018
M. Sc./M.A. (Applied Psychology) — First Semester
CLINICAL PSYCHOLOGY-I (MPSY-D-107)

Time: 3 hrs.

Max Marks: **50**

No. of pages: **1**

Note: Attempt **FIVE** questions in all; **PART-B is compulsory**. Attempt **ANY FOUR** questions from **PART-A**. Marks are indicated against each question.

PART-A

- Q.1 Short answer types questions:
a) Define "Clinical psychology".
b) Mention the activities of a clinical psychologist.
c) What is the difference between anxiety and fear?
d) According to DSM 5 what are the major dissociative disorders?
e) Define SAD. **2×5**
- Q.2 Discuss the profession of clinical psychology and list the ethical issues in this profession. **4**
- Q.3 Define "Panic and PTSD". What are the possible causes of these disorders? **4**
- Q.4 Discuss the biological, psychological and social factors that contribute to the mood disorders. **4**
- Q.5 Discuss the causes, diagnosis and treatment of OCD and somatic symptom disorders. **8**

PART-B

- Q.6 Answer **any two** of the following long answer type questions:
a) "Niharika, a 27-year-old woman presents to your clinic stating that she is troubled by headaches and fatigue. She says that she always feels tired and can't sleep well, often waking up early. She describes her headaches as dull, aching and generalized. These symptoms began about three weeks ago and have been getting worse. She reports a lack of interest in her usual activities. She also reports that she is missing work due to fatigue and inability to concentrate. She is facing excessive guilt as she is not able to give time to her husband and is having frequent crying spells. She reports not sleeping well and a loss of appetite, with a weight loss of 5kgs in the last month". What diagnosis and treatment plan will you formulate for her?
b) Present a case study on Phobia along with a treatment plan.
c) Present a case study on DID along with possible causes. **10×2**

End Semester Examination, Dec. 2018
MA (Applied Psychology) – First Semester
GENDER: TOWARDS A NEW UNDERSTANDING (MPSY-O-108)

Time: 3 hrs.

Max Marks: **50**

No. of pages: *1*

Note: Attempt **SEVEN** questions in all; **Q.1 is compulsory**. Attempt any **FOUR** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.

- Q.1 Write short answers for each of the following:
- a) What were the names of the two pamphlets which appeared in 1620 that spoke about the interchangeability of roles between male and females?
 - b) What is the difference between sex and gender?
 - c) Explain the personality differences in Arapesh tribe in Margaret Mead's work "Sex and Temperament in Three Primitive Societies".
 - d) Elaborate on the difference between boys and girls in expressing aggression.
 - e) Explain one way in which sex and intellect are correlated with each other. **2×5**

PART-A

- Q.2 Explain the significance of personality in relation to sex differences. **5**
- Q.3 Explain briefly the causes of Anorexia Nervosa. Explain the prevalence of anorexia nervosa using feminist perspective. **5**
- Q.4 Explain the social and religious perspective related to menstruation. **5**
- Q.5 Explain briefly the progression of dowry acts in India from 1960s to 2000. Elaborate on the UN Declaration of Violence Against Women. **5**
- Q.6 How did the feminist perspective develop, explain the emancipation of women briefly. **5**

PART-B

- Q.7 Explain the state and feminist perspectives on dowry and domestic violence. **10**
- Q.8 Using examples from literature, elaborate on the historical myths surrounding menstruation. **10**
- Q.9 Elaborate on the relationship between sex and intellect. **10**
- Q.10 Elaborate on the relationship between sex and personality. **10**

End Semester Examination, Dec. 2018
Masters of Social Work – First Semester
HISTORY AND DEVELOPMENT OF SOCIAL WORK PROFESSION
(MSW-101)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 1

Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FIVE** questions from **PART-A** and **TWO** questions from **PART-B**. Marks are indicated against each question.

- Q.1 a) What are the functions of social work?
b) What are the Objectives of social work practice?
c) Differentiate between Social reform and Shramdan.
d) Explain what you understand by privatization of social work practice.
e) What skills are required for Social Work practice? **2×5**

PART-A

- Q.2 *Explain the role of Social Worker while working with women?* 4
- Q.3 *What is the NASW Code of ethics? Explain its purpose.*
- Q.4 *Explain Social service traditions in India.* 4
- Q.5 *What do you understand by Human Rights?* 4
- Q.6 *Explain Social Justice with an example.* 4
- Q.7 *Explain Professional Social Work and its relationship with Voluntary action.* 4

PART-B

- Q.8 Explain the importance of Social Movement in Social work practice with reference to USA. **10**
- Q.9 Explain the contribution of Chipko andolan and Sarv Shiksha Abhiyan in development of India. **10**
- Q.10 What are the changing trends in Social Work Practice in terms of disaster management? **10**

End Semester Examination, Dec. 2018
Masters of Social Work – First Semester
SOCIETY AND CONTEMPORARY CONCERNS (MSW-102)

Time: 3 hrs

Max Marks: **50**

No. of pages: 1

*Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FIVE** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.*

- Q.1 a) Describe Family as a social institution in social work?
b) Explain the dynamics of joint family system in India?
c) Explain the term social stratification.
d) Explain the role of religion in society.
e) How does religion shape the values of a social worker? **2x5**

PART-A

- Q.2 Explain the role of social worker while working with minorities in India. **4**
- Q.3 How does casteism manifests in Indian Social structures? **4**
- Q.4 Explain reasons for violence against children and women **4**
- Q.5 Explain the Conflict approach in the study of Society. **4**
- Q.6 Explain the changing structures of family as an Institution. **4**
- Q.7 Explain the changing pattern in social structure for dalits. **4**

PART-B

- Q.8 Explain the importance of class in terms of an Agregarian Society. **10**
- Q.9 Suggest measures to curb the unrest in today's youth. **10**
- Q.10 Explain any two theories of Social stratification. **10**

End Semester Examination, Dec. 2018
Masters of Social Work – First Semester
HUMAN BEHAVIOUR AND SOCIAL PSYCHOLOGY (MSW-103)

Time: 3 hrs

Max Marks: **50**

No. of pages: **1**

*Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FIVE** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.*

- Q.1 a) Define 'learning'.
b) What are the different stages of cognitive development?
c) State two theories of intelligence.
d) Define 'cognition'.
e) What is prejudice? **2x5**

PART-A

- Q.2 What is social perception? **4**
- Q.3 Describe the meaning of normal and abnormal behavior. **4**
- Q.4 How social institutions shapes human behavior? **4**
- Q.5 Describe the two theories of learning. **4**
- Q.6 Describe the process of forming public opinion. **4**
- Q.7 Write a short note on 'social perfection'. **4**

PART-B

- Q.8 Describe the concept of prejudice and stereotypes with specific reference to minorities and dalits. Suggest measures to abolish the negative attitude towards specific groups. **10**
- Q.9 Describe the Need Theory of Motivation in context of society and development. **10**
- Q.10 Describe the importance of studying psychology and how it contribute to a social worker's perspective towards the society. **10**

End Semester Examination, Dec. 2018
Masters of Social Work – First Semester
SOCIAL POLICY, ECONOMIC AND POLITICAL SYSTEM (MSW-104)

Time: 3 hrs

Max Marks: **50**

No. of pages: 1

*Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FIVE** questions from **Part-A** and **TWO** questions from **Part-B**. Marks are indicated against each question.*

- Q.1 Answer the following questions:
- a) What are fundamental rights?
 - b) What is the biggest contribution of Marx?
 - c) Name three NGOs working in the area of child welfare.
 - d) What is a bureaucratic model?
 - e) Describe the preamble of Indian constitution. **2x5**

PART-A

- Q.2 Write a short note on 'RTI'. **4**
- Q.3 Write a short note on 'inflation'. **4**
- Q.4 Describe the contribution of Hobbes. **4**
- Q.5 Explain people participation in political system. **4**
- Q.6 What do you mean by political economy? **4**
- Q.7 Write a short note on 'Indian Judiciary'. **4**

PART-B

- Q.8 Describe the function of demand and supply in market economy. **10**
- Q.9 Explain the major changes that are taking place in socio cultural sphere. **10**
- Q.10 How the changing political scenario affect the economy of State or Nation? Explain with an examples. **10**

End Semester Examination, Dec. 2018
Masters of Social Work – First Semester
SOCIAL LEGISLATIONS AND HUMAN RIGHTS (MSW-105)

Time: 3 hrs.

Max Marks: **50**

No. of pages: 1

Note: Attempt **EIGHT** questions in all; **Q.1 is compulsory**. Attempt any **FIVE** questions from **PART-A** and **TWO** questions from **PART-B**. Marks are indicated against each question.

- Q.1 a) Explain "Human Rights are Universal"?
b) Mention the dimensions of social justice.
c) Explain the term Social injustice?
d) Define the term Oppression?
e) What is the full form of PIL and RTI? **2×5**

PART-A

- Q.2 Explain the two instruments of Indian legal system. 4
- Q.3 Explain the importance of free legal aid in providing justice to people. 4
- Q.4 Explain the term Social Justice with an example. 4
- Q.5 Explain the function of statutory body, the Child Welfare Committee set up under the Juvenile Justice (care and Protection of Children) Act, 2015. 4
- Q.6 What do you understand by Human Rights? 4
- Q.7 What is the importance of laws pertaining to SC/STs in India? 4

PART-B

- Q.8 Explain the term "Empowerment" with emphasis on Models of social empowerment? **10**
- Q.9 What are the highlights of the Protection of Children from Sexual Offences, Act, 2012 (POCSO). **10**
- Q.10 Explain the functions of National Human Rights Commission set up in India. **10**