

Reg. No. : .....

Name : .....

**FY-335**

**FIRST YEAR HIGHER SECONDARY MODEL EXAMINATION – 2021**

Part – III  
**ECONOMICS**  
Maximum : 80 Scores

Time : 2½ Hours  
Cool-off time : 20 Minutes

**ANSWER KEY**

**Answer any 10 questions from 'a' to 'l'. Each carries 1 score.  $10 \times 1 = 10$**

- (a) Class interval in a frequency distribution is equal to  
**Upper class limit – Lower class limit**
- (b) The World Trade Organisation (WTO) was founded as the successor to the  
**GATT**
- (c) First census after independence in India was conducted in  
**1951**
- (d) Which of the following was used by Dadabhai Naoroji to measure poverty line?  
**Jail cost of living**
- (e) The frequency distribution of two variables is known as  
**Bivariate frequency distribution**
- (f) Which of the following is NOT a commercial source of energy?  
**Cow dung**
- (g) Which of the following is an environmental issue?  
**Water pollution**
- (h) Mode can be graphically located using  
**Histogram**
- (i) The data collected from Census Report is an example of  
**Secondary Data**
- (j) The economic activity which is included in the secondary sector:  
**Manufacturing**
- (k) A consumer price index number measures the changes in  
**Retail price**
- (l) Which of the following is a Social infrastructure?  
**Schools**

**Answer any 6 questions from 2 to 13. Each carries 2 scores.  $(6 \times 2 = 12)$**

2. Classify the following into biotic and abiotic elements of environment.  
Soil, birds, air, animals

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Biotic elements	Abiotic elements
birds	Soil
animals	air

3. List out the two categories of infrastructure.

### SOCIAL INFRASTRUCTURE AND ECONOMIC INFRASTRUCTURE

4. Name any two tools to study correlation.

SCATTER DIAGRAMS, KARL PEARSON'S CORRELATION COEFFICIENT, SPEARMAN'S RANK CORRELATION (ANY TWO)

5. Write any two factors responsible for land degradation.

1. Loss of vegetation occurring due to deforestation.
2. Unsuitable fuel wood and fodder extraction.
3. Shifting cultivation.
4. Encroachment into forest lands.
5. Forest fires and over grazing.
6. Non-adoption of adequate soil conservation measures.
7. Improper crop rotation.
8. Indiscriminate use of agro-chemicals such as fertilizers and pesticides.
9. Improper planning and management of irrigation systems.
10. Extraction of ground water in excess of the recharge capacity.
11. Open access resource.
12. Poverty of the agriculture-dependent people. (ANY TWO)

6. What is head count ratio?

When the number of poor is estimated as the proportion of people below the poverty line, it is known as 'Head Count Ratio'.

7. List any two non-sampling errors.

Errors in data acquisition: This type of error arises from recording of incorrect responses.

Non response errors: It occurs if an interviewer is unable to contact a person listed in the sample .

Sampling bias: Sampling bias occurs when the investigator performs biased in the selection of samples. (ANY TWO)

8. Write any two issues in the construction of an index number.

- Purpose of index numbers

- Choice of commodities and number of items
- Selection of base year and current year
- Collection of data relating to price and quantities
- Choice of price
- Choice of weights
- Selection of an average
- Selection of formula
- Interpretation of the index (ANY TWO)

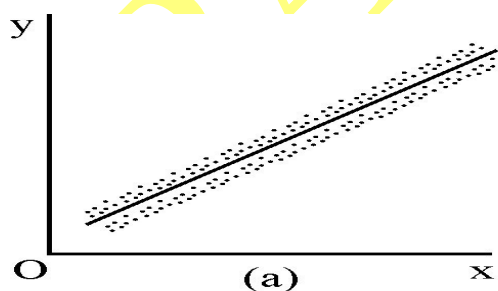
9. What do you mean by privatisation?

It implies shedding of the ownership or management of a government owned enterprise.

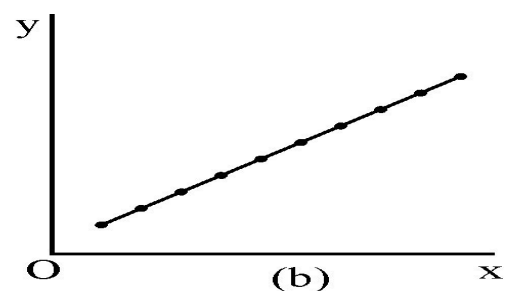
10. Write any two measures taken by China in their development path.

GLF, SEZ

11. Identify the type of correlation.



POSITIVE CORRELATION



PERFECT POSITIVE CORRELATION

12. Below given frequency distributions are arranged in inclusive and exclusive class intervals. Identify them.

(a)	(b)
0 – 10	0 – 10
10 – 20	11 – 21
20 – 30	22 – 32
30 – 40	33 – 43

(a) exclusive class intervals (b) inclusive class intervals

13. Calculate the mid value of the class 50 – 60.

$$\frac{50+60}{2} = \frac{110}{2} = 55$$

Answer any 5 questions from 14 to 23. Each carries 3 scores. (5 × 3 = 15)

14. Write a short note on outsourcing.

Outsourcing is one of the important outcomes of the globalisation process. In outsourcing, a company hires regular service from external sources. As a form of economic activity, outsourcing has widely enlarged. Many of the services such as voice-based business processes (popularly known as BPO or call centres), record keeping, accountancy, banking services, music recording, film editing, book transcription, clinical advice etc outsourced by companies in developed countries to India. The low wage rates and availability of skilled manpower in India have made it a destination for global outsourcing in the post-reform period.

15. Explain any three functions of environment.

**Supply resources:** One the important function of environment is that it supplies both the renewable and non-renewable resources.

**Assimilates waste:** Human being is producing millions of tonnes of waste every day. The environment assimilates all the waste.

**Sustains life:** Without environment life is not possible. The environment sustains life.

**Aesthetic services:** The last but not least, the environment provides aesthetic services like scenery.

16. Write a short note on 'Indian System of Medicine (ISM)'

Indian System of Medicine (ISM) consists of six systems. They are Ayurveda, Yoga, Unani, Siddha, Naturopathy and Homeopathy known as AYUSH.

17. Explain quantitative and qualitative data with suitable examples.

**QUANTITATIVE AND QUALITATIVE DATA:** The data which can be Measurable is called quantitative data. Eg. Price, Height, Weight, Income etc. The data which cannot be measurable is called Qualitative data. Eg. Honesty, aptitude, beauty etc.

18. What is pilot survey? Write two advantages.

When the questionnaire is ready, it is advisable to conduct a try out with a small group of Population is known as pilot survey or pre testing of the questionnaire. It's advantages are the following

- It help us to access the suitability of the questionnaire.
- It help us to identify the drawbacks and shortcomings of the questionnaire.
- It help us to calculate survey cost and time.
- It help us to pre testing of the questionnaire

19. Write any three benefits of organic farming.

- Organic agriculture generates income through exports.
- It is pesticide-free and produced in an environmentally sustainable way.
- Organic farming helps in sustainable development of agriculture.
- Organic products had both domestic and international demand.

20. What are the main causes of stagnation of agriculture in India during the British period?

Stagnation in the agricultural sector was caused mainly because of the various systems of land and revenue settlement (eg: zamindari system) introduced by the colonial government. The profit accruing out of the agriculture sector went to the zamindars instead of the cultivators. Interest of the zamindars was only to collect rent without considering economic condition of the cultivators. Inadequate technology, lack of irrigation facilities and fertilisers, contributed to the low level of agricultural productivity. Commercialisation of agriculture: instead of producing food crops, farmers were producing cash crops which were ultimately used by British for their development. Indian agriculture faces low investment, flood-control, drainage etc.

21. Complete the list that shows steps towards making a project.

Identifying a problem or an area of study

Choice of Target Group

Collection of Data

**Organisation and Presentation of Data**

**Analysis and Interpretation**

**Conclusion**

**Bibliography**

22. Write a short note on bar diagram

- 1) **SIMPLE BAR DIAGRAM:** It comprises a group of equi spaced and equi width rectangular bars for each class of data. Height of the bar reads the magnitude of data.
- 2) **MULTIPLE BAR DIAGRAM:** Multiple bar diagrams are used for comparing two or more sets of variables.
- 3) **COMPONENT BAR DIAGRAM:** It is also called sub- divided bar diagram. It is very useful in comparing the sizes of different parts of data.

23. Match the following :

A	B
Date of birth of applicants	Chronological classification
Applicants from different states	Spatial classification
Married applicants	Qualitative classification

**Answer any 3 questions from 24 to 31. Each carries 4 scores. (3 × 4 = 12)**

24. Calculate mean deviation from mean for the following frequency array.

X	10	20	30	40	50	60
Frequency	8	12	20	10	6	4

X	Frequency	FX	$\frac{ X - 31 }{D}$	F/D
10	8	80	21	168
20	12	240	11	132
30	20	600	1	20
40	10	400	9	90
50	6	300	19	114
60	4	240	29	116
	60	1860		640

$$\text{MEAN} = \frac{\Sigma FX}{\Sigma F} = \frac{1860}{60} = 31$$

$$\text{MEAN DEVIATION} = \frac{\Sigma F/D/}{\Sigma F} = \frac{640}{60} = 10.67$$

25. Explain the role of private sector health infrastructure in India.

Private sector has a significant role in the development of health infrastructure, medical education, research and training. More than 70 per cent of the hospitals and nearly 60 per cent of the dispensaries are run by private sector. They provide healthcare for 80 per cent outpatients and 46 percent inpatients.

26. A statistical table should essentially have 8 parts. List out

Table number, Title, Captions, Stubs, Body of the table, Unit of measurement, source, note

27. What are the causes of poverty in India?

1. social, economic and political inequality
2. social exclusion
3. unemployment
4. indebtedness
5. unequal distribution of income and wealth.

28. Explain the goals of five year plans in India.

(i) Growth: It refers to increase in the country's capacity to produce the output of goods and services within the country. It implies either a larger stock of productive capital, or a larger size of supporting services like transport and banking.

- A good indicator of economic growth is steady increase in the Gross Domestic Product (GDP).
- The GDP is the market value of all the goods and services produced in the country during a year.
- The GDP of a country is derived from the different sectors of the economy, namely the agricultural sector, the industrial sector and the service sector.

(ii) Modernisation:

- To increase the production of goods and services the producers have to adopt new technology.
- Modernisation does not refer only to the use of new technology but also to changes in social outlook such as the recognition that women should have the same rights as men.
- A modern society makes use of the talents of women in the work place — in banks, factories, schools etc

(iii) Self-reliance:

- A nation can promote economic growth and modernisation by using its own resources or by using resources imported from other nations.
- The first seven five year plans gave importance to self-reliance which means avoiding imports of goods which could be produced in India itself.

(iv) Equity:

- Every Indian should be able to meet his or her basic needs such as food, a decent house, education and health care.
- Inequality in the distribution of wealth should be reduced.
- It is important to ensure that the benefits of economic prosperity reach to the poor sections of the society.

29. Write the importance of statistics in Economics.

1. Statistics is an inevitable tool in the hands of Economists.
2. Formulation of Economic policies.
3. Helps for Economic planning.
4. Complex Economic data can be reduced.

30. Explain the impact of economic reforms in India in 1991 on agriculture and industry.

Agriculture

removal of agricultural subsidies.

rise in the cost of production of agriculture

fall in the price of agricultural products

lack of government investments

higher exports of cash crops instead of food crops leads to food crisis.

industry

cheaper imports

foreign competition

lack of modern technology

lack of infrastructure investments

not removed barriers on India's trade by developed nations like USA.etc..



31. Write the advantages and disadvantages of personal interview.

ADVANTAGES	DISADVANTAGES
Highest response rate	Most expensive
Allows all types of questions	More time taking
Better for using open ended questions.	Possibility of influencing respondents
Allows clarifications to ambiguous questions	

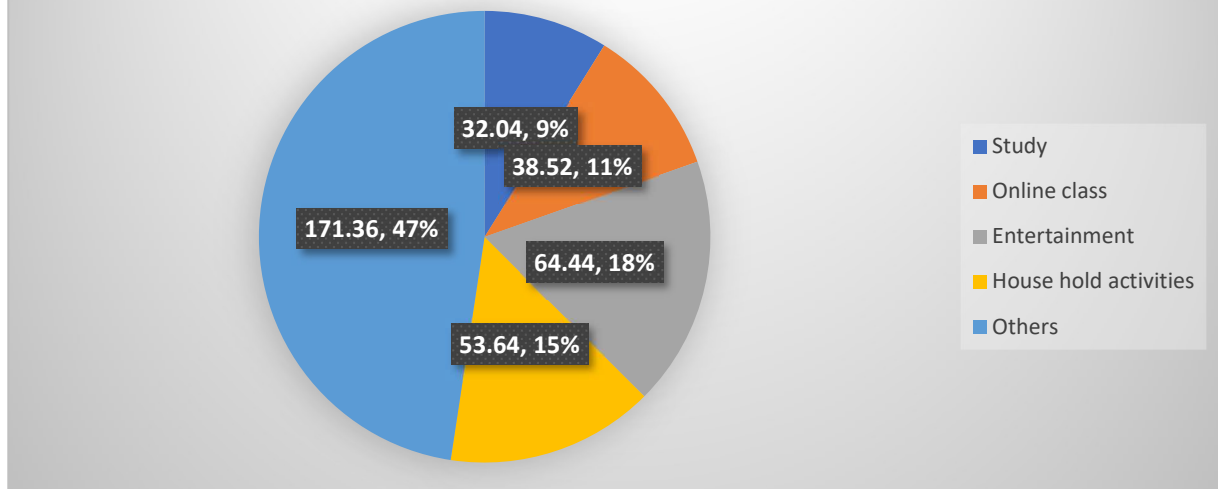
**Answer any 3 questions from 32 to 37. Each carries 5 scores. (3 × 5 = 15)**

32. A students activity in a week in hours is given below. Draw a pie diagram.

Activity	Weekly hours
Study	15
Online class	18
Entertainment	30
Household activities	25
Others	80

Activity	Values	%	% X 3.6
Study	15	8.9	32.04
Online class	18	10.7	38.52
Entertainment	30	17.9	64.44
House hold activities	25	14.9	53.64
Others	80	47.6	171.36

### 3.1 pie diagram



33. Briefly explain the sources of human capital.

Investment in education is considered as one of the main sources of human capital, others are: investments in health, job training Migration Information

34. Construct a frequency distribution by exclusive method taking class interval of 10 for the following data :

12 37 17 53 58 26 21 19 50 42  
 27 6 42 56 47 32 15 21 30 16  
 43 16 8 23 37 36 42 18 6 37  
 10 25 12 33 47 52 41 32 50 11

Class	Frequency
0 – 10	3
10 – 20	10
20 – 30	6
30 – 40	8
40 – 50	7
50 – 60	6
Total	40

35. Explain the liberalisation policies taken by the government in 1991 in foreign exchange sector and financial sector.

## Financial Sector Reforms

- Financial sector includes financial institutions, such as commercial banks, investment banks, stock exchange operations and foreign exchange market.
- The financial sector in India is regulated by the Reserve Bank of India (RBI).
- One of the major aims of financial sector reforms is to reduce the role of RBI from regulator to facilitator of financial sector.
- The reform policies led to the establishment of private sector banks, Indian as well as foreign.
- Foreign Institutional Investors (FII), such as merchant bankers, mutual funds and pension funds, are now allowed to invest in Indian financial markets.
- Foreign investment limit in banks was raised to around 50 per cent. Those banks which fulfil certain conditions have been given freedom to set up new branches without the approval of the RBI.

## Foreign Exchange Reforms

- The first important reform in the external sector was made in the foreign exchange market. In 1991, as an immediate measure to resolve the balance of payments crisis, the rupee was devalued (decrease in the value of home currency in the international market due to the deliberate action taken by the government) against foreign currencies.
- It also set the tone to free the determination of rupee value in the foreign exchange market from government control.
- It led to an increase in the inflow of foreign exchange.
- Now, more often markets determine exchange rates based on the demand and supply of foreign exchange.

36. Write two main sources of electricity generation in India. List any three challenges in the power sector.

Thermal electricity, Hydro electricity

- Insufficient capacity to generate electricity
- Transmission & distribution loss of electric power
- Loss of state electricity boards
- Problems of high power tariff and power cuts
- Shortage of raw materials
- Lack of government investment in power sector
- Problems of privatisation

37. Explain the points we should keep in mind while preparing a questionnaire for conducting a survey.

- Questionnaire should not be too long.
- A series of questions should move from general to specific.

- The questionnaire should be easy to understand and avoid ambiguous or difficult words.
- The questions should be arranged in an order such that the person answering should feel comfortable.
- The questions should not be ambiguous. They should enable the respondents to answer quickly, correctly and clearly.
- The questions should not use double negatives.
- The questions should not be a leading question, which gives a clue about how to answer.
- The questions should be precise and clear.
- The questionnaire should include both open ended and closed ended questions.

**Answer any 2 questions from 38 to 41. Each carries 8 scores. (2 × 8 = 16)**

38. In India, Government's approach to poverty alleviation was of three dimensional. Explain

The Indian Constitution and five year plans state social justice as the primary objective of the developmental strategies of the government. The government's approach to poverty reduction was of three dimensions.

(i) Growth oriented approach-It is based on the expectation that the effects of economic growth leads to rapid increase in gross domestic product and per capita income would spread to poor sections of society.(Trickle down effect)

(ii) Expanding self-employment and wage employment programmes are being considered as the major ways of addressing poverty.

- Examples of self-employment programmes are Rural Employment Generation Programme (REGP), Prime Minister's Rozgar Yojana (PMRY) and Swarna Jayanti Shahari Rozgar Yojana (SJSRY)
- SJSRY mainly aims at creating employment opportunities both self employment and wage employment in urban areas.
- Swarnajayanti Gram Swarozgar Yojana (SGSY) has now been restructured as National Rural Livelihoods Mission (NRLM).
- Food for Work programme.
- The government has a variety of programmes to generate wage employment for the poor unskilled people living in rural areas.
- In August 2005, the Parliament passed a new Act to provide guaranteed wage employment to every rural household. It is known as Mahatma Gandhi National Rural Employment generation programme.

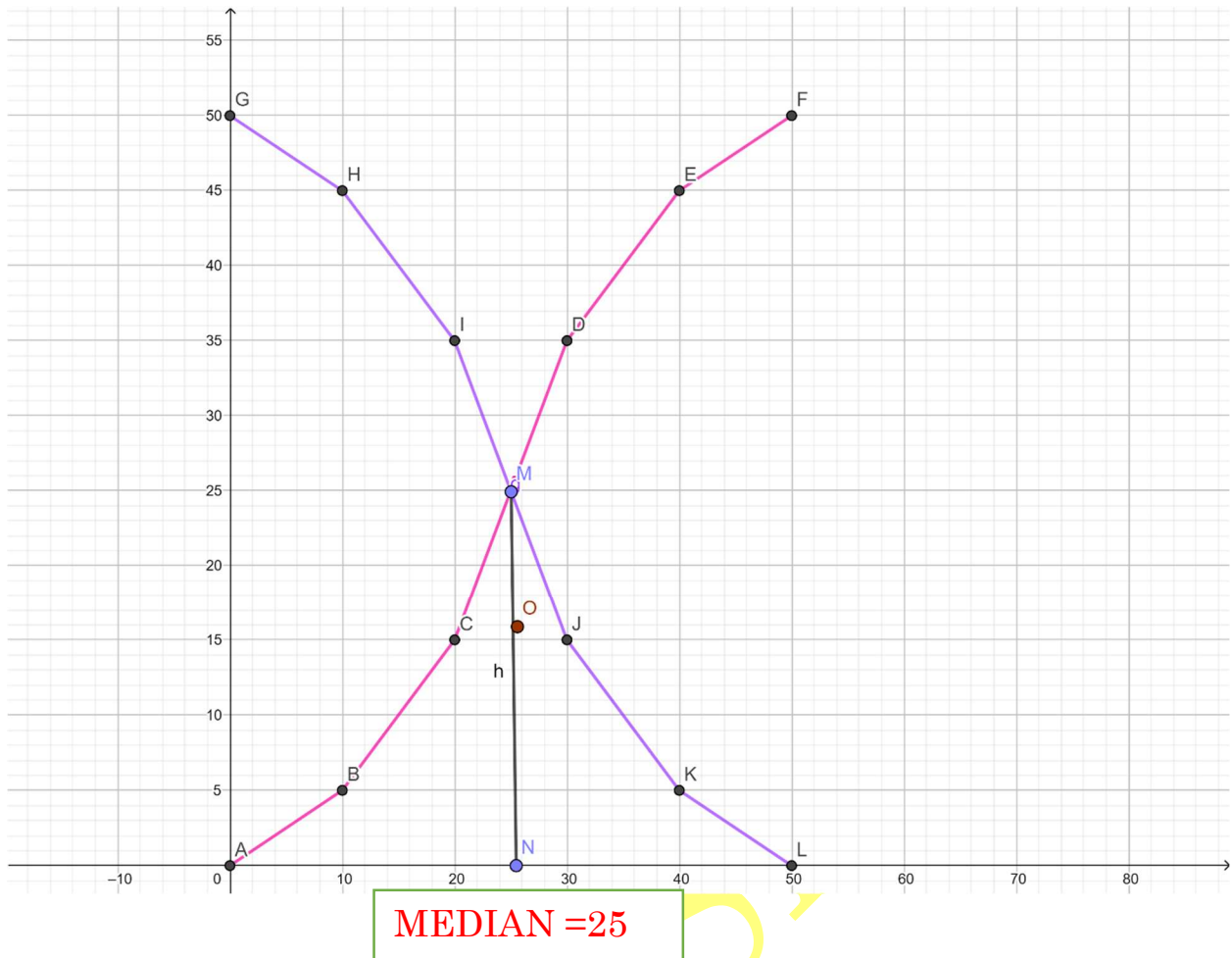
(iii) To provide minimum basic amenities to the people. Expanding self employment and wage employment programmes

- Programmes under this approach are expected to supplement the consumption of the poor, create employment opportunities and bring about improvements in health and education.
- Three major programmes aim at improving the food and nutritional status of the poor are Public Distribution System, Integrated Child Development Scheme and Midday Meal Scheme.
- Pradhan Mantri Gram Sadak Yojana, Pradhan Mantri Gramodaya Yojana, Valmiki Ambedkar Awas Yojana are started in developing infrastructure and housing conditions.
- The government also has a variety of other social security programmes to help a certain specific groups. eg: National Social Assistance Programme .
- The government has also introduced a few schemes to provide health insurance to poor people.eg: Pradhan Mantri Jan-Dhan Yojana (2014)

39. Draw less than and more than ogives for the following frequency distribution and find out the median graphically.

Class	Frequency
0 – 10	5
10 – 20	10
20 – 30	20
30 – 40	10
40 – 50	5

Class	Frequency	values	lcf	values	mcf
0 – 10	5	less than 10	5	more than 0	50
10 – 20	10	less than 20	15	More than 10	45
20 – 30	20	less than 30	35	More than 20	35
30 – 40	10	less than 40	45	More than 30	15
40 – 50	5	less than 50	50	More than 40	5



40. What is sustainable development? Explain the strategies of sustainable development.

The concept of sustainable development was emphasized by the United Nations Conference on Environment and Development (UNCED). It defines sustainable development as the development that meets the need of the present generation without compromising the ability of the future generation to meet their own needs'. It is the development that can sustain itself. It considers the protection of environment.

### STRATEGIES FOR SUSTAINABLE DEVELOPMENT

We should take necessary steps to protect the environment along with development. The following are the strategies for sustainable development.

1. **Use of Non-conventional Sources of energy:** The use of non-conventional sources of energy reduces the risk of pollution. Wind mills can provide electricity without any adverse impact on the environment. Solar energy is extremely useful in remote areas. Wave energy plants can be set up in coastal areas. All such non-conventional energy sources are free from pollution.
2. **Use of LPG and Gobar Gas:** The use of LPG, Gobar Gas and Bio-gas in rural area etc. reduces the household pollution.

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3. **Use of CNG:** The use of Compressed Natural Gas as fuel in transportation system reduces the air pollution.
  4. **Mini-hydel Plants:** Another strategy of sustainable development is that the establishment of mini-hydel power plants in mountainous regions. These plants meet local demands and eco-friendly.
  5. **Traditional Knowledge and Practice:** We had a good knowledge of traditional system of health care, agriculture and transportation. The practice of traditional knowledge such as Ayurveda, Unani, Tibetan and folk system of medicine etc. environment friendly treatment.
  6. **Bio-composting:** Modern agriculture uses large amount of chemicals which adversely affect the environment. So the use biocomposting is the better strategy of sustainable development.
  7. **Bio-pest control:** Similarly, modern agriculture uses large amount of pesticides. The use of bio-pest reduces the pressure on environment.
41. Calculate mean, median and mode for the following data:

Class	Frequency
0 – 10	3
10 – 20	7
20 – 30	9
30 – 40	18
40 – 50	11
50 – 60	8
60 – 70	4

## ARITHMETIC MEAN

Class	Frequency	MID X	FX
0 – 10	3	5	15
10 – 20	7	15	105
20 – 30	9	25	225
30 – 40	18	35	630
40 – 50	11	45	495
50 – 60	8	55	440
60 – 70	4	65	260
	<b>60</b>		<b>2170</b>

$$\text{ARITHMETIC MEAN} = \frac{\Sigma FX}{\Sigma F} = \frac{2170}{60} = 36.17$$

## MEDIAN

Class	Frequency	CF
0 – 10	3	3
10 – 20	7	10
20 – 30	9	19
<b>30 – 40</b>	<b>18</b>	<b>37</b>
40 – 50	11	48
50 – 60	8	56
60 – 70	4	60
	<b>60</b>	

Size of median class =  $(\frac{N}{2})$ th item =  $(\frac{60}{2})$ th item = 30th Item

Median class = 30-40

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$$MEDIAN = L + \frac{\frac{N}{2} - cf}{f} \times c = 30 + \frac{30 - 19}{18} \times 10 = 30 + \frac{11}{18} \times 10 = 36.11$$

MODE

Class	Frequency
0 – 10	3
10 – 20	7
20 – 30	9
30 – 40	18
40 – 50	11
50 – 60	8
60 – 70	4

Model Class=30-40

$$\text{Mode} = L + \frac{D_1}{D_1 + D_2} \times c = 30 + \frac{9}{9+7} \times 10 = 30 + \frac{90}{16} = 35.63$$

