

Booklet Type

A

Booklet No.

192001

THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA, VADODARA

Ph. D. ENTRANCE TEST (PET) – 27<sup>th</sup> January 2019

Signature of Invigilator

Roll No.

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(in figures as in Hall Ticket)

Paper - I

Roll No. \_\_\_\_\_

(in words)

Maximum Marks: 50

No. Of Printed Pages: 8

**Instruction for the Candidate:**

1. Write your Roll Number in the space provided on the top of this page.
2. This paper consists of **FIFTY (50)** multiple choice type questions. Each Question carries **ONE (1)** mark.
3. At the commencement of examination, the question booklet will be given to you. In the first 5 minutes, you are requested to open the booklet and compulsorily examine it as below:
  - a. To have access to the Question Booklet, tear off the paper seal on the edge of this cover page, Do not accept a booklet without sticker seal and do not accept an open booklet.
  - b. Tally the number of pages and number of questions in the booklet with the information printed on the cover page. Faculty booklets due to pages/questions missing or duplicate or not in serial order or any other discrepancy should be got replaced immediately by a correct booklet from the invigilator within the period of 5 minutes. Afterwards, neither the Question Booklet will be replaced nor any extra time will be given.
  - c. After this verification is over, the Test Booklet Number should be entered on the OMR Answer Sheet and the OMR Answer Sheet Number should be entered on this Test Booklet.
4. Each item has four alternative responses marked (A), (B), (C) and (D). You have to darken the circle as indicated below on the correct response against each item.  
**Example:** (A) ● (C) (D) where (B) is correct response.
5. Your responses to the items are to be indicated on the OMR Answer Sheet under Paper – II only. If you mark your response at any place other than in the circle in the OMR Answer Sheet, it will not be evaluated.
6. Read instructions given inside carefully.
7. Rough Work is to be done in the end of this booklet.
8. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Answer Sheet, except for the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, such as change of response by scratching or using white fluid, you will render yourself liable to disqualification.
9. You have to return the original OMR Answer Sheet to the invigilator at the end of the examination compulsorily and must not carry it with you outside the Examination Hall. You are however, allowed to carry original question booklet and duplicate copy of OMR Answer Sheet on conclusion of examination
10. Use only Blue/ Black Ball point pen.
11. Use of any calculator or log table etc., is prohibited.
12. There shall be no negative marking.

## Paper – I

**Note:** This paper consists of **FIFTY (50)** multiple choice type questions. Each Question carries **ONE (1)** mark.

- 01) Below are listed certain attributes of teachers. Which of the following attributes denote the strength of a teacher? Select your answer from the code below.
- Active involvement in institutional management
  - Respect the institutional authority
  - Acknowledge own mistakes
  - Updates oneself in content knowledge
- Code:**
- i, iii, and iv
  - ii, iii, and IV
  - i, ii, and iii
  - i, ii, and iv
- 02) Which one of the following statements is true in case of multiple choice type tests?
- They are subjective than true false type test
  - They are objective than true false type test
  - They are neither subject or objective than essay type test
  - They are subjective in comparison to essay type test
- 03) Which of the following statements represents team teaching?
- A team of teachers teach students different subjects.
  - A team of teachers teach and evaluate students
  - A team of teachers plan and teach together the same class
  - A team of more than two teachers and students discuss a topic.
- 04) Discussion as a method of teaching is fruitful only when;
- Students are interested
  - Teachers take initiative
  - Students have prior knowledge of the topic
  - Institution provide all needed facilities
- 05) Which among the following statement represents a seminar?
- A forum where speakers speak against and in favour of a topic
  - A forum where experts are invited to present their ideas on a specified topic
  - A forum where people are asked to deliberate on a selected issue
  - A forum where students display their work.
- 06) Which type of research enhances the frontier of knowledge?
- Action research
  - Fundamental research
  - Survey research
  - Case study research
- 07) What is the meaning of scientific research?
- When the data are collected in quantitative form
  - When the results obtained are reproduced by following the method
  - When the research questions are answered seriously
  - When the findings are arrived at used by the society
- 08) Which of the type of research is generally done after a felt problem?
- Survey research
  - Philosophical research
  - Action research
  - Experimental research
- 09) Who among the following has given the concept of paradigm?
- Max Weber
  - Thomas Kuhn
  - Plato
  - Aristotle

- 10) Arrange the steps of scientific research in logical order.
- i. Identification of a problem
  - ii. Research questions and hypotheses
  - iii. Data collection
  - iv. Design methodology
  - v. Review of related literature
  - vi. Data analysis
  - vii. Findings and conclusions

Choose the right code from below to answer

- A) i, ii, iii, iv, v, vi, and vii
- B) i, v, ii, iv, iii, vi, and vii
- C) ii, iii, iv, vi, vii, i, and v
- D) vi, v, vii, I, ii, iii, and iv

- 11) If the following scores are obtained by a group of five students, what will be the SD?

Score scored: 15, 15, 15, 15, and 15.

- A) 1
- B) 2
- C) 0
- D) 5

**Answer question 12- 16 from the passage below.**

When another old cave is discovered in the south of France, it is not usually news. Rather, it is an ordinary event. Such discoveries are so frequent these days that hardly anybody pays heed to them. However, when the Lascaux cave complex was discovered in 1940, the world was amazed. Painted directly on its walls were hundreds of scenes showing how people lived thousands of years ago. The scenes show people hunting animals, such as bison or wild cats. Other images depict birds and, most noticeably, horses, which appear in more than 300 wall images, by far outnumbering all other animals. Early artists drawing these animals accomplished a monumental and difficult task. They did not limit themselves to the easily accessible walls but carried their painting materials to spaces that required climbing steep walls or crawling into narrow passages in the Lascaux complex. Unfortunately, the paintings have been exposed to the destructive action of water and temperature changes, which easily wear the images away. Because the Lascaux caves have many entrances, air movement has also damaged the images

inside. Although they are not out in the open air, where natural light would have destroyed them long ago, many of the images have deteriorated and are barely recognizable. To prevent further damage, the site was closed to tourists in 1963, 23 years after it was discovered.

- 12) Which title best summarizes the main idea of the passage?

- A) Wild Animals in Art
- B) Hidden Prehistoric Paintings
- C) Exploring Caves Respectfully
- D) Determining the Age of French Caves

- 13) In line 4, the words pays heed to are closest in meaning to;

- A) discovers
- B) watches
- C) notices
- D) buys

- 14) Based on the passage, what is probably true about the south of France?

- A) It is home to rare animals.
- B) It has a large number of caves.
- C) It is known for horse-racing events.
- D) It has attracted many famous artists.

- 15) According to the passage, which animals appear most often on the cave walls?

- A) Birds
- B) Bison
- C) Horses
- D) Wild cats

- 16) Why was painting inside the Lascaux complex a difficult task?

- A) It was completely dark inside.
- B) The caves were full of wild animals.
- C) Painting materials were hard to find.
- D) Many painting spaces were difficult to reach.

- 17) In terms of population size and geographical area, India's respective position in the world is;

- A) 1, and 2
- B) 2, and 7
- C) 7, and 2
- D) 1, and 5

18) Given below are two sets. Set-I presents some world days and set-II presents the dates. Match the two sets as per the code given below.

**Set-I**

- a. World health day
- b. World population day
- c. World Ozone day
- d. World AIDS day

**Set-II**

- i. 16th September
- ii. 1st December
- iii. 11th July
- iv. 7th April

**Answer Code :**

	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>
A)	i	ii	iii	iv
B)	iv	iii	i	ii
C)	ii	iii	iv	i
D)	iii	iv	ii	i

19) Among the following listed countries, which country has the highest per capita use of water is more?

- A) USA
- B) European union
- C) China
- D) India

20) Majority of Indian people depends for their living on;

- A) Business
- B) Government service
- C) Agriculture
- D) Daily wage labourers

21) The letters in the following arrangement follow some pattern. What are the missing letters?

**d \_ n \_ \_ \_ n n d m \_ n**

- A) ndmnm
- B) mdnmm
- C) dmnmn
- D) mndmn

22) What will be the missing number in the following series?

**87, \_\_\_, 28, 13, 5, 2, 2**

- A) 52
- B) 72
- C) 46
- D) 35

23) In a certain code, if 'EQOKYO' stands for 'DOLLAR' and 'QQXMBP' stands for 'POUNDS', then the code for 'MARK' will be:

- A) NCUO
- B) NCQI
- C) LCUJ
- D) LCPH

24) 'Disease' is related to 'Pathology' in the same way as 'Planet' is related to;

- A) Sun
- B) Satellite
- C) Astronomy
- D) Astrology

25) The alphabets in three out of the four options given below are placed in a particular form. Find the one that does not belong to the group.

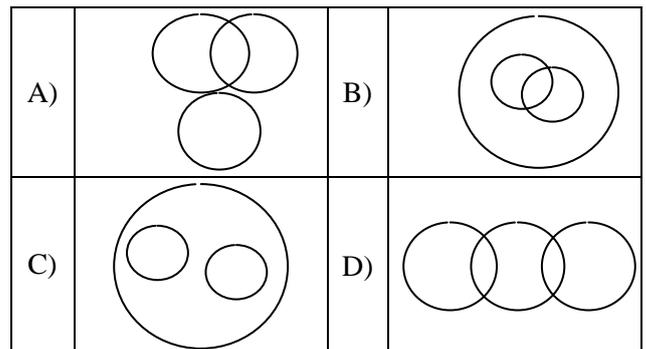
- A) NOQT
- B) DEHK
- C) BCEH
- D) RSUX

26) In the following pattern of numbers, what will be the missing number?

15	6	5
13	3	9
8	2	?
20	7	13

- A) 7
- B) 6
- C) 4
- D) 1

27) Select among the following diagrams, that best represents the relationship among: woman, wife, mother.



28) Six girls are sitting in a circle. Sonia is sitting opposite to Radhika. Poonam is sitting right of Radhika but left of Dipti. Monika is sitting left of Radhika. Kamini is sitting right of Sonia and left of Monika. Now Dipti and Kamini, Monika and Radhika mutually exchange their positions. Then who will be sitting left of Kamini?

- A) Poonam
- B) Dipti
- C) Radhika
- D) Sonia

29) In the following arrangement of numbers, which number will replace the question mark?

4		5
	4	
6		1

10		3
	11	
8		4

7		2
	3	
3		?

- A) 4
- B) 5
- C) 1
- D) 3

30) Consider the two statements given below that might be useful in answering the following question: In a library, 10% of the books are added every year. What was the number of books in the library in year 1994?

- I. During 1996, 9999 books were added
- II. During 1995, the library had 99,990 books.

Decide the least number of statements that would be sufficient to answer the question.

- A) I alone is sufficient
- B) II alone is sufficient
- C) Either I alone or II alone is sufficient
- D) I and II both are needed

31) The table given below consists of the data regarding average monthly expenditure towards different heads for two families:

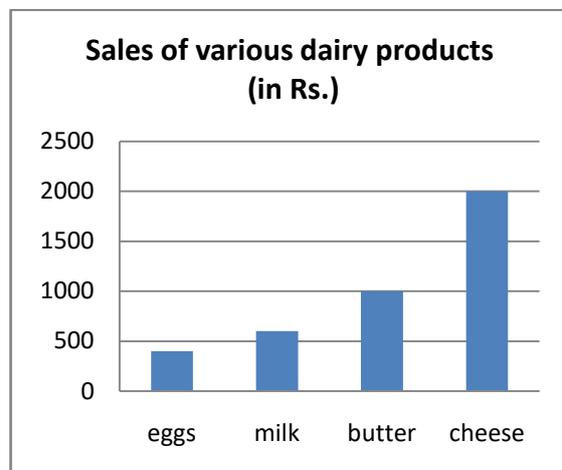
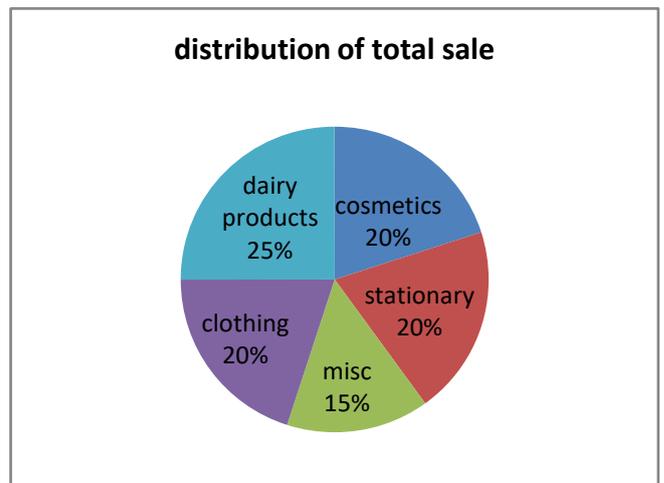
Expenditure Head	Family A (in %)	Family B (in %)
Food	50	10
Entertainment	30	20
Miscellaneous	20	70

If the total monthly expenditure of Family A is Rs. 20,000 and the same for the Family B is Rs. 1,00,000, which of the following statements is true on the basis of the above data?

- I. Family A spends more on food
- II. Family B spends more on food
- III. Family A and B spend equally on food
- IV. The data is insufficient to conclude which family spends more on food

- A) I
- B) II
- C) III
- D) IV

Consider the data as given in the following diagrams regarding sales of a shop on a particular day. Answer questions 32 and 33 on the basis of this data:



32) The sale of eggs contributed how much percent of the total sale?

- A) 2.5
- B) 5
- C) 7.5
- D) 10

- 33) If the sale of an item 'X' in the category of miscellaneous items was equal to the sale of Cheese, what percentage of the total sale was accounted for by 'X'?
- A) 5  
B) 7.5  
C) 10  
D) 12.5

**Study the following the following table and answer questions numbered 34 and 35 based on the table:**

Present Age (in years)	Expected age of Survival (in years)	
	Male	Female
25	65	66
30	66	67
35	68	68
40	69	70
45	71	71
50	72	73
55	74	76
60	76	77

- 34) The difference between the age of a man and his wife is 10 years. If the man can expect (according to the above table) that he would survive for 29 years more, then what is the present age of his wife, assuming that the man is older than his wife?
- A) 39  
B) 40  
C) 30  
D) 49
- 35) If a woman sees that her expected age of survival is 23 years more than her present age, then her present age will be
- A) 45  
B) 50  
C) 52  
D) 55
- 36) MICR stands for
- A) Magnetic Ink Character Reader  
B) Magnetic Ink Code Reader  
C) Magnetic Ink Cases Reader  
D) None

- 37) CAD stands for
- A) Computer aided design  
B) Computer algorithm for design  
C) Computer application in design  
D) Computer analogue design
- 38) A computer cannot 'boot' if it does not have the
- A) Compiler  
B) Loader  
C) Operating System  
D) Assembler
- 39) First page of Website is termed as-
- A) Homepage  
B) Index  
C) JAVA script  
D) Bookmark
- 40) DOS stands for
- A) Disk Operating System  
B) Disk operating session  
C) Digital Operating System  
D) Digital Open system
- 41) Didactic communication is
- A) intra-personal  
B) inter-personal  
C) organisational  
D) relational
- 42) In communication, the language is
- A) the non-verbal code  
B) the verbal code  
C) the symbolic code  
D) the iconic code
- 43) Identify the correct sequence of the following :
- A) Source, channel, message, receiver  
B) Source, receiver, channel, message  
C) Source, message, receiver, channel  
D) Source, message, channel, receiver
- 44) The first Indian Satellite for serving the educational sector is known as :
- A) SATEDU  
B) INSAT – B  
C) EDUSAT  
D) INSAT-C

- 45) Exclusive educational channel of IGNOU is known as :
- A) Gyan Darshan
  - B) Cyan Vani
  - C) Door Darshan
  - D) Prasar Bharati
- 46) Which of the following is a Central University?
- A) Delhi University
  - B) M.S University of Baroda
  - C) Gujarat University
  - D) Parul University
- 47) What is the name of the organization that is responsible for the promotion and coordination of the open university and distance education system and for determination of its standards in India ?
- A) Distance Education Bureau (DEB)
  - B) National Council for Teacher Education (NCTE)
  - C) National Council of Educational Research and Training (NCERT)
  - D) National Assessment and Accreditation Council (NAAC)
- 48) Which Institute in India started 'Vastu Shastra' classes for architecture students?
- A) IIT Kharagpur
  - B) IIT Bombay
  - C) IIT Madras
  - D) IIT Indore
- 49) The Gross Enrolment Ratio (GER) in institutions of higher education in India at present (2017-18) is about:
- A) 8 percent
  - B) 25.8 percent
  - C) 19 percent
  - D) 23 percent
- 50) Indian Institute of Advanced Study is located at
- A) Dharmshala
  - B) Shimla
  - C) Solan
  - D) Chandigarh

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**Rough Work:**