### JAI HIND COLLEGE

### (AUTONOMOUS) MUMBAI

### Syllabus for FYBSc IT for Entrance Exam 2021

The entrance examination will primarily check basic aptitude in computer knowledge, mathematics and statistics, general knowledge, ability to logically interpret data as well as verbal ability. Entrance test will consist of multiple-choice questions from the following five sections. No negative marking.

### **Section I: Fundamental of Computers**

- Introduction to information technology
- Microsoft office
- Multimedia
- Web
- Files and disk utilities
- HTML
- Cyber Laws and ethics
- E-commerce
- Introduction to Networking
- Number System

### **Section II: Mathematics and Statistics**

- Sequences and Series of Real Numbers
- Linear Algebra
- Vectors and Matrices
- Numerical Methods
- Set Theory
- Relations
- Logical Compound Statements
- Permutations and Combinations
- Measures Of Central Tendency
- Correlation
- Regression
- Probability Distributions
- Data Visualization

### **Section III: English Language**

- Sentence Formation
- Paragraph Formation
- Error Detection
- Jumbled word/Paragraphs
- Vocabulary & Grammar
- One Word Substitution
- Idioms and Phrases
- Antonyms and Synonyms
- Change the voice

### **Section IV: Logics and Reasoning**

- Analogy
- Sequence
- Blood Relations
- Predicate and Propositional Logic
- Puzzle
- Coding-Decoding
- Cause-Effect
- Artificial Language
- Deductive Reasoning
- Seating Arrangements

### **Section V: General Knowledge**

- Static GK
- Current affairs
- Geography
- History
- Indian Economy

### Following is the weightage per subject:

Sr. No.	Section	Weightage
1	Fundamental of Computers	25%
2	Mathematics and Statistics	25%
3	English Language	20%
4	Logics and Reasoning	20%
5	General Knowledge	10%
Total Qu	uestions	75
Duration		1 Hr. 30 Mins.
Paper pattern		MCQ

## **Sample Questions for Entrance Exams: FYBSc IT**

Identify the device through which data and instructions are entered into a

### **Section 1: Fundamental of Computers**

	mputer
	A) Software
	B) Output device
	C) Input device
	D) Memory
2)	Which one of these stores more data than a DVD?
	A) CD Rom
	B) Floppy
	C) Blue Ray Disk
	D) Red Ray Disk
3)	Eight Bits make up a
	A) byte
	B) megabyte
	C) kilobyte
	D) gigabyte
4	
4)	A process is a
4)	A) single thread of execution.
4)	<ul><li>A) single thread of execution.</li><li>B) program in the execution</li></ul>
4)	<ul><li>A) single thread of execution.</li><li>B) program in the execution</li><li>C) program in the memory</li></ul>
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	<ul><li>A) single thread of execution.</li><li>B) program in the execution</li><li>C) program in the memory</li><li>D) task</li></ul>
5)	A) single thread of execution. B) program in the execution C) program in the memory D) task What is the decimal equivalent of the binary number 10111?
	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21
	<ul> <li>A) single thread of execution.</li> <li>B) program in the execution</li> <li>C) program in the memory</li> <li>D) task</li> <li>What is the decimal equivalent of the binary number 10111?</li> <li>A) 21</li> <li>B) 39</li> </ul>
	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21 B) 39 C) 42
	<ul> <li>A) single thread of execution.</li> <li>B) program in the execution</li> <li>C) program in the memory</li> <li>D) task</li> <li>What is the decimal equivalent of the binary number 10111?</li> <li>A) 21</li> <li>B) 39</li> </ul>
	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21 B) 39 C) 42
5)	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21 B) 39 C) 42 D) 23
5)	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21 B) 39 C) 42 D) 23  Which of the following is the smallest visual element on a video monitor?
5)	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21 B) 39 C) 42 D) 23  Which of the following is the smallest visual element on a video monitor? A) Character
5)	A) single thread of execution. B) program in the execution C) program in the memory D) task  What is the decimal equivalent of the binary number 10111? A) 21 B) 39 C) 42 D) 23  Which of the following is the smallest visual element on a video monitor? A) Character B) Pixel

### 7) What is the mean of the Booting in the system?

- A) Restarting computer
- B) Install the program
- C) To scan
- D) To turn off

### 8) Which one of the following groups contains graphical file extensions?

- A) JPG, CPX, GCM
- B) GIF, TCE, WMF
- C) TCP, JPG, BMP
- D) JPG, GIF, BMP

## 9) Which of the following statement is correct regarding a template prepared by a word processing package?

- A) Any document can be saved as a template.
- B) Default template is used when you create a new file.
- C) Many templates contain text that gives one advice on how to use the template.
- D) Default settings are reflected by the normal document template and cannot be overwritten.

### 10) Which of the following statement is correct about the URL?

- A) URL is a software that connects to the internet
- B) URL is the address of the web page
- C) URL is the domain name
- D) All of the these

### **Section 2: Mathematics and Statistics**

task?

1)	A shopkeeper sold an article for Rs. 2500. If the cost price of the article is 2000,
find t	he profit percent.
A)	23%
B)	25%
C)	27%
D)	29%
2) sneed	A running man crosses a bridge of length 500 meters in 4 minutes. At what he is running?
_	8.5 km/s
ĺ	7.5 km/s
ĺ	9.5 km/s
	6.5 km/s  A. D. C is in the ratio of 3, 3, 5. How much manay will C get out of De 12602.
3)	A: B: C is in the ratio of 3: 2: 5. How much money will C get out of Rs 1260?
	252
ĺ	125
ĺ	503
	630
4)	40 % of 280 =?
A) B)	112 116
C)	115
	120
5)	A pipe can fill a tank in 6 hours and another pipe can empty the tank in 12
hours	s. If both the pipes are opened at the same time,the tank can be filled in
A)	10 hours
B)	12 hours
C)	14 hours
D)	16 hours

Worker A completes a task in 8 days and worker B completes the same task in

10 days. If both A and B work together, in how many days they will complete the

	A)	) 40/10 days	
	B)	•	
	C)	•	
	•	) 40/7 days	
7)	•	What is the probability of getting an even number when	a dice is rolled?
ĺ	A)	) 1/5	
		) ½	
	C)	) 1/3	
	D)	0) 1/4	
8)		Find the missing term of the	given expression:
18	.834	34 + 818.34 -? = 618.43	
	A)	217.644	
	B)	) 218.744	
	C)	) 217.744	
	D)	2) 217.844	
		1 1	
9)		If $x^2 + \frac{\frac{1}{x^2}}{x^2} = 34$ , $x + \frac{\frac{1}{x}}{x}$ is equal to	
ĺ	A)	A) 3	
	B)	3) 4	
	C)	5) 5	
	D)	0) 6	
10	)	In what ways the letters of the word "RUMOUR" can be	e arranged?
	$\mathbf{A}$	A) 150	
	<b>B</b> )	B) 200	
	$\mathbf{C}$	C) 230	
	$\mathbf{D}$	D) 180	

### **Section 3: English Language**

### 1) Spot the error from following sentence

Our destination	(1)	) was about (	(2)	) thirty	/ and	forty	' (3	)	kilometers to the west. (	(4)	)
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- A) 1
- B) 2
- C) 3
- D) 4

# 2) Peter has bought (1) a dozen of copies (2) of English story (3) books for children. (4) No error (5)

- A) 1
- B) 2
- C) 3
- D) 4

### 3) Her selection in the crew surprised Peter.

- A) Her selection in the crew was a big surprise.
- B) Peter was surprised at her selection in the crew.
- C) Her selection was a surprise.
- D) Peter was surprised at her selection of the crew.

### 4) Student committed mistakes.

- A) The mistake has committed by the student.
- B) The mistake had been committed by the student.
- C) The mistake was committed by the student.
- D) The mistake is committed by the student

### 5) The Clean India campaign is being run by the government.

- A) The government was running the Clean India campaign.
- B) The government is running the Clean India campaign.
- C) The government has been running the Clean India campaign.
- D) The government has run the Clean India campaign

### 6) Stringent

- A) lenient
- B) Vehement
- C) Meaningful
- D) Meaningless

### 7) Quiescent

- A) Hard
- B) Active
- C) Dull
- D) Attractive

### 8) Ducks: Quack

- A) Bears: Grunt
- B) Cat: Roar
- C) Dogs: Bark
- D) Lion: Predator

### 9) 1.not 2.Maria 3.run 4.did 5.away

- A) 24153
- B) 24135
- C) 21354
- D) 41235

### 10) a. trouble b. I c. have d. math e. with

- A) bcdea
- B) edbca
- C) bcaed
- D) eabcd

### **Section 4: Logics and Reasoning**

- 1) PETAL: FLOWER
  - A) Pen: Paper
  - B) Engine: Car
  - C) Cat: Dog
  - D) Ball: Game
- 2) I. All the colleges in the city had to keep closed for three days a week.
  - II. Many students have left the local colleges.
  - A) Statement II is the cause and statement I is its effect
  - B) Statement I is the cause and statement II is its effect
  - C) Both the statements are effects of independent causes
  - D) Both the statements are independent causes
- 3) Pointing to a photograph, a man said, "I have no brother, and that man's father is my father's son." Whose photograph was it?
  - A) His son
  - B) His own
  - C) His father
  - D) His nephew
- A. Peter is in the East of Tom and Tom is in the North of John. Mike is in the South of John then in which direction of Peter is Mike?
  - A) South-East
  - B) South-West
  - C) South
  - D) North-East
- 1) What is Geeta's rank in the class?
  - I. There are 30 students in the class.
  - II. There are 10 students who scored less than Geeta.
  - A) Statement I alone is sufficient, but statement II alone is not sufficient
  - B) Statement II alone is sufficient, but statement I alone is not sufficient
  - C) Either I or II is sufficient
  - D) Both I and II are needed
- 2) If in a certain language, NOIDA is coded as OPJEB, how is DELHI coded in that language?
  - A) CDKGH

- B) EFMIJ
  C) FGNJK
  D) IHLED
- 3) Essential part of Book is
  - A) Education
  - B) Pictures
  - C) Pages
  - D) Knowledge
  - 4) I. Pooja is older than Mukesh.
    - II. Suresh is older than Pooja.
    - III. Mukesh is older than Suresh.

If the first two statements are true, the third statement is

- A) False
- B) True
- C) Uncertain
- D) Can't say
- 5) Select three figures out of the following five figures which when fitted into each other would form a square.











- A) 1, 2, 4
- B) 1, 2, 5
- C) 5, 3, 1
- D) 2, 3, 4
- 6) Which number should come next in the series, 48, 24, 12, .....?
- A) 8
- B) 6
- C) 4
- D) 2

#### **Section 5: General Knowledge**

- 1) Annie Besant arrived in India in:
  - A) 1878
  - B) 1885
  - C) 1893
  - D) 1900

## 2) Mahatma Gandhi laid down four preconditions for a Satyagrahi (Passive Resistor) to fulfill - namely

- A) Observe perfect Chastity, Adopt Poverty, Follow truth and Cultivated Fearlessness.
- B) Observe perfect Chastity, Gain Money, Follow truth and Cultivated Fearlessness.
- C) Observe perfect Chastity, Adopt Poverty, Follow truth and Cultivated Power.
- D) Observe perfect Chastity, Gain Money, Follow truth and Cultivated Power.

### 3) The oldest among the spoken literary languages of South India is:

- A) Kannada
- B) Malayalam
- C) Telugu
- D) Tamil

#### 4) The first coal mine in India

- A) Dhanbad
- B) Jharia
- C) Raniganj
- D) Asansol

### 5) The Himalayan region is poor in mineral resources because \_\_\_\_\_

- A) It is made of crystalline rocks
- B) The displacement of rock strata has disturbed the arrangement of rock and made it complex
  - C) The climatic conditions are not suitable for exploitation of minerals
- D) The terrain makes exploitation of minerals difficult and very costly due to transport difficulties

#### 6) Aam Admi Bima Yojana was launched on:

- A) 14/11/2011
- B) 5/3/2009
- C) 10/3/2008
- D) 2/10/2007

<b>7</b> )		Income tax in India was introduced by:
	A)	William Jones
	B)	James Wilson
	C)	Nicholas Kaldor
	D)	Mahavir Tyagi
8)		In India, the state which has the largest forest cover is:
	A)	MP
	B)	Arunachal Pradesh
	C)	Chattisgarh
	D)	Odisha
9)		The share of road transport in total transportation of the country is
	A)	60%
	B)	70%
	C)	75%
	D)	80%

10) Project 'Sankalp' is associated with the elimination of:

- A) Polio
- B) AIDS/HIV
- C) A and B
- D) No such Project