BNAT
BYJU'S NATIONAL APTITUDE TEST

BNAT- BYJU'S National Aptitude Test

Student Assessment Report

Mohd Niumanuddin

AIR
155

Assessment Date
21 Jun, 2020

Enrolment Number
7013230597

You have scored
81%

99.0
You All India Percentile

Your State Percentile
(Telangana)
99.6

100.0
You City Percentile
(Nizamabad)

WELCOME TO BYJU'S
NATIONAL APTITUDE TEST (BNAT)

Dear **Mohd Niumanuddin**,

Thank you for taking BYJU'S National Aptitude Test (BNAT).

You must have been awaiting the outcome and analysis of the assessment that you took on 21 Jun, 2020. The findings are now here. These have been understood, analysed and interpreted to comprise this report. You will find an elaborate explanation of your Physics, Chemistry and the Learning pattern in the report. The findings of this report are based entirely on the observations of academic and scholastic performance demonstrated by you during the online assessment. The information in this report is specific to you.

We recommend that you and your parents familiarize yourselves with the report before the one-on-one interaction with BYJU'S Education Counselor.

The BYJU'S Education Counselor will guide you through macro and micro analysis of your BNAT result, and assist you in taking the right career decision.

We wish you all the very best for your future.

It is strongly recommended that the report is viewed in its entirety and not a part thereof.

ABOUT THIS REPORT

This report provides an in-depth description of your responses to the BYJU'S National Aptitude Test (BNAT). It is designed to help you identify and understand your potential and learning pattern.

a) The findings of this report are based entirely on the observations of academic and scholastic competence demonstrated by you during the online BYJU'S National Aptitude Test (BNAT). The information in this report is specific to you.

b) When you are making career decisions gather as much information as possible.

c) The analysis drawn in this report are based on single evidence and hence must be supplemented with other information such as academic grades, etc. The results of this report should be used with caution.

THE REPORT CONTAINS THE FOLLOWING SECTIONS

Section A - Learning Pattern Analysis

Section B - Question Wise Analysis

Section C - Keep Learning

LEARNING PATTERN ANALYSIS

This section of the report will help you in understanding your potential skills and abilities. It will further help you to identify the skill areas which you can develop, in order to be proficient in your chosen career path.

Chemistry 80%

Learning Pattern 90%

Physics 75%
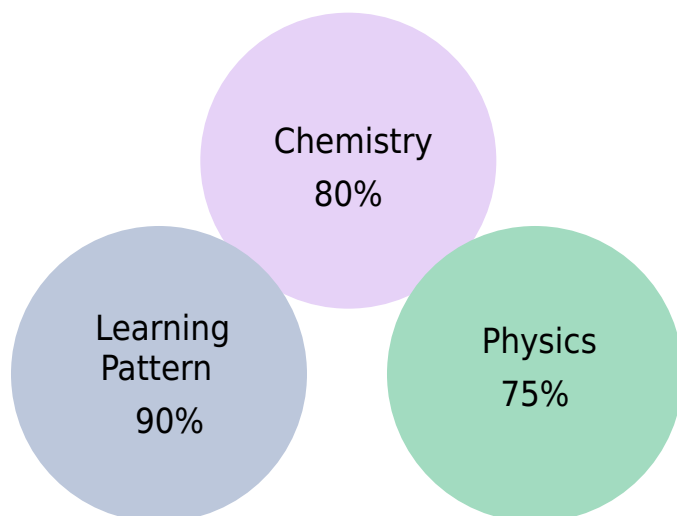
1. Overall Analysis **(Excellent):** An excellent overall score indicates that your Learning Skills are in sync with the requirements of competitive exams. You must keep your skills top-notch by practicing often. A combination of Hard Work and Learning Skills will prove instrumental in cracking competitive examinations.

2. Mental Ability **(Excellent):** Mental Ability is the power and skill to acquire and retain knowledge.To apply it when needed in different situations. An excellent score in Mental Ability indicates that you are skilled at acquiring, retaining and applying knowledge . This skill will prove very useful in solving questions in competitive examinations. Keep the skill sharp by understanding the basic concepts.

3. Physics **(Good):** Physics is the science of how things work. A good score in Physics indicates that you are skilled at understanding how things work . This skill will prove very useful in competitive examinations. Keep the skill sharp by always understanding the concepts by visualising them.

LEARNING PATTERN ANALYSIS

4. Chemistry **(Excellent):** Chemistry is the study of matter, its properties, how and why substances combine or separate to form other substances, and how substances interact with energy. An excellent score in Chemistry indicates that you are skilled at understanding the basics of chemistry. This skill will prove very useful in dealing with Physical, Inorganic and Organic Chemistry of Class 11 and 12. Keep the skill sharp by always revising the concepts you learn.

5. Numerical Reasoning **(Excellent):** An excellent score in Numerical Reasoning indicates that you are skilled at using mathematical operations. This skill will prove very useful in solving numerical questions in competitive examinations. Keep the skill sharp by solving tough questions under limited time.

6. Verbal Ability **(Excellent):** An excellent score in Verbal Ability indicates that you are skilled in Grammar and Vocabulary. This skill will prove very useful in understanding and visualising the concepts. Keep the skill sharp by reading good books.

7. Logical Reasoning **(Excellent):** An excellent score in Logical Reasoning indicates that you are skilled at using rational and systematic thought process. This skill will prove very useful in solving conceptual questions in competitive examinations. Keep the skill sharp by solving conceptual questions under limited time.

LEARNING PATTERN ANALYSIS

8. Spatial Reasoning **(Excellent):** An excellent score in Spatial Reasoning indicates that you are skilled at visualising and operating on geometrical figures in 2D and 3D. This skill will prove very useful in understanding concepts in Physics, Chemistry, and Biology especially Free Body Diagrams, Optics, and Organic Chemistry. Keep the skill sharp by trying to express the concepts by drawing figures.

9. Application **(Good):** A good score in Application indicates that you are skilled at the usage of concepts and interlinkages to arrive at a solution/ answer. This skill will be very useful in attempting questions that involve a combination of concepts. Keep the skills sharp by attempting questions involving multiple concepts.

10. Retention **(Excellent):** An excellent score in Retention indicates that you are skilled at dealing with the usage of formulas and/or memorization of conditions. This skill will be very useful in retaining close to 500 concepts and formulas required for competitive examinations. Keep the skill sharp by making own notes and revising them thoroughly.

QUESTION WISE ANALYSIS

Question Attempted	Total Score	Percentage
58 out of 60	**196**	**81%**

Percentile	Average Time / Ques
99.0	**1 min, 20 secs**

1.0% students did better

ANALYTICS

	Attempted	Correct	Incorrect	Total Time Taken	Average Time / Ques
Overall Analysis	58 out of 60	49 out of 60	9 out of 60	1 hr, 16 mins, 56 secs	1 min, 20 secs 89.4% students were faster
Mental Ability	19 out of 20	18 out of 20	1 out of 20	34 mins, 13 secs	1 min, 48 secs 89.5% students were faster
Physics	19 out of 20	15 out of 20	4 out of 20	21 mins, 6 secs	1 min, 7 secs 77.8% students were faster
Chemistry	20 out of 20	16 out of 20	4 out of 20	21 mins, 37 secs	1 min, 5 secs 89.5% students were faster

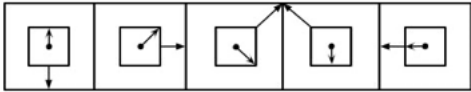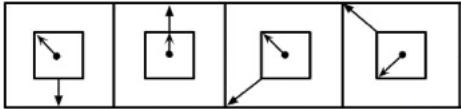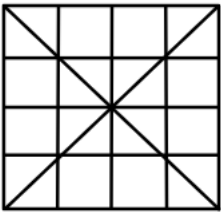| S.No.	Questions	Your Answers	Time Taken (sec)
1.	What is the missing character? a. P_{42} b. R_{42} c. Q_{41} **d. P_{41}**	✔	2 mins, 36 secs
2.	Rajan starts sleeping between 2 pm and 3 pm and he wakes up when his watch shows such a time that the two hands (i.e., hour-hand and minute-hand) interchange their respective positions. He wakes up between 3 pm and 4 pm on the same day. How long did he sleep? **a. 55 5/13 min** b. 110 10/13 min c. 45 6/13 min d. 96 4/13 min	!	2 mins, 51 secs
3.	'X' years ago, Rakesh's age was twice his brother's age and '4X' years ago, Rakesh's age was thrice his brother's age. If it is known that 'X' is a natural number, then what can be the absolute difference between their present ages? a. 43 b. 25 c. 20 **d. 36**	✔	2 mins, 22 secs
4.	Two bus tickets from city A to B and three tickets from city A to C cost Rs. 583, but three tickets from city A to B and two tickets from city A to C cost Rs. 557. The difference between the fares from city A to C and A to B is: a. Rs. 23 b. Rs. 24 c. Rs. 25 **d. Rs. 26**	✔	2 mins, 53 secs

MENTAL ABILITY

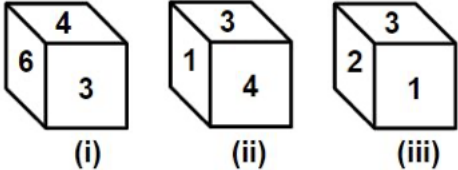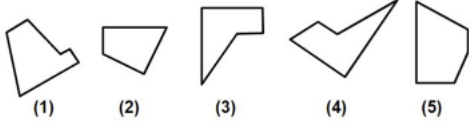| S.No.	Questions	Your Answers	Time Taken (sec)
5.	The length of a train and that of a platform are equal. If the train crosses the platform in one minute with a speed of 90 km/hr, then the length of the train is: **a. 750 m** b. 800 m c. 700 m d. 850 m	✔	1 min, 36 secs
6.	Choose the alternative which best expresses the meaning of the idiom/ phrase. 'To nip it in the bud' a. To pluck the flowers **b. To stop something at the start** c. To trim the flowers d. To steal from	✔	35 secs
7.	The work was completed _____ sunset. a. on b. in **c. at** d. by	✔	2 secs
8.	Choose the word which is least like the other words in the group? a. Sun **b. Universe** c. Star d. Planet	✔	13 secs
9.	Choose the correct alternative which will make the sentence meaningful. _____ people as they are and have tolerance with their weaknesses. **a. Accept** b. Access c. Expect d. Except	✔	22 secs

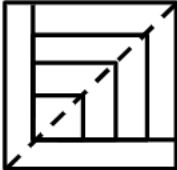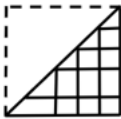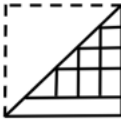| S.No.	Questions	Your Answers	Time Taken (sec)
10.	The first three options together make a sentence, identify the section of the sentence that has an error in it. a. He is a fast bowler of repute, b. but his yesterday's performance c. was not upto the mark. **d. The sentence is error free**	✔	2 mins, 21 secs
11.	In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code? **a. QDFHS** b. SDFHS c. SHFDQ d. UJHFS	✔	2 mins, 18 secs
12.	Twenty four teams are divided into 4 groups of six teams each. Within each group, the teams play each other exactly once. The winner of each group then plays in the semi-finals. The winners of the semi-finals play in the finals and the losers for the 3rd place. How many matches are played? a. 60 b. 63 **c. 64** d. 66	✔	2 mins, 37 secs
13.	Pointing to a woman, a girl says, "She is the mother of the only child of my father-in-law." How is the woman related to the girl? a. Aunt b. Mother **c. Cousin** **d. Mother-in-law**	✔	32 secs
14.	There are six people A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and the grandfather of F. There are two fathers, three brothers and a mother in the group. Which option represents the group of brothers? **a. ABF** b. ABD c. BFC d. BDF	✔	0 sec
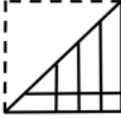
MENTAL ABILITY

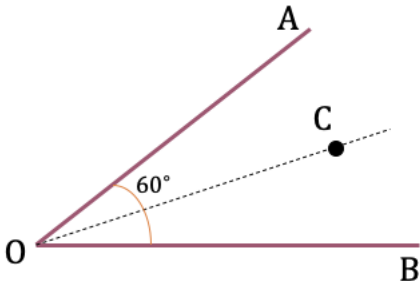| S.No.	Questions	Your Answers	Time Taken (sec)
15.	Consider the three statements: No night is a Facebook user. Some Facebook users are day. All WhatsApp users are night. Conclusions: 1. All day is night is a possibility. 2. Some WhatsApp users are Facebook users. a. Only 1 follows b. Only 2 follows c. Both 1 and 2 follows **d. Neither 1 nor 2 follows**	✔	1 min, 34 secs
16.	 Which among the following figures follows the series shown by the above figures? (a) (b) (c) (d) **a. (a)** b. (b) c. (c) d. (d)	✔	2 mins, 20 secs
17.	Find the number of triangles in the given figure a. 36 b. 40 **c. 48** d. 50	✔	5 mins, 32 secs

MENTAL ABILITY

S.No.	Questions	Your Answers	Time Taken (sec)
18.	Which digit will appear on the face opposite to the face with number 2 ? a. 3 **b. 4** c. 5 d. 6	✔	3 mins, 27 secs
19.	Choose the correct set of the following figures, which on rearranging makes a perfect square. a. 1, 4, 5 **b. 2, 4, 5** c. 1, 2, 3 d. 2, 3, 4	✗	0 sec

S.No.	Questions	Your Answers	Time Taken (sec)
20.	Find out from the following alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line. **a.** b. c. d.	✔	2 secs

PHYSICS

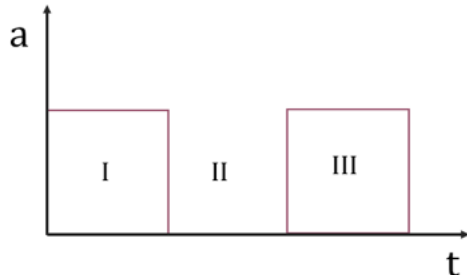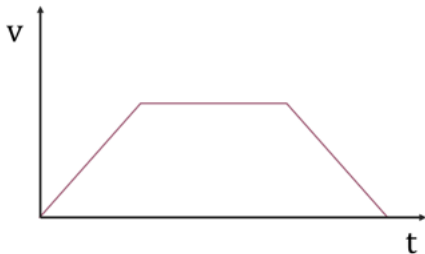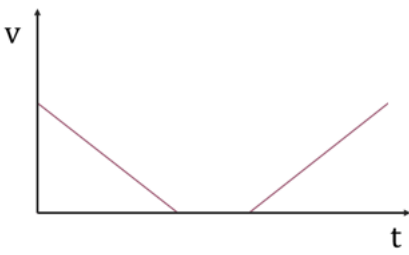| S.No.	Questions	Your Answers	Time Taken (sec)
1.	A particle is travelling with a uniform acceleration of magnitude 'a'. During successive time intervals of $\Delta t_1, \Delta t_2$ and Δt_3, its average velocities are v_1, v_2 and v_3 respectively. Then, a. $(v_2 - v_1)/(\Delta t_2 - \Delta t_1) = (v_3 - v_2)/(\Delta t_3 - \Delta t_2)$ **b.** $\mathbf{(v_2 - v_1)/(\Delta t_2 + \Delta t_1) = (v_3 - v_2)/(\Delta t_3 + \Delta t_2)}$ c. $(v_2 + v_1)/(\Delta t_2 - \Delta t_1) = (v_3 + v_2)/(\Delta t_3 + \Delta t_2)$ d. $(v_2 + v_1)/(\Delta t_2 - \Delta t_1) = (v_3 + v_2)/(\Delta t_3 - \Delta t_2)$	!	1 min, 29 secs
2.	Two plane mirrors OA and OB make an angle of 60° with each other. An object C is placed on the angular bisector of angle AOB. The total number of images formed by the set of mirrors will be _____. **a. 5** b. 6 c. 7 d. 8	✔	1 min, 17 secs
3.	Consider two arrangements of N identical resistors, one in parallel and the other in series. Each of these arrangements are connected to batteries of the same voltage. The ratio of power dissipated in the parallel arrangement to the series arrangement is: a. N b. 1/ N **c. N^2** d. 1/ N^2	✔	4 mins, 17 secs
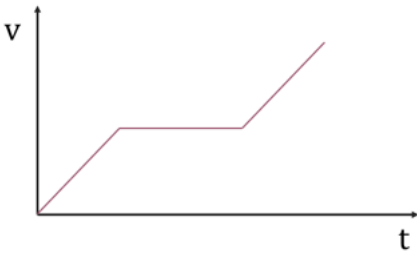
PHYSICS

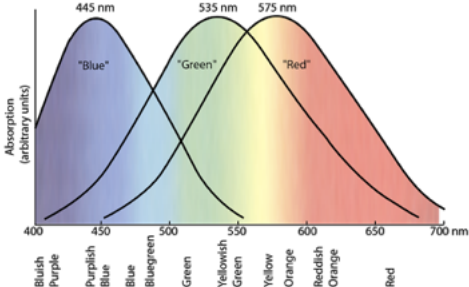| S.No.	Questions	Your Answers	Time Taken (sec)
4.	White light from a distant extended source is incident on a convex lens. Its image is seen on a screen kept at the focal plane of the lens. The top half of the lens is covered with a green filter and the bottom half with a red filter. Choose the correct statement from the following: a. The top half of the image will be green, and the bottom half will be red b. The top half of the image will be red, and the bottom half will be green c. The image will be white **d. The image will be yellow**	✔	3 mins, 5 secs
5.	A beaker of mass 50 g with 262 g of water in it, is kept on a weighing machine. A uniform hollow brass ball of total volume 36π cc is inserted into the water in the beaker. It is observed that the ball floats on water. The weighing machine now reads 400 g. Density of brass is 8 g/cc, while that of the air inside the brass ball can be neglected. Thickness of the brass used to prepare the ball will be close to _____. a. 3.0 mm b. 2.0 mm **c. 1.0 mm** d. 4.0 mm	✘	8 secs
6.	A magnet is in the form of a bar. Initially, the axis of the bar magnet is along the x-axis. At some distance from the magnet, a coil is kept in the y-z plane with its center along the x-axis. Which of the following motions of the bar magnet will NOT induce an electric current in the coil? a. Translational vibrations perpendicular to x-axis **b. Rotation of bar magnet about the x-axis** c. Magnet swinging back and forth about the x-axis with the south pole fixed on the x-axis d. Bar magnet spinning about a perpendicular bisector as its axis of rotation, with its center on the x-axis	✔	5 secs

PHYSICS

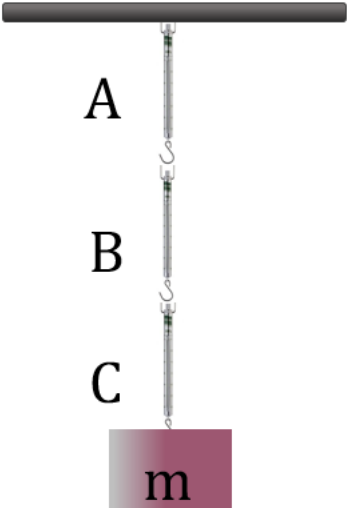| S.No.	Questions	Your Answers	Time Taken (sec)
7.	Pascal's law holds good for: a. Gases only **b. Fluids only** c. Solids only d. For all of the above	✔	2 secs
8.	The distance travelled by a body falling freely from rest in 2nd, 3rd and 5th second of its motion are in the ratio a. 1:3:5 b. 3:5:7 **c. 3:5:9** d. 1:3:7	✔	2 mins, 33 secs

PHYSICS

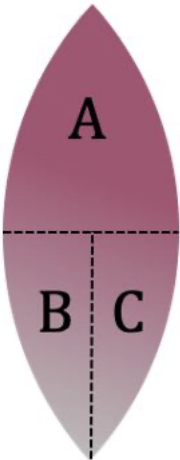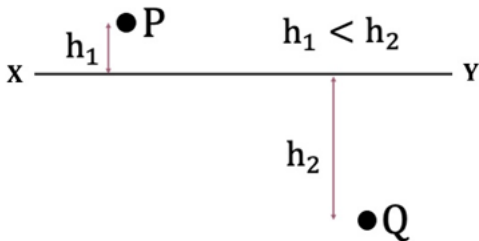| S.No.	Questions	Your Answers	Time Taken (sec)
9.	The acceleration time graph of a body is shown below. Which of the following represents the velocity time graph of the motion? a. b. c. d. None of the above	✔	30 secs

S.No.	Questions	Your Answers	Time Taken (sec)
10.	Cone cells in the human eye are responsible for coloured vision. The cone cells are of three types: Red (R), Green (G) and Blue (B) cells. Each type of cone cell responds to a range of wavelengths, with a particular wavelength showing the maximum response. Given below is a graph showing the relative response of cone cells in different wavelengths of light. Which of the cone cell(s) will respond to wavelengths in the orange region? a. Blue and red **b. Red and green** c. Blue and green d. Only red	✔	1 min, 0 sec
11.	Five polyester balls labeled P, Q, R, S and T are suspended from insulating threads. Several experiments are performed on the balls and the following observations are made. • Ball P repels R and attracts Q • Ball S attracts Q and has no effect on T • A negatively charged rod attracts both P and T Which one of the following options correctly describes the nature of charges on the respective balls (zero refers to uncharged)? a. P – positive, Q – negative, R – positive, S – zero, T – positive b. P – positive, Q – negative, R – positive, S – positive, T – zero c. P– negative, Q – positive, R – negative, S – zero, T – zero **d. P – positive, Q – negative, R – positive, S – zero, T – zero**	✘	3 mins, 45 secs

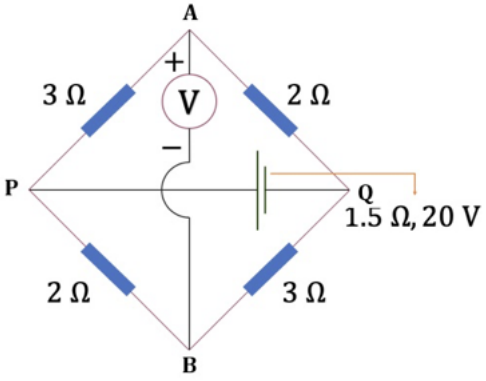| S.No.	Questions	Your Answers	Time Taken (sec)
12.	A piece of wood is floating in water kept in a bottle. The bottle is connected to an air pump. Neglect the compressibility of water. When more air is pushed into the bottle from the pump, the piece of wood will float with: a. The larger part in the water b. The smaller part in the water **c. The same part in the water** d. None of the above, the piece of wood will sink to the bottom	✔	4 secs
13.	A block of mass m is suspended through a massless spring balance as shown in the figure: a. The reading of A is greater than that of B b. The reading of B is greater than that of C c. The reading of A is the maximum **d. The readings of A,B and C are same**	✔	25 secs
14.	From an elevated point A, a stone is projected vertically upwards. When the stone reaches a distance 'h' below A, its velocity is double of what it was at a height 'h' above A. The greatest height attained by the stone is: a. h/3 b. 2h/3 c. 5h/4 **d. 5h/3**	✔	2 mins, 4 secs

PHYSICS

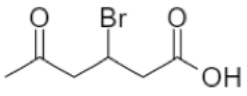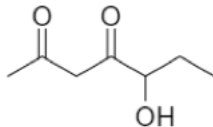| S.No.	Questions	Your Answers	Time Taken (sec)
15.	A thin symmetric double convex lens of power P is cut into three parts A, B and C are as shown. The power of: a. A is P, B is P/4 b. A is 2P, B is P/3 c. A is P/2, B is P/4 **d. A is P, B is P/2**	✔	10 secs
16.	Two points P and Q lie on either side of an axis XY as shown. It is desired to produce a real image of P at Q using a spherical mirror with XY as the optic axis. The spherical mirror must be: **a. Converging and positioned to the left of P** b. Diverging and positioned to the right of Q c. Diverging d. Converging and positioned to the right of Q	✔	2 secs

PHYSICS

S.No.	Questions	Your Answers	Time Taken (sec)
17.	What is the temperature which is identical in both Celsius and Fahrenheit temperature scales? **a. -40°** b. -4° c. 0° d. None of the above	✔	1 secs
18.	A falcon and its trainer are exactly midway between two vertical and parallel hills. As the trainer fires the gun, the falcon starts flying directly towards one of the hills. The falcon hears the first and second echoes of the gunshot at 2 s and 3 s respectively. Ignore the reflection of the sound from the falcon and from the trainer. The air is practically still. Among the following options, respective speeds of the falcon and the sound (in m/s) could be _____. a. 85 and 340 **b. 68 and 340** c. 50 and 350 d. 40 and 360	✘	8 secs
19.	At time t=0, an object is dropped from point A that rebounds inelastically (losing some of its kinetic energy) with a speed of 10 m/s after making a collision with the ground. It finally attains the maximum possible height at t=4 s. What is the difference of heights at t=0 and t=4 s?(Ignore air resistance as well as time of impact) a. 35 m **b. 40 m** c. 45 m d. 0 m	✘	0 sec

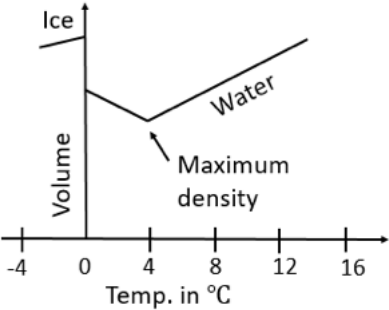| S.No.	Questions	Your Answers	Time Taken (sec)
20.	In the circuit shown below, the internal resistance of the battery is 1.5 Ω and its EMF is 20 V. A multimeter in its voltage mode is connected between A and B. Internal resistance of the multimeter can be taken to be infinite. The multimeter reading is a. -2.5V b. -4V c. 4V d. 2.5V	✔	1 secs

CHEMISTRY

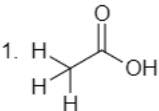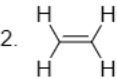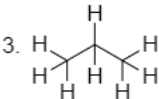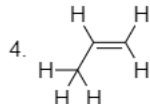| S.No.	Questions	Your Answers	Time Taken (sec)
1.	Which functional group is present in both the following compounds? Compound (A) Compound (B) **a. Ketone** b. Carboxylic acid c. Aldehyde d. Alcohol	✗	26 secs
2.	In an element (X), the number of electrons is 15 and the number of neutrons is 16. It reacts with hydrogen to form XH_3. What are the number of electrons present in its second shell and what is the nature of this element? a. 5, Metal b. 8, Metal **c. 8, Non-metal** d. 5, Non-metal	✗	3 mins, 0 sec
3.	Ammonium sulphate is the salt of: a. a weak acid and a strong base b. a weak acid and a weak base **c. a strong acid and a weak base** d. a strong acid and a strong base	✔	1 min, 26 secs
4.	Identify the methods by which the individual components of a mixture containing water, sodium chloride, ethanol and benzene can be separated. **a. Separating funnel, fractional distillation, evaporation** b. Fractional distillation, distillation, crystallisation c. Separating funnel, fractional distillation, filtration, distillation d. Separating funnel, fractional distillation, sedimentation and decantation	✗	1 min, 57 secs

CHEMISTRY

S.No.	Questions	Your Answers	Time Taken (sec)
5.	The correct formula of dolomite is: **a. CaCO₃.MgCO₃** b. CaCO₃.ZnCO₃ c. MgCO₃.ZnCO₃ d. FeCO₃.CaCO₃	✔	23 secs
6.	Alkenyne is a hydrocarbon which contains both - a double and a triple bond in a single molecule. The third member of the family of alkenynes has the molecular formula: a. C₆H₆ b. C₅H₆ **c. C₆H₈** d. C₄H₄	✔	1 min, 33 secs
7.	Which of the following properties does not depend on periodicity? **a. Atomic weight** b. Electron affinity c. Ionisation energy d. Electronegativity	✔	1 min, 47 secs
8.	A solid compound 'X' on heating gives CO₂ gas and a residue. The residue is then mixed with water to form 'Y'. On passing an excess amount of CO₂ through 'Y' in water, a clear solution 'Z' is observed. On boiling 'Z', compound 'X' is formed. Compound 'X' is: a. Na₂CO₃ **b. CaCO₃** c. K₂CO₃ d. Ca(HCO₃)₂	✔	1 min, 43 secs
9.	The principle behind fractional distillation technique in the separation of two liquids is: a. Difference in their melting points **b. Difference in their boiling points** c. Difference in their concentrations d. Difference in their solubilities	✔	40 secs

| S.No.	Questions	Your Answers	Time Taken (sec)
10.	Common name of H_2SO_4 is: **a. Oil of vitriol** b. Muriatic acid c. Blue vitriol d. Green vitriol	✔	33 secs
11.	Study the graph given below and select the correct statement: Ice / Water / Maximum density / Volume / -4 0 4 8 12 16 / Temp. in °C a. When water is cooled to 4°C, it contracts b. At 0°C, water freezes c. The volume of ice is more than the volume of water at 0°C **d. All of these**	✔	1 min, 6 secs
12.	The reverse process of neutralisation is: **a. Hydrolysis** b. Decomposition c. Dehydration d. Synthesis	✔	3 secs
13.	Which one of the following four metals would be displaced from the solution of its salt by the other three metals? a. Mg **b. Ag** c. Al d. Cu	✔	44 secs
14.	What happens when a methyl orange solution is mixed with HCl? a. The solution turns yellow **b. The solution turns red** c. The solution turns blue d. The solution turns pink	✔	36 secs

CHEMISTRY

S.No.	Questions	Your Answers	Time Taken (sec)
15.	Which of the following contains the greatest number of atoms? **a. 1.0 g of butene** b. 1.0 g of dinitrogen c. 1.0 g of sodium d. 1.0 g of water	✗	1 min, 52 secs
16.	Various colloids are given below. Match column X with column Y. | X (Colloids)	Y(Classification) | |---|---| | (i) Cloud | (P) Sol | | (ii) Gelatin | (Q) Aerosol | | (iii) Soap Lather | (R) Emulsion | | (iv) Milk | (S) Foam | a. i- P, ii- Q, iii- R, iv- S b. i- P, ii- R, iii- Q, iv- S **c. i- Q, ii- P, iii- S, iv- R** d. i- Q, ii- P, iii- R, iv- S	✓	1 min, 47 secs
17.	The structures of four organic compounds are shown below. Which compounds decolourise bromine water? a. 1 and 2 only b. 1, 2 and 4 only **c. 2 and 4 only** d. 3 and 4 only	✓	0 sec
18.	Which of the following statements about graphite and diamond is true? a. They have the same crystal lattice structure b. They have the same degree of hardness c. They have the same electric conductivity **d. The melting points of both are very high**	✓	1 min, 45 secs

CHEMISTRY

S.No.	Questions	Your Answers	Time Taken (sec)
19.	The SI unit of temperature is: a. Degree Fahrenheit (°F) b. Degree Celsius (°C) **c. Kelvin** d. None of the above	✔	16 secs
20.	Study the given reaction below $2Pb(NO_3)_2 \rightarrow 2PbO + nA + O$ In the above reaction, what is nA? **a. $4NO_2$** b. $2NO_2$ c. $2PbNO_2$ d. NO_2	✔	0 sec

KEEP LEARNING
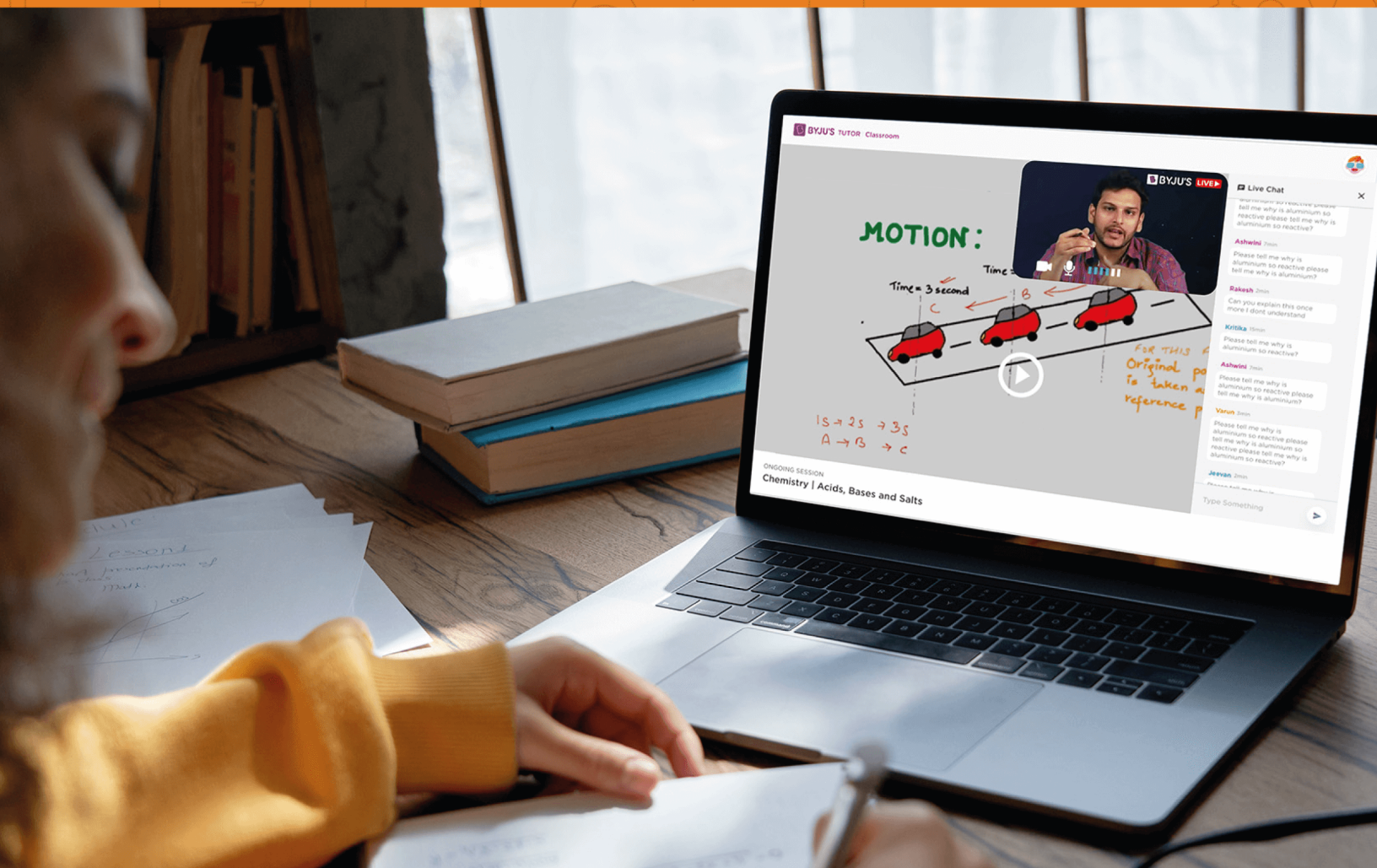
KEEP LEARNING

Assessment is a continuous process which does not end with just an evaluation. In fact this is just the beginning. You need to work hard to succeed in tests and interviews and finally do wonders.

Having identified improvement areas, you need to ask yourself the following questions:
- What is the objective? How can I define the goal that I am aiming for?
- What specific methods will I enrol? For example if classes / seminars / Workshops are required then what exactly?
- What time frame is realistic for my goals ?
- What resources do I require to make my development happen in a sustained manner?

Development initiatives fall into one of the below categories:
- Self development activities
- Guidance or Counselling
- Administrative support (like projects, classes/seminars/trainings/ workshops, etc.)

It is strongly recommended that the report is viewed in its entirety and not a part thereof. The information in this report is specific to your performance in BNAT on 21st June, 10 AM.

Wish you great success as you embark on your journey towards excellence!!