BKT TYRES

Jawaharlal Nehru Engineering College, Aurangabad.

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Guided by:
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About Company:

For over 30 years, BKT has led the way in the creation and manufacture of safe, innovative and performance-focused tires for a range of specialist sectors, including the agricultural, construction, earthmoving, port and mining industries. Our pioneering technology and dedication to continuous improvement has made us the partner of choice for those operating in some of the most challenging environments on the planet. With distribution partners in over 160 countries on five continents, we are proud to serve a truly global customer base. Wherever our customers are in the world, and no matter the task at hand, BKT is proud to work alongside them.

Key Highlights:

Website	https://www.bkt-tires.com
phone	+ 022-66663800
Industry	Tyre Manufacturing
Company size	7000+ employees
Headquarters	MUMBAI
Type	Pvt Ltd.
Founded	1987
Specialties	BKT Tires is a leading manufacturer of tires in the agricultural, industrial or OTR industry, BKT tires are designed to help your machinery perform at its best, even on the toughest terrains. Find your perfect tire today by browsing our wide range of tires, or filter your search by industry, application or features.

STUDENTS ELIGIBILITY CRITERIA :

CRITERIA	DETAIL
Qualification	B.E./B.Tech / 5 years Integrated-M.Tech
Branch of Study	MECH/ CHEM/ ELECTRICAL
Year of passing	2022 AND 2023 pass-outs
Other criteria	• Maximum of 2 years of education gap, if any, is allowed between 10th and graduation. • Should be from a Full-time Degree course recognized by the Central/ State Government of India. • All Arrears and backlogs need to be cleared at the time of selection process. • Candidates who have participated in any interview process held by bkt tyres in the last six months are not eligible. • Should be an Indian Citizen or should hold a PIO or OCI card, in the event of holding a passport of any other country.
Min academic requirement	• 10th Standard: 60% or above • 12th Standard: 60% or above • Graduation: 60% or CGPA Equivalent to 6.5 or above as applicable by the university guidelines

CAMPUS RECRUITMENT PROCESS

BKT tyers hire both fresher's and passout students with 0-2 years of experience. The hiring process at BKT tyers typically includes the following steps: 1. Application: Eligible Applicants should submit their resumes and/or applications online or through college 2. Test- BKT tyers will conduct General Aptitude to assess the performance of students 3. Interviews: shortlisted students will get a call from BKT tyers, and BKT tyers may conduct one or more interviews with qualified applicants. 4. Background Check: BKT tyers may conduct a background check on applicants to verify their qualifications. 5. Offer: BKT tyers may extend an offer of employment to qualified applicants. 6. On-boarding: Applicants accepted the offer may be required to complete onboarding paperwork and attend orientation.

- **General Aptitude Assessment (60 minutes) comprising of 3 sections:**

- Aptitude Test – Logical Ability, Quantitative Ability, English (verbal/Non Verbal) Ability.

- **Group Discussion (02-03 minutes to each student) – Only for fresher's from college.**

- Group Discussion on recent topics from social, political, technical and sports field.

- **Interview (10-15 minutes for student)**

- Interviewer will Interview the shortlisted candidates to assess his or her Technical knowledge, communication skills and ability to work in an organization.

Verbal/Non -Verbal Reasoning

1. Select the word or phrase that is closest in meaning to the given word - NONCHALANCE
a. Neutrality
b. Indifference
c. All-knowing
d. Ignorance
e. Timeliness

ANSWER: B

2. Choose the correct alternative
Flow : River :: Stagnant : ?
a. Rain
b. Stream
c. Pool
d. Canal

ANSWER: C

3. GIGANTIC (opposite)
a. Huge
b. Invisible
c. Zero
d. Tiny

ANSWER: D

4. Archaic (opposite)
a. Fresh
b. Modern
c. Ancient
d. Present

ANSWER: A

5. Unyoke (Meaning)
a. Merge
b. Amalgamate
c. Split
d. Federate

ANSWER: C

6. Indolent(Meaning)
a. crabbed
b. intent
c. inactive
d. diligent

ANSWER: C

7. Monika is quite intelligent but rather ----------
a. idealistic
b. generous
c. lazy
d. Optimistic

ANSWER: C

8. Each of the following sentences has been divided into four parts. There is an error in one of the parts. Point out the part which has an error.
(A) The man to/ (B) who I sold/ (C) my house/ (D) was a cheat. (E) No error
a. A
b. B
c. C
d. D
e. E

ANSWER: B

Directions (Q 9 - 13): Read the passage and answer the questions:

Knowledge has turned out to be mans greatest asset in mastering and conquering nature. The word science means literally knowledge. It is this quest and thrust for knowledge and the curiosity of man to know things beyond his reach that resulted in his becoming the lord of this plant. His never-ending pursuit to unearth the reason behind phenomenon has resulted in endless discoveries and inventions, which have proved to be the grate stepping stones in the progress of mankind.

Inventions like the telephone,radio, t.v, telegraph, transistors, airplanes, automobiles, steam engine, electricity, wireless, telescopes, microscope etc, have changed mans life forever. There have been inventions and discoveries in all aspects of life. Science has worked grater miracles in the fields of health and medicine and has been the greatest weapon in mans battle against diseases of various kinds. Vaccination is a miracle in the field of science. Penicillin, streptomycin, radium and x-rays have turned out be great blessings.

The discovery of the atom and its structure has been one of the most remarkable discoveries made by man. The quantum theory, the electricity along with the great findings of Einstein, Neils Bohr etc, have revolutionized the world of science forever. Computer and information technology are the latest revolutions in the field of science. With the coming of mobiles, internet, web conferencing etc, the world has shrunk into a cyber village where time and

distance have no meaning are at least are no longer barriers.

Technology is on a rise every day. Each new day brings better technology with it. However, we should learn to us our knowledge constructively. Only constructive uses of science can guarantee the continuation of mankind on this earth. Moreover, it is man who is the great generator, creator and inventor of all this knowledge and technology. We should be warned of becoming slaves to our own creations and inventions. Only then, can science be a blessing and a miracle. Science, if used for the betterment of mankind and society can bring about changes in our lives by making better, more comfortable and worthwhile.

9. What was the first thing that the man learnt to do?

a. To conquer nature.
b. To battle with his fellow men.
c. To live leisurely in the nature.
d. To eat and sleep.

ANSWER: A

10. How has the world shrunk for man technologically?

a. Continents on the earth are drifting closer to each other
b. Video conferencing, the internet has made this possible
c. Development of medicines
d. The planet is becoming smaller

ANSWER: B

11. According to the given passage, _____ is the miracle in the field of science

a. computers
b. vaccination
c. atoms and its structure
d. airplane

ANSWER: C

12. Mark the option which is closest to the meaning of the word given below

ABNEGATE

a. Renounce
b. Assert
c. Give out
d. Continue

ANSWER: A

13. Alex had his dinner after he _____

a. completed his work
b. had been completing his work
c. was completing his work
d. had been completed his work

ANSWER: A

Directions (Q 14 - 16): Read the passage and answer the questions:

Indian governments intention of introducing caste-based quotas for the Other Backward Classes in centrally funded institutions of higher learning and the Prime Ministers suggestion to the private sector to voluntarily go in for reservation, has once again sparked off a debate on the merits and demerits of caste-based reservations. Unfortunately, the predictable divide between the votaries of social justice on one hand and those advocating merit on the other seems to have once again camouflaged the real issues. It is necessary to take a holistic and non-partisan view of the issues involved.

The hue and cry about sacrificing merit is untenable simply because merit is, after all, a social construct and it cannot be determined objectively in a historically unjust and unequal context. The idea of competitive merit will be worthy of serious attention only in a broadly egalitarian context. But then, caste is not an obstacle in the way of an egalitarian order.

After all, economic conditions, educational opportunities, and discrimination on the basis of gender also contribute to the denial of opportunity to express ones true merit and worth. It is interesting to note that in the ongoing debate, one side refuses to see the socially constructed nature of the notion of merit while the other side refuses to recognize the multiplicity of the mechanisms of exclusion with equal vehemence.

The idea of caste-based reservations is justified by the logic of social justice. This implies the conscious attempt to restructure a given social order in such a way that individuals belonging to the traditionally and structurally marginalized social groups get adequate opportunities to actualize their potential and realize their due share in the resources available.

In any society, particularly in one as diverse and complex as the Indian society, this is going to be a gigantic exercise and must not be reduced to just one aspect of state policy. Seen in this light, the caste-based reservation has to work in tandem with other

policies ensuring the elimination of the structures of social marginalization and denial of access. It has to be seen as a means of achieving social justice and not an end in itself. By the same logic, it must be assessed and audited from time to time like any other social policy and economic strategy.

14. What is meant by the phrase Sacrificing merit referring to?

a. Killing merit
b. Selection on the basis of merit
c Encouraging reservation
d. None of these

ANSWER: C

15. What is the author most likely to agree with?

a. Caste-based reservation is the answer to Indias problems
b. Gender-based reservation is the answer to Indias problems
c. There is no solution to bridge the gap between privileged and underprivileged
d. None of these

ANSWER: D

16. What do you mean by the word Egalitarian?

a. Characterized by belief in the equality of all people
b. Characterized by belief in the inequality of all people
c. Another word for reservations
d. Growth

ANSWER: A

Directions: (Q 17 - 18): Choose the best alternative for the sentence completion

17. There is mutual and public interest..... and curbing arbitrariness, in this instance the governor or President's space to act in a partisan manner.

a. on reviewing such the loopholes
b. for reviewed such loopholes
c. at reviewing such loophole
d. in reviewing such loopholes
e. of reviewing such as loopholes

ANSWER: D
Explanation: in reviewing such loopholes is the best-suited alternative.

18. What makes a celebrity wedding so crackling is the way .....if theywere apart of it, participating in the romance and glamour.

a. it could make millions feel as the
b. it would be making millions feels as
c. that can make millions feel so
d. this can be made millions feel as
e. it can make millions feel as

ANSWER: E
Explanation: it can make millions feel as is the best alternative

Directions (Q 19 - 20): This section is nothing but spotting the errors in the entire sentence or paragraph

19. When one views them as rigid self-contained systems / in mortal combat and searches for total victory, / one exaggerates difference among and disregards / differences within communitarianism and liberalism.

a. When one views them as rigid self-contained systems
b. in mortal combat and search for total victory,
c. one exaggerates difference among and disregards
d. differences within communitarianism and liberalism.
e. No error

ANSWER: C
Explanation: Replace 'among' with 'between'.
between – at, into, or across the space separating (two objects or regions)

20. Like most post-colonial scholars, I have written reams about the / double standards of Western colonial and imperial / power, the cultural hegemony of the West, the / pernicious influence of 'Orientalist' myths, and so on.

a. Like most post-colonial scholars, I have written reams about the
b. double standards of Western colonial and imperial
c. power, the cultural hegemony of the West, the
d. pernicious influence of 'Orientalist' myths, and so on.
e. No error

ANSWER: C
Explanation: Replace 'power' with 'powers'.

Directions (Q 21 - 22): Choose the correct word in order to fill in the blanks:

21. Spirituality is also about_____life in an _____, magnanimous and righteous manner.

a. untie, observable
b. remorseless, undeniable
c. pestilential, transparent
d. traversing, altruistic
e. delay, prominent

ANSWER: D
Explanation:
traversing – travel across or through.
altruistic – showing a disinterested and selfless concern for the well-being of others; unselfish.

22. It is remaining detached in the midst of worldly attachments, performing one's duties _____ without giving in to one's egocentric_____.

a. lethal, monstrous
b. hinder, lucid
c. pestilent, manifest
d. noxious, palpable
e. meticulously, disposition

ANSWER: E
Explanation:
meticulously – in a way that shows great attention to detail; very thoroughly.
disposition – a person's inherent qualities of mind and character.

Logical Reasoning questions

1. Statement: The greatest need of India today is not of good researchers but well trained teachers.

Con I India does not need researchers today.
Con II: Researchers are least attached with the universalization and popularization of quality education.

A. Only conclusion I is true
B. Only conclusion II is true
C. Either conclusion I or II is true
D. Neither conclusion I nor II is true
E. Both conclusions I and II are true

ANSWER: B

2. Statement: The disparities between the problems of rich and the poor do not stand out clearly when we compare the attitude of the law making bodies towards these two strata of the society.

Con. I: Parliament do not discriminate between rich and.poor while formulating policies for them.
Con.II: Law makers do not have identical attitude towards the haves and have nots.

A. Neither conclusion I nor II is true
B. Only conclusion II is true
C.Either conclusion I or II is true
D. Only conclusion I is true

ANSWER: D

3. STATEMENT: SRK is a famous filmstar. He earns a handsome amount every year through advertisements of products he endorses.

CONCLUSIONS

I. All famous Filmstars earn handsome amount through advertisements.
II. SRK, being famous, endorses only famous brands.
A. Only conclusion I is true
B. Only conclusion II is true
C. Both conclusion I and II are true
D. Neither conclusion I nor II is true

ANSWER:D

4. In a certain language "PARAMPARA" is written as "RAPPMAARA". How is "SUDHAKARA" coded in that language?

A.DUSHAKARA
B.DUSHAKRAA
C.SUDKAHARA
D.None of these

ANSWER: C

5. If "ABHI" is coded as 23910 and BIG is coded as 3108 then answer the following question.
How is "RAM" coded in the language.

A.18113
B.19214
C.17112
D.None of these

ANSWER: B

6. In a certain code, '786' means 'study very hard', '958' means 'hard work pays' and '645' means

'study and work'. Which of the following is the code for "very".

A.8
B.7
C.6
D. Cannot be determined

ANSWER: B

7. In a certain language "lujakahu" means "we provide study material", "faka la ju" means " we score maximum selection" , "la fujaju" means "study score the selection" and "julunafu" means " selection of the material". Then :
What is the code of "score" in this code language?

A.ju
B.fa
C. la
D.ka

ANSWER: C

8. What is the code of "provide" in this code language?

A. ja
B.l u
C. ka
D. hu
ANSWER: D

9. What is the code of "provide of maximum"

A.nahufu
B.fuluna
C.fahuna
D.hufa la

ANSWER: C

10. In acertain language"DELHI" iswritten as451289. How is " MUMBAI" coded in that language?

A.5105108
B.132113219
C.209199
D.None of these

ANSWER: B

11. In a vertain code "LUCKNOW" is coded as "NWEMPQY". How is "SARK" coded in that language?

A.MCT
B.UCTM
C.CTUM
D.None of these

ANSWER: B

12. If MISTER is coded as 131776218 the PAWAN will be coded as:

A.123251225
B.102532512
C.2532
D.102532

ANSWER: B

13. In a certain language "AMBE" is coded as "BNCF". How is "CHENNAI" in the that language?

A.None of these
B.BGDMMZH
C.DGDMMZJ
D.DIFOOBJ

ANSWER: D

14. Consider the following statements and answer the given question.

If L + M => L is the husband of M,
L / M => L is the sister of M and
L * M => L is the son of M, then

How is W and Z related from the following statement:
W * X + Y / Z?

A.Cousin
B.Sister
C.Sister-in-law
D.Nephew
E.None of these

ANSWER: D

15] Introducing a boy, Ralf said, "His mother is the only daughter of my mother-in-law". How is Ralf related to the boy?

A) Uncle
B) Father
C) Brother
D) Husband

ANSWER: B

16] There are two grandfathers and two grandmothers in a family of 21. There are six couples each having at least one child. The grandparents have 9 grandchildren altogether, among them three

are Anne, Jerry and Ravi. Their father and mother are a physician and physiotherapist respectively. The Physician has a sister who is an Economist. The Physiotherapist has two brothers, one Engineer and a banker. Among the 9 grandchildren there are 5 granddaughters and 4 grandsons. The mother of two granddaughters among the five is the Economist whose husband is not in the party. The father of two grandsons among the four is an Engineer, whose wife is a homemaker.

How many children does the banker have?

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

ANSWER: D

17] How many grandchildren do the parents of the Economist have?

A) 3
B) 5
C) 4
D) 6

ANSWER: C

18] How many children does the banker have?

A) One daughter and a son
B) Two daughters
C) Two sons
D) No children

ANSWER: A

19] How many fathers are there in the family?

A) 5
B) 4
C) 6
D) 3

ANSWER: A

20] A is the son of P, P is the daughter of K, K is the husband of O and O is the mother of only son L. What is L to A?

A) Father
B) Uncle
C) Son
D) Grandfather

ANSWER: B

21] In a family of seven people lawyer is married to a teacher and has three sons, one engineer, one doctor and one actor. The actor's wife is a dancer and aunt of Emily. Emily, the daughter of engineer learns martial arts with her brother Joseph. How is the doctor related to Joseph?

A) Uncle
B) Son
C) Brother
D) Nephew

ANSWER: A

22] While discussing Pam's ancestry, Rick quizzes Pam while pointing towards a man," His mother is the only daughter of your father". How is Pam related to that person?

A) Aunt
B) Mother
C) Daughter
D) None of these

ANSWER: B

23] Looking at a man, Darren said," Your only brother is the father of my daughter's father ". How is the gentleman related to Darren?

A) Father
B) Grandfather
C) Uncle
D) Brother-in-law

ANSWER: C

24] Airplanes A, B, C and D started flight towards east. After flying 125 kms planes A and D flew towards right while planes B and C flew towards left. After 115 km, planes B and C flew towards their left while planes A and D also turned towards their left. In which directions are the airplanes A, B, D, C respectively flying now?

A) North, South, East, West
B) East, West, East, West
C) East, West, West, East
D) South, North, North, South

ANSWER: B

25] A man start from his house and walks 2 km east up to his class and turns southwards and walks 1 km up to his friend's house. At the friend's house, he turns to east and walks 2 km up to his school.

He then turns northwards and walks 4 km to the garden. How far is he from his house?

A) 7Km
B) 5Km
C) 4Km
D) 2.5Km

ANSWER: B

26] Babita runs 8 km to the South. Then she turns to her right and walks 4 km. Then again, she turns to her right and runs 8 km forward. How far is she from the starting point?

A) 8 Km
B) 6 Km
C) 12 Km
D) 4 Km

ANSWER: D

27. Kabul is located 2 km away to the north-west Punjab. Rohtak is located 2 km in the south-west direction from Kabul. Melghat is another place and is located 2 km away in the north-west of Rohtak. Talu is located 2 km away in the south-west direction from Melghat. In which direction is Talu from Punjab?

A) South
B) North east
C) North west
D) West

ANSWER: D

28] AryaandBindyastartfromapointsimultaneously. Arya moves to his East and travels 12 km, and Bindya moves to her south and travels 12 km. Arya takes a 270° anti-clock wise turn and travels 12 km. Bindya takes a 90° clock wise turn and runs 18km. Then Bindya goes 30km in same line in exactly opposite direction. Which of the following is true regarding their positions?

1) Bindya has travelled 30 km more than Arya
2) Both are to the south east of original position
3) Both are at the same point

A. Only 1 and 2 are true
B. Only 2 and 3 are true
C. Only 1 is true
D. All are true

ANSWER: B

Quantitative Aptitude questions

1. A student scores 55% marks in 8 papers of 100 marks each. He scores 15% of his total marks in English. How much does he score in English?

A.55
B.66
C.77
D.44
E. None of these

ANSWER: B
Explanation:We have to find the marks scored by the student in English.
Given that his score in English is 15% of his total marks. So let us first find the total marks scored by the student in all the 8 papers.
He scored 55% in 8 papers of 100 marks each.
Since each paper is of 100 marks, total marks of the exam = (100 × 8) = 800
Thus, the total marks scored by him in all the 8 papers = 55% of 800 = (55/100)× 800 = (55 × 8) = 440
Thus, the marks scored by the student in English = 15% of 440 = 15/100× 440 = 66

2. A software engineer creates a LAN game where an 8 digit code made up of 1, 2, 3, 4, 5, 6, 7, 8 has to be decided on as a universal code. There is a condition that each number has to be used and no number can be repeated. What is the probability that the first 4 digits of the code are even number?

A.1/70
B.1/840
C.1/8
D.1/40320

ANSWER: A
Explanation:Given that an 8 digit code is made up of the digits 1, 2, 3, 4, 5, 6, 7, 8 using all without repeating any number.
Total number of possible codes = 8!
(Because 8 numbers can be arranged in 8 positions in 8! ways)
We have to find the probability that the first four digits of the code are even numbers.

Out of the given 8 numbers, exactly 4 are even numbers.
So, these 4 even numbers will occupy the first 4 positions in 4! ways
The remaining 4 odd numbers will occupy the remaining 4 positions (i.e. the last four positions) in 4! ways
To get an 8 digit code both the first 4 positions and the last 4 positions are to be occupied.
Thus, the total number of codes in which the first four digits are even numbers = 4! × 4!
We know that the probability of an event = Number of favourable outcomes / Total number of possible outcomes
Thus, the required probability = Number of codes with the first four digits as even numbers / Total number of possible codes= (4! X 4!) / 8!= 1/70

3. A car is 250 meters behind the bus. The car and the bus are moving at a speed of 60 km/hr and 35 km/hr respectively. In what time will the car be ahead of the bus by 250 meters?

A.37 seconds
B.48 seconds
C.72 seconds
D.68 seconds

ANSWER: C
Explanation:Initially the car is 250 meters behind the bus. We have to find the time taken by the car to be ahead of the bus by 250 meters.
So the car should first cover the 250 meters by which it is behind and then again another 250 meters to be ahead of the bus.
Thus, the total distance to be covered = (250 + 250) = 500 meters
Throughout the journey both the car and the bus are in motion. So, this distance of 500 meters is to be covered by both the car and the bus together.
Here both the car and the bus are moving in the same direction.
Thus, the relative speed = Speed of the car – Speed of the bus = (60 - 35) = 25 km/hr
25 km/hr = 25 X (5/18) m/s = 125/18 m/s
At the relative speed of 125/18 m/s time taken to cover the distance of 500 meters = 500/(125/18)= 72 seconds

4. A, B and C can do a piece of work in 30, 45, and 90 days respectively. In how many days can A alone do the work if he is assisted by B and C on every 4th day?

A.12 days
B.24 days
C.36 days
D.48 days

ANSWER: B

Explanation:Let us first assume the total work as the LCM of (30, 45, 90)
So, total work = LCM of (30, 45, 90) = 90 units
If the total work is 90 units then,
The efficiency of A = 90/30 = 3 u/d;
The efficiency of B = 90/45 = 2 u/d;
The efficiency of C = 90/90 = 1 u/d
Given that A alone starts the work and he is assisted by B and C on every 4th day
So, the work completed at the end of first 4 days = Work completed by A in the first 3 days + Work completed by A, B and C together in the fourth day
Work completed at the end of first 4 days = (3 × 3) + ((3 + 2 + 1) × 1) = (9 + 6) = 15 units
This cycle of A working alone for 3 days and being accompanied by B and C on the fourth day is repeated.
So, it is very clear that a total of 15 units of work is completed in every 4 days.
In this pattern the number of cycles required to complete the total work of 90 units = 90/15 = 6 cycles where each cycle is comprised of 4 days
Thus, the total number of days required = (6 × 4) = 24 days

5. A starts a business with Rs. 3500 and after 5 months, B joins with A as his partner. After a year, the profit is divided in the ratio 2 : 3. What is B's contribution to the capital?

A.Rs. 5000
B.Rs. 7500
C.Rs. 9000
D.Rs. 9500

Answer: C
Explanation:We know that the profit share is dependent on both the amount of investment and the period of investment.
Given that the amount invested by A = Rs. 3500
Also A kept his investment throughout the year (i.e. for all the 12 months)
Let the amount invested by B be Rs. P
B joined the business only after 5 months. So B would have kept his investment for 7 months
So, the ratio in which the profit should be shared

between A and B = (3500 × 12) : (P × 7)
Given ratio is 2 : 3
So, if we equate the same we get,3 × 3500 × 12 = 2 × P × 7
Thus, P = Rs. 9000 which is the required investment made by B

6. There are two sections in a question paper. Each contains five questions. A student has to answer 6 questions. The maximum number of questions that can be answered from any section is 4. In how many ways can he attempt the paper?

A.50
B.100
C.120
D.200

ANSWER: D
Explanation:Given that there are two sections of 5 questions each. And the maximum number of questions that can be answered from any section is 4.
So, 6 questions in total can be attempted from these two sections in the following ways:
i) 4 questions from section 1 and 2 questions from section 2
ii) 3 questions from section 1 and 3 questions from section 2
iii) 2 questions from section 1 and 4 questions from section 2
Now the number of ways of selecting:
i) 4 questions from section 1 and 2 questions from section 2 = 5C4 × 5C2 = 5 × 10 = 50
ii) 3 questions from section 1 and 3 questions from section 2 = 5C3 × 5C3 = 10 × 10 = 100
iii) 2 questions from section 1 and 4 questions from section 2 = 5C2 × 5C4 = 5 × 10 = 50
Thus, the total number of ways in which a student can attempt the test paper = (50 + 100 + 50) = 200 ways.

7. In an annual sale, there was a flat discount of 40% on all items. Kamal bought a pair of jeans for Rs. 480. What is the labeled price of the pair of jeans?

A.799
B.699
C.899
D.720

ANSWER: A
Explanation:Given that there was a flat discount of 40% on all items. The discount would have been given on the labeled price to get the selling price.
Here the selling price is given as Rs. 480. We have to find the labeled price.
As a discount of 40% was given on the labeled price, the selling price of Rs. 480 would have been the resultant after a reduction of 40% from the labeled price. Thus,
Labeled price – 40% of labeled price = Selling price
Labeled price – 0.4 Labeled price = 480
0.6 Labeled price = 480
Thus, Labeled price = 480/0.6 = Rs. 800
One close value is given in option A (Rs. 799) and hence is the answer.

8. Solve: (2^288)/(2^n) = 512

A.219
B.218
C.237
D.None

ANSWER: D
Explanation:Given equation is: (2^288)/(2^n) = 512
We know that am/an = am-n
Thus the LHS of the given equation can be rewritten as:
2288 – n = 512
2288 – n = 29 (Because 512 = 29)
Since the bases are same, we can equate the powers of the equation.
Thus, 288 – n = 9
n = 288 – 9
n = 279
As one such value is not given in the options the answer is none.

9. If 764xy is divisible by 90, then what will be the value of x+y?

A.2
B.3
C.1
D.5

ANSWER: C
Explanation:Given that the number 764xy is divisible by 90
If a number is divisible by 90 then it should be divisible by both 9 and 10.
(Because 90 can be written as a product of two co-prime numbers as 9 × 10. So, the divisibility rule of 90 is that if a number is divisible by both 9 and 10 then it will also be divisible by 90. As the given number is said to be divisible by 90, we can definitely say that it

is divisible by both 9 and 10.)
For a number to be divisible by 10, its unit digit should be 0
So, in the given number 764xy the unit digit y should be = 0
For a number to be divisible by 9, its digital sum should be a multiple of 9
Digital sum known so far = (7 + 6 + 4 + x + 0) = (17 + x)
To make this digital sum a multiple of 9, let us consider a multiple of 9 that is close to 17.
One such multiple of 9 is 18.
To get the digital sum as 18, the value of x should be = 1
(If (17 + x) = 18, then x = (18 - 17) = 1)
Thus, we found the value of x = 1 and y = 0
So, the required value of (x + y) = (1 + 0) = 1

10. A sum of money triples itself at compound interest in 3 years. In 9 years it will be:

A.6 times the principal
B.12 times the principal
C.18 times the principal
D.27 times the principal

ANSWER: D
Explanation:We know that if a principal of Rs. P is invested at compound interest for n years at the rate of r% per annum then the amount after n years
Given that a sum of money triples itself at compound interest in 3 years.
Thus, the amount after 3 years (i.e. the amount when n = 3 years) = 3P
Thus, = 3P= 3 Equation 1)
We have to find the amount at the end of 9 years (i.e. the amount when n = 9 years)
If we substitute the value of 'n' as 9 in the formula, we get
The amount at the end of 9 years = P (3)3
[From Equation 1)]
= 27P
Thus, the amount at the end of 9 years is 27 times the principal.

11. If logx (1/343) = -3, then the value of x is equal to:

A.3
B.7
C.-7
D.-3

ANSWER: C
Explanation:Given that logx (1/343) = -3
If we raise both the sides of the equation to the base of x, we get
Thus, x-3 = 1/343
1/x3 = 1/343
x3 = 343
If we take cube root on both the sides of the equation we get x = 7

12. When the price of a pair of shoes is decreased by 10%, the number of pairs sold increased by 20%. What is the net effect on sales?

A.8% decrease
B.10% decrease
C.10% increase
D.8% increase

ANSWER: D
Explanation:We know that the sales of shoes = Number of shoes sold × Price of 1 shoe
Let the number of shoes sold initially be N and the original price of 1 shoe be Rs. P
So, the initial sales = N × P = NP
Given that the price of the shoes is decreased by 10% and the number of shoes sold is increased by 20%
Thus, the current price of 1 shoe = P – 10% of P = P – 0.1P = 0.9P
And the number of shoes sold at present = N + 20% of N = N + 0.2N = 1.2N
Thus, the current sales = 1.2N × 0.9P = 1.08NP
Now, the net effect on sales = 8% increase

13. Four bells begin to toll together and then each one at intervals of 6, 7, 8 and 9 seconds respectively. The number of times they will toll together in the next 2 hours is:

A.14
B.15
C.13
D.11

ANSWER: A
Explanation:To find the number of times the bells toll together in the next 2 hours, let us first find the duration after which all the bells toll together.
Each of the 4 bells tolls at intervals of 6, 7, 8 and 9 seconds respectively.
The duration after which they toll together = LCM of individual times taken = LCM of (6, 7, 8, 9)
To find the LCM of (6, 7, 8, 9) let us first prime factorize the numbers.

6 = 2 × 3
7 = 7
8 = 23
9 = 32
In order to get the LCM we should include all the different bases and the corresponding highest powers.
Here the different bases are 2, 3 and 7 and the corresponding highest power of 2 is 3; that of 3 is 2; and that of 7 is 1.
Thus the LCM of (6, 7, 8, 9) = 23 × 32 × 7 = 504
So, all the bells toll together for every 504 seconds.
Thus, the number of times they toll together in the next 2 hours (i.e.) in the next 7200 seconds = 7200/504 ≈ 14
(2 hours = 2 × 60 × 60 = 7200 seconds)
Thus, in the next 2 hours all the bells toll together for 14 times.

14. Both Shruti and Pooja randomly choose a colour from red, orange, and yellow. What is the probability that both choose orange?

A.1/3
B.1/6
C.1/9
D.2/3

ANSWER: C
Explanation:There are three different colourspossible to be chosen.
Probability that Shruti chooses orange colour = 1/3
(Orange is 1 among the 3 possible colours)
Probability that Pooja chooses orange colour = 1/3
Probability that both Shruti and Pooja choose orange colour = 1/3 × 1/3 = 1/9
(Since it is both Shruti and Pooja the individual probabilities are multiplied. For 'and' the operator to be used is '×')

15. The correct relationship after eliminating x, y and z from x + y = a, y + z = b, z + x = c and x + y + z = m, is:

A.m = x + y + z
B.2m = a + b + c
C.m = x - y - z
D.2m = x - y - z
E.None of the above

ANSWER: B
Explanation:Given that,
x + y = a Equation 1)
y + z = b Equation 2)
z + x = c Equation 3)
x + y + z = m Equation 4)
Eliminating x, y and z we have to find the relationship among a, b, c and m.
If we add equations 1), 2) and 3) we get
(x + y) + (y + z) + (z + x) = a + b + c
2(x + y + z) = a + b + c
Thus, 2m = a + b + c [From Equation 4)]
Hence option B is the correct answer.

16. 5 coins are tossed together. What is the probability of getting exactly 2 heads?

A.1/2
B.5/16
C.4/11
D.7/16

ANSWER : B
Explanation :Option A
Total number of outcomes possible when a coin is tossed = 2 (∵ Head or Tail)
Hence, total number of outcomes possible when 5 coins are tossed, n(S) = 25
E = Event of getting exactly 2 heads when 5 coins are tossed
n(E) = Number of ways of getting exactly 2 heads when 5 coins are tossed = 5C2
P(E) = n(E)/n(S)=5C2/25= 5/16 .

17. The sum of a number and the two numbers preceding it is equal to 30. Find the number:

A.10
B.11
C.9
D.8

ANSWER: C
Explanation: Number is 9,
As 9 +10+11=30

18. Sanjay invested an amount of Rs 16,000 for two years on compound interest and received an amount of RS 17,640 on maturity. What is the rate of interest per annum?

A.4%
B.5%
C.8%
D.Data Inadequate

ANSWER: B
Explanation: Amount =P(1+r/100)2

17640/16000= (1+r/100)2
441/400= (1+r/100)2
=> (21/20)2= (1+r/100)2
R=5%

19. Six pipes are fitted to a water tank. Some of these are inlet pipes and the others outlet pipes. Each inlet pipe can fill the tank in 9 hours and each outlet pipe can empty the tank in 6 hours. On opening all the pipes, an empty tank is filled in 9 hours. How many inlet pipes are there?

A.2
B.4
C.3
D.5

ANSWER: B
Explanation:x / 9 – y / 6 = 1/9;
2x – 3y = 2
We can compute that x = 4 and y = 2.
Thus, Inlet pipe = x = 4.

20. A reservoir is provided by two pipes A and B. A can fill the reservoir 5 hours faster than B. If both together fill the reservoir in 6 hours, the reservoir will be filled by A alone in

A.12 hours
B.8 hours
C.10 hours
D.11 hours

ANSWER: C
Explanation: If x is the speed then speed of A= x + 5 and B = x
Time taken by A and B will be x and x + 5 resp.
1/x + 1/x + 5 = 1/6 ; x2 – 7x - 30 = 0 x = -3 or x = 10.
Since time can't be negative, x =10.

21. A dealer buys dry fruits at the rate of ` 100, ` 80 and ` 60 per kg. He bought them in the ratio 12 : 15 : 20 by weight. He in total gets 20% profit by selling the first two and at last he finds he has no gain or no loss in selling the whole quantity which he had. What was the percentage loss he suffered for the third quantity?

A.30%
B.40%
C.20%
D.50%

ANSWER: B
Explanation: Total quantity rate =(12 * 100 + 15 * 80 + 20 * 60) = 3600
For first 2 quantity, (12 * 100) + (15 * 80) = 2400
But he gets 20% profit = 2400 * 1.2 = 2880
So the third quantity = 3600 – 2880 = 720
Actual third quantity rate = 20 * 60 = 1200
Loss suffered = (1200 - 720) / 1200
= 480/1200 = 40 %

22. How many kgs of flour worth Rs 25 per kg must be blended with 30 kgs of flour worth Rs 30 per kg so that by selling the blended variety at Rs 30 per kg there should be a gain of 10%?

A.32 kg
B.40 kg
C.36 kg
D.42 kg

ANSWER: C
Explanation: (25X+30×30)/(X+30)=300/11
X=36

23. A boat takes 19 hours for travelling downstream from point A to point B and coming back to a point C midway between A and B. If the velocity of the stream is 4 km/h and the speed of the boat in still water is 14 km/h, what is the distance between A and B?

A.200 km
B.180 km
C.160 km
D.220 km

ANSWER: B
Explanation: Speed of boat for downstream = 14 + 4 = 18 km/hr
Speed of boat for upstream = 14 – 4 = 10 km/hr
Distance = x
x / 18 + (x /2)/10 = 19
x = 180 km

24. The speed of a boat in still water is 4 km/h and the speed of current is 2 km/h. If the time taken to reach a certain distance upstream is 9 hours, the time it will take to go the same distance downstream is

A.3.5 hours
B.2.5 hours
C.2 hours
D.3 hours

ANSWER: D
Explanation: Upstream speed of a boat = 4 – 2 = 2 km/hr

Downstream speed of a boat = 4 + 2 = 6 km/hr
Suppose time taken = x
Then for Upstream case: 9 = x / 2 So, x = 18 km
Now for downstream case :Time = 18/6 = 3 hrs

25. In a stream running at 2 km/h, a motor boat goes 10 km upstream and back again to the starting point in 55 min. The speed of the motorboat in still water is

A.22 km/h
B.21 km/h
C.20 km/h
D.24 km/h

ANSWER: A
Explanation: Let "x" be the speed of Motor boat in still water
Distance = 10 km; Time = 55/60 hrs
For upstream, the speed of motorboat = x - 2
For downstream, the speed of motorboat = x + 2
55 / 60 = 10/ (x – 2) + 10/(x + 2) So, x = 22.

26. A man can row 4.5 km/h in still water and he finds that it takes him twice as long to row up as to row down the river. The speed of the stream is

A.2.5 km/h
B.1.5 km/h
C.2 km/h
D.1.75 km/h

ANSWER: B
Explanation: Let speed of stream be S and x be upstream speed.
Then for downstream, 4.5 + S = D
And for upstream , 4.5 – S = U
So we get, D + U = 9
But, it takes him twice as long to row up as to row down the river.
3U = 9 ; U = 3. Thus, 4.5 – S = 3
S=1.5 kmph

27. Priya takes 8 hours to draw 60 pages on a computer while Parul takes 6 hours to draw 45 pages on a computer. If both are working together in how much time will they draw a lot of 120 pages?

A.8hrs
B.7hrs
C.9hrs
D.11hrs

ANSWER: A
Explanation:First, calculate no of pages they draw in one hour. For Priya, it is 60/8 and for parul, it is 45/6.
Now total pages they draw in one hour is 60/8 + 45/6 = 15
So to print 120 time they will take = 15*X = 120. So X = 8hrs

28. A can finish a work in 15 days and B can finish the work in 25 days. Both of them start working together but B leaves the work 3 days prior to the completion. After how many days B quit the work.

A.7.5
B.8
C.8.5
D.9

ANSWER: A
Explanation:Let 'X' days they take to complete the whole work.
(1/15 + 1/25)*(X-3) + 3* (1/15), X = 10.5 days. So he quits after 7.5 days.

29. A contractor undertook a job and employed 40 men to do a piece of work in 80 days. But after 60 dayshe foundthat only 3/5 of the work is completed. To complete the work in time, how many more men he should employ.

A.15
B.20
C.25
D.40

ANSWER: D
Explanation:(40*60)/3 = (x*20)/2
x=80
No of men required=80-40 =40

30. P, Q, and R can complete a piece of work in 9, 18 and 27 days respectively. After 1/3 work is completed P left the work and the remaining work is completed by Q and R together. Find the days required to complete the remaining work.

A.36/7
B.35/6
C.36/5
D.32/5

ANSWER: C
Explanation:1/3 work is completed so remaining work is 2/3. As P left the job so the remaining work

will be completed by Q and R. Take X no. of days Q and R take to complete the work.
(1/18 + 1/27)*X = 2/3. So, X = 36/5

31. A is 25% more efficient than B. C does half the work done by A & B together. If C alone does the work n 30 days, then A alone can do the work in

A.32 days
B.27 days
C.22 days
D.25(1/2) days
E.None of these

ANSWER: B
Explanation:A's one day's work:B's one days work = 125:100 = 5:4
Let A's & B's one day's work be 5x and 4x days
Then C's one day's work = 9x/2
= > 9x/2 = 1/30
= > x = ((1/30)*(2/9)) = 1/135
A's one day's work = 5/135 = 1/27
Therefore, A alone can do the work in 27 days

32.P can finish a work in 27 days, Q in 9 days and C in 12 days. Q & R start the work but are forced to leave after 4 days. The remaining work was done by P in:

A.6 days
B.9 days
C.10 days
D.12 days
E.None of these

ANSWER: A
Explanation:(Q+R) one day's work = 1/9+1/12 = 7/36
Q & R in 3 days = 4*7/36 = 7/9
Remaining work = 1-(7/9) = 2/9
1/27 work is done by A in 1 day.
2/9 work is done by A in 27*2/9 = 6 days

Best of luck !!

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