GRAD B

AMBITO 1

1. Come provvedere in un impianto di produzione e stoccaggio di acqua calda sanitaria onde evitare il pericolo di diffusione della legionella?

2. Perché può essere conveniente sostituire un generatore di calore a gas con una pompa di calore elettrica?

3. Quali sono i rendimenti che entrano in gioco nel bilancio termico di un edificio?

4. A seguito della pandemia gli impianti di climatizzazione a servizio di un edificio sono stati privati del ricircolo di aria quindi lavorano in totale espulsione difficilmente riescono a fornire condizioni di benessere climatico standard, come si potrebbe risolvere il problema?

5. Si deve installare un impianto idrico antincendio in un edificio dove si pensa di esercire l'attività di scuola con presenza superiore a 100 persone, ma l'acquedotto non può garantire i livelli di pressione e portata minimi necessari, cosa possiamo mettere in atto per raggiungere i livelli di sicurezza.

AMBITO 2

1. Quando diventa necessaria la produzione di un piano di coordinamento e sicurezza in fase di esecuzione.

2. Quali sono i compiti indelegabili del datore di lavoro nell'ambito del Dgls 81/08.

3. Che cosa è il documento valutazione del rischio (DVR).

4. Che cosa è l'Attestato di Prestazione Energetica (APE) e quando diventa obbligatoria.

5. Realizzando un'Opera Pubblica quando si rilevano le condizioni per produrre una SCIA ai sensi della attuale normativa antincendio, da dove dobbiamo iniziare per regolarizzare l'attività?

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AMBITO 3

1. Il candidato illustri il potere di autotutela della pubblica amministrazione e le sue applicazioni.

2. Il candidato illustri la disciplina del cosiddetto silenzio assenso.

3. Il candidato illustri i principi applicabili al trattamento dei dati personali.

4. Il candidato illustri le competenze della giunta comunale e del consiglio comunale.

5. Il candidato illustri il diritto di accesso agli atti amministrativi.

AMBITO INFO

1. Quale programma del pacchetto office permette di gestire la posta elettronica e le sue principali funzioni?

2. Che cosa è un browser?

3. Word: principali funzionalità.

4. Quali sono le principali funzioni logiche e matematiche di Excel?

5. A che cosa serve power point?

AMBITO INGLESE

1. School refurbishment: a challenge, locally and for Europe

Across Europe and worldwide,infant, primary and secondary schools are essential tools in the construction of tomorrow's society and transmission of democratic values.Schools are, first and foremost, places for opening up to the world, to the acquisition of knowledge and for socialisation: three indispensable foundations for becoming a citizen of tomorrow's world, capable of good governance.
Through their educational career, through the teaching they receive and the subject matter taught, the child or young person will be taught to have balanced relationships, to be aware of equality between boys and girls, to be mindful of others: their fellow students, adults around them, including the elderly, as well as to be active participants in community life. They will be given knowledge, acquire abilities and skills in various fields.
This is a fundamental role in our societies. In order to fulfil this role, schools must provide places for training and teaching that are comfortable and of high quality. This is not currently the situation in Europe. Most school buildings are old, dila-pidated and poorly insulated. Heating systems too are old and often cannot be regulated. Ventilation systems, if any, are inefficient.

2. School buildings: buildings with special characteristics

School buildings have characteristics very different from administrative or office buildings. If certain characteristics can vary between countries, regions, communes or even between schools, others are common to all schools. Actually, they will all influence the refur-bishment strategies to be adopted.
Relatively low occupancy rates.
School buildings have a relatively low occupancy rate, which is very different from that of other public buildings. They are, most of the time, occupied between four and five days per week, from Monday to Friday, from 8 a.m. till 4 p.m. Some pre-mises, such as the library, canteen, study rooms and childcare rooms have even lower rates of occupation, in the order of a few hours per day. School buildings are used for about 30 weeks or 200 days a year, with relatively long periods during which they are unoccupied and, in general, few activities take place during weekends and evenings, other than partial occupation of sports halls, gyms or some cultural spaces.

3. School buildings

Diversity of occupants and needs.
In Belgium, infant schools or kindergartens receive children of various ages between 3 and 6 years. Primary schools receive children of between the ages of 6 and 12 years and secondary schools receive young people between the ages of 12 and 18 to 19 years. In Norway, school is compulsory from the age of six. Primary schools receive children between the ages of 6 and 12 years, middle schools receive children between the ages of 13 and 15 years and upper schools receive students between the ages of 16 and 18 years. In Germany, children of between 3 and 6 years are received in kindergartens. Primary schools then receive children between the ages of six or seven and up to 10 years and secondary schools admit young people between the ages of 11 and 19 years. Needs, whether physical (to move about, create, invent etc.), emotional or educational, will vary according to age-group. School buildings (indoor and outdoor spaces) thus need to be able to adapt to these specific needs and provide the phy-sical framework in the lines, volumes, materials and colours that will both affirm and support the teacher's work.

4. Sustainable refurbishment of school buildings

Childcare premises are mainly used in the morning before classes begin and at the end of the afternoon, after classes have finished;- Nursery school children's sleep rooms are used at the beginning of the afternoon;- Study rooms are mainly used at the end of the day;- Canteens are used at midday;- Classrooms are used for relatively long periods of time;- Gyms or sports halls are used all day, including at midday and sometimes at the end of the afternoon, in the evenings or at weekends.Construction of these various spaces produces large floor areas and major volumes to design, fit out and operate.
Importance of outside place Outdoor spaces that relate to the immediate environment of the school, as well as playgrounds or soft landscaped areas are areas of great importance in the life of the school. These are places for meeting and discussion, but also spaces that fill a need for relaxation, recharging one's batteries or exploration. These places give children contact with other children and with nature.These areas must, therefore, be carefully treated, as they must offer a multiplicity of ambiences and layouts (rest and encounter, relaxation and play) to support children's psycho-motor and social development.

5. Sustainable refurbishment of school buildings

Diversity of buildings, methods of construction, materials used There is no predefined model of a school. Some schools have a very large footprint and are very spread out, with one- or two-storey buildings. Other schools use multi-storey buildings. Yet others operate with a mixture of old and prefabricated «container»-type buildings.According to the construction period, the construction methods and materials used are different: - Buildings with heavy masonry facades and structure. Reduction of energy consumption in european Schools and academic buildings (including universities) represent 17% of the European stock of buildings and approxi-mately 12% of average, non-residential, energy consumption in Europe3 .A large part of the operational costs of schools in central Europe and in the Scandinavian countries is taken up by heating the premises and the upkeep and maintenance of buildings.Simultaneously reducing energy and maintenance costs is, thus, one of the main objectives for all school building refur-bishment projects, from both an economic and an environmental point of view:- Optimising or reducing operating costs;- Improving asset value;- Reduction of resource consumption: power, water etc.;- Reducing environmental impacts such as global warming, pollution of air, water and soil.